

*Bringing Together Social Science and Medicine to  
Study Youth Obesity's Causes, Consequences, and Solutions*

**A Workshop Joining the Ithaca and Weill Cornell Campuses  
Sponsored by the Institute for the Social Sciences at Cornell**

**February 26-27, 2009  
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**Abraham Bornstein**

*Title and Affiliation:* Cardiologist, Weill Cornell Medical College

*Mailing Address:* 525 east 68<sup>th</sup> St, F-695, New York, New York, 10021

*Email Address and Telephone:* [abb2006@med.cornell.edu](mailto:abb2006@med.cornell.edu); 917-846-1346; 212-746-3566

*Webpage Address:* [http://www.med.cornell.edu/publichealth/about\\_us/faculty.html](http://www.med.cornell.edu/publichealth/about_us/faculty.html)

*Discipline:* Public health, global health

*Research Interests:* Childhood & adolescent obesity, the metabolic syndrome, and subclinical coronary disease

*Obesity Focus:* Mechanisms

*Biography:*

I am a physician who is currently an Assistant Professor of Medicine at Weill Cornell Medical College, but who has also had more than 25 years of clinical practice experience in invasive & interventional cardiology, as well as critical care medicine. Along with recently attained experience in medical informatics (telemedicine), medical education, and medical research, I have accrued a combination of skills that should enhance my ability to fully participate in my next venture, 'Hospitals Without Borders', a new global telemedicine initiative in partnership with New York Presbyterian Hospital. In an attempt to stay true to my academic roots, I feel it is critically important for me to get further training in the area of clinical investigation so that I may be better able to assess the impact that our new technology makes in terms of clinical outcomes and cost-effective analysis.

*Research Summary:*

At Weill Cornell Medical College, I have been extensively involved at many levels of medical education, including medical student (PBL and MPS I), pediatric housestaff, medical housestaff, and cardiology fellow training. I have also participated in provision of content for the 'Problem Based Learning' medical school curriculum, as well as content for CME and teleconferencing. Additionally, I am currently involved in the deployment of a Telemedicine-based Adult Congenital Heart Disease Service as a joint project involving the divisions of Pediatric Cardiology at the Weill Cornell and Columbia Campuses of New York Presbyterian Hospital as well as SUNY-Downstate College of Medicine.

Throughout my career, I have tried to be instrumental in promoting medical education as the backbone for the ongoing process of establishing clinical excellence, receiving multiple teaching awards in the process. At every stage of my career in medicine, I have always contributed to the development of the teaching programs including CME programs. I have delivered and continue to deliver numerous medical/scientific presentations at conferences, medical meetings and at conferences for hospital house staff. Additionally, I have lectured extensively for a number of pharmaceutical companies as a member of their speakers' bureau and medical educational panels. As a result, I have developed excellent writing, public speaking and presentation skills.

My clinical trials experience began in 1998-1999 when I became a Clinical Research Associate with Stamford Therapeutics Consortium (STC) in Stamford, CT a clinical investigational site specializing in phase III, and IV clinical trials for the pharmaceutical and biotechnology industries.

I have collaborated with the Division of Pediatric Cardiology to establish an obesity council as well as in obesity research working group which will include physicians and medical researchers from all the pediatric subspecialties as well as the Weill Cornell Medical College Clinical Research Center (GCRC), who currently meet on a monthly basis in order to help design and implement research protocols addressing childhood obesity, the metabolic syndrome, diabetes mellitus, as well as subclinical vascular disease. In conjunction with The Rogosin Institute, the Division of Pediatric Cardiology, and Vascular Surgery, I have worked to help establish a vascular screening program to detect undiagnosed or subclinical vascular disease in overweight and or obese children, as well as children with the metabolic syndrome or DM. A comprehensive coronary risk factor assessment and profile will be developed for each child. Modalities utilized to evaluate the status of their vascular system will include flow mediated forearm vasodilation, carotid ultrasound to assess intimal-medial thickness, CT angiography, and intravascular ultrasound (IVUS) as clinically indicated.

We have also designed a protocol to look at the effects of soluble rice bran products on blood glucose levels and on multiple cardiovascular risk factors in children with the metabolic syndrome or Type II diabetes mellitus.

My expertise with the metabolic syndrome and type 2 diabetes mellitus as major coronary risk factors and coronary risk equivalents, respectively, evolved while I served as the medical director for Cerebrio, an independent professional CME company within the Corbett Accel Healthcare Group, an Omnicom Group Company. Cerebrio has been nationally recognized to develop highest quality, CME activities scientifically rigorous certified educational activities and independent programming for healthcare professionals that deliver new science with impact and integrity. The programs are designed to enhance the practice of medicine, and, as a result, clinical outcomes. At Cerebrio, I developed educational programming, CME content, as well as the multimedia content, in the areas of the metabolic syndrome, type 2 diabetes mellitus, and atherosclerotic cardiovascular disease, for nationally recognized physician experts from major academic medical centers who

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would lecture at national meetings such as Prime Med, the American College of Cardiology Meetings, the American Heart Association Meetings, the Heart Failure Society of North America, etc. I was also responsible for the development of tools to determine educational outcomes assessment.

Prior to that, I participated as a member of the Educational Speakers Bureau for GlaxoSmithKline, lecturing on the use of thiazolidinediones in patients with insulin resistance, as well as Type II diabetes mellitus, and their potential in the prevention of the atherosclerotic process. Lectures, which I delivered included 'Insulin Resistance as a Coronary Risk Factor', delivered as Endocrine Grand Rounds at St. Luke's-Roosevelt Hospital, in New York City, and 'Insulin Resistance Syndrome and Coronary Disease', as GlaxoSmithKline sponsored Medical Symposia for practicing physicians.

**Sunita Cheruvu**

*Title and Affiliation:* Fellow, Pediatric Endocrinology, New York Presbyterian Hospital, Weill Cornell Medical Center

*Mailing Address:* 525 East 68th Street, Box 103, NY, NY 10021

*Email Address and Telephone:* [snc9008@nyp.org](mailto:snc9008@nyp.org), 212-746-3462

*Discipline:* Pediatric endocrinology

*Research Interests:* My research during fellowship will be a clinical study, looking at the relationship between vitamin D, obesity, and glucose metabolism.

*Obesity Focus:* Mechanism

**Stephen Cook**

*Title and Affiliation:* Assistant Professor of Pediatrics, Univ. of Rochester Medical Center

*Mailing Address:* 601 Elmwood Ave, Box 777 Rochester, NY 14642

*Email address and Telephone:* [Stephen\\_cook@urmc.rochester.edu](mailto:Stephen_cook@urmc.rochester.edu), 585-275-9279

*Webpage Address:*

[http://www.urmc.rochester.edu/web/index.cfm?event=doctor.profile.show&person\\_id=1002054&display=for\\_researchers](http://www.urmc.rochester.edu/web/index.cfm?event=doctor.profile.show&person_id=1002054&display=for_researchers)

*Discipline:* Pediatrics and internal medicine

*Research Interests:* Cardiovascular risk factors in childhood obesity, primary care training for management and prevention of childhood obesity

*Obesity Focus:* Mechanisms, consequences, treatment/prevention

*Biography:*

Dr. Cook is an assistant professor of Pediatrics, he is trained and board certified in both pediatrics and internal medicine, and he has a master's in public health. Dr. Cook's research focuses on childhood and adolescent obesity with cardiovascular risk factors and clinical studies on approaches to prevention and intervention. Dr. Cook pioneered the first national report to describe the metabolic syndrome in U.S. adolescents. Metabolic syndrome is a clustering of metabolic and cardiovascular complications of obesity involving excess abdominal fat, elevated cholesterols, high blood pressure, insulin resistance and high blood glucose. He's described the association of metabolic syndrome with smoking and exposure to second hand smoke in adolescents. The other area of focus is Community and Health Services Research: involving identification, screening, prevention, and management of childhood obesity. In addition, his focus on health services research related to obesity features a national description for the diagnosis of obesity and counseling behaviors for children.

*Research Summary:*

Ongoing research projects include:

1. Developing a community level cohort of children to study and follow for the development of obesity related risk factors that comprise the metabolic syndrome and tobacco exposure;
2. Providing an effective practice-level intervention for improved obesity screening, identification and lifestyle counseling

Greater Rochester Health Foundation, Stephen Cook, MD, MPH (PI) 4/01/08 – 12/31/2010

“Greater Rochester Clinical Training Initiative for Childhood Obesity Prevention”

This project aims to deliver a clinical training intervention for quality improvement of clinical prevention strategies for the prevention and treatment of overweight in primary care practices in Monroe County.

Greater Rochester Health Foundation, Principle Investigator: Stephen Cook, MD, MPH, 20% 11/01/07 – 12/31/2010

“Greater Rochester Healthy Childcare 2010”

This project aims to deliver a clinical training intervention for quality improvement of clinical prevention strategies for the prevention and treatment of overweight in primary care practices in Monroe County.

Principle Investigator: Dirk Hightower (Stephen Cook, MD, MPH consultant, 3%)

NIH/NHLBI 1 K23 HL 086946-01A1, Stephen Cook, MD (PI) 07/01/07-06/30/12

“Metabolic Syndrome in Adolescents: Contribution of Tobacco and Central Fat”

The major goals of this project provide 75% protected time for the development of Dr Cook's research career with mentorship on childhood obesity, cardiovascular risk factors, pediatric and health services research and community based participatory research. The project with in the career development award will focus on recruiting and tracking pre-adolescent children and the development of obesity and CVD risk factors prior to, during and after pubertal development as well as examine mechanistic influence of tobacco use or exposure on CVD risk factors in childhood and adolescences during this critical period.

The Greater Rochester Health Foundation, Stephen Cook, MD, MPH (PI) 5/01/07-12/31/08

“Childhood Obesity Community Report Card”

Community wide epidemiology project to: 1) collect anthropometric data from ~7000 medical records to provide a county wide estimation of the prevalence of childhood obesity, and 2) link early childhood experiences and development to the distribution of obesity among children entering kindergarten in the City of Rochester.

*Selected Bibliography:*

Dandona, P., Thusus, K., Cook, S., Snyder, B., and Nicotera, T., “Oxidative Damage of Deoxyribonucleic Acid (DNA) in Insulin Dependent Diabetes Mellitus.” *Diabetes* 43 (1): 35A, May 1994

Dandona, P., Thusus, K., Cook, S., Snyder, B., Makowski, J., Armstrong, D., and Nicotera, T. “Increased Oxidative Damage of Deoxyribonucleic Acid and Proteins in Diabetes Mellitus.” *Lancet* 347(8999): 444-445. February 17, 1996

Cook, S.R., Weitzman, M., Auinger, P., Nguyen, M., Dietz, W., "Prevalence of a Metabolic Syndrome Phenotype in Adolescents: Findings from the National Health And Examination Survey III, 1988-1994." *Archives of Pediatric and Adolescent Medicine*; 157:821-827. August 2003.

Cook, S.R., "The Metabolic Syndrome: Antecedent of Adult Cardiovascular Disease in Pediatrics." *The Journal of Pediatrics*; 145(4): 427-430. October 2004

Cook, S., Weitzman, M., Auinger, P., Barlow, S., "Screening and Counseling Associated with Obesity Diagnosis in a National Survey of Ambulatory Pediatric Visits." *Pediatrics*; 116(1); 112-116. July 2005.

Weitzman, M., Cook, S., Auinger, P., Florin, T., Daniels, S., Nguyen, M., Winickoff, J., "Tobacco Exposure is Associated with the Metabolic Syndrome in Adolescents", *Circulation*; 112(6); 862-869. August 2005.

Li, C., Ford, E., Mokdad, A., Cook, S., "Recent Trends in Waist Circumference and Waist-to-Height Ratio among US Children and Adolescent", *Pediatrics*. Vol 118, No.5, November 2006, e1390-e1398.

Ford, E., Li, C., Imperatore, G., Cook, S., "Age, Gender, and Ethnic Variations in Serum Insulin Concentrations among US Youth: Findings from the National Health and Nutrition Examination Survey 1999-2002", *Diabetes Care*, December, 2006; 29(12): 2605-2611.

Cook, S. Gidding, S.S. "Modifying Cardiovascular Risk in Adolescent Obesity" *Circulation*; 115(17): 2251-2253. May 1, 2007

Ford, E., Li, C., Cook, S., Choi, H., "Serum Concentrations of Uric Acid and the Metabolic Syndrome among U.S. Children and Adolescents", *Circulation*, Vol 115, No. 19, May 15, 2007. 2528-2532.

Stahlhut, R.W., van Wijngaarden, E., Dye, T.D., Cook, S., Swan, S.H. "Concentrations of Urinary Phthalate Metabolites are Associated with Increased Waist Circumference and Insulin Resistance in Adult U.S. Males", *Environmental Health Perspectives*, Vol 115 No.6, June 2007. 876-882.

Loucks, E.B., Magnusson, K.T., Cook, S., Rehkopf, D.H., Ford, E.S., Berkman, L.F., "Socioeconomic Position and the Metabolic Syndrome in Early, Middle and Late Life: Evidence from NHANES 1999-2002", *Annals of Epidemiology*, Vol 17, No. 10, October 2007. 782-790.

Kelishadi, R., Cook, S.R., Motlagh, M.E., Gouya, M.M., Ardalan, F., Motaghian, M., Majdzadeh, R., Ramezani, M.A., "Metabolically Obese Normal Weight and Phenotypically Obese Metabolically Normal Youths: CASPIAN Study", *Journal of the American Dietetic Association*, Vol 108, No. 1, Jan 2008. 82-90.

Cook, S., Auinger, P., Li, C., Ford, E., "Metabolic Syndrome Rates in U.S. Adolescents, from the National Health and Nutrition and Examination Survey 199-2002", *Journal of Pediatrics*, Vol 152, No. 2, February, 2008, 165-170.

Schwimmer, J.B., Pardee, P.E., Lavine, J.E., Blumkin, A.K., Cook, S., "Cardiovascular Risk Factors and the Metabolic Syndrome in Pediatric Nonalcoholic Fatty Liver Disease", *Circulation*, Vol 118, No. 3, July 15, 2008, 277-283

Rossi, B., Sukalich, S., Droz, J., Griffin, A., Cook, S., Blumkin, A., Guzik, D., Hoeger, K., "Prevalence of Metabolic Syndrome and Related Characteristics in Obese Adolescents with and without Polycystic Ovary Syndrome", *The Journal of Clinical Endocrinology and Metabolism*, -- In press --

Kelishadi, R., Cook, S., Amra, B., Adibi, A., "Factors Associated with Insulin Resistance and Non-alcoholic Fatty Liver Disease among Youths", *Atherosclerosis*, -- In press --

Cook, S., Auinger, P., Huang, TK. A., "Growth Curves for Cardio-Metabolic Risk Factors in Children and Adolescents", *Journal of Pediatrics*, -- In press

**Susanna Cunningham-Rundles**

*Title and Affiliation:* Professor of Immunology in Pediatrics and Vice Chair for Academic Affairs, Department of Pediatrics, Weill Cornell Medical College

*Mailing Address:* Weill Cornell Medical College, 1300 York Avenue, New York, New York, 10021

*Email Address and Telephone:* [scrundle@med.cornell.edu](mailto:scrundle@med.cornell.edu), 212-746-3414

*Webpage Address:* <http://www.med.cornell.edu/research/scunningham-rundles/>

*Discipline:* Immunobiology

*Research Interests:* Role of micronutrients in immune response; inflammation markers and Vitamin D deficiency in obesity

*Obesity Focus:* Mechanism

*Biography:*

Susanna Cunningham-Rundles, Ph.D. is an immunologist. She is PI of an NIH NCI training grant on nutrition and cancer prevention and Cornell PI of the Memorial Sloan Kettering (MSK) Research Center for Botanical Immunomodulators. Dr. Cunningham-Rundles received her PhD in Biochemical Genetics from New York University and was a postdoctoral fellow at MSK in Immunobiology. Dr. Cunningham-Rundles has published on human immune response to infection and micronutrients and edited two books: *Nutrient Modulation of Immune Response* and *Persistent Bacterial Infections*.

*Research Summary:*

Our laboratory has a long standing interest in nutrient modulation of immune response, the role of micronutrients on development of immune response, and the effect of nutrient deficiency on host defense and cancer prevention. Obesity is increasingly a subject. We are currently involved in a study on the effects Vitamin D supplementation on immune response in obese, vitamin D deficient adults. We are also interested in the role of inflammation in fatty liver disease, which is prevalent among obese children and adolescents.

*Selected Bibliography:*

*Publications*

Cunningham-Rundles, S. 1983. Nutritional factors in immune response In *Malnutrition: Determinants and Consequences*. (EDS., P.L. White, N. Selvey) Alan R. Liss, NY, pp. 233-244.

Berry, E.M., Hirsch, J., Most, J., Mc Namara, D.J, and Cunningham- Rundles, S. 1987. Dietary fat, plasma lipoproteins, and immune function in middle-aged American men. *Nutr Cancer* 9: 129-142.

Boeck, M.A., Chin, C. , and Cunningham-Rundles, S. 1993 Altered immune response in morbid obesity. *Annals N.Y.Acad.Sci.* 699: 253-256

S. Cunningham-Rundles. (Editor) 1993 "Nutrient Modulation of Immune Response" Marcel Dekker, Inc., New York, New York, 556 pgs.

Cunningham-Rundles S. 1994: Malnutrition and gut immune function. *Curr Op Gastroenterol.*10: 664-670.

Miller, D.G., Sepkovic, D.W., Bradlow, H.L., Martucci, C.P., Levine, B.S., and Cunningham-Rundles, S. 1996 The effect of nutritional intervention on immune function and other biomarkers in genetic risk of cancer *J. Nutritional Immunol* (2): 9-15

Cunningham-Rundles, S. Cervia, J.S. 1996 "Malnutrition and Host Defense" in *Nutrition in Pediatrics: Basic Science and Clinical Application* 2nd Edition. W.A. Walker, J.B. Watkins (eds) BC Decker, Hamilton, Ontario 295-307.

Cunningham-Rundles, S. and Lin, D.H. 1998 Nutrition and the immune system of the Gut. *J Nutrition* 14: 573-579

Cunningham-Rundles, S. 1998 Analytical Methods for Evaluation of Nutrient Intervention *Nutrition Reviews* s27-s37.

Cunningham-Rundles, S. 2001 Nutrition and the mucosal immune system *Current Opinion in Gastroenterology* 17:171-176.

Cunningham-Rundles, S. 2002 Evaluation of Nutrient Interaction In Immune Function In "Nutrition and Immune Function" Ed P.C. Calder, C.J., Field, and H.S. Gilled CABI Oxon. UK pp21-39.

Cunningham-Rundles, S. 2003 Is the fatty acid composition of immune cells the key to normal variations in human immune response? *Am J Clin Nutr*;77:1096-7.

Rivlin, RS and Cunningham-Rundles, S. 2003 "Malnutrition and Cancer" in *Nutrition in Pediatrics :Basic Science and Clinical Application* 3rd Edition. W.A. Walker, J.B. Watkins,C. Duggan (eds) BC Decker, Hamilton, London. pp 699-708.

Cunningham-Rundles, D. McNeeley, J.S. 2003 "Malnutrition and Host Defense" in *Nutrition in Pediatrics: Basic Science and Clinical Application* 3rd Edition. W.A. Walker, J.B. Watkins,C. Duggan (eds) BC Decker, Hamilton, London. pp.367-385

Cunningham-Rundles, S. 2003 Issues in the Study of Human Immune Function In "Dietary Enhancement of Human Immune Function" Eds: DA Hughes, LG Darlington, A Bendich Humana Press pp17-34.

Cunningham-Rundles, S. McNeely, David, and Ananworanich, Jean M 2004 Immune Response in Malnutrition In 5<sup>th</sup> Edition of *Immunologic Disorders in Infants and Children* (Ed. ER Stiehm, HD Ochs, and JA Winkelstein) Elsevier Saunders pp 761-784

Cunningham-Rundles, S. McNeely, D., Moon, A. mechanisms of nutrient modulation of immune response 2005 *J. Allergy Clin Immunol.* 115 1119-1128

Cunningham-Rundles, S. Moon, A, McNeely, D. 2008 "Malnutrition and Host Defense" in *Nutrition in Pediatrics: Basic Science and Clinical Application* 4th Edition. C. Duggan, J.B. Watkins, W.A. Walker, (eds) BC Decker, Hamilton, London (261-271).

Cunningham-Rundles, S, Lin, H, Ho-Lin, D, Dnistrian, A, Cassileth, BR, Perlman, J 2008 Role of nutrients in development of the neonatal immune response (*Nutr Rev* in press)

#### Abstracts

Boeck, M.A., Cunningham-Rundles, S., Chen (X), C. 1993. Altered Immune Function in a Morbidly Obese Pediatric Population New York Academy of Sciences Conference: Prevention of Childhood Obesity. Bethesda, MD.

Nowak KM, Cunningham-Rundles S, Granady LC. 1999. Prevalence of Overweight Among Healthy and Asthmatic Patients at the Cornell Pediatric Residency Group Practice. *Annals of Allergy, Asthma & Immunology.*

Solomon, A. Fan, L., Greendyk, T., Sockolow, T, Cunningham-Rundles, S. 2006 Meal choice and awareness of caloric intake in children. *Weill Cornell Ped Res Day Journal* Vol 4 2006.

Patel, N, Tripp, E. 2, Solomon, A, Cunningham-Rundles, S. Sockolow, R., Moon, A. The relation between childhood obesity and gastroesophageal reflux disease *Weill Cornell Ped Res Day Journal* Vol 4 2006.

Erdélyi I, Liu T, Cunningham-Rundles S, Lipkin M, Holt P: A high fat Western style diet induces early genetic and inflammatory changes in mouse colorectal cancer model. *Gastroenterology*, 2007, 132, A306.

Richard Rosencrantz, Hong Lin, Yin Yan Xu. and Susanna Cunningham-Rundles, Oxidative Stress Profiles in Pediatric Nonalcoholic Fatty Liver Disease (NAFLD) *AASLD*, November, 2007.

Aliza Solomon, A., Cunningham-Rundles, S., Greendyk, T. and Sockolow R. 2008 Will Knowledge Of Caloric Values Alter Food Choices? A Food Labeling Study In Children. *Annual Scientific Meeting of The Obesity Society.*

**Lisa Cooper Hudgins**

*Title and Affiliation:* Assoc. Prof. of Pediatrics in Medicine, The Rogosin Institute/Weill Cornell Medical College

*Mailing Address:* 1167 York Avenue, New York, New York 10065

*Email Address and Telephone:* [hudgins@rockefeller.edu](mailto:hudgins@rockefeller.edu), 212-702-9600, ext. 107

*Webpage Address:* <http://www.med.cornell.edu/research/lhudgins/>

*Discipline:* Pediatrics, lipid disorders

*Research Interests:* Effects of dietary carbohydrate on fatty acid synthesis and triglyceride levels, treatment and noninvasive monitoring of atherosclerosis

*Obesity Foci:* Mechanisms, consequences

*Biography:*

Lisa C. Hudgins, M.D., received her medical degree from The University of Pennsylvania in 1979 and was board-certified in pediatrics after completing her residency at the Albert Einstein and Jacobi Hospitals in the Bronx, New York in 1982. She then joined The Rockefeller University as a clinical scholar, first studying cholesterol metabolism in infants, children and adults in the laboratory of Edward Ahrens and then dietary fat and carbohydrate, obesity and fatty acid synthesis in the laboratory of Jules Hirsch. Upon Dr. Hirsch's retirement in 1995, she continued patient-oriented research at Rockefeller as a full-time member of The Rogosin Institute, a not-for-profit institution in research and patient care, affiliated with Weill Medical College and The Rockefeller University. She is currently Associate Professor of Pediatrics in Medicine at Weill-Cornell Medical College, an adjunct professor at Rockefeller, and Director of Pediatric Lipid Control, The Rogosin Institute Comprehensive Lipid Control Center, where, for the past 13 years, she has cared for children referred for evaluation and treatment of lipid disorders, including obesity.

*Research Summary:*

Obesity, prediabetes and diabetes are associated with elevated triglycerides, small dense LDL and low HDL, a dyslipidemia that is a component of the metabolic syndrome and contribute to the accelerated atherosclerosis in these disorders. Fructose and glucose are consumed in large and increasing quantities in the US and other countries where obesity is epidemic. They are present in nearly equivalent quantities in high fructose corn syrup and table sugar (sucrose), both common caloric sweeteners. My research carried out in lean and overweight adult volunteers at The Rockefeller University Hospital Clinical Translational Science Center demonstrated that chronic ingestion of a weight-maintaining, very low fat, high sugar diet caused a large increase in hepatic de novo lipogenesis (DNL) and blood levels of saturated fat that correlated with an increase in serum triglycerides and decrease in HDL cholesterol. In contrast, adipose tissue DNL was minimally responsive to dietary carbohydrate and there was no evidence for weight gain. More recent preliminary data show that fructose, unlike glucose, given as a single oral dose or as multiple doses over 6 hours acutely stimulated the production of saturated fat and triglycerides due to its unique hepatic metabolism. The magnitude of the lipogenic response was significantly correlated with fasting insulin levels and inversely correlated with fasting HDL. These results support the concept that dietary sugars, particularly fructose, not only cause or exacerbate dyslipidemia but promote deposition of fat in the liver that may cause or exacerbate insulin resistance that progresses to diabetes. There is a need to better understand the heterogeneity of increase in triglycerides in response to dietary carbohydrate as a clue to the precursors, diagnosis, treatment and prevention of metabolic syndrome and diabetes.

Elevated triglycerides and other components of the metabolic syndrome are frequent in overweight children and may precede excessive weight gain, but the lipogenic responsiveness to dietary carbohydrate has not been explored in this age group. In future studies, I hope to develop a simple, outpatient, standardized fructose lipogenic test to evaluate the role of obesity, insulin resistance, age, and genetics in the variations in DNL, a key pathway controlling triglyceride levels and storage in liver and adipose tissue. These studies should ultimately yield valuable new information about the relationship between dietary sugars and dyslipidemia, diabetes and cardiovascular disease.

*Selected Bibliography:*

Hudgins, L.C., E. Emken and J. Hirsch. Correlation of isomeric fatty acids in human adipose tissue with clinical risk factors for cardiovascular disease. *Am. J. Clin. Nutr.* 53:474-482, 1991.

Hudgins, L.C. and J. Hirsch. Changes in abdominal and gluteal adipose tissue fatty acid compositions in obese subjects after weight gain and weight loss. *Am. J. Clin. Nutr.* 53:1372-1377, 1991

Petrek, J.A., L.C. Hudgins, B. Levine, M. Ho and J. Hirsch. Breast cancer risk and fatty acid composition of breast and abdominal adipose tissue. *J. Natl. Cancer Inst.* 86:53-56, 1994.

Hudgins, L.C., M. Hellerstein, C. Seidman, J. Diakun, and J. Hirsch. Human fatty acid synthesis is stimulated by a eucaloric, low fat, high carbohydrate diet. *J. Clin. Invest.* 97:2081-2091, 1996

Hudgins, L.C., C. Seidman, J. Diakun, and J. Hirsch. Human fatty acid synthesis is reduced after the substitution of dietary starch for sugar. *Am. J. Clin. Nutr.* 67: 631-639, 1998

Hudgins, L.C., M.K.Hellerstein, C. Seidman, R.A.Neese, J. Tremaroli, J. Hirsch. Relation between carbohydrate-induced hypertriglyceridemia and fatty acid synthesis in lean and obese subjects. *J. Lipid Res.* 41: 595-604, 2000

Hudgins, L.C. Effect of high carbohydrate feeding on triglyceride and saturated fatty acid synthesis. *P.S.E.B.M.* 225:178-183, 2000

Hudgins, L.C., A. Baday, M.K. Hellerstein, T.S. Parker, D.M. Levine, C.E. Seidman, R.A. Neese, J.D. Tremaroli, J. Hirsch. The effect of dietary carbohydrate on the genes for fatty acid synthase and inflammatory cytokines in adipose tissue from lean and obese subjects. *J Nutr Biochem* 19: 237-245, 2008.

**Marla E. Lujan**

*Title and Affiliation:* Assistant Professor, Human Nutrition, Cornell University

*Mailing Address:* 216 Savage Hall, Cornell University, Ithaca, NY 14853

*Email Address:* [mel245@cornell.edu](mailto:mel245@cornell.edu), 607-255-3153

*Webpage Address:* <http://www.human.cornell.edu/che/bio.cfm?netid=mel245>

*Discipline:* Physiology, reproductive endocrinology, ultrasonography

*Research interests:* Nutritional regulation of fertility, obesity-induced infertility, polycystic ovary syndrome

*Obesity Foci:* Mechanisms, Consequences

*Biography:*

Marla Lujan received her BSc degree in Life Sciences from Queen's University in 1998, and her MSc and PhD degrees in Physiology in 2001 and 2004 from Queen's University. She was a Saskatchewan Health Research Foundation and Canadian Institutes of Health Research Postdoctoral Fellow in Obstetrics, Gynecology and Reproductive Sciences at the University of Saskatchewan from 2005 to 2008. She became an Assistant Professor in the Division of Nutritional Sciences at Cornell University in 2008.

Loss of regular menstrual cycles – termed amenorrhea – has emerged as a highly prevalent symptom of obesity in women. Currently, overweight and obese women account for over 50% of couples undergoing fertility therapy making obesity the leading cause of anovulatory infertility in North America and the UK. While lifestyle intervention is heralded as the best treatment and defense against obesity-related amenorrhea, very little is known about how obesity inhibits ovulation or what accounts for the tremendous variability seen in the return of menses in women following weight loss. A recent call by experts to ban fertility treatments in obese women, due to extremely poor maternal and fetal outcomes, has brought to the forefront the urgent need for studies aimed at understanding these newly recognized pathophysiological consequences of obesity. Since amenorrhea compounds the risk of developing chronic diseases such as, depression, anxiety, hyperandrogenism, polycystic ovary syndrome, endometrial hyperplasia and uterine cancer, the consequence of obesity-related amenorrhea should be viewed as broad-spectrum issue impacting Women's Health.

Our laboratory investigates the link between nutrition, metabolism and fertility in women. Specific interests include deciphering the endocrine, cellular and molecular mechanisms that lead to amenorrhea in overweight and obese women as well as improving the diagnosis of polycystic ovary syndrome - a condition of impaired fertility that is tightly linked to obesity, insulin resistance and excess male hormone production. We use high-resolution serial ovarian ultrasonography in women to track changes in follicle development and to identify key periods during the menstrual cycle in which follicle development and ovulation are most sensitive to metabolic cues (e.g., energy balance, body composition, fat-derived hormones, glucose, insulin, androgens). By understanding the physiological mechanisms governing obesity-related amenorrhea, the long-term goal of our laboratory is to develop nutritional, lifestyle and pharmaceutical regimens that promote and preserve reproductive health and wellness in women.

*Selected Bibliography:*

Lujan ME, Chizen DR, Pierson RA. Diagnostic criteria for polycystic ovary syndrome: pitfalls and controversies. *Journal of Obstetrics & Gynaecology Canada* 2008; 30(8):671-9.

Lujan ME, Chizen DR, Peppin AK, Leswick D, Kriegler S, Bloski TG, Pierson RA. Improving inter-observer variability in the evaluation of ultrasonographic features of polycystic ovaries. *Reproductive Biology and Endocrinology* 2008; 6(1):30.

Mircea CN, Lujan ME, Pierson RA. Metabolic Fuel and Clinical Implications for Female Reproduction. *Journal of Obstetrics and Gynaecology Canada* 2007; 29(11):887-902.

Van Vugt DA, Lujan ME, Froats M, Krzemien AA, Couceyro PR, Reid RL. Effect of fasting on cocaine-amphetamine-regulated transcript, neuropeptide Y, and leptin receptor expression in the non-human primate hypothalamus. *Neuroendocrinology* 2006; 84(2):83-93.

Lujan ME, Krzemien AA, Reid RL, Van Vugt DA. Effect of leptin administration on ovulation in food-restricted rhesus monkeys. *Neuroendocrinology* 2006; 84(2):103-14.

Lujan ME, Krzemien AA, Reid RL, Van Vugt DA. Developing a model of nutritional amenorrhea in rhesus monkeys. *Endocrinology* 2006; 147(1):483-92.

Lujan ME, Krzemien AA, Reid RL, Van Vugt DA. Caloric restriction inhibits steroid-induced gonadotropin surges in ovariectomized rhesus monkeys. *Endocrine* 2005; 27(1):25-31.

Lujan ME, Krzemien AA, Van Vugt DA. Hypoglycemia does not affect gonadotrope responsiveness to gonadotropin-releasing hormone in rhesus monkeys. *Endocrine* 2003; 21(2):109-14.

Lujan ME, MacTavish PJ, Krzemien AA, Bradstock MW, Van Vugt DA. Estrogen-induced gonadotropin surge in rhesus monkeys is not inhibited by cortisol synthesis inhibition or hypoglycemia. *Endocrine* 2002; 19(2):169-76.

**Saroj Nimkarn**

*Title and Affiliation:* Pediatric Endocrinology, New York Presbyterian Hospital, Weill Cornell Medical Center

*Mailing Address:* 525 E 68th Street, Box 103, New York, NY 10065

*Email Address and Telephone:* san2002@med.cornell.edu

*Discipline:* Pediatric endocrinology

*Obesity Focus:* Mechanism

**Michael Rosenbaum**

*Title and Affiliation:* Associate Professor, Clinical Pediatrics and Medicine, and Associate Program Director, General Clinical Research Center, Columbia University College of Physicians & Surgeons

*Mailing Address:* 450 West End Ave., New York, NY 10024 or Naomi Berrie Diabetes Research Pavilion, 1150 St. Nicholas Avenue, New York, NY 10032

*Email Address and Telephone:* [mr475@columbia.edu](mailto:mr475@columbia.edu), 212-305-9949

*Webpage Address:* <http://nyp.org/FPHTML/1168360120749.html>

*Discipline:* Pediatrics

*Research interests:* Body weight regulation and prevention of type 2 diabetes and obesity in adults and children

*Obesity Focus:* Mechanisms, causes, treatment

*Brief Biography:* Dr. Rosenbaum received his M.D. degree from Cornell in 1982. He completed a residency in pediatrics at Columbia Presbyterian Medical Center in 1985 and a fellowship in Pediatric Endocrinology at The New York Hospital in 1988. From 1988-97 he was a research associate and then an assistant professor at Rockefeller University. In 1997 he moved to Columbia University Medical Center where he is currently an Associate Professor of Clinical Pediatrics and Medicine and an Associate Director of the Clinical Research Center.

*Research Summary:*

We wish to understand the physiological mechanisms by which human body weight is regulated and, in specific, to define the physiological predicates for the over 75-95% recidivism to obesity following otherwise successful therapeutic weight loss. Our central hypothesis is that the molecular physiology of the regulation of somatic energy (fat) stores is designed to alter energy intake and expenditure so as to maintain body fat above a minimal level that is determined by genetic and developmental factors. These studies focus on the regulation of body energy stores by the adipocyte-derived hormone leptin acting via effects on central nervous system (CNS) tracts regulating energy intake, energy output, autonomic nervous system (ANS) function, and neuroendocrine function. We have shown that all of these systems are altered following weight loss in a manner that favors weight gain. Maintenance of a weight-reduced state in lean or obese individuals is characterized by decreases in energy expenditure, sympathetic nervous system (SNS) tone, circulating concentrations of bioactive thyroid hormones and, of course, leptin; accompanying these changes are increases in skeletal muscle work efficiency and parasympathetic nervous system (PNS) tone. These metabolic and behavioral adjustments act coordinately to favor regain of lost weight. Most of these changes are reversed by doses of exogenous leptin sufficient to restore circulating leptin concentrations to those present prior to weight (fat) loss. Therefore, the changes in weight stable weight-reduced subjects in energy intake, energy expenditure, skeletal muscle work efficiency and fuel utilization, regional neuronal activity, autonomic nervous system function, and neuroendocrine function are substantially mediated by weight-loss associated declines in hypothalamic signaling by the adipocyte-derived hormone, leptin. The critical role of CNS leptin signaling in this regard is supported by the similarity of metabolic/behavioral phenotypes of animals with systemic disruptions of leptin signaling and disruptions limited to the CNS as in isolated CNS/hypothalamic neuronal leptin receptor deficiency or hypomorphic alleles of POMC,  $\alpha$ -MSH, and MC4R.

The consequences of this mechanistic dissection of systems regulating body weight are relevant to social, biological, and epidemiological scientists. The potent sustained metabolic opposition to prolonged weight loss implies that the tendency to gain weight and to regain it after weight loss are the biological products of gene x environment interactions over many millennia and are equally operant in lean and obese individuals only at different “thresholds” of energy stores. The overwhelming body of evidence is that these thresholds can be manipulated upwards but not downwards. Obesity prevention and treatment strategies need to be designed within the context of a biological system that has been honed over millennia to favor weight gain and resists attempts at both weight loss and sustained weight reduction in the service of reproductive integrity. Societal interventions designed to alter behavior in a manner that decreases the likelihood that an individual will become obese are more likely to be successful than interventions designed to help sustain weight loss. Pharmacological interventions designed to assist in maintaining a reduced weight are more likely to be successful than those designed to prevent weight gain. In all instances, the difficulties in preventing weight gain or sustaining weight loss must be acknowledged as physiological and not as the product of sloth and gluttony. The goal of weight loss is good health and not an arbitrary cosmetic standard. There are substantial health benefits to even a small degree of sustained weight loss and many of the methods utilized to lose weight, including exercise and a more healthful diet, have independent health benefits even if weight loss is neither achieved nor sustained.

*Selected Bibliography:*

Leibel, R.L., M. Rosenbaum, and J. Hirsch. Changes in energy expenditure resulting from altered body weight. *N. Eng. J. Med.*, 332:621-28, 1995.

Aronne, L.J., et al. Autonomic nervous system activity and energy expenditure during weight gain and weight loss. *Am. J. Physiol.*, 38:R222-25, 1995.

- Rosenbaum, M., et al. A comparative study of different means of assessing long-term energy expenditure in humans. *Am. J. Physiol.*, 270:R496-504, 1996.
- Rosenbaum, M., et al. Effects of gender, body composition, and menopause on plasma concentrations of leptin. *J. Clin. Endocrinol. Metab.*, 81:3424-27, 1996.
- Campfield, L.A. et al. Human eating: Evidence for a physiological basis using a modified paradigm. *Neurosci. Biobehav. Rev.*, 20:133-37, 1996.
- Rosenbaum, M., et al. Effects of weight change on plasma leptin concentrations and energy expenditure. *J. Clin. Endocrinol. Metab.*, 82:3647-54, 1997.
- Aronne, L.J., et al. Cardiac autonomic nervous system activity in obese and never-obese young men. *Obes. Res.*, 5:354-59, 1997.
- Wu-Peng, S., et al. Effects of exogenous gonadal steroids on leptin homeostasis in rats. *Obes. Res.*, 84:1784-89, 1999.
- Rosenbaum, M., R.L. Leibel. Role of gonadal steroids in sexual dimorphisms in body composition and circulating concentrations of leptin. *J. Clin. Endocrinol. Metab.*, 84:1784-89, 1999.
- Boschmann M, et al. Physical activity exhibits differences in the action of fat metabolism in men and women- a microdialysis study. *Forsch Komplementarmed*; 6:52-3, 1999.
- Chung, W.K., et al. Genetic and physiologic analysis of the role of uncoupling protein 3 in human energy homeostasis. *Diabetes*, 48:1890-95, 1999.
- Vidal-Puig, A., et al. Effects of obesity and stable weight reduction on UCP2 and UCP3 gene expression in humans. *Obes. Res.*, 7:133-40, 1999.
- Rosenbaum, M., et al. The effects of changes in body weight on carbohydrate metabolism, catecholamine excretion, and thyroid function. *Am. J. Clin. Nutr.*, 71:1421-32, 2000.
- Boschmann M. et al. Metabolic and hemodynamic responses to exercise in subcutaneous adipose tissue and skeletal muscle. *Int. J. Sports Med.* 23:537-43.
- Rosenbaum, M., et al. Effects of weight perturbation on skeletal muscle work efficiency in human subjects. *Am. J. Physiol.*, 285:5183-92, 2003.
- Weisberg, S., et al. Obesity is associated with Increased macrophage accumulation in adipose tissue. *J. Clin. Invest.* 112:1796-808, 2003.
- Rosenbaum, M., et al, Effects of exogenous leptin on skeletal muscle, autonomic, metabolic, and neuroendocrine changes associated with the maintenance of a reduced body weight. *J. Clin. Invest.*, 115: 3579-3586, 2005.
- Rosenbaum, M., The epidemiology of obesity in children. *Pediatric Ann.*, 36:89-95, 2007
- Rosenbaum, M., et al. Effects of weight loss and leptin on *in vivo* regional neuron activity in response to visual food stimuli. *J Clin Invest.*, 118:2583-91, 2008.
- Rosenbaum, M. et al. Long-term persistence of adaptive thermogenesis in subjects who have successfully maintained a reduced body weight. *Am. J. Clin. Nutr.* 88:906-12, 2008.
- Swinburn, B.A., et al Estimating the changes in “energy flux” which characterize the rise in obesity prevalence. *Am. J. Clin. Nutr.* In Press, 2009
- Goldsmith R. et al. Effects of experimental weight perturbation on skeletal muscle fuel utilization and biochemistry in human subjects (Submitted 2009).
- Kissileff, H.K., et al. Maintenance of a reduced body weight in humans is associated with a leptin-reversible decline in satiety. (Submitted 2009).

**Mary J. Ward**

*Title and Affiliation:* Associate research professor of psychology in pediatrics and psychiatry, Weill Cornell Medical Center

*Mailing Address:* 525 East 68th Street, New York, NY 10065

*Email Address and Telephone:* [mjward@med.cornell.edu](mailto:mjward@med.cornell.edu), 212-746-3582

*Discipline:* Psychology

*Research Interests:* Child-parent attachment, feeding behavior in young children, and research ethics

*Obesity Focus:* Mechanisms

*Biography:*

Dr. Ward earned a Ph.D. in developmental psychology from the Institute of Child Development, University of Minnesota. She came to Cornell University Medical College (now Weill Cornell Medical College) in 1983, where she is now associate research professor of psychology in pediatrics and psychiatry. In the past 25 years, she has conducted studies of children with malnutrition, adolescent mothers and their children, children adopted from overseas, and the grandchildren of adults with HIV. She has remained at the forefront of research on attachment, including assessment of attachment in infants, preschool children, adolescents, and adults. Her work has been supported by grants from the National Institutes of Health and private foundations. In addition to her research activities, Dr. Ward has maintained a commitment to education at Weill Cornell, providing didactic instruction to medical students and residents and mentoring pediatric residents and fellows, as well as undergraduate and graduate students in psychology. She serves on the Weill Cornell Institutional Review Board, the Pediatrics Resident Research Oversight Committee, and the Pediatrics Scholarship Oversight Committee. She is co-chair of the Pediatric Obesity Research Working Group. From 2002 to 2008, she served on the Pediatric Scientific Advisory Committee of the Clinical and Translational Research Center (CTSC); from 2008 to the present, she serves as a Research Subject Advocate for the CTSC, representing the Department of Pediatrics. Her greatest pride derives from her work on a community service project: the Heads Up! literacy program, which serves over 9,000 children in New York City each year, providing over 30,000 free books and parent guidance about the importance of reading aloud.

*Research Summary:*

I am a developmental psychologist with expertise in child-parent attachment, feeding behavior in young children, research design and methodology, statistics, and research ethics. A focus on development in overweight children represents a change in my line of research. I chose to shift the emphasis of my research program from underweight (or failure-to-thrive) to overweight in young children, given major shifts in prevalence of the two disorders. Until about 10 years ago, those of us who study the development of children in poverty were concerned primarily about children who took in too few calories and suffered from malnutrition. Today, our concern is for children who take in excessive calories and suffer from overweight.

Over two years ago, a group of colleagues and I began monthly meetings with the goal of creating a program of multi-disciplinary research focused on overweight children. Data from the proposed pilot study will allow conclusions about the risks associated with overweight status and the family correlates of children's overweight. The goal of this study is to gather pilot data to validate and refine a clinical pathway for the evaluation and treatment of overweight in children. We plan to enroll 200 children aged 5 to 16 years who have BMI above the 85<sup>th</sup> percentile for age and gender. Each child will be entered into the study for what we have termed Level 1 evaluations (history and physical plus laboratory studies). We postulate that there are four phenotypes that can be distinguished with the proposed pathway. Individual children may present with or a combination of these phenotypes: (1) atypical sugar/insulin metabolism, (2) atypical lipid metabolism, (3) atypical liver function and structure, (4) Vitamin D deficiency or insufficiency. Data from this study will clarify the prevalence of these four phenotypes and their overlap in this group of children.

*Selected Bibliography:*

Ward, M.J., Kessler, D.B., & Altman, S.C. (1993). *Patterns of infant-mother attachment in children with failure-to-thrive. Infant Mental Health Journal, 14*, 208-220.

Polan, H. J., & Ward, M.J. (1994). The role of maternal touch in failure-to-thrive. *Journal of the American Academy of Child and Adolescent Psychiatry, 33*, 1098-1105.

Ward, M.J., Lipper, E.G., Lee, S.L. (2000). Failure-to-thrive is associated with disorganized infant attachment and unresolved maternal attachment. *Infant Mental Health Journal, 21*, 428-442.

Ward, M.J., Fink, C.A., Master, M.G., Perez, E.A., & Greenfield, J.F. (2008). *Oral-motor dysfunction in children with failure-to-thrive*. Manuscript submitted for publication, *Pediatric Psychology*.

Ward, M.J., Lipper, E.G., Brathwaite, J., Lee, S.L., & Wong, M.Y. (2008). Malnutrition in young children is associated with dysregulation in adrenal cortical function. Manuscript in preparation.

**Matthew E. Brashears**

*Title and Affiliation:* Assistant Professor of Sociology, Cornell University

*Mailing Address:* Uris Hall Rm. 323, Department of Sociology, Cornell University, Ithaca, NY 14853

*Email Address and Telephone:* [meb299@cornell.edu](mailto:meb299@cornell.edu), 607-255-4925

*Webpage Address:* <http://www.soc.cornell.edu/faculty/brashears.html>

*Discipline:* Sociology; social network analysis

*Research Interests:* Obesity, social network analysis, diffusion and innovation, dynamic networks, gender

*Obesity Focus:* Social causes

*Biography:*

Matt Brashears is an Assistant Professor of Sociology at Cornell University. He has published papers in the *American Sociological Review* (with Miller McPherson and Lynn Smith-Lovin) as well as in *Social Psychology Quarterly* and *Social Science Research*. He is primarily interested in network evolution and the co-determination of network structure and content.

*Research Summary:*

My research on obesity employed social network analysis and the National Longitudinal Survey of Adolescent Health or Add Health. The Add Health is the largest survey of adolescents ever undertaken in the United States and includes information on community, school, family, and individual factors. Data were gathered on respondent nutrition habits, hobbies, sexual activity, and so forth. Particularly, respondent BMI was obtained as well as measures of respondent body image. A/CASI technology was used to allow respondents to answer socially sensitive questions and bioassay data were gathered to provide indicators of actual levels of drug use.

Besides typical survey items, the Add Health collected data on the patterns of association among adolescents in the sampled high schools. In the case of approximately a dozen schools, however, the effort was made to sample the entire student population. This yielded nearly complete network data for an entire school and, moreover, these schools were resampled approximately a year later, providing longitudinal network data that can be matched with respondent level characteristics.

My research focused on selection, the tendency to associate with those like oneself, and harmonization, the tendency to become like those with whom we associate. I examined the factors predicting actual respondent BMI, respondent weight self-perceptions and respondent intentions to lose weight. Analysis proceeded using the Siena longitudinal analysis software developed by Tom Snijders, which employs a simulation-based approach to estimate the parameters determining network structure and respondent covariates. The results indicate that respondent BMI and weight self-perceptions are partly determined by our associates (i.e. social influence) and partly reciprocally determine each other. Additionally, it appears that while weight self-perceptions influence intentions to lose weight, those intentions are NOT influenced by actual BMI. Thus, level of obesity does not trigger a weight loss intention unless the respondent perceives themselves to be overweight. The results do not differ between males and females.

This research is ongoing as I am hoping to confirm the finding with additional schools as the Siena approach can only accommodate one school at a time.

*Selected Bibliography:*

Brashears, Matthew E. 2008. "Picking and Choosing, Accepting and Changing: The Effects of Selection and Harmonization on Network Structure and Content." Ph.D. Dissertation, University of Arizona.

**John Cawley**

*Title and Affiliation:* Associate Professor, Policy Analysis and Management, Cornell University

*Mailing Address:* 124 Martha Van Rensselaer Hall, Cornell University, Ithaca, NY 14853

*Email Address and Telephone:* [jhc38@cornell.edu](mailto:jhc38@cornell.edu), 607-255-0952

*Webpage Address:* <http://www.human.cornell.edu/bio.cfm?netid=jhc38>

*Discipline:* Health economics

*Research Interests:* The economics of obesity

*Obesity Focus:* Causes, consequences, treatment/prevention

*Biography:*

John Cawley is an associate professor in the Department of Policy Analysis and Management at Cornell University. John is also a Research Associate of the National Bureau of Economic Research and serves on the board of directors of Shaping America's Health. His primary field of research is health economics, with a focus on the economics of obesity. John received his Ph.D. in economics from the Univ. of Chicago in 1999 and graduated magna cum laude from Harvard in 1993.

*Research Summary* (Note: The abbreviations and dates below refer to journal articles listed on the following bibliography.)

*Causes of Obesity:* I have outlined the economic model of eating and physical activity (AJPM 2004) and provided an overview of the interaction between markets, childhood obesity, and obesity policy (FoC 2006). I have encouraged social scientists to use more accurate measures of fatness (such as percent body fat and waist circumference) given the limitations of body mass index (JHE 2008). Ongoing research concerns the impact of food advertising on the consumption of specific branded food items by children and youth.

*Consequences of Obesity:* I have extensively studied the labor market consequences of obesity. For example, I have found that weight lowers wages for white females but not for other groups (JHR 2004). Obesity also hinders the transition from welfare to work for white (but not African-American) former welfare mothers (JPAM 2005). I have also studied the impact of obesity on employment disability (HSR 2000) and job absenteeism (JOEM 2007, JOEM 2008). Ongoing research concerns how robust these findings are to the use of more accurate measures of fatness than BMI.

Among adolescent girls, higher body weight increases the probability of smoking initiation; there is no such effect for boys (JHE 2004). I have also studied the impact of obesity on adolescent dating and sexual activity (book chapter 2001; R&S 2006) and on relationship matching among young adults (JMF 2008). Recent work documents that overweight children as young as 2-3 years already exhibit lower skill attainment (E&HB 2008) than their healthy-weight peers.

*Treatment/Prevention of Obesity:* I have documented the reduction in obesity-related comorbidities six months after bariatric surgery (OS 2006), and used obesity-related comorbidities to predict complications after bariatric surgery (OS 2007). I've also studied the demand for anti-obesity drugs (AHEHSR 2007), and am currently studying the effect of magazine and television advertisements on the demand for over-the-counter weight loss products. A 2007 article in APAM provides an overview of what is known about the cost-effectiveness of programs to prevent or reduce obesity. Other work assesses the cost effectiveness of a variety of obesity prevention interventions (AJPM 2008). I have found no detectable impact of high school physical education classes on BMI or the probability of overweight, but do find that PE classes increase self-reported physical activity (HE 2007). A 2007 article in Obesity documents the correlates of state legislative action to prevent childhood obesity. I have also studied the willingness of voters to pay higher taxes to reduce childhood obesity (E&HB 2008). I am currently evaluating the effectiveness of a school-based anti-obesity program in New York City, and a workplace intervention that offers financial incentives for weight loss.

*Selected Bibliography:*

Cawley, John. "An Instrumental Variables Approach to Measuring the Effect of Body Weight on Employment Disability." *Health Services Research*, December 2000, 35(5, Part II): 1159-1179.

Cawley, John. "Body Weight and the Dating and Sexual Behaviors of Young Adolescents." In *Social Awakening: Adolescent Behavior as Adulthood Approaches*, edited by Robert T. Michael. (Russell Sage: New York), 2001.

Cawley, John, Sara Markowitz, and John Tauras. "Lighting Up and Slimming Down: The Effects of Body Weight and Cigarette Prices on Adolescent Smoking Initiation." *Journal of Health Economics*, March 2004, 23(2): 293-311.

Cawley, John. "The Impact of Obesity on Wages." *Journal of Human Resources*, Spring 2004, 39(2): 451-474.

Cawley, John. "An Economic Framework for Understanding Physical Activity and Eating Behaviors." *American Journal of Preventive Medicine*, October 2004, 27(3): 1-9.

## *Causes of Obesity*

- Cawley, John, Markus Grabka, and Dean R. Lillard. "A Comparison of the Relationship Between Obesity and Earnings in the U.S. and Germany." *Journal of Applied Social Science Studies (Schmollers Jahrbuch)*, 2005, 125(1): 119-129.
- Cawley, John, and Sheldon Danziger. "Morbid Obesity and the Transition From Welfare to Work." *Journal of Policy Analysis and Management*, Fall 2005, 24(4): 727-743.
- Cawley, John, Kara Joyner, and Jeff Sobal. "Size Matters: The Influence of Adolescents' Weight and Height On Dating and Sex." *Rationality and Society*, February 2006, 18(1): 67-94.
- Cawley, John. "Markets and Childhood Obesity Policy." *The Future of Children*, Spring 2006, 16(1): 69-88.
- Cawley, John, Timothy Prinz, Susan Beane, and the New York State Bariatric Surgery Workgroup. "Health Insurance Claims Data as a Means of Assessing Reduction in Comorbidities Six Months After Bariatric Surgery." *Obesity Surgery*, July 2006, 16(7): 852-858.
- Cawley, John, and John A. Rizzo. "One Pill Makes You Smaller: The Demand for Anti-Obesity Drugs." *Advances in Health Economics and Health Services Research*, 2007, 17: 149-183.
- Cawley, John. "The Cost Effectiveness of Programs to Prevent or Reduce Obesity: The State of the Literature and a Future Research Agenda." *Archives of Pediatrics & Adolescent Medicine*, June 2007, 161(6): 611-614.
- Cawley, John, Matthew J. Sweeney, Marina Kurian, Susan Beane, and the New York State Bariatric Surgery Workgroup. "Predicting Complications after Bariatric Surgery Using Obesity-Related Comorbidities." *Obesity Surgery*, November 2007, 17(11): 1451-1456.
- Cawley, John, Chad Meyerhoefer, and David Newhouse. "The Impact of State Physical Education Requirements on Youth Physical Activity and Overweight." *Health Economics*, December 2007, 16(12): 1287-1301.
- Cawley, John, John A. Rizzo, and Kara Haas. "Occupation-Specific Absenteeism Costs Associated with Obesity and Morbid Obesity." *Journal of Occupational and Environmental Medicine*, December 2007, 49(12): 1317-1324.
- Cawley, John, and Feng Liu. "Correlates of State Legislative Action to Prevent Childhood Obesity." *Obesity*, January 2008, 16(1): 162-167.
- Burkhauser, Richard V., and John Cawley. "Beyond BMI: The Value of More Accurate Measures of Fatness and Obesity in Social Science Research." *Journal of Health Economics*, March 2008, 27(2): 519-529.
- Cawley, John, John A. Rizzo, and Kara Haas. "The Association of Diabetes with Job Absenteeism Costs Among Obese and Morbidly Obese Workers." *Journal of Occupational and Environmental Medicine*, May 2008, 50(5): 527-534.
- Cawley, John. "Contingent Valuation Analysis of Willingness to Pay to Reduce Childhood Obesity." *Economics and Human Biology*, July 2008, 6(2): 281-292.
- Cawley, John and C. Katharina Spiess. "Obesity and Skill Attainment in Early Childhood." *Economics and Human Biology*, December 2008, 6(3): 388-397.
- Roux, Larissa, Tammy O. Tengs, Michelle M. Yore, Teri L. Yanagawa, Jill Van den Bos, Candace Rutt, Ross C. Brownson, Kenneth E. Powell, Gregory Heath, Harold W. Kohl III, Steven Teutsch, John Cawley, I-Min Lee, Linda West, and Michael Pratt. "Are public health efforts to promote physical activity cost-effective? A cost-effectiveness analysis of the Guide to Community Preventive Services recommendations for increasing physical activity." *American Journal of Preventive Medicine*, December 2008, 35(6): 578-588.
- Carmalt, Julie H., John Cawley, Kara Joyner, and Jeffery Sobal. "Body Weight and Matching with a Physically Attractive Partner." *Journal of Marriage and the Family*, December 2008, 70(5): 1287-1296.

**Carol M. Devine**

*Title and Affiliation:* Professor, Division of Nutritional Sciences, Cornell University

*Mailing Address:* 377 MVR Hall, Cornell University, Ithaca, NY 14853

*Email Address and Telephone:* [cmd10@cornell.edu](mailto:cmd10@cornell.edu), 607-255-2633

*Webpage Address:* <http://www.human.cornell.edu/che/bio.cfm?netid=cmd10>

*Discipline:* Nutrition and community nutrition

*Research Interests:* Work-family integration and food choices, worksite weight gain prevention interventions, work to family transmission of weight gain prevention strategies

*Obesity Foci:* Social causes, prevention

*Biography:*

Dr. Carol Devine is Professor in the Division of Nutritional Sciences at Cornell University. She studies how low income working parents integrate work, family, and food choices. Her outreach focuses on creating food and physical activity environments in large and small workplaces and community organizations that prevent weight gain. She is co-author of a Cornell NutritionWorks course to promote the use of an ecological approach in obesity prevention by health professionals.

*Research Summary:*

*Work-family spillover and time scarcity: contributors to the relationship between the low wage work, poor dietary quality, and obesity.* Our group has conducted basic investigations of relationships between work-family spillover and time scarcity (Jabs, 2006), and dietary quality among low/moderate income working parents. Most U.S. parents are employed, and work-family conflict makes competing demands on parents' time and energy. Obesity and weight gain have been associated with work conditions such as long hours and high job strain. We have reported how employed parents use food choice coping strategies in response to work and family demands to: manage stress and fatigue, reduce meal time and effort, reduce food and eating expectations, and trade off food and eating against other family needs (Devine, 2003, 2006). Food choice coping strategies include: food prepared at/away from home, missing meals, individualizing meals, speeding up, and planning. Food choice strategies are associated with working conditions (e.g. long hours, non-standard schedules) and with dietary quality (Devine, in review). Gender differences in parents' evaluations of work-family integration and in their food choice coping strategies, support intersecting economic and gender explanations for differences in food choice strategies (Blake, in review). Analysis of timestyles by working mothers describe how the meaning, constructions, and allocation of time by study participants were linked to their food choice strategies (Jabs, 2007).

*Images of a Healthy Worksite: trial of an environmental intervention for weight gain prevention at a large urban worksite.* In collaboration with researchers at the University of Rochester, I am Co-PI of a NHLBI-funded randomized controlled trial of an environmental intervention for weight gain prevention in a large industrial worksite in Rochester, NY. The intervention aims to provide easy worksite access to healthy foods and to reduce weight gain. Formative research provided a broad understanding of the social/cultural role of food and eating among workers, and elicited worker perspectives on socially feasible and culturally acceptable strategies for weight gain prevention (Devine, 2007). The intervention is underway in six worksites with interventions in cafeterias, vending, and the overall worksite environment.

*Small Steps are Easier Together: an environmental intervention for weight gain prevention in rural worksites.*

We have worked with CCE partners to test a worksite environmental intervention to prevent weight gain in rural worksites, funded by USDA CSREES. *Small Steps are Easier Together* features close collaboration between community health and nutrition professionals, worksite leaders, and researchers. Each site carries out: environmental needs assessment, identification and ranking of intervention options, and site-specific environmental intervention strategies to increase physical activity and healthful food choices (Maley 2007, in review). In 2007-2008, 221 (43%) study participants in 10 worksites (mean BMI =28.2) increased walking steps 2000 or more a day for 3 or more days a week. The proportion meeting walking goals increased from 38% to 65% over the intervention (Warren, in review).

*Preventing Childhood Obesity: An Ecological Approach, an interactive on-line course via Cornell NutritionWorks (CNW)* CNW is Cornell's on-line professional development platform for health and nutrition professionals. The course, developed by DNS faculty, helps participants assess and prioritize local factors related to childhood obesity, build and facilitate collaborations, and develop an action plan for community intervention. This course is offered three times annually through CNW, at [www.nutritionworks.cornell.edu](http://www.nutritionworks.cornell.edu).

*RHEALTH: A Nutrition Program for Men in Residential Treatment Facilities for Drug and Alcohol Addictions.*

Doctoral candidate Jennifer Cowan is testing the impact of an environmental and educational intervention on the diets and weight of men in recovery from drug and alcohol addiction at 6 sites in Rochester, NY (Cowan, 2008).

*Selected Bibliography:*

Cowan J, Devine C. Food, eating and weight concerns of men in recovery from substance addiction. *Appetite*. 2008; 50:33-42.

## *Causes of Obesity*

Blake C, Devine C, Wethington E, Jastran M, Farrell T., Bisogni, C. Employed parents' satisfaction with food choice coping strategies: influence of gender and household structure. In review *Appetite*.

Devine C, Connors M, Sobal J, Bisogni C. Sandwiching it in: Managing food and work in low and moderate income urban households *Social Science & Medicine* 2003; 56: 617-630.

Devine CM, Jastran M, Jabs J, Wethington E, Farrell T, Bisogni C. "A lot of sacrifices:" Work-family spillover and the food choice coping strategies of low wage employed parents. *Social Science & Medicine*.2006;63(10):2591-2603.

Devine CM, Nelson J, Chin N, Dozier A, Fernandez ID. "Pizza is cheaper than salad:" assessing workers' views for an environmental food intervention. *Obesity*. 2007;15S:57S-68S.

Devine C, Farrell T, Blake C, Jastran M, Bisogni C, Wethington E. Work conditions and the food choice coping strategies of employed parents. In review *Journal of Nutrition Education and Behavior*.

Jabs J, Devine CM. Time Scarcity and Food Choices: An Overview. *Appetite*. 2006 47: 196-204.

Jabs J, Devine C, Jastran M, Bisogni C, Farrell T, Jastran M, Wethington E. Trying to find the quickest way: Employed mothers' constructions of time for food. *Journal of Nutrition Education and Behavior*. 2007;39:18-25.

Maley M. "Learning the lay of the land: needs assessment for a community environmental approach to obesity prevention" 2007. MS thesis Cornell University.

Maley M, Devine C, Warren B. Perceptions of the environment for eating and exercise in a rural community. In review. *Journal of Nutrition Education and Behavior*.

Sobal J, Devine CM, Social Aspects of Obesity: Influences, Assessments, and Interventions Chapter 15 in Sharron Dalton (ed) *Overweight and Weight Management* 2nd Edition. Gaithersburg, MD: ASPEN Publishers, 1997.

Warren B, Devine C, Maley M. Increasing walking steps at small rural worksites using locally determined strategies and web-based reporting (In preparation).

**Jane Fajans**

*Title and Affiliation:* Associate Professor, Anthropology, Cornell

*Mailing Address:* 202 McGraw Hall, Cornell University, Ithaca, NY 14853

*Email Address and Telephone:* [jf20@cornell.edu](mailto:jf20@cornell.edu), 607-255-8662

*Webpage Address:* [http://falcon.arts.cornell.edu/anthro/faculty/faculty\\_JFajans.php](http://falcon.arts.cornell.edu/anthro/faculty/faculty_JFajans.php)

*Discipline:* Anthropology

*Research Interests:* Anthropology of food, family, child socialization, identity

*Obesity Focus:* Causes, treatment/prevention

*Biography:*

Jane Fajans is a sociocultural anthropologist who has researched food and identity issues in Papua New Guinea, France and Brazil. As a sociocultural anthropologist she is interested in the complex interface between food patterns, concepts of bodiliness, and the context of eating behavior. She is particularly interested in the way social factors such as race, class, ethnicity, and lifestyle affect attitudes about bodies, health, exercise, and family relations. She brings a perspective on how factors often considered unrelated to food choices may have significant impacts on how and why people eat what they eat. Research on regional foods and regional identities in Brazil (including factors of race, class, ethnicity, and regional cultures) will form a good comparative background to research in the U.S. and elsewhere.

*Research Summary:*

Jane Fajans is particularly interested in continuing her research on food and identity. She studies how people use certain foods and combinations of food to provide or project aspects of identity to themselves and others. Many foods embody symbolic properties pertaining to ethnicity, cosmopolitanism, gender, wealth, and other aspects of identity. When consumed, shared, or given to others they create both bodily essence and social ties. In order to understand why people choose certain foods we need to examine the range of meanings that food conveys. My research examines these non-nutritive components of food and eating. I want to focus on different food values across a range of ethnic, regional, class, and age groups to examine how what we eat symbolizes who we are even if the product appears flawed from a bio-medical perspective.

*Selected Bibliography:*

In Process. *Regional Recipes and Alimentary Identities: Gender, Race and Place in Brazilian Cuisine*. Manuscript in process.

Forthcoming. *Seria A Moqueca Apenas Uma Peixada? Alimentação E Identidade Em Salvador, Bahia (Brasil)* in "Anthropology of Food", special number *Modelos alimenticios y recomposiciones sociales en América Latina/ Modelos alimentares e recomposições sociais na America Latina*", C.E. de Suremain & E. Katz (eds).

2008 "Can *moqueca* just be fish stew? Food and identity in Salvador, Bahia (Brazil)" reprinted simultaneously on the OCHA website Online at: <http://www.lemangeur-ocha.com>.

2008 "Can Moqueca Just Be Fish Stew? Bahian Food and Bahian Identity." In *Anthropology of Food*. EditionS 4 *Modèles alimentaires et recompositions sociales en Amérique Latine*, que editei com Charles-Edouard de Suremain. Online at: <http://aof.revues.org/>

1999 "Transforming Nature, Making Culture: Why the Baining are not Environmentalists" in *Identity, Nature and culture: Sociality and Environment in Melanesia*. Ed by. Sandra Bamford. In *Social Analysis* 42(3): 12-27.

1997 *They Make Themselves: Work and Play among the Baining of Papua New Guinea*. Chicago: University of Chicago Press.

1993 "Producing Exchange, Exchanging Products" in *Exchanging Products, Producing Exchange*. ed. by Jane Fajans. *Oceania Monographs No.43*.

1993 "The Alimentary Structures of Kinship" in *Exchanging Products, Producing Exchange*. ed. by Jane Fajans. *Oceania Monographs No. 43*.

1988 "The Transformative Value of Food: A Review Essay." in *Food and Foodways: Explorations in the History and Culture of Human Nourishment*. Vol.3 pp. 143-166.

**Ann Forsyth**

*Title and Affiliation:* Professor, City and Regional Planning, Cornell

*Mailing Address:* 106 West Sibley Hall, Cornell university, Ithaca, NY 14853

*Email Address and Telephone:* [forsyth@cornell.edu](mailto:forsyth@cornell.edu), 607-277-0506

*Webpage Address:* [http://www.aap.cornell.edu/aap/crp/people/faculty-profile.cfm?customel\\_datapageid\\_7102=49334](http://www.aap.cornell.edu/aap/crp/people/faculty-profile.cfm?customel_datapageid_7102=49334)

*Discipline:* Urban Planning

*Research Interests:* Health and the built environment, physical activity, food environments

*Obesity Focus:* Causes, measurement

*Biography/Research Summary:*

Trained in planning and architecture, Ann Forsyth works mainly on the social aspects of physical planning and urban development exploring how to make more sustainable and healthy cities. Professor Forsyth's contributions have been to analyze the success of planned alternatives to sprawl, particularly exploring the tensions between social and ecological values in urban design. Several issues prove to be the most difficult to deal with in planning better places and provide a focus for some of her more detailed investigations: suburban design, walkability, affordable housing, social diversity, and appropriate green space.

In doing this work she has created a number of new tools and methods in planning—an urban design inventory for measuring walkability; GIS protocols for measuring the connections between physical activity, food, and the built environment; health impact assessments; and participatory planning techniques. Her work on walkability was funded by the Robert Wood Johnson Foundation and on food, physical activity, and the built environment is funded by the National Institutes of Health.

*Bibliography:*

----- Forthcoming, Ann Forsyth, Kevin Krizek, Daniel Rodriguez. Non-motorized Travel Research and Contemporary Planning Initiatives. *Progress in Planning*.

----- Forthcoming, J. Michael Oakes, Ann Forsyth, Mary Hearst, and Kathryn H. Schmitz. Recruiting a Representative Sample for Neighborhood Effects Research: Strategies and Outcomes of the Twin Cities Walking Study. *Environment and Behavior*.

----- Forthcoming, Kevin Krizek, Susan Handy, and Ann Forsyth. Explaining Changes in Walking and Bicycling Behavior: Challenges for Transportation Research. *Environment and Planning B*.

----- Forthcoming, Ann Forsyth, Carissa Schively Slotterback, and Kevin Krizek. Health Impact Assessment for Planners: What Tools are Useful? *Journal of Planning Literature*.

2009 Forthcoming, Ross Brownson, Christy Hoehner, Kristin Day, Ann Forsyth, Jim Sallis, Measuring the Built Environment for Physical Activity: State of the Art. *American Journal of Preventive Medicine*.

2009 Keryn E. Pasch, Mary O. Hearst, Melissa C. Nelson, Ann Forsyth, Leslie A. Lytle. Alcohol Outlets and Youth Alcohol Use: Exposure in Suburban Areas. *Health and Place* 15: 642-646.

2009 Ann Forsyth, J. Michael Oakes, and Kathryn H. Schmitz, Test-Retest Reliability of the Twin Cities Walking Survey. *Journal of Physical Activity and Health* 6, 1: 119-131.

2009 Ann Forsyth, J. Michael Oakes, Brian Lee, and Kathryn H. Schmitz, The Built Environment, Walking, and Physical Activity: Is the Environment More Important to Some People than Others? *Transportation Research Part D* 14: 42-49.

2008 Daniel Rodriguez, Semra Aytur, Ann Forsyth, J. Michael Oakes, and Kelly Clifton. Relation of Modifiable Neighborhood Attributes to Walking. *Preventive Medicine* 47: 260-264.

2008 Ann Forsyth, Mary Hearst, J. Michael Oakes, M. Kathryn Schmitz, Design and Destinations: Factors Influencing Walking and Total Physical Activity. *Urban Studies* 45, 9: 1973-1996.

2007 J. Michael Oakes, Ann Forsyth, and Kathryn H. Schmitz, The Effect of Neighborhood Density and Street Connectivity on Walking Behavior: The Twin Cities Walking Study. *Epidemiologic Perspectives & Innovations* 4, 16: <http://www.epi-perspectives.com/content/4/1/16/>.

2007 Ann Forsyth, J. Michael Oakes, Kathryn H. Schmitz, and Mary Hearst, Does Residential Density Increase Walking and Other Physical Activity? *Urban Studies* 44, 4: 679-697.

- 2006 Ann Forsyth, Kathryn H. Schmitz, J. Michael Oakes, Jason Zimmerman, and Joel Koeppe, Standards for Environmental Measurement using GIS: Toward a Protocol for Protocols. *Journal of Physical Activity and Health* 3, S1: 241-257.
- 2006 Kristen Day, Marlon Boarnet, Mariela Alfonzo, Ann Forsyth, The Irvine Minnesota Inventory to Measure Built Environments: Development. *American Journal of Preventive Medicine* 30, 2: 144-152.
- 2006 Marlon Boarnet, Kristen Day, Mariela Alfonzo, Ann Forsyth, J. Michael Oakes, The Irvine Minnesota Inventory to Measure Built Environments: Reliability Tests. *American Journal of Preventive Medicine* 30, 2: 153-259.

**Diane Gibson**

*Title and Affiliation:* Associate Professor, School of Public Affairs, Baruch College - CUNY

*Mailing Address:* 17 Lexington Avenue, Box D-901, New York, New York, 10010

*Email Address and Telephone:* [Diane.Gibson@baruch.cuny.edu](mailto:Diane.Gibson@baruch.cuny.edu), 646-660-6845

*Webpage Address:* [http://www.baruch.cuny.edu/spa/facultystaff/facultydirectory/bio\\_diane\\_gibson.php](http://www.baruch.cuny.edu/spa/facultystaff/facultydirectory/bio_diane_gibson.php)

*Discipline:* Public policy

*Research Interests:* Social program participation and obesity; the neighborhood food and retail environment and obesity

*Obesity Focus:* Causes

*Biography:*

I am currently an Associate Professor at the School of Public Affairs at Baruch College – CUNY and the Executive Director of the New York Census Research Data Center. I received my Ph.D. in Public Policy from the University of Chicago. My research focuses on the relationship between means-tested social program participation and weight status, other factors that are expected to influence an individual's weight status such as the neighborhood food environment, and the relationship between a neighborhood's demographic characteristics and the availability of amenities and economic development incentives in the neighborhood.

*Research Summary:*

My research can be best categorized as attempting to understand the causes of obesity. My published research focuses on the relationship between Food Stamp Program (FSP) participation and weight status. My research underway currently examines the relationship between the neighborhood food environment and weight status.

My research on FSP participation and weight status has considered adults and children separately as well as mothers and daughters in the same family. This research uses data from the National Longitudinal Survey of Youth 1979 (NLSY79) or the NLSY79 Child Sample. These papers attempt to deal with concerns about omitted variable bias by including detailed individual, family and environment characteristics as well as individual fixed effects in the empirical models of weight status.

In my paper on low-income adults, current and long-term FSP participation were significantly related to the obesity of low-income women ( $p < 0.05$ ), but not of low-income men. For low-income women, current participation in the FSP was associated with a 9.1% increase in the predicted probability of current obesity. Participation in the FSP in each of the previous five years compared to no participation over that time period was associated with approximately a 20.5% increase in the predicted probability of current obesity.

In my paper on children, models were estimated separately for younger (aged 5-11 y) and older (aged 12-18 y) children. Long-term FSP participation was positively and significantly related to overweight in young girls ( $P = 0.048$ ), and negatively and significantly related to overweight in young boys ( $P = 0.100$ ). Compared to girls and boys whose families did not participate in the FSP during the previous five years, FSP participation during all of the previous five years was associated with a 42.8% increase for young girls and a 28.8% decrease for young boys in the predicted probability of overweight. Long-term FSP participation was not significantly related to overweight in older children.

Given that my previous research found a positive and significant relationship between FSP participation and overweight in young girls and obesity in low-income women, I was interested in whether these relationships occurred simultaneously for members of the same family. Using longitudinal data on mothers and daughters, long-term FSP participation was positively and significantly related to the likelihood that mothers were obese and young daughters were overweight at the same time.

I am currently working on a set of projects that consider the relationship between the availability of food retail and food service establishments in a person's neighborhood of residence (often referred to as the "neighborhood food environment") and weight status. Preliminary results suggest that the neighborhood food environment is not significantly related to adult weight status. Future work will consider this relationship for children, and will also test whether the relationships for adults and children are sensitive to the definition of a "neighborhood" or the "neighborhood food environment."

*Selected Bibliography:*

Diane Gibson. 2006. "Long-term Food Stamp Program Participation is Positively Related to Simultaneous Overweight in Young Daughters and Obesity in Mothers" *Journal of Nutrition*, 136, pp. 1081-1085.

Ted Joyce, Diane Gibson and Silvie Coleman. 2005. "The Changing Association between Prenatal Participation in WIC and Birth Outcomes in New York City." *Journal of Policy Analysis and Management*, 24(4), pp. 661-683.

Diane Gibson. 2004. "Long-Term Food Stamp Program Participation is Differentially Related to Overweight in Young Girls and Boys." *Journal of Nutrition*, 134, pp. 372-379.

Diane Gibson. 2003. "Food Stamp Program Participation is Positively Related to Obesity in Low Income Women." *Journal of Nutrition*, 133, pp. 2225-2231.

Diane Gibson. 2001. "Food Stamp Program Participation and Health: Estimates from the NLSY97" in *Social Awakening: Adolescent Behavior as Adulthood Approaches*, edited by Robert T. Michael. New York: Russell Sage Foundation, pp. 258-295.

**S. Nena Osorio**

*Title and Affiliation:* Assistant Professor of Pediatrics & Medical Director Inpatient Service, The New York Presbyterian-Weill Cornell Medical Center

*Mailing Address:* 525 East 68th St. NY, NY 10065

*Email Address and Telephone:* [snm2001@med.cornell.edu](mailto:snm2001@med.cornell.edu), 212-746-3457

*Webpage Address:* <http://www.med.cornell.edu/research/snm2001/>

*Discipline:* Pediatrics

*Research Interests:* Angiogenic and vasculogenic markers among overweight children

*Obesity Focus:* Causes

*Biography:*

Dr. Snezana Nena Osorio is an Assistant Professor of Pediatrics in the Division of General Pediatrics at The New York Presbyterian-Weill Cornell Medical Center. She works as a Pediatric Hospitalist. She is also a Medical Director for the Inpatient Unit. Her primary research interest is in obesity and genetic link to cancer. Dr. Osorio is enrolled in a Master's Program in Clinical and Translational Research.

*Research Summary:*

Title of the project: Angiogenic and Vasculogenic Markers among Overweight Children:

Profiles of Bone Marrow-Derived Hematopoietic Stem Progenitor Cells, Endothelial Progenitor Cells, and Chemokines

Obesity is an established epidemiological risk factor for cancers of the colon, breast, endometrium, kidney and esophagus . Low fat diets and/or increased physical activity decrease the risk for cancers of cervix, gall bladder, prostate and thyroid suggesting the link between obesity and these types of cancer as well. In particular, obesity is a risk factor for breast cancer in post-menopausal women. Obese women, regardless of their menopausal status, are likely to have metastatic breast cancers when they are first diagnosed and to have poor outcomes. In addition, high BMI in early adulthood may increase the risk of ovarian cancer among postmenopausal women. Specifically, among older women who never took hormone replacement therapy, obese women were 2.83 times more likely to have developed ovarian cancer than women of normal weight.

The mechanisms underlying the association between obesity and metastasis have not been fully elucidated. Substantial evidence shows that neoplastic and non-neoplastic tissue growth is dependent on angiogenesis. Neovascularization and adipogenesis are temporally and spatially coupled processes during prenatal life and they continue to reciprocally interact via paracrine signaling systems throughout adult life. Activated adipocytes produce multiple angiogenic factors including leptin, angiopoietins, HGF, GM-CSF, VEGF, FGF-2, and TGF- $\beta$ , which either alone or collectively stimulate neovascularization during fat mass expansion.

Studies in humans have demonstrated that angiogenic factors are elevated in overweight and obese adults . Similar to malignant tissue growth, expansion of fat mass would not be achieved without switching on an angiogenic phenotype. (Substantial evidence implicates VEGF as an angiogenic mediator in tumors. Recent data from Drs. Kaplan and Lyden demonstrate that adult patients with breast, lung, and colorectal carcinomas showed elevated levels of circulating HPCs by flow cytometry and hematopoietic colony-forming assays, as compared with normal controls (see Figure 1. The same results were obtained from pediatric patients with rhabdomyosarcomas A recent study suggests that adipocytes and their accompanying endothelial cells might share a common progenitor that could differentiate into adipocytes or endothelial lineages depending upon exposure to different environments.

**David Sahn**

*Title and Affiliation:* Professor of Economics in the Division of Nutritional Science and Dept. of Economics, Cornell University

*Mailing Address:* B44 Martha Van Rensselaer Hall, Cornell University, Ithaca, NY 14853

*Email Address and Telephone:* [david.sahn@cornell.edu](mailto:david.sahn@cornell.edu), 607-255-8931

*Webpage Address:* <http://www.people.cornell.edu/pages/des16/>

*Discipline:* Economics

*Research Interests:* The economics of nutrition; public policy

*Obesity Focus:* Measurement

*Biography:*

David E. Sahn is a professor of economics at Cornell University in the Division of Nutritional Sciences and Department of Economics. He received his PhD from the Massachusetts Institute of Technology and Masters of Public Health from the University of Michigan. Previously he was an economist at the World Bank and served as a visiting distinguished scholar the International Monetary Fund. Dr. Sahn has published widely on issues of poverty, inequality, and health and serves as an advisor to several international organizations and various governments in Africa.

*Research Summary:*

My research on obesity has been focused on first, examining and quantifying changes in the prevalence of overweight and obesity in developing countries. In that context, I have employed tests of stochastic dominance to compare distributions intertemporally. In addition I have developed cardinal measures of BMI inequality. I have also decomposed changes in levels of overweight and BMI inequality over time, and estimated "BMI growth curves" which indicate the percent increase in BMI at each point along the distribution. Examining whether the proportionate increase in weights is more concentrated in certain percentiles of the initial BMI distribution provides further insight into the nature of the emerging epidemic. Finally, I have applied the techniques for measuring BMI inequality to examine the existing of Kuznets relationships between level of well-being and inequality at both inter-country and intra-household levels. This is possible, and indeed, straightforward, because BMI is measured for individuals, not households.

*Selected Bibliography:*

Sahn, David E. and Stephe Younger, "Measuring Intra-Household Inequality: Explorations Using the Body Mass Index," *Health Economics* Forthcoming

Sahn, David E. "Weights on the Rise: Where and for Whom?" *Journal of Economic Inequality* Forthcoming

**Kosali Simon**

*Title and Affiliation:* Associate Professor, Policy Analysis and Management, Cornell University

*Mailing Address:* MVR Hall, Cornell University, Ithaca, NY 14853

*Email Address and Telephone:* [kis6@cornell.edu](mailto:kis6@cornell.edu), 607-255-7103

*Webpage Address:* <http://www.human.cornell.edu/che/bio.cfm?netid=kis6>

*Discipline:* Economics

*Research Interests:* Health economics

*Obesity Focus:* Causes

*Biography:*

Kosali Simon is an associate professor in the Department of Policy Analysis and Management at Cornell University. She is also a Faculty Research Fellow of the National Bureau of Economic Research and a Research Associate of the Census Bureau. She is the 2007 Recipient of the John D. Thompson Prize for Young Investigators (given by the Association of University Programs in Health Administration) and is on the Board of Directors of the American Society of Health Economists (ASHE). Kosali's primary field is health economics. Her research investigates the impact of state and federal regulations attempting to ease the availability of private and public health insurance for vulnerable populations (through state 'small-group' reforms, public health insurance expansions, Medigap rate regulations and adding prescription drug coverage to Medicare) on health insurance, health and labor market outcomes. As examples of other work on the economics of health insurance, she has investigated the effect of factors such as unemployment, involuntary job loss, and minimum wage laws on health insurance. A secondary research focus is the determinants of health and care use, e.g. she has studied the income elasticity of demand for prescription medications. Kosali received her PhD in Economics from the University of Maryland at College Park.

*Research Summary:*

John Cawley, John Moran and I have conducted research on the causal impact of income on body weight and clinical weight classification of elderly Americans using a natural experiment that led otherwise identical retirees to receive significantly different Social Security payments based on their year of birth. We estimate models of instrumental variables using data from the National Health Interview Surveys and find no significant effect of income on weight.

**Jeffrey Sobal**

*Title and Affiliation:* Professor, Division of Nutritional Science, Cornell University

*Mailing Address:* 303 MVR Hall, Cornell University, Ithaca, NY 14853

*Email Address and Telephone:* [js57@cornell.edu](mailto:js57@cornell.edu), 607-255-6015

*Webpage Address:* <http://www.human.cornell.edu/che/bio.cfm?netid=js57>

*Discipline:* Sociology

*Research Interests:* Social causes of overweight (marital status, socioeconomic status, rural/urban residence, religion, modernization, built environments) and social consequences of body weight (stigmatization, weight bias, obesity discrimination, and the treatment of obesity as a social problem)

*Obesity Foci:* Social causes, social consequences

*Biography:*

Jeffery Sobal is Professor of Nutritional Sciences at Cornell University. He previously taught at University of Maryland School of Medicine and Gettysburg College. He has a B.A. in Biology from Bucknell University, Ph.D in Sociology University of Pennsylvania, and M.P.H. from Johns Hopkins University. His research focuses on the sociology of food, eating, and nutrition; social aspects of obesity; food choice processes; and food systems. He has co-edited 3 books, authored over 15 book chapters, and published over 150 journal articles.

*Research Summary:*

I am a sociologist who applies a variety of social science concepts, theories, and methods to examine body weight. I primarily examine social causes of overweight, like marital status, socioeconomic status, rural/urban residence, religion, modernization, built environments, and others. I also examine social consequences of body weight, like stigmatization, weight bias, obesity discrimination, and the treatment of obesity as a social problem.

A major research program that I have pursued is the relationship between marriage and body weight. Marriage is one of the most important roles in society, and is involved with body weight in a number of ways. We have conducted several studies of marital selection that examine prejudice against obese girls (and to a lesser extent obese boys) in dating, showing that those who are obese begin dating later, date less often, and date less attractive partners than thinner individuals. Similarly, we have found that obese women (and less so men) marry later and marry less attractive partners than thinner people. However, once people are married, our research suggests that the quality of marriages of obese individuals is not substantially different than the reported marital happiness, problems, and satisfaction of thinner individuals. We also have examined marital causation of obesity, finding that married men (more so than women) are heavier and that married people are more likely to gain weight than those who remain unmarried. Finally, we find that exit from marriage tends to be associated with weight loss, particularly among men. Some of our research has examined how often married individuals eat together, finding that spouses are the primary eating partners, and how newly married couples negotiate their food choices to establish joint eating patterns.

Another research interest is the larger social patterns and dynamics of obesity in contemporary society. We have identified rural-urban weight differences in U.S. adults, with rural women (and less so men) more likely to be obese than suburban and urban residents. However, it is not clear how this is changing and what underlying social mechanisms are involved. Also, we have documented the relationship between acculturation into U.S. society and rising body weight, but the trends and underlying mechanisms for this relationship have not yet been clearly identified. Finally, there has been a worldwide increase in obesity, but the specific processes involved in globalization of obesity have not been clearly articulated, and we are working on that topic.

Finally, I have been working on how obesity is interpreted as a social issue in the U.S. by examining how it is constructed as a social problem by some groups but discounted as an issue by other groups. The social and cultural beliefs about the extent, form, and solutions to deal with body weight are being contested in many social arenas. Specific individuals and groups are involved in framing obesity as a medical problem, moral issue, political dilemma, cultural quandary, economic consequence, and environmental outcome. The social dynamics of struggles over the way obesity is interpreted are important to document and understand because they will play a significant role in the allocation of attention and resources to obesity and the willingness of citizens, corporations, governments, and other social entities to be involved in dealing with obesity.

*Selected Bibliography:*

*Books:*

Sobal, J. and Maurer, D. (eds). *Weighty Issues: Fatness and Thinness as Social Problems*. Hawthorne, NY: Aldine de Gruyter. 1999.

Sobal, J. and Maurer, D. (eds). *Interpreting Weight: Social Management of Fatness and Thinness*. Hawthorne, NY: Aldine de Gruyter. 1999.

## *Causes of Obesity*

### *Selected Book Chapters:*

Sobal, J. Social and Cultural Influences on Obesity. In: Bjorntorp, P. (ed). *International Textbook of Obesity*. London: John Wiley and Sons. 2001. pp 305-322.

Sobal, J. Social consequences of weight bias by partners, friends, and strangers. In: Brownell K.D., Puhl, R.M., Schwartz, M.B., and Rudd, L. (eds). *Weight bias*. New York: Guilford. 2005. Pp 150-164.

Sobal, J., and Wansink, B. Built Environments and obesity. Chapter 9 In: Blass, E. (ed). *Obesity*. Sunderland, MA: Sinauer Associates. 2008. pp 281-299.

Sobal, J. Sociological Analysis of the Stigmatisation of Obesity. In: Germov, J. and Williams, L. (eds). *A Sociology of Food and Nutrition*. Melbourne: Oxford University Press. 3<sup>rd</sup> ed. 2008. pp 381-400.

### *Selected Journal Articles:*

Sobal, J., Stunkard, A.J. Socioeconomic Status and Obesity: A Review of the Literature. *Psychological Bulletin* 1989, 105(2):260-75.

Sobal, J., Troiano, R.P., Frongillo, E.A. Rural-urban differences in obesity. *Rural Sociology* 1996;61(2):289-305.

Khan, L.K., Sobal, J., Martorell, R. Acculturation, socioeconomic status, and overweight in US Hispanics. *International Journal of Obesity* 1997;21:91-96.

Wolfe, W.S., Sobal, J., Olson, C.A., Frongillo, E.A., Williamson, D. Parity-associated weight gain and its modification by sociodemographic and behavioral factors: A prospective analysis of U.S. Women. *International Journal of Obesity* 1997;21:802-10.

Sobal, J., Rauschenbach, B., Frongillo, E.A. Marital status changes and body weight changes: A U.S. longitudinal analysis. *Social Science and Medicine* 2003;56(7):1543-1555.

Kim, K.H., Sobal, J., Wethington, E. Religion and body weight. *International Journal of Obesity* 2003;27:469-77.

Lee, S., Sobal, J. Socio-economic, dietary, activity, nutrition, and body weight transitions in South Korea. *Public Health Nutrition* 2003;6(7):665-674.

Cawley, J., Joyner, K., Sobal, J. Size matters: The influence of adolescents' weight and height on dating and sex. *Rationality and Society* 2006;18(1):67-94.

Neighbors, L., Sobal, J., Liff, C., Amiraian, D. Weighing weight: Trends in body weight evaluation among young adults, 1990 and 2005. *Sex Roles* 2008;59:68-80.

Carmalt, J.H., Joyner, K., Cawley, J.H., Sobal, J. Body weight and matching with a physically attractive romantic partner. *Journal of Marriage and Family* 2008;70(6):1287-1296.

**Nancy Wells**

*Title and Affiliation:* Associate Professor, Design and Environmental Analysis, CHE, Cornell University

*Mailing Address:* 3M13A MVR Hall, Cornell University, Ithaca, NY 14853

*Email Address and Telephone:* [nmw2@cornell.edu](mailto:nmw2@cornell.edu), 607-254-6330

*Webpage Address:* <http://www.human.cornell.edu/che/bio.cfm?netid=nmw2>

*Discipline:* Environmental psychology

*Research Interests:* Environmental influences on physical activity and diet

*Obesity Focus:* Environmental causes, prevention

*Biography:*

Nancy Wells is an Associate Professor in the Department of Design and Environmental Analysis (DEA) in the College of Human Ecology at Cornell University. She received a joint PhD in Psychology and Architecture from the University of Michigan and then completed an NIMH post-doc at the University of California Irvine's School of Social Ecology. As an environmental psychologist, Dr. Wells examines the influence of the built and natural environment on human health and well-being.

*Research Summary:*

Key words: environment, physical activity, walking, diet, poverty, health-impact assessment

The research I conduct related to obesity addresses environmental factors contributing to obesity, and by extension, that the role the environment can play in prevention. I am particularly interested in the rare, but compelling, opportunity provided by natural experiments (e.g., relocations, interventions, or redesigns) to employ quasi-experimental designs and move beyond correlational data toward a more causal understanding of environmental and policy influences on both physical activity and diet.

My research funded by the Robert Wood Johnson Foundation's Active Living Research program has focused on how rates of walking among low-income, primarily minority women are affected by neighborhood environment features such as housing density, street network patterns, and proximity to retail. This work has employed a longitudinal quasi-experimental research design by studying families who were relocating to new homes and new neighborhoods through their partnership with the self-help housing program, Habitat for Humanity. Findings suggest that when women relocate to places with fewer cul-de-sacs and, unexpectedly, less land use mix, they walk more (Wells & Yang, 2008).

In addition to my interest in the impact of the environment on physical activity, my work has included the influence of the environment on the other side of the energy balance equation: dietary intake. Recently, I have served as co-PI on a USDA-funded project led by Christine Olson (DNS) to examine environmental interventions as a mechanism to promote physical activity, healthy eating, and breastfeeding among new mothers in rural upstate New York. Other research I am conducting related to the food environment and diet asks how far do people travel for food shopping? Does the nearby food environment influence diet? And, if there is an influence of the environment on diet, for whom is this the case? Does this relationship vary by socioeconomic status, for example? Currently, I am also beginning to focus on how research evidence linking the food environment to dietary intake can be integrated into the practice of urban and regional planning through the use of "health impact assessment" (HIA). HIA is a tool intended to link health-related research evidence to the field of planning ([www.cdc.gov/healthypplaces/hia.htm](http://www.cdc.gov/healthypplaces/hia.htm)). While HIA has been developed to address a wide range of health issues, little attention has focused on the food environment and diet. Because HIA is more advanced in several other countries, I intend to spend part of my sabbatical (2009) in Australia study HIA methods.

While most of my work has focused on causes of obesity, I am also interested in the mechanisms that might link characteristics of vulnerability with obesity. For example, in some ongoing work with my colleague Gary Evans we examine the possible mediating role of chronic stress (Wells & Evans, in preparation).

I have also written some conceptual articles examining the role of the ecological model in obesity research (Wells & Olson, 2007), the need for interdisciplinary approaches to examine the environmental factors contributing to obesity (Wells, Ashdown, Davies, Cowett & Yang, 2007) and the evidence linking environment and obesity (Evans & Wells, In press). With Barbara Brown, I co-edited a special issue of *Environment and Behavior* dedicated to environmental influences on both physical activity and diet (Brown & Wells, 2007).

*Selected Bibliography:*

Wells, N.M. & Donofrio, G. (In press). Urban planning, the natural environment, and public health. *Encyclopedia of environmental health*.

Evans, G.W. & Wells, N.M. (In press). On poverty, health, and lifestyle. *Obesity Prevention Handbook: The role of society and brain on individual behavior*.

Wells, N.M., Evans, G.W. and Yang, Y. (In press). Environment and health: Planning decisions as public health decisions. *Journal of Architectural and Planning Research*.

Wells, N.M. and Yang, Y. (2008). Neighborhood Design & Walking: A quasi-experimental longitudinal study of low-income Southern women moving to neotraditional or suburban neighborhoods. *American Journal of Preventive Medicine*, 34(4), 313-319.

Brown, B.B., and Wells, N.M. (Guest Editors) (2007). Special Issue - Environment and Obesity: Environmental influences on physical activity and dietary intake. *Environment and Behavior*, 39 (1).

Wells, N.M. and Olson, C.M. (2007). The Ecology of Obesity: Perspectives from life course, design, and economics. *Journal of Hunger & Environmental Nutrition*, 1(3), 99-129.

Wells, N.M., Ashdown, S.P., Davies, E.H.S., Cowett, F.D. and Yang, Y. (2007). Environment, Design and Obesity: Opportunities for interdisciplinary collaborative research. *Environment and Behavior*, 39 (1), 6 – 33.

Wells, N.M. and Lekies, K.S. (2006). Nature and the Life Course: Pathways from childhood nature experiences to adult environmentalism. *Children, Youth, and Environment*. 16 (1), 1-24.

Wells, N.M. and Evans, G.W. (2003). Nearby Nature: A buffer of life stress among rural children? *Environment and Behavior*, 35 (3), 311-330.

Wells, N.M. (2000). At home with nature: effects of “greenness” on children’s cognitive functioning. *Environment and Behavior*, 32(6), 775-795.

**Richard V. Burkhauser**

*Title and Affiliation:* Professor, PAM/Economics, Cornell University

*Mailing Address:* 125 MVR, Cornell University, Ithaca, NY 14853

*Email Address and Telephone:* [rvb1@cornell.edu](mailto:rvb1@cornell.edu), 607-255-2071

*Webpage Address:* <http://www.human.cornell.edu/che/bio.cfm?netid=rvb1>

*Discipline:* Economics

*Research Interests:* Economics of obesity, especially how obesity relates to disability and retirement programs

*Obesity Focus:* Consequences

*Biography:* Richard V. Burkhauser is the Sarah Gibson Blanding Professor of Policy Analysis in the Department of Policy Analysis and Management and Professor of Economics at Cornell University. He has published widely on issues related to vulnerable populations including—older workers, working age people with disabilities, and low skilled workers—in the fields of demography, economics, gerontology, and public policy. He received his Ph.D. in Economics from the University of Chicago.

*Research Interests:*

I am an economist broadly interested in disability issues. My primary interest with respect to obesity as with other health conditions is how they impact on social success indicators—employment, wage earnings, early exits from the labor market via disability, early retirement programs, etc. In general, my work involves evaluating the consequences of government policies or programs that attempt to impact on these populations. But I am also interested in more fundamental measurement issues. With respect to obesity, I am interested in better capturing fatness and obesity in social science data sets.

*Selected Bibliography:*

*Books*

Houtenville, Andrew J., David C. Stapleton, Robert R. Weathers II, Richard V. Burkhauser (eds.) *Counting Working-age People with Disabilities: What Current Data Tell Us and Options for Improvement*. Kalamazoo, MI: W.E. UpJohn Institute for Employment Research, (forthcoming)

Stapleton, David C. and Richard V. Burkhauser (eds.) *The Decline in Employment of People with Disabilities: A Policy Puzzle*. Kalamazoo, MI: W.E. UpJohn Institute for Employment Research, (2003).

*Articles*

Burkhauser, Richard V. and John Cawley. “Beyond BMI: The Value of More Accurate Measures of Fatness and Obesity in Social Science Research.” *Journal of Health Economics*, 27 (2) (March 2008): 519-529.

Weathers, Robert R., Gerard Walter, Sara Schley, John Hennessey, Jeffrey Hemmeter and Richard V. Burkhauser. “How Postsecondary Education Improves Adult Outcomes for Supplemental Security Income Children with Severe Hearing Impairments.” *Social Security Bulletin*. 67 (2) (2007): 101-131. <http://www.ssa.gov/policy/docs/ssb/v67n2/v67n2p101.pdf>

Burkhauser, Richard V. and Mathis Schroeder. “A Method for Comparing the Economic Outcomes of the Working-Age Population with Disabilities in Germany and the United States.” *Schmollers Jahrbuch: Journal of Applied Social Science Studies*, 127 (2) (2007): 227-258.

**Chris Chen**

*Title and Affiliation:* Assistant Scientist/Assistant Professor, Hospital for Special Surgery

*Mailing Address:* 535 East 70<sup>th</sup> Street, New York, New York 10021

*Email Address and Telephone:* [Chench@hss.edu](mailto:Chench@hss.edu), 212-606-1068

*Webpage Address:* [http://www.hss.edu/research-staff\\_chen-chris.asp](http://www.hss.edu/research-staff_chen-chris.asp)

*Discipline:* Bioengineering & biochemistry

*Research Interests:* Osteoarthritis, cartilage repair, tissue engineering

*Obesity Focus:* Consequences

*Biography:*

Dr. Christopher T Chen is an Assistant Scientist at Hospital for Special Surgery / Weill Cornell Medical College and an Assistant Professor at NY Center for Biomedical Engineering. Dr. Chen has more than 20 peer-reviewed publications. His research focuses on osteoarthritis pathology/prevention, cartilage mechanobiology, and joint inflammation. More recently, Dr. Chen has been working with an interdisciplinary group to determine the effect of pediatric obesity on joint deformity and osteoarthritis.

*Research Summary:*

The percentage of overweight/obese children and adolescents in the United States is growing at an alarming rate in the last two decades with over seven million children (or 18%) severely overweight. Data demonstrate that overweight children are likely to be obese as adults (e.g., Venn, Thompson et al., 2007), thus at risk for the myriad health complications that accompany obesity. Obesity presents numerous problems to these young individuals. In addition to the greater chances of developing diabetes, non-alcohol fat-liver disease, and coronary heart diseases, they are also at a greater risk of bone deformity and osteoarthritis.

Osteoarthritis currently affects over 20 million individuals and is expected to significantly increase by the year 2020 because of aging in the baby boomer generation. Osteoarthritis is the number one cause of disability in the United States and there is a growing concern that overweight children may develop osteoarthritis at younger ages than previous generations.

Osteoarthritis is a disease that affects all tissues in the diarthrodial joint. These tissues can be stressed by the changes in biomechanics that occur through increased BMI and joint malalignment. Recent studies suggest that obesity also affects child's locomotor system both functionally and structurally, which can further increase the burden of the whole diarthrodial joint. Together, these findings suggest that obesity deposits significant risks on the initiation and progress of osteoarthritis. Given that little or no treatment exists to reverse the course of OA, it is important to determine how obesity and gait patterns affect cartilage degradation in young patients.

My previous and current research has been focused on osteoarthritis pathology / prevention, cartilage mechanobiology, and joint inflammation. In the last two years, I have been working closely with an interdisciplinary investigational team at Weill Cornell Medical College and Hospital for Special Surgery. With a seeding funding from NIH CTSC center, we are currently studying the association between lower extremity alignment, gait, and joint pathophysiology in overweight as compared with normal weight children. We postulate that the additional joint stress and tissue damage at the subchondral level resulting from overweight will promote the onset of osteoarthritis and associated pathophysiology.

*Selected bibliography:*

Chen C.T., Burton-Wurster N., Lust G., Bank R.A., and Tekoppele J.M. (1999) Compositional and metabolic changes in damaged cartilage are loading-duration and loading-rate dependent. *J Ortho Res* 17:870-9.

Chen C.T., Burton-Wurster N.I., Borden C., Hueffer K., Bloom S.E., and Lust G. (2001) Chondrocyte necrosis and apoptosis in impact damaged articular cartilage. *J. Orthop Res* 19:703-11.

Levin A., Burton-Wurster N.I., Chen C.T., and Lust G. (2001) Cellular signaling as a cause of cell death in cyclically impacted cartilage explants. *Osteoarthritis and Cartilage* 9: 702-711.

Hidaka C., Goodrich L., Quitariano M., Bent S., Brower-Toland B., Chen C.T., Crystal R., and Nixon A. (2003) Acceleration of cartilage repair by genetically modified chondrocytes over expressing bone morphogenetic protein-7. *J. Orthopaedic Research* 21:573-83.

Chen C.T., Torzilli P.A., Fishbein K. W., Spencer R.G.S., Hilger A., and Horton W.E. Jr. (2003) Matrix fixed charge density as determined by magnetic resonance microscopy of bioreactor-derived hyaline cartilage correlates with biochemical and biomechanical properties. *Arthritis & Rheumatism* 48(4): 1047-56.

Chen C.T., Bhargava M., Lin P.M., and Torzilli P.A. (2003) Time, stress, and location dependent chondrocyte death and collagen damage in cyclically loaded articular cartilage. *J. Orthopaedic Research* 21:888-898.

- Williams R., McCarthy D., and Chen C.T. (2004) Chondrocyte survival and biomechanical Properties of fresh cold-stored whole femoral condyles: An evaluation of tissue used in osteochondral allograft transplantation. *Am J Sports Med.* 32:132-9.
- Lin P.M., Chen C.T., Torzilli P.A. (2004) Increased localization of stromelysin-1 and proteoglycan degradation in Mechanically Injured Articular Cartilage. *Osteoarthritis and Cartilage* 12:485-96.
- Strauss E., Hidaka C., Chen C.T., Goodrich L., Nixon A. (2006) Biochemical and biomechanical properties of lesion and peri-lesion tissue after cartilage repair with genetically modified chondrocytes in an equine model. *Am. J. Sport Medicine* 2006; 33:1647-53.
- Ranawat A.S., Vidal A.F., Chen C.T., Zelken J., Turner A.S., and Williams R.J. (2008) The material properties of fresh cold-stored allografts used for the reconstruction of osteochondral defects after one year *in vivo*. *Clin Ortho & Rel Research, in Press*.
- Gulotta L., Rudzki J.R., Kovacevic D., Milentijevic D., Chen C.T.; Williams R. (2008) Chondrocyte Death and Cartilage Degradation Following Autologous Osteochondral Transplantation Surgery in a Rabbit Model *Am J Sports Med (accepted)*
- Chen C.T., Narayanan S, Song M, Torzilli PA (2007) Intermittent daily load increases collagen cleavage in injured cartilage. *Osteoarthritis and Cartilage (in review)*
- Chan G, CT Chen, Green DW, Musculoskeletal Effects of Obesity, 2008, Journal of pediatric Orthopedics (in review)
- Torzilli PA, Bhargava M, Park S, Chen C.T. (2008) Mechanical load interleukin-1 induced matrix degradation in cartilage. *Osteoarthritis and Cartilage (in review)*

**Rubin Cooper**

*Title and Affiliation:* Co-Chair of the Obesity Council at The Komansky Center for Children's Health, Professor of Clinical Pediatric Cardiology, Weill Medical College, Cornell University

*Mailing Address:* 1300 York Avenue, New York, New York, 10021

*Email Address and Telephone:* [rsc2002@med.cornell.edu](mailto:rsc2002@med.cornell.edu), 212-746-3561

*Webpage Address:* <http://www.med.cornell.edu/research/rscooper/>

*Discipline:* Pediatric cardiology

*Research Interests:* Congenital heart disease, coronary artery disease, Kawasaki disease, Rheumatic fever, telemedicine and telehealth

*Obesity Research Interests:* Effects of obesity on the cardiovascular system: specifically the endothelium (EndoPAT Study)

*Obesity Focus:* Consequences

*Biography:*

Voted one of New York Magazine's Best Doctors (2008) Pediatric Cardiologist Rubin S. Cooper, M.D. is a specialist in congenital heart disease and rheumatic fever. He is active in several research projects and is the principal investigator of a Endothelial Dysfunction Study: "Differences in Vascular Compliance in Pediatric Patients at Risk for Cardiovascular Disease as Measured by EndoPAT Technology." His interests include: coronary and congenital heart disease, adult congenital heart disease, Rheumatic heart disease, telehealth and telemedicine.

*Research Summary:*

Pediatric Cardiology Research Study: "Differences in Vascular Compliance in Pediatric Patients at Risk for Cardiovascular Disease as Measured by EndoPAT Technology".

Endothelial dysfunction (ED) is a vascular marker for underlying subclinical cardiovascular disease. In the adult population, endothelial dysfunction has been observed in a variety of pathologic conditions, such as obesity, type 2 diabetes mellitus, hypertension, and atherosclerotic cardiovascular disease. Numerous studies have established the validity of the Endo-PAT technique when compared to flow mediated dilation (FMD) measurement of the brachial artery, intracoronary acetylcholine infusion, and, to a limited extent, carotid Intima-Media Thickness (IMT). Recent pediatric population studies of obese, hypertensive, diabetic, as well as Kawasaki patients have demonstrated abnormalities in endothelial function noninvasively. Recently, a less cumbersome and user-independent technique to assess endothelial function has been developed by Itamar Corporation using the Endo-PAT technology. Currently, many large adult cardiovascular programs have replaced FMD with the Endo-PAT technique.

We propose a pilot observational and feasibility study to measure the utility of Endo-PAT in the pediatric population, and ultimately incorporate its utilization into our overall pediatric cardiovascular preventive program. We plan to concurrently measure carotid artery intimal-medial thickness (IMT), as it is a standard of experimental design for assessing preliminary subclinical atherosclerosis *anatomically* in conjunction with *physiologic* assessment by Endo-PAT.

EndoPAT is a new, noninvasive technique to measure the stiffness and endothelial function of the arteries. A new and safe method to measure the health of the arteries (blood vessels that carry blood with oxygen) has been developed. Arteries may become stiffer with age or other conditions such as: overweight, high blood pressure, high cholesterol (fat) in the blood, or fatty liver. The Endo-PAT is a non-invasive machine that is similar to a blood pressure machine. A small soft rubber cup is placed on the middle finger of each hand. One arm will have a blood pressure cuff inflated (squeezed) above the elbow for 5 minutes and then released. The machine will record the pulse waves in the finger tips on the computer. The test will be performed once in a quiet area at the time of enrollment and should take approximately 60 minutes. An automated computer software program will immediately analyze the information. The child will have this measurement repeated between 3-6 months and 12 months later. After completion of the Endo-PAT test, an ultrasound picture of the thickness of the walls of the main arteries in the neck (carotid arteries) will be obtained at the time of enrollment and repeated 12 months later. We hope to be able to use this new non-invasive test to detect whether the child's arteries are healthy or not and whether the treatment received, such as diet, exercise, or medication, improves his/her condition. This test could be a way of detecting early changes in the arteries of children and adolescents that may lead to significant cardiovascular disease in adulthood.

**Primary Aims:** To demonstrate the feasibility of Endo-PAT technology to measure 1) endothelial function (EF) as reflected in changes in peripheral arterial tone (PAT) and 2) arterial stiffness (Augmentation Index) non-invasively in pediatric patients at high risk for early cardiovascular disease.

**Secondary Aims:**

- 1) To observe changes (and/or improvements) in PAT after interventions (treatments) appropriately tailored for each cohort:
  - Overweight: reduction in BMI or weight as the result of a comprehensive weight management program intervention.
  - Familial hypercholesterolemia and dyslipidemia: pre-and post-LDL apheresis, diet, and/or statin therapy.
  - Nonalcoholic Fatty Liver Disease (NAFLD): pre-and post-vitamin E treatment.

- 2) To correlate PAT with carotid intimal medial thickness (IMT).
- 3) To correlate PAT with risk factors for vascular disease (markers of abnormal lipid, glucose and vitamin D metabolism, inflammation, blood clotting, blood pressure, family history).

*Selected Bibliography:*

- Kuvin JT, Patel AR, Sliney KA, Pandian NG, Sheffy J, Schnall RP, Karas RH, Udelson JE. Assessment of peripheral vascular endothelial function with finger arterial pulse wave amplitude. *Am Heart J.* 2003; Jul;146(1):168-74.
- Kuvin JT, Mammen A, Mooney P, Alsheikh-Ali AA, Karas RH. Assessment of peripheral vascular endothelial function in the ambulatory setting. *Vasc Med.* 2007; Feb; 12(1): 13-16.
- Kuvin JT, Patel AR, Sliney KA, et al. Peripheral vascular endothelial function testing as a noninvasive indicator of coronary artery disease. *J Am Coll Cardiol.* 2001; Dec; 38(7): 1843-1849.
- Bonetti PO, Pumper GM, et al. Noninvasive identification of patients with early coronary atherosclerosis by assessment of digital reactive hyperemia. *J Am Coll Cardiol.* 2004; Dec 7;44(11):2137-41.
- Jambrik Z, Venneri L, Varga A, Rigo F, Borges A, Picano E. Peripheral vascular endothelial function testing for the diagnosis of coronary artery disease. *Am Heart J.* 2004;148(4):684-9.
- Chenzbraun A, Levin G, Scheffy J, et al. The peripheral vascular response to exercise is impaired in patients with risk factors for coronary artery disease. *Cardiology.* 2001;95(3):126-30.
- Celermajer DS, Sorensen KE, Gooch VM, Spiegelhalter DJ, Miller OI, Sullivan ID, Lloyd JK, Deanfield JE: Non-invasive detection of endothelial dysfunction in children and adults at risk of atherosclerosis. *The Lancet.* 1992;340:1111-1115.
- Deanfield JE, Halcox JP, Rabelink TJ. Endothelial function and dysfunction: testing and clinical relevance. Recent comprehensive methodological summary of techniques for clinical assessment of endothelial function. *Circulation.* 2007; 115:1285–1295.
- Jadhav UM, Kadam NN. Non-invasive assessment of arterial stiffness by pulse-wave velocity correlates with endothelial dysfunction. *Indian Heart J.* 2005; 57(3):226-32.
- Giannotti G, Landmesser U. Endothelial dysfunction as an early sign of atherosclerosis. *Herz.* 2007 Oct; 32(7): 568-572.
- Głowińska-Olszewska B, Tołwińska J, Urban M. Relationship between endothelial dysfunction, carotid artery intima media thickness and circulating markers of vascular inflammation in obese hypertensive children and adolescents. *J Pediatr Endocrinol Metab.* 2007; Oct; 20(10):1125-36.
- Schiel R, Beltschikow W, Radón S, Kramer G, Perenthaler T, Stein G. Increased carotid intima-media thickness and associations with cardiovascular risk factors in obese and overweight children and adolescents. *Eur J Med Res.* 2007; Oct 30; 12(10):503-8.
- Aggoun Y, Farpour-Lambert NJ, Marchand LM, Golay E, Maggio AB, Beghetti M. Impaired endothelial and smooth muscle functions and arterial stiffness appear before puberty in obese children and are associated with elevated ambulatory blood pressure. *Eur Heart J.* 2008; Mar; 29(6):792-9.
- Meyer AA, Kundt G, Lenschow U, Schuff-Werner P, Kienast W. Improvement of early vascular changes and cardiovascular risk factors in obese children after a six-month exercise program. *J Am Coll Cardiol.* 2006; Nov 7; 48(9):1865-70.
- Nieminen T, Kähönen M, Islam S, Raitakari OT, Hutri-Kähönen N, Marniemi J, Juonala M, Rontu R, Viikari J, Lehtimäki T. Apolipoprotein A-I/C-III/A-IV SstI and apolipoprotein B XbaI polymorphisms do not affect early functional and structural changes in atherosclerosis: the Cardiovascular Risk in Young Finns study. *Circulation.* 2007;71(5):741-5.
- Yekeler E, Dursun M, Emeksiz E, Akkoyunlu M, Akyol Y, Demir F, Gökçay G, Demirkol M. Prediction of premature atherosclerosis by endothelial dysfunction and increased intima-media thickness in glycogen storage disease types Ia and III. *Turk J Pediatr.* 2007; Apr-Jun; 49(2):115-9.

**Christine L. Himes**

*Title and Affiliation:* Maxwell Professor of Sociology, Syracuse University  
*Mailing Address:* 426 Eggers Hall, Syracuse University, Syracuse, New York  
*Email Address and Telephone:* [clhimes@syr.edu](mailto:clhimes@syr.edu), 315-443-9064  
*Webpage Address:* <http://www-cpr.maxwell.syr.edu/faculty/himes/index.htm>

*Discipline:* Sociology

*Research Interests:* Obesity and health problems in the elderly

*Obesity Foci:* Consequences, causes

*Biography:*

Christine L. Himes, Ph.D. is Maxwell Professor of Sociology at the Maxwell School, Syracuse University. She is a Senior Researcher within the Center for Policy Research. Dr. Himes' expertise is in the area of the demography of health and aging. Her recent research examines the role of obesity in health and functioning at older ages. Himes received her Ph.D. in demography and sociology from the University of Pennsylvania in 1989.

*Research Summary:*

I am primarily interested in the consequences of obesity, particularly the role that increasing levels of obesity will play in later life health. Using data from several large national surveys (HRS, AHEAD, LSOA), I have examined trends in both obesity rates and health status of the older population. Among the very old, obesity is not clearly linked to an increased risk of death, but it is related to disability and health. Obesity lowers functional status later in life. Those who are obese are more likely to have limitations in their mobility, including walking, getting out of bed, and using transportation. In addition, some health conditions are clearly linked to obesity, particularly diabetes. These health problems often begin earlier in life and have implications for the employment status of individuals. As a result, those who are obese often enter old age in poorer health and with fewer economic resources than those who are not obese.

My secondary interest is in the causes of the obesity trends. With co-author Sandra Reynolds, University of South Florida, I have used data from the National Health Interview Survey to focus on how compositional changes in the population are related to obesity rates. We find that in contrast to expectations, the increased educational level of the adult population has not resulted in a decline in obesity. Although future cohorts of older adults are likely to be better educated, they also are more likely to be obese, leading to increased risk of heart disease and diabetes. In addition, while increasing racial and ethnic diversity in the older population will still likely result in higher rates of obesity for adults in the future, the impact of our increasingly sedentary lives and the uncertain impact of smoking cessation on weight gain outweigh population composition effects.

*Selected Bibliography:*

Himes, Christine L. and Madonna Harrington Meyer. Forthcoming. "Gender and Race Differences in the Impact of Obesity on Work and Economic Security in Later Life in the U.S." *Hallym International Journal of Aging*.

Reynolds, Sandra L. and Christine L. Himes. 2007. "Cohort Differences in Adult Obesity in the U.S.: 1982-1996." *Journal of Aging and Health* 19:831-850.

Himes, Christine L. and Sandra L. Reynolds. 2005. "The Changing Relationship between Obesity and Educational Status." *Gender Issues* 22:45-57.

NaPier, Emily, Harrington Meyer, Madonna, and Christine L. Himes. 2005. "Overweight Over the Life Course." *Generations* 29:31-36.

Himes, Christine L. 2005. "Health Status in Later Life." *Public Policy and Aging Report* 15(3):

Himes, Christine L. 2004. "Obesity in Later Life: An Overview of the Issues." *Research on Aging* 26:3-12.

Himes, Christine L. 2000. "Obesity, Disease, and Functional Limitation in Later Life." *Demography* 37:73-82.

**Lisa Ipp**

*Title and Affiliation:* Associate Director, Adolescent Medicine Weill Cornell Medical College; Chief of Pediatric Medicine, The Hospital for Special Surgery

*Mailing Address:* 525 East 68th Street, Box 139, New York, NY 10021

*Email Address and Telephone:* [lsi9001@med.cornell.edu](mailto:lsi9001@med.cornell.edu), 212-746-3372

*Webpage Address:* <http://www.med.cornell.edu/research/lisaipp/>

*Discipline:* Adolescent medicine

*Research Interests:* Obesity and musculoskeletal effects

*Obesity Focus:* Consequences

*Biography:*

Lisa Ipp is an Assistant Professor of Pediatrics at the Weill Cornell Medical College, and the Associate Director of Adolescent Medicine. She is also the Chief of Pediatrics at the Hospital for Special Surgery (HSS). Dr. Ipp is the co-author of an on-going joint Weill Cornell/HSS study entitled, "Effect of Weight on Lower Extremity Function and Development." which examines the musculoskeletal effects of obesity. Dr. Ipp received her MD degree from Weill Cornell Medical College and completed her pediatric residency training at the Hasbro Children's Hospital/Brown University School of Medicine. Her adolescent sub-specialty training was completed at the Mount Sinai School of Medicine.

**Rogan Kersh**

*Title and Affiliation:* Associate Dean/Prof. of Public Policy, NYU Wagner School

*Mailing Address:* 295 Lafayette Street, NYC, NY 10012

*Email Address and Telephone:* [rk79@nyu.edu](mailto:rk79@nyu.edu), 212-998-7466

*Webpage Address:* <http://wagner.nyu.edu/faculty/facultyDetail.php?whereField=facultyID&whereValue=412>

*Discipline:* Political science/public policy

*Research Interests:* Health policy, with focus on obesity politics

*Obesity Focus:* Consequences, treatment/prevention, causes

*Biography:* Rogan Kersh is academic dean and a professor of public policy at NYU's Wagner School, where he moved in 2006 from Syracuse's Maxwell School. He spent spring 2006 as Distinguished Fellow at Yale's Rudd Center for Food Policy & Obesity. Kersh has been a RWJ Fellow in Health Policy and a Mellon Fellow in the Humanities. His publications include *two books* and more than 50 articles and book chapters. He is also a frequent media commentator on U.S. politics and health policy. Kersh is currently completing a book on the politics of obesity and another on interest-group lobbying around health care.

*Research Summary:*

My work on obesity has been from a public-policy perspective. Is obesity/overweight a legitimate subject of policymakers' activity? How do other "private" matters compare, such as alcohol or smoking? And if there's a government role, what policies might have the most impact—and feasibility, as in actually having a chance of becoming law? I've tried to answer these questions from both a historical and forward-looking perspective. Recently I've turned as well to empirical testing, specifically of New York City's law mandating calorie labels on fast-food menus. Here I remain driven by the same basic questions: does this policy *work* in practice? And how might it be revised to work better?

*Selected Bibliography:*

"The Influence of Calorie Labeling on Food Choice: A First Look from Low-Income Communities" (co-authored), under review at *American Journal of Public Health*.

"The Politics of Obesity: A Current Assessment & Look Ahead," *Milbank Quarterly* 87:1 (forthcoming 2009).

"Obesity and Reproduction: Policy and Political Implications," *Journal of the Society of Reproductive Medicine* 7:1 (forthcoming 2009).

"Anti-Fett Politik: Übergewicht und staatliche Interventionspolitik in den USA" (w/J. Morone), in H. Schmidt-Semisch & F. Schorb, eds., *Kreuzzug gegen Fette* [Political Crusade Against Fat]. Translated fm. original. Wiesbaden, Germany: VS Verlag/Springer Publishing (2008).

"Assessing the Feasibility and Impact of Federal Childhood Obesity Policies" (co-authored), *Annals of the American Academy of Political & Social Science* 615 (2008).

"Obesity, Courts, and the New Politics of Public Health" (with J. Morone), *Journal of Health Politics, Policy, & Law* 30:5 (2005).

"The Politics of Obesity: Seven Steps to Government Action" (with J. Morone), *Health Affairs* 21:6 (Nov./Dec. 2002).

"How the Personal Becomes Political" (w/J. Morone), *Studies in American Political Development* 16 (2002).

**Kathleen M. Rasmussen**

*Title and Affiliation:* Professor, Division of Nutritional Sciences, Cornell University

*Mailing Address:* 111 Savage Hall, Cornell University, Ithaca, NY 14853

*Email Address and Telephone:* [kathleen.rasmussen@cornell.edu](mailto:kathleen.rasmussen@cornell.edu), 607-255-2290

*Webpage Address:* <http://www.human.cornell.edu/che/bio.cfm?netid=kmr5>

*Discipline:* Nutrition

*Research Interests:* Maternal and child nutrition

*Obesity Focus:* Consequences

*Biography:*

Dr. Kathleen M. Rasmussen is internationally known for her research on maternal and child nutrition, which has included studies in experimental species, observational and intervention studies in human subjects, and epidemiologic studies. The results of this research have that women who are obese at conception have problems establishing and maintaining breastfeeding and have babies who are heavier at one year of age than those of normal-weight women. She is currently the chair of the Institute of Medicine's committee that is reexamining the guidelines for weight gain during pregnancy.

*Research Summary:*

I am broadly interested in the effect of obesity on the outcome of pregnancy and success in breastfeeding. These are important both for the mother and for her child and in both the short and long-term. Based on our studies in rats, we proposed that maternal obesity would be deleterious for the success of breastfeeding in women. We found this to be the case in white women living in the US and also Denmark, where the environment for breastfeeding is much more supportive and the association was attenuated but nonetheless highly significant. This association was also present in Hispanic but not black women living in the US. Taken together these findings suggest that there is both a biological and sociocultural aspect of this association.

We have shown that some of the biological underpinnings of lactation are affected by obesity, namely the rise in prolactin in response to the suckling stimulus and how rapidly the milk "comes in" after delivery. From studies in production species by others, there is reason to think that obesity may negatively affect the mammary gland both before and during pregnancy as well as during the immediate postpartum period. We have also examined whether maternal psychosocial factors play a role in this association, but were unable to demonstrate this. Our sample was small, so this issue merits further investigation in a larger group of women. Based on all of these findings, we have conducted two preliminary studies among obese women. In the first, we assigned them to better care during the immediate postpartum period or not. In the second, we assigned them to receive a manual or electric breast pump or not. None of these interventions was effective in prolonging breastfeeding, so new approaches are needed.

There is a complex interplay between obesity before conception, weight gain during pregnancy, breastfeeding and maternal and infant health. Excessive weight gain during pregnancy exacerbates the negative effects of prepregnant obesity on the duration of breastfeeding and increases postpartum weight retention. We have also shown that for any given prepregnant BMI and weight gain during pregnancy, breastfeeding attenuates postpartum weight retention. This is good news if American women can be persuaded to increase the duration of their breastfeeding, which may be difficult for those who are obese and need to do this the most. In addition, we have shown that women who are too heavy before pregnancy have larger babies than women who are not, they breastfeed for a shorter period and their babies are heavier at a year of age for these reasons and also because shorter breastfeeding is associated with other differences in the overall pattern of infant feeding.

Recently, we have explored the delicate trade-off between mother and infant that occurs with weight gain during pregnancy and varies with prepregnant fatness. It has long been known that this trade-off affects birthweight, but our findings suggest that when postpartum weight retention is included in the analysis, women would be advised to gain less weight than previously considered desirable.

*Selected Bibliography:*

Hilson JA, Rasmussen KM, Kjolhede CL. Maternal obesity and breast-feeding success in a rural population of white women. *Am J Clin Nutr* 1997;66:1371-8.

Hilson JA, Rasmussen KM, Kjolhede CL. High prepregnant body mass index is associated with poor lactation outcomes among white, rural women independent of psychosocial and demographic correlates. *J Hum Lact*. 2004;20:18-29.

Kugyelka JG, Rasmussen KM, Frongillo Jr EA. Maternal obesity and breastfeeding success among Black and Hispanic women. *J Nutr*. 2004;134:1746-1753.

Rasmussen KM, Kjolhede CL. Prepregnant overweight and obesity diminish the prolactin response to suckling in the first week postpartum. *Pediatrics* 2004;113:e465-471.

Baker JL, Michaelsen KF, Rasmussen KM, Sørensen TIA. Maternal prepregnant body mass index, duration of breastfeeding and timing of solid food introduction are associated with infant weight gain. *Am J Clin Nutr.* 2004;80:1579-1588.

Hilson JA, Rasmussen KM, Kjolhede CL. Excessive weight gain during pregnancy is associated with earlier termination of breastfeeding among white women. *J Nutr* 2006;136:140-146.

Nøhr EA, Bech BH, Væth M, Rasmussen KM, Hendriksen TB, Olsen J. Obesity, gestational weight gain and preterm birth. A study within the Danish National Birth Cohort. *Pædiatr Perinat Epidemiol.* 2007;21:5-14.

Rasmussen KM. Association of maternal obesity before conception with poor lactational performance. *Annu Rev Nutr* 2007;27:103-21.

Baker JL, Michaelsen KF, Sørensen TIA, Rasmussen KM. High prepregnant body mass index is associated with early termination of full and any breastfeeding among Danish women. *Am J Clin Nutr* 2007;86:404-11.

Nohr EA, Væth M, Baker JL, Sørensen TIA, Olsen J, Rasmussen KM. Combined associations of prepregnancy BMI and gestational weight gain with the outcome of pregnancy. *Am J Clin Nutr.* 2008;87:1750-1759.

Rasmussen KM. Maternal obesity and the outcome of breastfeeding. In: Hale TW, Hartmann PE, eds. *Hale & Hartmann's Textbook on Human Lactation*. Amarillo, TX: Hale Publishing, 2007, pp. 387-402 (Chapter 20).

**Peter A. Torzilli**

*Title and Affiliation:* Senior Scientist, Hospital for Special Surgery, and Professor, Orthopaedics, Weill Medical College

*Mailing Address:* Hospital for Special Surgery, 535 East 70th St, New York, NY 10021

*Email Address and Telephone:* [TORZILLIP@HSS.EDU](mailto:TORZILLIP@HSS.EDU), 212-606-1087

*Webpage Address:* <http://www.hss.edu/11549.asp>

*Discipline:* Mechanical engineering/bioengineering

*Research Interests:* Osteoarthritis, cartilage, joint biomechanics, mechanobiology

*Obesity Foci:* Consequences

*Biography:*

Peter Torzilli received a PhD in engineering mechanics from Rensselaer Polytechnic Institute in 1974. He is a Senior Scientist and Director of the Tissue Engineering, Regeneration and Repair (TERR) Program at Hospital for Special Surgery, and Professor in Orthopaedics at Weill Medical College of Cornell University. The TERR Program is a multi-disciplinary research group of scientists, engineers and physicians studying soft tissue injuries to the musculoskeletal system.

*Research Summary:*

Currently I do not do any specific research related to obesity. However, I do research in the area of osteoarthritis, of which obesity has become one of the major areas of concern in the adolescent and young and older adults. My research program is beginning to focus on the issue of pediatric obesity and its affect on bone and cartilage growth abnormalities leading to osteoarthritis. Our research would best fit areas related to biological and mechanical mechanisms of the initiation and progression of degenerative joint diseases, and methodologies for the detection, prevention and reversal of the progression of the degradation of articular cartilage.

**Gilbert J. Botvin**

*Title and Affiliation:* Professor and Chief, Division of Prevention and Health Behavior, Department of Public Health, Weill Cornell Medical College

*Mailing Address:* Weill Cornell Medical College, 525 E. 68th St., New York, NY 10065

*Email Address and Telephone:* [gjbotvin@med.cornell.edu](mailto:gjbotvin@med.cornell.edu), 212-746-1270

*Webpage Address:* <http://www.med.cornell.edu/research/gjbotvin/>

*Discipline:* Psychology and public health

*Research Interests:* Health promotion; behavioral risk factors associated with major public health problems; tobacco, alcohol, drug abuse, and violence prevention

*Obesity Focus:* Prevention, treatment

*Biography:*

Dr. Gilbert J. Botvin is an internationally known expert on tobacco, alcohol, and drug abuse prevention. He holds a Ph.D. in psychology from Columbia University and has been a member of the Cornell faculty for 30 years. He is a tenured professor of psychology in public health and a professor of psychiatry at Weill Cornell Medical College, and Chief of the Division of Prevention and Health Behavior. Dr. Botvin has published 250 scientific papers and book chapters, has received 28 major federal grants including a Center grant from the National Institute on Drug Abuse. Dr. Botvin is the founding editor of *Prevention Science*, is past president of the Society for Prevention Research, and has served on numerous NIH expert panels.

*Research Summary:*

Lifestyle patterns or health risk behaviors play a major role in the development of chronic diseases such as heart disease, cancer, chronic, and HIV/AIDS. These risk behaviors have their roots in childhood and adolescence. Our research at Weill Cornell Medical College has focused on increasing our understanding of the etiology of these risk behaviors and the development of interventions for preventing them. Chief among these health risk behaviors are tobacco, alcohol, and illicit drug use. Research at WCMC's division of prevention and health behavior has identified key etiologic factors promoting tobacco, alcohol, and illicit drug use and tested school-based prevention approaches. Our prevention work has examined a multi-component drug abuse prevention program, called *Life Skills Training (LST)*, which teaches generic personal and social skills, anti-drug use norms, and drug resistance skills. The LST approach has demonstrated positive behavioral effects on alcohol, tobacco, and other drug use. The focus of our initial evaluation studies was on cigarette smoking and involved predominantly white middle-class populations. This research consisted largely of small-scale pilot studies testing the short-term effects of the intervention on cigarette smoking and related risk factors. Several early studies demonstrated that this prevention approach effectively reduces cigarette smoking among youth receiving the program compared to a control group that does not (e.g., Botvin, & Eng, 1980, 1982). During the first decade of evaluation research on this approach, additional studies examined the effectiveness of the LST approach with different delivery formats, different program providers, and with different substances. These studies found that the prevention approach was made more effective by the inclusion of booster sessions after the initial year of intervention and that it is equally effective when taught by teachers, peer leaders, and health educators (Botvin, Renick, & Baker, 1983). Additional studies found that the approach produced behavioral effects on alcohol (e.g., Botvin et al., 1984). These initial studies were among the first school-based prevention studies to show consistent behavioral effects on adolescent substance use.

The second decade of evaluation research on the LST approach, from 1990 to the present, has focused increasingly on the intervention's long-term effects on drug use, effects on more serious levels of drug involvement including illicit drug use, and its impact on hypothesized mediating variables, and has increasingly focused on effects when used with inner-city minority populations. The evaluation designs have become increasingly sophisticated with time, including two large-scale multi-site randomized prevention trials with long-term follow-up. The first of these prevention trials focused on predominantly white, suburban youth and more recent trials have examined prevention effects with predominantly minority inner-city youth. Beginning in 1985, a large randomized controlled prevention trial examined the short- and long-term effects of the prevention approach among close to 6,000 students from 56 junior high schools in New York State. This study was one of the largest and most methodologically rigorous drug abuse prevention trials ever conducted and included adolescents that were predominantly white (91%). Students in the prevention condition received the intervention in the 7th grade and booster sessions during the eighth and ninth grades. Significant prevention effects were found among intervention participants at the end of the ninth grade in terms of cigarette smoking, marijuana use, and immoderate alcohol use (Botvin, Baker, Dusenbury, Tortu, & Botvin, 1990) as well as at the end of the twelfth grade (Botvin, Baker, Dusenbury, Botvin, & Diaz, 1995). In the latter follow-up study, there were significantly fewer smokers, heavy drinkers, marijuana users and polydrug users among students who received the prevention program relative to controls. The strongest prevention effects were produced for the students who received the most complete implementation of the prevention program. A related study using data from a confidential and random subsample of these students (N = 447) found that there were lower levels of overall illicit drug use and lower levels of use for hallucinogens, heroin and other narcotics in the intervention group relative to controls (Botvin et al., 2000). More recently, several large-scale prevention trials testing the LST approach have been conducted with inner-city minority youth in New York City. One randomized controlled trial tested the effectiveness of the prevention program in a

sample of predominantly African-American (61%) and Hispanic (22%) sample of students (N = 3,621) in 29 urban schools. Results at the posttest and one-year follow-up indicated that those who received the prevention program reported less smoking, drinking, drunkenness, inhalant use, and polydrug use relative to those in the control group who did not receive the intervention (Botvin, Griffin, Diaz, & Ifill-Williams, 2001a). Additional studies using data from this large-scale trial focused on prevention effects of the intervention program in terms of cigarette smoking onset, binge drinking, and effects for youth at high risk for substance use initiation. The first of these studies examined the effectiveness of the prevention program in reducing the initiation and escalation of smoking in a sub-sample of girls from the larger study (Botvin, Griffin, Diaz, Miller, & Ifill-Williams, 1999). One-year follow-up data indicated that girls who participated in the intervention condition were significantly less likely to initiate smoking relative to controls, and 30% fewer of participants escalated to monthly smoking relative to students in the control group. A second study showed that this intervention approach had protective effects in terms of binge drinking (5 or more drinks per drinking occasion) among inner-city middle-school boys and girls (Botvin, Griffin, Diaz, & Ifill-Williams, 2001b). In this study, the proportion of binge drinkers was over 50% lower in those who received the prevention program relative to the control group at both the one-year and two-year follow-up assessments. Finally, a recent study examined the effectiveness of the prevention program among a subset of youth at high risk for substance use initiation and found that those students who had poor grades in school and friends that engage in substance use were less likely to engage in smoking, drinking, inhalant use, or poly-drug use compared to similarly matched controls that did not receive the intervention (Griffin, Botvin, Nichols, & Doyle, 2003). Taken together, the results from several large-scale randomized prevention trials provide strong evidence of the effectiveness of this prevention approach, both with suburban white youth as well as inner-city minority youth.

*Selected Bibliography:*

Botvin, G.J., Baker, E., Renick, N., Filazzola, A.D., and Botvin, E.M. (1984). A cognitive-behavioral approach to substance abuse prevention. *Addictive Behaviors*, 9, 137-147.

Botvin, G.J., Dusenbury, L., Baker, E., James-Ortiz, S., and Kerner, J. (1989). A skills training approach to smoking prevention among Hispanic youth. *Journal of Behavioral Medicine*, 12, 279-296.

Botvin, G.J., Baker, E., Dusenbury, L., Tortu, S., and Botvin, E.M. (1990). Preventing adolescent drug abuse through a multimodal cognitive-behavioral approach: Results of a three-year study. *Journal of Consulting and Clinical Psychology*, 58, 437-446.

Botvin, G.J., Baker, E., Botvin, E.M., Dusenbury, L., Cardwell, J. and Diaz, T. (1993). Factors promoting cigarette smoking among black youth: A causal modeling approach. *Addictive Behaviors*, 18, 397-405.

Botvin, G.J., Epstein, J.A. Schinke, S.P., & Diaz, T. (1994). Predictors of cigarette smoking among inner-city minority youth. *Journal of Developmental and Behavioral Pediatrics*, 15, 67-73.

Botvin, G.J., Schinke, S.P., Epstein, J.A., & Diaz, T. (1994). Effectiveness of culturally-focused and generic skills training approaches to alcohol and drug abuse prevention among minority youths. *Psychology of Addictive Behaviors*, 8, 116-127.

Botvin, G.J., Schinke, S.P., Epstein, J.A., Diaz, T. & Botvin, E.M. (1995). Effectiveness of culturally-focused and generic skills training approaches to alcohol and drug abuse prevention among minority adolescents: Two-Year follow-up results. *Psychology of Addictive Behaviors*, 9, 183-194.

Botvin, G.J., Baker, E., Dusenbury, L., Botvin, E.M. & Diaz, T. (1995) Long-term follow-up results of a randomized drug abuse prevention trial in a White middle-class population. *Journal of the American Medical Association*, 273(14), 1106-1112.

Botvin, G.J., Malgady, R.G., Griffin, K.W., Scheier, L.M., & Epstein, J.A. (1998). *Alcohol and marijuana use among rural youth: Interaction of social and intrapersonal influences*. *Addictive Behaviors*, 23(3), 379-387.

Botvin, G.J., Griffin, K.W., Diaz, T., Scheier, L., Williams, C., & Epstein, J.A. (2000). *Preventing illicit drug use in adolescents: Long-term follow-up data from a randomized control trial of a school population*, *Addictive Behaviors*, 5, 769-774.

Botvin, G. J., Griffin, K. W., Diaz, T., & Ifill-Williams, M. (2001). *Drug abuse prevention among minority adolescents: Posttest and one-year follow-up of a school-based prevention intervention*. *Prevention Science*, 2, 1-13.

Botvin, G. J., Griffin, K. W., Diaz, T., & Ifill-Williams, M. (2001). *One- and two-year follow-up of a school-based preventive intervention*. *Psychology of Addictive Behaviors*, 15, 360-365.

Botvin, G. J., & Diaz, T. (2001). *The Hutchinson Smoking Prevention Project: A lesson on inaccurate media coverage and the importance of prevention advocacy*. *Prevention Science*, 2, 67-70.

**Sahara Byrne**

*Title and Affiliation:* Assistant Professor, Communication, Cornell University

*Mailing Address:* 314 Kennedy Hall, Cornell University, Ithaca, NY 14853

*Email Address and Telephone:* [seb272@cornell.edu](mailto:seb272@cornell.edu), 607-255-8085

*Webpage Address:* [http://www.comm.cornell.edu/staff/employee/sahara\\_byrne.html](http://www.comm.cornell.edu/staff/employee/sahara_byrne.html)

*Discipline:* Communication

*Research Interests:* Media effects, strategic communication and cognitive development

*Obesity Focus:* Prevention and treatment

*Biography/Research Summary:*

Sahara received her Ph.D. in Communication from the University of California, Santa Barbara. Sahara's research focuses on the intersection of media effects, strategic communication and cognitive development. She is currently examining why health campaigns are sometimes ineffective or actually cause harm. Her most recent research aims to explain why this 'boomerang effect' is likely to occur in response to many types of strategic messages, and is especially focused on messages aimed at children and adolescents. She has been the principal investigator on several field experiments investigating children and media effects. Her work on overcoming children's resistance to health messages through the use of interactive media and mobile gaming technology is currently funded by the Robert Wood Johnson Foundation. [Mindless Eating Challenge: Persuasive mechanisms in mobile games. Gay, G. (PI); Byrne, S. (co-PI). (Funded for \$164,319).]

*Selected Bibliography:*

Byrne, S. & Hart, P. S. (in press). The 'boomerang' effect: A synthesis of findings and a preliminary theoretical framework. In C. Beck (Ed.), *Communication Yearbook 33*(pp. 3-37).Mahwah, NJ: Lawrence Erlbaum Associates.

Byrne, S., Linz, D., & Potter, W. J. (in press). A test of competing cognitive explanations for the boomerang effect in response to anti-aggression media literacy interventions. *Media Psychology*.

Cantor, J. A., Byrne, S., Moyer-Gusé, E. & Riddle, K. (in press). Young children's reports of media induced fear reactions and coping strategies. *Journal of Children and Media*.

Byrne, S. (2009). Media literacy interventions: What makes them boom or boomerang? *Communication Education*, 58, 1-14.

**Jamie Dollahite**

*Title and Affiliation:* Associate Professor, Division of Nutritional Sciences, Cornell

*Mailing Address:* 342A MVR Hall, Cornell University, Ithaca, NY 14853

*Email Address and Telephone:* [jsd13@cornell.edu](mailto:jsd13@cornell.edu), 607-255-7715

*Webpage Address:* <http://www.human.cornell.edu/che/bio.cfm?netid=jsd13>

*Discipline:* Nutrition

*Research Interests:* Community based interventions for limited-resource audiences designed to prevent obesity and chronic disease

*Obesity Focus:* Prevention

*Biography:*

Jamie Dollahite received her BS in Nutrition from the University of Texas in 1970, her MS in Human Nutrition from the University of Iowa in 1974, and her PhD in Biological Sciences from the University of Texas in 1990. She has conducted research in animal models, clinical research in humans, epidemiology, and community based interventions all focused on prevention of obesity and chronic diseases, especially heart disease. In the last 15 years, she has worked in community nutrition, focusing on prevention of nutrition-related chronic diseases among low income populations. At Cornell, she is the Director of Food and Nutrition Education in Communities (FNEC). Funded by USDA and delivered through Cornell Cooperative Extension in 54 counties and New York City, FNEC reaches over 19,000 adults and 10,000 youth per year with education designed to promote health through improved food choice and active living. Dollahite's research is closely integrated with and informs FNEC outreach. The outreach programs provide a unique sustainable context in which to develop, test, and disseminate interventions.

*Research Summary:*

*Collaboration for Health, Activity, and Nutrition in Children's Environments (CHANCE):* We are currently undertaking this community-based intervention study designed to build parenting skills among low SES participants that will support healthy lifestyles and prevent childhood obesity. We have developed a conceptual model of parental influences on children's food choice and active play behaviors that is guiding our work. The model uses the socio-ecological framework to take into account individual behaviors of children and parents, and environmental influences. In this model, parents affect children through role modeling, shaping of child behavior by parenting and the home environment, and influencing other environments where the child spends time. We are particularly interested in how low SES families are able to carry out the healthy lifestyle recommendations and what barriers they encounter.

Because we believe that obesity is a complex problem that requires changes in the social and physical environment to support individual behavior change, I am also interested in studying how environmental changes are made. With a doctoral student I am studying what organizational supports are necessary for professionals to make the paradigm shift in their practice from focus on individual behavior change to a more inclusive model that also addresses environmental influences on obesity. Worksite wellness projects at each CHANCE site are providing an important learning opportunity to study the process staff use to implement collaborative projects aimed at environmental change. In addition we are working with CHANCE staff using a participatory action research approach to work towards change in larger community environments that impact children.

*Selected Bibliography:*

Dollahite J, Hosig KW, White KA, Rodibaugh R, Holmes TM. Impact of a school-based community intervention program on nutrition knowledge and food choices in elementary school children in the rural Arkansas Delta. *J Nutr Educ.* 1998; 30:289-301.

Hosig K, Dollahite J, Rodibaugh R, White KA. Development and evaluation of a consortium to support a school-based community nutrition education program in the rural Arkansas Delta. *J Nutr Educ.* 1998;30:281-288.

Dollahite J, Nelson J, Frongillo E, Griffin M. Building Community Capacity Through Enhanced Collaboration in the Farmers' Market Nutrition Program. *J. Agriculture and Human Values.* 2005;22:339-354.

Dollahite J, Olson C, Scott-Pierce M. The impact of nutrition education on food insecurity among low-income participants in EFNEP. *Family Consumer Sci Res J.* 2003; 32:127-139.

Dickin KL, Dollahite JS, Habicht JP. Behavior change among EFNEP beneficiaries is higher in well-managed sites where front-line nutrition educators value the program. *J Nutr.* 2005;135:2199-2205.

Dollahite JS, Kenkel DS, Thompson CS. An economic evaluation of the Expanded Food and Nutrition Education Program *J Nutr Educ Behav* 2008;40:134-143.

**Geri Gay**

*Title and Affiliation:* Kenneth J. Bissett, Professor and Chair, Department of Communication and Information Science, Cornell University

*Mailing Address:* 339 Kennedy Hall, Cornell University, Ithaca, NY 14853

*Email Address and Telephone:* [gkg1@cornell.edu](mailto:gkg1@cornell.edu), 607-255-7737

*Webpage Address:* [http://www.comm.cornell.edu/staff/employee/geri\\_gay.html](http://www.comm.cornell.edu/staff/employee/geri_gay.html)

*Discipline:* Communication

*Research Interests:* Social and technical issues in the design of interactive communication technologies

*Obesity Focus:* Prevention

*Biography:*

Dr. Geri Gay is the Kenneth J. Bissett Professor and Chair of Communication at Cornell University and a Stephen H. Weiss Presidential Fellow. She is also a member of the Faculty of Computer and Information Science and the director of the Human Computer Interaction Lab at Cornell University. She is co-directing the Institute of Social Sciences theme project on social networks and networking. Her research focuses on social and technical issues in the design of interactive communication technologies. Specifically, she is interested in social navigation, affective computing, social networking, mobile computing, and design theory.

*Research Summary:*

The Mindless Eating Challenge is a mobile phone-based health game based on Dr. Brian Wansink's Mindless Eating Challenge. In the game, players are tasked with caring for a virtual pet or plant, similar to the popular Tamagotchi. Pet care requires the user to follow a variety of health and eating recommendations and verify their actions with photos taken with their phone's camera. For example, the recommendation "Eat a hot breakfast" would require the player to submit a photo of him/ herself eating a bowl of oatmeal. Photos and compliance are then judged either by judges or peers. Based on compliance to these recommendations, the pet or plant changes its appearance and gains features or accessories--a tree might grow taller or grow more leaves or fruit in response. Alternatively, leaves might fall off if the players performance is poor. A social portion of the game allows the user to see various depictions of their performance in comparison to the performance of others in their group, as well as of their group in comparison to other groups. The game is designed so that various features can be easily enabled and disabled so it can be used as a platform from which to conduct research into the mechanisms of mobile persuasion in the context of improving health and well-being.

This project is funded by the Robert Wood Johnson Foundation. The game was designed by Geri Gay and JP Pollak, Ph.D. student, in Prof. Gay's HCI Lab, and developed by Sara Lin and Emily Wagner, two students. Also collaborating on the project is Sahara Byrne, Assistant Professor in Communication, who studies media effects in children.

*Selected Bibliography:*

Gay, G. & Hembrooke, H. (2004). *Activity Centered Design*. Boston: MIT Press.

Nomura, S., Birnholtz, J. P., Rieger, O., Leshed, G., Trumbull, D., and Gay, G., (2008). *Cutting into Collaboration: Understanding Coordination in Distributed and Interdisciplinary Medical Research*. Will be presented at Computer Supported Cooperative Work (CSCW) 2008 Conference in November 2008. San Diego, CA.

Wesler, H.T., Cosley, D., Kossinets, G., Lin, A., Dokshin, F., Gay, G., and Smith, M., (2008). *Finding Social Roles in Wikipedia*. Proc ASA 2008

Cho, H. C., Gay, G., Davidson, B. D., and Ingraffea, A., (2007). *Communication Styles, Social Networks, and Learning Performance in a CSCL*. Journal of Computers and Education, Vol. 49, No. 2, pp. 309-329.

Joachims, T., Granka, L., Pan, B., Hembrooke, H., Radlinski, F., & Gay, G. (2007). *Evaluating the Accuracy of Implicit Feedback from Clicks and Query Reformulations in Web Search*. ACM Transactions on Information Systems (TOIS), 25( 2).

Leshed, G., Hancock, J., Cosley, D., McLeod, P., Gay G. (2007). *Feedback for Guiding Reflection on Teamwork Practices*. GROUP Proceedings, Conference, Sanibel Island, FL., November.

Pai, S., Kuryloski, P., Yip, H., Yennamandra, S., Wicker, S., Boehner, K., & Gay, G. (2007). *Networks of Sensors in Public Spaces: Combining Technology With Art*. In the IEEE International Symposium on Ubiquitous Computing and Intelligence (IEEE UCI'07). Niagara Falls, Ontario, Canada.

Pan, B., Hembrooke, H., Joachims, T., Lorigo, L., Gay, G., and Granka, L., (April 2007). In Google We Trust: Users Evaluations of Google Results. *Journal of Computer-Mediated Communication*, 2(3), article 3.

**David Just**

*Title and affiliation:* Associate Professor, Applied Economics and Management, Cornell University

*Mailing address:* 254 Warren Hall, Ithaca, NY 14850

*Email Address and Telephone:* [drj3@cornell.edu](mailto:drj3@cornell.edu), 607-255-2086

*Webpage Address:* <http://www.aem.cornell.edu/profiles/just.htm>

*Discipline:* Behavioral economics

*Research Interests:* Psychology and economics of food decisions in the marketplace.

*Obesity Focus:* Mechanism, prevention

*Biography:*

David R. Just (Ph.D, University of California, Berkeley 2001) joined the department of Applied Economics and Management at Cornell University in 2002 and currently serves as associate professor and director of graduate studies. Employing the tools of behavioral economics, Dr. Just's work examines how consumer misperceptions interact with profit motive to shape the marketplace. His work has been reported on in numerous popular publications and on television including *Discover Magazine's* top science stories of 2006.

*Research Summary:*

Dr. Just uses the tools of experimental and behavioral economics to examine behavior related to food. Individuals make tremendous numbers of food related decisions every day, limiting the amount of attention given to any particular decision. Due to the constraints on these decisions, individuals often fail to make decisions that are consistent with their own health and weight goals. Food decisions are often influenced by subtle factors within the decision-making environment. Individuals often respond to consumption norms suggested by the food environment (e.g., by package size, or plate size). Additionally, individuals often fail to monitor the amount of food they have consumed especially in distracting environments. Importantly food consumers do not recognize that they are influenced by these factors and thus do not take account of them when making food choices.

Food manufacturers, marketers, and retailers, motivated by profit, use tremendous resources to experiment with food and restaurant design. These efforts may unwittingly take advantage of these food behaviors by increasing food consumption volume and simultaneously reducing the health value of the food consumed. For example, we have found that using debit or credit cards to purchase food will often lead individuals to consume more calorie dense foods than when using cash. This appears to occur because the use of debit cards allows the individual to make purchases without as much cognitive involvement.

Because individuals make food decisions without much thought, it is unlikely that health policies designed to appeal to highly conscious thought will have much of an impact (e.g., health information or fat taxes). Alternatively, there is the potential for marketers to increase profits by charging consumers for access to food packaging or environments that set smaller consumption norms, or offer fewer distractions. Further, individuals may be taught ways to manipulate their own environment to make healthier eating more convenient or likely.

Common behavioral economic phenomena can substantially contribute to food consumption decisions. For example, due to time inconsistent preferences, individuals may burn through money quickly, not fully accounting for future needs. Food assistance programs may unwittingly interact with these behavioral tendencies to increase the likelihood of becoming overweight. Food stamp benefits given monthly may lead an individual to consume relatively large quantities of food at the beginning of a cycle, but consume much less toward the end of a cycle. Redesigning the benefit transfer to smooth consumption may help to reduce this cycle of consumption. Alternatively, the sunk cost fallacy can lead individuals to over-consume when faced with higher priced food. Rather than consuming until they are satisfied, consumers may consume until they feel they have gotten their money's worth. Thus the relative prices of foods can play unintuitive roles in consumption volume.

Policy makers must account for food behavior in trying to reduce obesity. Without accounting for the behavioral impacts of their policies, they may unwittingly exacerbate problems with weight and food consumption control.

*Selected Bibliography:*

Wansink, Brian, David R. Just and Collin R. Payne. "Mindless Eating and Healthy Heuristics for the Irrational." *American Economic Review* Vol. 99 No. 2 (2009).

Just, David R. and Brian Wansink. "The Fixed Price Paradox: Conflicting Effects of 'All-You-Can-Eat' Pricing" *Review of Economics and Statistics*. Conditionally accepted September 16, 2008.

Just, David R., Brian Wansink and Callum G. Turvey. "Biosecurity Terrorism, Food Safety, and Food Consumption Behavior: Using Experimental Psychology to Analyze Economic Behavior." *Journal of Agricultural and Resource Economics*. Vol. 34, No. 1. (2009).

Just, David R., Brian Wansink, Lisa Mancino and Joanne Guthrie. "Behavioral Economic Concepts to Encourage Healthy Eating in School Cafeterias: Experiments and Lessons From College Students." *Economic Research Report* No. 68, Economic Research Service, USDA, December 2008.

Just, David R., Amir Heiman and David Zilberman. "The Interaction of Religion and Family Members' Influence on Food Decisions" *Food Quality and Preference* Vol. 18 No. 5 (2007): 786 – 794.

Chang, Hung-Hao, and David R. Just. "Health Information Availability and the Consumption of Eggs: Are Consumers Bayesians?" *Journal of Agricultural and Resource Economics* Vol 32. No. 1 (April 2007): 77 – 92.

Just, David R., Lisa Mancino and Brian Wansink. "Could Behavioral Economics Help Improve Diet Quality for Nutrition Assistance Program Participants." *Economic Research Report* No. 43, Economic Research Service, USDA, June 2007.

Gomez, I. Miguel, Laoura M. Maratou and David R. Just. "Factors Affecting the Allocation of Trade Promotions in the US Food Distribution System." *Review of Agricultural Economics* Vol 29 No. 1 (Spring 2007): 119 – 140.

Just, David R. "Behavioral Economics, Food Assistance, and Obesity." *Agricultural and Resource Economics Review*. Vol. 35, No. 2 (October 2006): 1 – 10.

Heiman, Amir, David R. Just, Bruce McWilliams, and David Zilberman, 2004. "Religion, Religiosity, Lifestyles and Food Consumption." *Agricultural and Resource Economics Update*, Giannini Foundation of Agricultural Economics, University of California, Vol. 8. No. 2 (November – December, 2004).

Heiman, Amir, David R. Just, and David Zilberman. "The Effect of Religion, Education and Income on the Level of Acceptance of Biotechnology." *International Journal of Biotechnology*. Vol. 3, No.3/4 (2001): 257 – 259.

Heiman, Amir, David R. Just, Bruce McWilliams, and David Zilberman. "Incorporating Family Interactions and Socio-Economic Variables into Family Production Functions: The Case of Demand for Meats." *Agribusiness, an International Journal*. Vol. 17, No. 4 (Fall 2001): 455 – 468.

Heiman, Amir, David R. Just, and David Zilberman. "The Role of Socio-economic Factors and Lifestyle Variables in Attitude and the Demand for Genetically Modified Foods." *Journal of Agribusiness*. Vol. 18, No. 3 (Fall 2000): 249 – 260.

**Jeff Niederdeppe**

*Title and Affiliation:* Assistant Professor, Department of Communication, Cornell University

*Mailing Address:* 328 Kennedy Hall, Cornell University, Ithaca, NY 14853

*Email address and Telephone:* [jdn56@cornell.edu](mailto:jdn56@cornell.edu), 607-255-9706

*Webpage Address:* [http://comm.cornell.edu/staff/employee/jeff\\_niederdeppe.html](http://comm.cornell.edu/staff/employee/jeff_niederdeppe.html)

*Discipline:* Communication, Population Health Science

*Research Interests:* (1) Media campaigns, news coverage and health behaviors (e.g., smoking, diet, exercise) and (2)

Communication about structural and environmental causes of obesity

*Obesity Focus:* Prevention

*Biography:*

Jeff Niederdeppe (Ph.D., University of Pennsylvania) is an Assistant Professor of Communication. His research explores the effects of media campaigns and news coverage on health behavior and social policy. His recent work examines why media campaigns to promote behavior change are often less effective, sometimes equally effective, and rarely more effective among socioeconomically disadvantaged populations relative to more advantaged populations. He is also testing persuasive message strategies to change determinants of obesity through policy change.

*Research Summary:*

Jeff Niederdeppe, PhD and Assistant Professor of Communication, conducts research on the prevention of obesity through individual behavior change and larger-scale policy changes to create healthier environments for behavior. His work, supported by a Loan Repayment Grant from the National Center on Minority Health and Health Disparities and a grant from the Robert Wood Johnson Foundation, focuses on the role of strategic communication in reducing SES disparities in behaviors related to obesity (e.g., diet and exercise). He is conducting several studies to develop and test message strategies to reduce SES disparities by raising public and policymaker support for policies to change social conditions associated with obesity. He is also working on a study to better understand the roles of news coverage, federal food labeling policy, and neighborhood SES context on dietary decisions related to high fat and obesogenic foods.

*Using Personal Stories to Raise Public Support for Social Policies to Reduce Obesity Rates.* This study, funded by Cornell's Institute for Social Sciences, seeks a greater understanding of how and when personal stories can influence attributions of responsibility for obesity and thus generate support for policies to address the problem. We are conducting a randomized, controlled 3-group experiment to test whether a personal story that emphasizes environmental barriers to healthy eating and active living can increase societal attributions of responsibility for obesity relative to a control group and a standard summary of research evidence. Formative research was conducted to gain a broad understanding of public attitudes about who is responsible for causing and addressing SES disparities in obesity and to elicit feedback on a series of personal stories aimed at increasing public understanding of the issue. Study findings will aid the continued development of messages to generate support for efforts to change social and structural conditions associated with SES disparities in obesity.

*Developing Messages to Improve Social Determinants of Health and Reduce Health Disparities.* This project, funded by the Robert Wood Johnson Foundation via a subcontract through the University of Wisconsin for a larger grant project, will identify a series of messaging best practices and disseminate a message design "toolkit" for use in local communities to support efforts to mobilize action toward community health. These goals will require the development and empirical testing of innovative strategies that highlight social determinants of health and social/structural barriers to behavior change. Over a period of three years, the study will conduct a series of focus groups, in-depth interviews, and randomized message testing studies to clarify specific message strategies that hold the greatest promise for mobilizing action toward community health by changing social conditions. The project's primary research question asks whether messages that incorporate personal stories, visual imagery, or both, are more effective than standard research summaries or statistical data at raising concern for and motivating effort to address social determinants of health and health disparities. While not specific to obesity or dietary decisions, the project will elucidate effective message strategies for efforts to reduce SES disparities in obesity by changing social conditions that influence multiple behaviors in local communities.

*News Coverage and Sales of Products Containing Trans Fats.* The FDA mandated that food products list the amount of trans fat per serving on Nutrition Facts labels by January 1<sup>st</sup>, 2006. There have been no coordinated efforts to raise awareness about trans fats since the policy went into effect, but news coverage may promote informed decisions about food purchases. This project assessed whether news coverage influenced sales of products containing trans fats between December 13, 2004 and June 24, 2007, both before and after the labeling policy went into effect. Furthermore, we examined whether news and price effects differ as a function of neighborhood socioeconomic status. We used a unique combination of retail scanner data from a major grocery chain with stores throughout Los Angeles County, news coverage data from Lexis-Nexis and Pro-Quest, and neighborhood SES data from the US Census. Overall, we found that news coverage about trans fat, combined with labeling information, appears to influence consumer behavior in the short-term. However news coverage and product labeling may not

be sufficient to promote sustained changes in trans fat purchases. Prices were lower in poor neighborhoods but price *effects* were greater in these areas.

*Selected Bibliography:*

Niederdeppe, J. & Frosch, D. (2009). News coverage and sales of products with trans fats: Effects before and after changes in federal labeling policy. *American Journal of Preventive Medicine*. Forthcoming.

Niederdeppe, J., Bu, L., Borah, P, Kindig, D., & Robert, S. (2008). Message design strategies to raise public awareness of social determinants of health and population health disparities. *The Milbank Quarterly*, 86, 481-513.

Niederdeppe, J. (under review). On the role of public communication campaigns in reducing, reinforcing or widening socioeconomic disparities in health behaviors.

Niederdeppe, J., Robert, S. & Kindig, D. (in preparation). Perceptions about causes of and solutions to high rates of overweight and obesity: Implications for messaging about policy change to improve population health.

**Christine M. Olson**

*Title and Affiliation:* Professor, Division of Nutritional Sciences, Cornell University

*Mailing Address:* 376 MVR Hall, Cornell University, Ithaca, NY 14853

*Email Address and Telephone:* [cmo3@cornell.edu](mailto:cmo3@cornell.edu), 607-255-2634

*Webpage Address:* <http://www.human.cornell.edu/che/bio.cfm?netid=cmo3>

*Discipline:* Nutrition

*Research Interests:* Food insecurity and obesity; pregnancy weight gain and risk of obesity in offspring (children)

*Obesity Focus:* Prevention, causes, mechanisms

*Biography:*

Christine M. Olson is Professor of Community Nutrition, Division of Nutritional Sciences. She received her BS in Experimental Foods in 1970 and her MS and PhD in Nutritional Sciences in 1972 and '74 respectively from the University of Wisconsin-Madison. In 2002, she received the Excellence in Dietary Guidance award from the American Public Health Association. In 2006, her article "Tracking of Food Choices across the Transition to Motherhood" received the Best Article Award from the *Journal of Nutrition Education and Behavior*.

*Research Summary:*

*Role of Childbearing in Weight Gain and Development of Obesity in Women and Their Offspring*

The nutritional concerns of women, infants, and children are the focus of Olson's scholarly work. Our research group is conducting a major extension-outreach project (the Healthy Start Partnership) focused on building the capacity of community-based health and nutrition professionals to design and implement environmental interventions promoting healthy weights in women and their infants. We are conducting an evaluation of the impact of the Healthy Start Partnership on women's gestational and postpartum weights and their infants' rate of growth in the first 6 months of life.

We are examining the inter-relationships between the food and socio-demographic environments in which women live, their diets, and body weight. We are particularly interested in the inter-relationships of these variables in rural settings which have typically not been included in the research to date on this topic.

The design and evaluation of clinical and patient education interventions to promote healthy weight gains in pregnancy and appropriate weight loss postpartum is a final interest area. We are interested in using contemporary electronic technology in these interventions.

The above work falls within the broad area of translational research aimed at prevention of obesity.

We have also done research on the links between maternal weight variables and the risk of obesity in offspring. This work links within the "fetal programming of obesity" area of study and is thus focused on causes and mechanisms.

*Socioeconomic Disadvantage, Food Insecurity and Obesity in Women*

I have long been interested in the strong inverse association between socioeconomic status and body weight in women. I've conducted a series of studies trying to understand the role of food insecurity and hunger as well as exposure to deprivation in early life as explanations. This work falls into the areas of causes and mechanisms.

*Selected Bibliography:*

*Role of Childbearing in Weight Gain and Development of Obesity in Women and Their Offspring:*

Olson CM, Strawderman MS. Modifiable behavioral factors in a biopsychosocial model predict inadequate and excessive gestational weight gain. *Journal of the American Dietetic Association* 103:48-54, 2003.

Olson CM, Strawderman MS, Hinton PS, Pearson TA. Gestational weight gain and postpartum behaviors associated with weight change from early pregnancy to 1 y postpartum. *International Journal of Obesity* 27:117-127, 2003.

Olson CM, Strawderman MS, Reed RG. Efficacy of an intervention to prevent excessive gestational weight gain. *American Journal of Obstetrics and Gynecology* 191(2):530-6, 2004.

Olson CM Tracking of food choices across the transition to motherhood. *Journal of Nutrition Education* 37:129-136, 2005.

Olson CM. A call for intervention in pregnancy to prevent maternal and child obesity. *American Journal of Preventive Medicine* 33(5):435-436, 2007.

Olson CM. Achieving a healthy weight gain during pregnancy. *Annual Review of Nutrition* 28:411-23, 2008.

Fernandez ID, Olson CM, De Ver Dye T. Discordance in the assessment of prepregnancy weight status of adolescents: a comparison between the Centers for Disease Control and Prevention sex- and age-specific body mass index classification and the Institute of Medicine-based classification used for maternal weight gain guidelines. *Journal of the American Dietetic Association* 108(6): 998-1002, 2008.

Olson CM, Strawderman MS, Dennison BA. Maternal weight gain during pregnancy and child weight at age 3 years. *Maternal and Child Health Journal*. 2008. DOI 10.1007/s10995-008-0413-6.

Davis EM, Zyzanski SJ., Olson CM, Stange KC, Horowitz RI. Racial, ethnic and socioeconomic differences in the incidence of obesity related to childbirth. *American Journal of Public Health* 99(2):294-299, 2009.

*Socioeconomic Disadvantage, Food Insecurity and Obesity in Women:*

Olson CM. Food insecurity in women: A recipe for unhealthy trade-offs. *Topics in Clinical Nutrition* 20(4):321-328, 2005.

Bove CF, Olson CM. Obesity in low-income rural women: Qualitative insights about physical activity and eating patterns. *Women & Health* 44(1):57-78, 2006.

Wells NW, Olson CM. The Ecology of Obesity: Perspectives from life course, design and economics. *Journal of Hunger & Environmental Nutrition* 1(3):99-129, 2006.

Olson CM, Bove CF, Miller EO. Growing up poor: Long-term implications for eating patterns and body weight. *Appetite* 49:198-107, 2007.

Olson CM, Strawderman MS. The relationship between food insecurity and obesity in rural childbearing women. *Journal of Rural Health* 24(1):60-66, 2008.

**Christine K. Ranney**

*Title and Affiliation:* Associate Professor

*Mailing Address and Telephone:* 351 Warren Hall, Cornell University, Ithaca, NY 14853

*Email Address and Telephone:* [ckr2@cornell.edu](mailto:ckr2@cornell.edu), 607-255-3095

*Webpage Address:* <http://www.aem.cornell.edu/profiles/ranney.htm>

*Discipline:* Applied Economics

*Research Interests:* Policy analysis -- well-being of vulnerable households

*Obesity Focus:* Prevention, causes

*Research Summary:*

As an associate professor in AEM, my research involves how government programs, particularly food and nutrition programs, affect poverty and problems associated with poverty in the U.S. Over the years I have studied food consumption, food assistance programs (FSP, WIC, and School Lunch-Breakfast), and diet quality. Currently, I'm investigating 1) linkages among FSP participation, food sufficiency and the health status of U.S. elderly and 2) the ability of U.S. food systems to deliver nutritious food.

*Selected bibliography:*

Ranney, C. K. (2008) Determining Food Expenditures and Measuring Poverty: The Work of Mollie Orshansky: Discussion. \*Review of Agricultural Economics\* 30(3) forthcoming.

Meyerhoefer, C. D., C. K. Ranney and D. Sahn (2005) Consistent Estimation of Censored Demand Systems using Panel Data. \*American Journal of Agricultural Economics\* 87(3): 660-672.

Wilde, P. and C. K. Ranney (2000) /The Monthly Food Stamp Cycle Shopping Frequency and Food Intake De Endogenous Switching Regression Framework. \*American Journal of Agricultural Economics\* 82(1):200-213. / /

Wilde, P., P. McNamara and C.K. Ranney (1999). "The Effect of Income and Food Programs on Dietary Quality: A Seemingly Unrelated Regression Analysis with One-way Error Components." (Parke Wilde, Paul McNamara and Christine Ranney). /American Journal of Agricultural Economics, 81(4): 959-971./ /

McNamara, P., C.K. Ranney, L.S. Kantor and S. Krebs-Smith (1999). "The Gap Between Food Intakes and the Pyramid Recommendations: Measurement and Food System Ramifications." (Paul McNamara, Christine Ranney, Linda Scott Kantor, and Sue Krebs-Smith) /Food Policy 24(2-3): 117-133.

**Aliza Solomon**

*Title and Affiliation:* Assistant Professor of Pediatrics, NY Presbyterian-Weill Cornell Medical College  
*Mailing Address:* Pediatric Gastroenterology and Nutrition, 525 East 68th St, Suite J114 NY, NY 10065  
*Email Address and Telephone:* [als9047@med.cornell.edu](mailto:als9047@med.cornell.edu), 212-746-3520  
*Webpage Address:* <http://www.Weillcornell.org/asolomon/>

*Discipline:* Pediatric gastroenterology

*Research Interests:* Obesity, Celiac disease, inflammatory bowel disease

*Obesity Foci:* Prevention, treatment

*Biography:* Dr. Aliza Solomon is Assistant Professor of Pediatrics at Weill Cornell Medical College. She received her B.A. in Psychology from Queens College in 1997. She completed medical training at New York College of Osteopathic Medicine in 2002, her Pediatric Residency at Maimonides Medical Center in 2005 and her Fellowship in Pediatric Gastroenterology at New York-Presbyterian Weill Cornell in 2008. She completed the American Neurogastroenterology and Motility Society's training program in 2008. She serves as a research mentor for pediatric residents and medical students.

*Research Summary:*

The focus of Dr. Solomon's research work is prevention of childhood obesity and treatment. The main objective of these studies is to test the hypothesis that age appropriate educational intervention will be effective in the prevention of childhood obesity. In addition, Dr Solomon is currently working on a protocol for treatment of the consequences of pediatric obesity.

Dr Solomon's work focuses on effects of age appropriate education on foods choices. The first "Will Knowledge Of Caloric Values Alter Food Choices?" is a food labeling study in children in the outpatient setting. The specific aims are: 1.) To determine if labeling fast food menu items with caloric values, alters meal selection and 2.) To determine if age, sex, ethnicity or BMI affects menu selection. This project has been completed and is in the process of being written for publication. The second project "Children's Health Attitudes on Nutrition and Good Eating at School (CHANGES) is a school-based project with the following specific aims: 1.) To promote knowledge of caloric intake in childhood via classroom teacher education in an age appropriate manner with reinforcement via a food labeling system in the cafeteria; 2.) To establish biomarkers (height, weight, blood pressure) of weight reduction/BMI to assess changes that reflect the effectiveness of the educational program. In addition, Dr Solomon is a co-investigator in "Differenced in Vascular Compliance in Pediatric Patients at Risk for Cardiovascular Disease as Measured by Endo-PAT Technology" with Dr. Rubin Cooper, and is currently working on a protocol studying NASH in the pediatric population.

*Selected Bibliography:*

Solomon A, Cunningham-Rundles S, Greendyk T, Sockolow R. Will Knowledge of Caloric Values Alter Food Choices? A Food Labeling Study in Children. *Obesity*. 16(S1): S208; 2008.

**Brian Wansink**

*Title and Affiliation:* John S. Dyson Professor Endowed Chair of Marketing and the Director of the Cornell Food and Brand Lab in the Department of Applied Economics and Management, Cornell

*Mailing Address:* 110 Warren Hall, Cornell University, Ithaca, NY 14853

*Email Address and Telephone:* [wansink@cornell.edu](mailto:wansink@cornell.edu), 607-254-6302

*Webpage Address:* [www.foodpsychology.cornell.edu](http://www.foodpsychology.cornell.edu), [www.mindlesseating.org](http://www.mindlesseating.org), [www.smallplatemovement.org](http://www.smallplatemovement.org)

*Discipline:* Consumer behavior, marketing, food psychology

*Research Interests:* The psychology behind what people eat and how often they eat it, helping people eat more nutritiously and to help control how much they eat, reducing childhood obesity through a focus on nutritional gatekeepers, improving school lunches with unduly restricting choice

*Obesity focus:* Causes, prevention

*Biography:*

Brian Wansink (Ph.D. Stanford 1990) holds the John S. Dyson Endowed Chair in the Applied Economics and Management Department at Cornell University, where he is Director of the Cornell Food and Brand Lab. His research findings have also contributed to the introduction of smaller packages (to prevent overeating), the use of taller glasses in some bars (to prevent the overpouring of alcohol), and the use of mouth-watering descriptions on some restaurant menus (to improve enjoyment of the food).

*Research Summary:*

A consumer psychologist, Wansink is best known for his work on food psychology and eating behavior and their relationship to the causes of obesity. This work focuses on how the environment leads or even tricks people into buying and eating food in ways they are unaware. While some of these insights are directed toward responsible food manufacturers and marketers, the majority are focused specifically at parents, dieters, and at the medical and nutrition community. Using a combination of lab studies and field studies, he has used movie popcorn, refillable soup bowls, bartender glasses, candy dishes, Chinese buffets, and ice cream socials to show how various environment cues influence the food intake of unknowing consumers. Although such environmental factors appear unrelated, they generally influence intake by inhibiting consumption monitoring and by suggesting alternative consumption norms.

In contrast to focusing on the macro-food environment as being the cause of the American obesity problem, Wansink's work focuses on the intermediate micro-environment that he contends people can control -- their home and their daily habits. In counterpoint to social criticism of the obesigenic nature of our "foodscape," recent work has focused on the more promising changes that can be made in what Wansink refers to as the obesigenic nature of our "kitchenscapes" and "tablescapes."

In examining the wider range of what is referred to as "mindless eating," Wansink has made contributions to three principal areas of food-related consumption: 1) consumption norms, 2) taste evaluation, and 3) food selection.

*Consumption Norms:*

Consumption norms are influenced by the wide range of factors that can bias an unknowing person to eat or drink more than they otherwise would. For instance, the size of a serving bowl, a plate, or a package has repeatedly been shown to bias how much a person serves himself and eats by an average of 20-30%. In addition, the perceived variety (color of candies) in an assortment and the proximity of candy on one's desk has been shown to double how much a person eats over the course of a day. Because people are estimated to make over 200 food-related decisions a day that they are unaware of making, the seemingly inconsequential impact of environmental cues can have a sizable impact on daily food intake. Over the course of year, even a 200 calorie daily change in how much one eats would translate into a 20 pound loss in weight or a 20 pound gain in weight.

*Taste Evaluation:*

The extent to which people enjoy food can be influenced by subtle environmental cues. The names of a food can create either positive or negative predispositions that can unfairly bias a person's perceived taste of a food. Wansink shows this is one reason why advertising or promoting a food as "healthy" unfairly biases people against the taste of a food. Yet using names and visual cues to guide a person's expectations can also enhance their perceived taste of a food.

*Food Selection:*

The food a person eats at a given time is related to sensory issues, but it is also related to how appropriate they perceive this food for that situation. People are more likely to adopt a food into a new situation (say, eating soup for breakfast) if they focus on the benefits of the food instead of on how it differs from prototypical breakfast foods.

*Selected Bibliography:*

Wansink, Brian and Junyong Kim (2005), "Bad Popcorn in Big Buckets: Portion Size Can

Influence Intake as Much as Taste," *Journal of Nutrition Education and Behavior*, 37:5 (Sept-Oct), 242-5.

- Wansink, Brian (2006), "Position of the American Dietetic Association: Food and Nutrition Misinformation," *Journal of the American Dietetic Association*, 106:4 (April), 601-607.
- Wansink, Brian, James E. Painter and Yeon-Kyung Lee (2006), "The Office Candy Dish: Proximity's Influence on Estimated and Actual Candy Consumption," *International Journal of Obesity*, 30:5 (May), 871-5.
- Wansink, Brian, Ganaël Bascoul, and Gary T. Chen (2006), "The Sweet Tooth Hypothesis: How Fruit Consumption Relates to Snack Consumption," 47:1 (July), *Appetite*, 107-110.
- Wansink, Brian, Koert van Ittersum, and James E. Painter (2006), "Ice Cream Illusions: Bowl Size, Spoon Size, and Serving Size," *American Journal of Preventive Medicine*, 145:5 (September), 240-243.
- Wansink, Brian and Pierre Chandon (2006), "Meal Size, Not Body Size, Explains Errors in Estimating the Calorie Content of Meals," *Annals of Internal Medicine*, 145:5 (September 5), 326-32.
- Wansink, Brian (2006), "Nutritional Gatekeepers and the 72% Solution," *Journal of the American Dietetic Association*, 106:9 (September), 1324-6.
- Wansink, Brian and Pierre Chandon (2006), "Can "Low-Fat" Nutrition Labels Lead to Obesity?," *Journal of Marketing Research*, 43:4 (November), 605-17.
- Sobal, Jeffery and Brian Wansink (2007), "Kitchenscapes, Tablesapes, Platescapes, and Foodscapes: Influences of Microscale Built Environments on Food Intake," *Environment and Behavior*, 39:1 (January), 124-42.
- Garg, Nitika, Brian Wansink, and J. Jeffrey Inman (2007), "The Influence of Incidental Affect on Consumers' Food Intake," *Journal of Marketing*, 71:1 (January), 194-206.
- Wansink, Brian and Jeffrey Sobal (2007), "Mindless Eating: The 200 Daily Food Decisions We Overlook," *Environment and Behavior*, 39:1 (January), 106-23.
- Chandon, Pierre and Brian Wansink (2007), "Is Obesity Caused by Calorie Underestimation? A Psychophysical Model of Fast-Food Meal Size Estimation," *Journal of Marketing Research*, 44:1 (February), 84-99.
- Wansink, Brian and Collin R. Payne (2007), "Counting Bones: Environmental Cues that Decrease Food Intake," *Perceptual and Motor Skills*, 104 (March), 273-7.
- Wansink, Brian, Collin R. Payne, and Jill North (2007), "Fine as North Dakota Wine: Sensory Expectations and the Intake of Companion Foods," *Physiology and Behavior*, 90:5 (April), 712-16.
- Van Ittersum, Koert and Brian Wansink (2007), "Do Children Really Prefer Large Portions? Visual Illusions Bias Their Estimates and Intake," *Journal of the American Dietetic Association*, 107:7 (July), 1107-1110.
- Wansink, Brian and Koert van Ittersum (2007), "Portion Size Me: Downsizing Our Consumption Norms," *Journal of the American Dietetic Association*, 107:7 (July), 1103-1106.
- Chandon, Pierre and Brian Wansink (2007), "The Biasing Health Halos of Fast Food Restaurant Health Claims: Lower Calorie Estimates and Higher Side-Dish Consumption Intentions," *Journal of Consumer Research*, 34:3 (October) 301-314.
- Wansink, Brian, Collin R. Payne, Pierre Chandon (2007), "Internal and External Cues of Meal Cessation: The French Paradox Redux?" *Obesity*, 15 (December), 2920-2924.
- Wansink, Brian and Collin R. Payne, (2008) "Eating Behavior and Obesity at Chinese Buffets," *Obesity*, 16:8, 1957-1960.
- Wansink, Brian, Collin R. Payne and C. Werle, (2008), "Consequences of Belonging to the 'Clean Plate Club,'" *Archives of Pediatrics & Adolescent Medicine*, 162:10, 994-995.
- Vartanian, LR, CP Herman, and B Wansink, (2008), "Are We Aware of the External Factors that Influence Our Food Intake?" *Health Psychology*, 27:5, 533-538.

**Rosemary Avery**

*Title and Affiliation:* Professor/Chair, Policy Analysis and Management, Cornell University

*Mailing Address:* 119 MVR Hall, Cornell University, Ithaca, NY 14853

*Email Address and Telephone:* [rja7@cornell.edu](mailto:rja7@cornell.edu); 607-255-2578

*Webpage Address:* <http://www.human.cornell.edu/che/bio.cfm?netid=rja7>

*Discipline:* Public policy

*Research Interests:* Child welfare and obesity

*Obesity Focus:* Treatment

**Karene Booker**

*Title and Affiliation:* Extension Support Specialist, Human Development, Cornell University

*Mailing Address:* G5 Martha Van Rensselaer Hall, Cornell University, Ithaca, NY 14853

*Email Address and Telephone:* [ktb1@cornell.edu](mailto:ktb1@cornell.edu), 607-255-7735

*Webpage Address:* <http://www.human.cornell.edu/che/bio.cfm?netid=ktb1>

*Discipline:* Organization Development

*Research interests:* Risk taking and decision making; impulsivity

*Obesity Foci:* Treatment/prevention

*Biography:*

Karene Booker is an Extension Support Specialist in the Department of Human Development. She manages Outreach & Extension initiatives designed to make lessons from faculty research more accessible to extension educators and other professionals, policy makers, and the public. She holds a M.S. in Organization Development from the Weatherhead School of Management at Case Western Reserve University. She joined the Department in 2006 after working extensively in human services policy, planning, and administration.

**Federica Del Genio**

*Title and Affiliation:* Visiting Research Fellow, Gastroenterology and Nutrition, Weill Medical College, Cornell University

*Mailing Address:* 1300 York Avenue, New York, New York, 10021

*Email Address and Telephone:* [frd2005@med.cornell.edu](mailto:frd2005@med.cornell.edu)

*Discipline:* Nutrition

*Research Interests:* Nutrition after bariatric surgery

*Obesity Focus:* Treatment

*Biography:*

I am part of an Italian family of medical doctors: my brother and my father are both surgeons. After my degree in Medicine, with magna cum laude, I have done my Residency and my PhD both in Clinical Nutrition. My Clinical Fellowship focused on Eating Disorders and then on Nutrition after gastrointestinal surgery. Since the beginning of my Ph.D. I have been working on obesity and obesity-related comorbidities and their improvements after bariatric surgery.

*Research Summary:*

My first interest was on the nutritional deficiencies and the bowel modifications after total gastrectomy for gastric cancer. Then at S. Raffaele Hospital (Milan, Italy) I had the possibility to assess the food intake of patients after different surgical procedures for gastrointestinal and pancreatic cancer; to evaluate furthermore their need of an early nutritional (enteral/parenteral) supplementation.

Since the beginning of my Ph.D., I have been working on obesity and obesity-related comorbidities and their improvements after bariatric surgery. I've focused on Non-alcoholic fatty liver disease and metabolic syndrome. I evaluated their prevalence in a metropolitan area of south Italy (Naples) and their changes (together with those of the body composition) following 10% weight loss in severe obese patients treated with laparoscopic bariatric surgery vs integrated medical treatment. Furthermore, I assessed all the metabolic abnormalities and hepatic steatosis changes following 10% and 25% weight loss in severe obese patients treated with laparoscopic gastric bypass.

At Weill Cornell Medical College, Department of Surgery, Section of Gastrointestinal Metabolic Surgery, our research aims to elucidate the mechanisms of diabetes control that may ultimately lead to a better understanding of diabetes and obesity. Indeed, metabolic surgery may help shape the future of diabetes care in the next few years, and is possibly the best promise we have ever had to cure the disease. In particular, I've been working on a study that aims to clarify if the early improvement/resolution of diabetes after bariatric surgery is due to the reduced food intake or to the surgery itself. We will compare the early effects (5 days post operative) of Roux-en-Y gastric bypass (RYGB) on glucose homeostasis with that of period of equivalent caloric restriction in matched patients.

*Selected Bibliography:*

Di Martino N, del Genio F, Bruscianno L. La sindrome da agastria. Aspetti fisiopatologici e nutrizionali. CIRANAD-ISA. Scientific Meeting. Avellino, Italy 4 Maggio 2000 (pp 36-43)

Colicchio P, Tarantino G, del Genio F, Sorrentino P, Saldamacchia G, Finelli C, Conca P, Contaldo F, Pasanisi F. Non-alcoholic fatty liver disease in young adult severely obese non-diabetic patients in South Italy. *Annals of Nutrition and Metabolism* 2005; 49(5): 289-295.

del Genio F. Clinica e terapia delle patologie del pavimento pelvico. Il ruolo del nutrizionista. In: *Le emorroidi dieci anni dopo. Il pavimento pelvico anno zero.* del Genio A, Bruscianno L. (eds). Ed: Grafica Nappa, Aversa (CE), Italy 2005, pag. 155-163.

del Genio G, del Genio A, Bruscianno L, Russo G, Pizza F, del Genio F, Rossetti G. Laparoscopic cardioplasty to avoid esophageal resection in patient not responsive to Heller myotomy. *Ann Thorac Surg* 2007; 83: 2235-8.

del Genio F, Alfonsi L, Marra M, Finelli C, del Genio G, Rossetti G, del Genio A, Contaldo F, Pasanisi F. Metabolic and nutritional status changes following 10% weight loss in severe obese patients treated with laparoscopic surgery vs integrated medical treatment. *Obesity Surgery* 2007; 17(12):1592-8.

del Genio G, Rossetti G, Bruscianno L, Russo G, Russo F, Pizza F, Tolone S, del Genio F, Di Martino M, Sagnelli C, del Genio A. Laparoscopic Duodenal Switch for pathologic duodenogastric reflux: initial experience. *Surg Laparosc Endosc Percutan Tech* 2007; 17: 517-520.

Contaldo F, del Genio F, Pasanisi F. Il danno epatico nell'obesità. In: *Aggiornamenti in Nutrizione Clinica 15: Nutrizione Clinica e patologie correlate.* Maria Gabriella Gentile Editor. Ed: Mattioli 1885, Firenze, Italy 2007, pag 21-26.

del Genio G, Tolone S, Rossetti G, Bruscianno L, del Genio F, Pizza F, Russo F, Di Martino M, Napoletano V, del Genio A. Total Fundoplication does not obstruct the esophageal secondary peristalsis: investigation with pre- and postoperative 24-hour pH-Multichannel Intraluminal Impedance. *Eur Surg Res* 2008; 40: 230-234.

del Genio G, Gagner M, Nocca D, Cuenca-Abente, Biertho L, Waage A, Faife B, del Genio F, Boza C, Aggarwal R, del Genio A. Endoscopic cervical bariatric surgery: follow-up study in a porcine model. *Obesity Surgery* 2008; 18(9): 1188-91.

del Genio G, Tolone S, del Genio F, Aggarwal R, d'Alessandro A, Allaria A, Rossetti G, Bruscianno L, del Genio A. Prospective assessment of patient selection for antireflux surgery by combined multichannel intraluminal impedance pH monitor. *Journal of Gastrointestinal Surgery* 2008; 2: 1491-1496

del Genio G, Tolone S, Bruscianno L, Rossetti G, Pizza F, del Genio F, Fei L, del Genio A. The total fundoplication controls acid and non-acid reflux. Evaluation by pre- and postoperative 24 hour pH-multichannel intraluminal impedance. *Surgical Endoscopy* 2008; 14 (in press)

del Genio G, Tolone S, Bruscianno L, Rossetti G, Pizza F, Russo F, Di Martino M, Barra L, Lucido F, del Genio F, Maffettone V, Napolitano V, del Genio A. Objective assessment of gastroesophageal reflux after extended Heller myotomy and total fundoplication for achalasia with the use of 24 hour combined multichannel intraluminal impedance and pH monitoring (MII-pH). *Disease of the Esophagus* 2008 (in press)

del Genio G, Gagner M, Cuenca-Abente F, Nocca D, Biertho L, del Genio F, Assalia A, Del Genio A. Laparoscopic sleeve gastrectomy with duodeno-jejunal bypass: a new surgical procedure for weight control. Feasibility and safety study in a porcine model. *Obesity Surgery* 2008 (in press)

**David A. Levitsky**

*Title and Affiliation:* Professor of Nutrition and Psychology, Cornell University

*Mailing Address:* 112 Savage Hall, Cornell University, Ithaca, NY 14853

*Email Address and Telephone:* [dal4@cornell.edu](mailto:dal4@cornell.edu), 607-255-3263

*Webpage Address:* <http://www.human.cornell.edu/che/bio.cfm?netid=dal4>

*Discipline:* Nutrition, Psychology

*Research Interests:* Regulation of energy balance, control of food intake and energy expenditure, regulation of body weight.

*Obesity Focus:* Environmental causes

*Biography:*

David Levitsky has been a member of the Division of Nutritional Sciences and the Department of Psychology since 1968. He has spent his career investigating the factors that influence the control of food intake and the energy expenditure in mammals. He has published widely in both the fields of Nutrition and Psychology. He has won several prestigious teaching awards including New York State Chancellors Award and has been a Steven H. Weiss Fellow since 1994. He currently teaches the introductory nutrition course, *Nutrition, Health, and Society*, and an advance course in Obesity, *Obesity and the Control of Body Weight*.

*Research Summary:*

Much of my work has focused on the precision to which humans adjust for imposed energetic errors (i.e., meal skipping, overeating, changes in energy density of the diet). I have concluded from these studies and my analysis of the literature that humans are extremely imprecise in their adjustment to any kind of energy challenge. On the other hand, our studies and those reported in the literature demonstrate that people are very sensitive, at least in the short term, to environmental cues such as the amount of food that is on their plate or the number of foods available at a meal. The paradox is if the intake of humans is altered so easily by changes in environmental cues, then why is it so difficult for humans resist weight gain and even lose weight. I believe the answer lies in the tremendous vulnerability of humans to the “occasion” to eat. The occasion can either be direct as in offering one food or more abstract such as seeing or hearing advertisements about food. The critical question is whether it is possible to overcome this vulnerability sufficiently to prevent weight gain or even lose weight? We propose that it is. We have recently published the results of two studies where we described the use of daily weight monitoring (Caloric Titration) as a method that completely prevented first semester freshman from gaining weight. The technique requires one to view their recent history of daily body weight and make changes in their subsequent intake or expenditure in order to hold their weight constant. We believe that this method allows people to make the kind of changes that best fits with their lifestyle. We are currently testing this technique to help people lose and sustain a weight loss. Besides the novelty of requiring regular weight monitoring, the method requires a slow weight loss, only 1 percent weight loss at a time, until they reach a maximum of ten percent weight loss. We also will be measuring the degree to which the use of the Caloric Titration Method increases one’s sense of control over the seductiveness of food in their environment.

*Selected Bibliography:*

Levitsky, D. A. *Macronutrients and the Control of Body Weight*. In: Coulston AM, Rock CL, Mosen ER. *Nutrition in the Prevention and Treatment of Disease*. Academic Press: San Diego, 2008 (second edition)

Levitsky, D. A. *The Control of Food Intake and the Regulation of Body Weight in Humans*. In: Harris, RBS, Mattes, R. *Appetite and Food Intake: Behavioral and Physiological Considerations*. CRC Press: Boca Raton, 2008

Speakman, J. and Levitsky, D. A. *The Aetiology of Obesity: genetics or environment, intake or expenditure*. Williams, G, Fruhbeck, G. *Obesity: science to practice*. In press.

Obarzanek E, Levitsky DA. Eating in the laboratory: Is it representative? *Am J Clin Nutr* 1985;42:323-28.

Lissner L, Levitsky DA, Strupp BJ, Kalkwarf HJ, Roe DA. Dietary fat and the regulation of energy intake in human subjects. *Am J Clin Nutr* 1987;46:886-92.

Levitsky DA, Obarzanek E, Stallone D, Strupp BJ. Unusual mechanism of expending energy. *Internat J Obesity* 1987;11:48.

Stevens J, Levitsky DA, Van Soest PJ, Robertson JB, Kalkwarf HJ, Roe DA. Effect of psyllium gum and wheat bran on spontaneous energy intake. *Am J Clin Nutr* 1987;16:812-17.

Lissner L, Stevens J, Levitsky DA, Rasmussen KM, Strupp BJ. Variations in energy intake during the menstrual cycle: implications for food-intake research. *Am J Clin Nutr* 1988;48:956-62.

Lissner L, Habicht J-P, Strupp BJ, Levitsky DA, Haas J, Roe DA. Body composition and energy intake: Do overweight women overeat and underreport? *Am J Clin Nutr* 1989;49:320-25.

- Troiano RP, Levitsky DA, Kalkwarf HJ. Effect of dl-fenfluramine on thermic effect of food in humans. *Internat J Obesity* 1990;14:647-55.
- Kendall A, Levitsky DA, Strupp BJ, Lissner L. Weight loss on a low fat diet: Consequence of the imprecision of the control of food intake in humans. *Am J Clin Nutr* 1991;53:1124-29.
- Levitsky DA, Troiano R. Metabolic consequences of fenfluramine for the control of body weight. *Am J Clin Nutr* 1992;55:167S-72S.
- Troiano R P, Frongillo EA Jr, Sobal J, Levitsky D A. The relationship between body weight and mortality: A quantitative analysis of combined information from existing studies. *Intern. J. Obesity*, 1996; 20: 63-75.
- Levitsky, D. Putting Behavior back into Feeding Behavior: A Tribute to George Collier. *Appetite* 2001; 38, 1-6.
- Mrdjenovic, G. & Levitsky, D. A. (2003) Nutritional and energetic consequences of sweetened drink consumption in 6- to 13-year-old children. *J Pediatr* 2003; 142: 604-610.
- Levitsky, D. A., Halbmaier, C. A. & Mrdjenovic, G. The freshman weight gain: a model for the study of the epidemic of obesity. *Int J Obes Relat Metab Disord* 2004, 28: 1435-1442.
- Levitsky, D. A. & Youn, T. The more food young adults are served, the more they overeat. *J Nutr* 2004, 134: 2546-2549.
- Levitsky DA, Obarzanek O, Mrdjenovic G, Strupp BJ. Imprecise Control of Energy Intake: Absence of a Reduction in Food Intake following Overfeeding in Young Adults. *Physiol Behav* 2005; 84: 669-675.
- Mrdjenovic G, Levitsky D. Children eat what they are served: the imprecise regulation of energy intake. *Appetite*, 2005, 273-282.
- Levitsky, DA. The non-regulation of food intake in humans: hope for reversing the epidemic of obesity. *Physiol Behav*, 2006, 86(5): 623-32.
- Levitsky DA, Garay J, Nausbaum M, Neighbors L, DellaValle DM. Monitoring weight daily blocks the freshman weight gain: A model for combating the epidemic of obesity. *Int J Obes (Lond)* 2006;30:1003-10.

**Valerie Reyna**

*Title and Affiliation:* Professor, Human Development, Cornell University

*Mailing Address:* B44 Martha Van Rensselaer Hall, Cornell University, Ithaca, NY 14853

*Email Address and Telephone:* [vr53@cornell.edu](mailto:vr53@cornell.edu), 607-319-0655

*Webpage Address:* <http://www.human.cornell.edu/che/HD/reyna/index.cfm>

*Discipline:* Psychology

*Research interests:* Risk taking and decision making; impulsivity

*Obesity Foci :* Treatment/prevention

*Biography:*

Valerie Reyna is Co-director of the Center for Behavioral Economics and Decision Research and Professor of Human Development, Psychology, Cognitive Science, and Neuroscience at Cornell University. She holds a Ph.D. in experimental psychology from Rockefeller University, and publishes regularly in such journals as *Psychological Science* and *Medical Decision Making*. Her research focuses on dual processes in memory, judgment, and decision making, on how these processes change with age and expertise, and on their implications for risky decision making. She is a developer of fuzzy-trace theory, a model of the relation between mental representations and decision making that has been widely applied in law, medicine, and public health.

*Research Summary:*

Valerie Reyna has published extensively on developmental differences in risky decision making across the lifespan, with particular emphasis on adolescence, and is the creator of an influential theory of risk taking, fuzzy-trace theory (Reyna, 2004). She also has a track record of funded research, including serving as Principal Investigator of a large NIH grant entitled "Interventions for Risk Reduction and Avoidance in Youth," which targeted adolescent risk taking relevant to premature pregnancy and sexually transmitted diseases. She has written several comprehensive reviews of the literature on risky decision making (e.g., Reyna & Farley, 2006), conducted numerous empirical studies on risky decision making across the lifespan (e.g., Reyna & Brainerd, 1991; Reyna & Ellis, 1994) and recently edited a special issue of a leading developmental journal on this topic (see Reyna & Rivers, 2008).

Reyna's research on adolescent decision making is directly relevant to the study of youth obesity. Adolescence is a time of risks. With greater freedom and independence, young people face new choices involving sexuality, addictive substances, and lifestyle choices such as what to eat and how to be fit. Poor choices can have long-lasting consequences for individuals, families, and society. To help young people make better choices, a different approach is needed: one that recognizes how young people reason.

Research by Valerie Reyna has revealed that adolescents rationally weigh benefits and risks, but may make poor choices because to them the benefits outweigh the risks. Adults make more decisions based on "gist," an overall sense of what is the best course of action. This approach enables adults to reach the bottom line more quickly and thereby reduce their risky behaviors.

Through empirical research Reyna has developed a new approach to adolescent risk prevention which encourages less deliberative, more categorical thinking and helps youth recognize cues in the environment that signal risk before it is too late to act. Reyna is planning research to further develop and test this new approach and to apply it to the critical issue of youth obesity.

*Selected Bibliography:*

Reyna, V. F. & Rivers, S. E. (2008). Editorial: Current theories of risk and rational decision making. *Developmental Review*, 28, 1-11.

Rivers, S. E., Reyna, V. F. & Mills, B. A. (2008). Risk taking under the influence: A fuzzy-trace theory of emotion in adolescence. *Developmental Review*, 28, 107-144.

Reyna, V. F., & Brainerd, C. J. (2007). The importance of mathematics in health and human judgment: Numeracy, risk communication, and medical decision making. *Learning and Individual Differences* 17, 147-159.

Reyna, V. F., & Farley, F. (2006). Risk and rationality in adolescent decision making: Implications for theory, practice, and public policy. *Psychological Science in the Public Interest*, 7(1), 1-44.

Reyna, V. F., & Lloyd, F. J. (2006). Physician decision-making and cardiac risk: Effects of knowledge, risk perception, risk tolerance, and fuzzy processing. *Journal of Experimental Psychology: Applied*, 12, 179-195.

Reyna, V. F. (2005). Fuzzy-trace theory, judgment, and decision-making: A dual-processes approach. In C. Izawa & N. Ohta (Eds.), *Human Learning and Memory: Advances in theory and applications*: (pp. 239-256). Mahwah, NJ: Erlbaum

- Reyna, V. F., Adam, M. B., Poirier, K., LeCroy, C. W., & Brainerd, C. J. (2005). Risky decision-making in childhood and adolescence: A fuzzy-trace theory approach. In J. Jacobs & P. Klaczynski (Eds.), *The development of judgment and decision making in children and adolescents* (pp. 77-106). Mahwah, NJ: Erlbaum.
- Reyna, V. F. (2004). How people make decisions that involve risk: A dual-process approach. *Current Directions in Psychological Science*, 13, 60-66.
- Reyna, V. F., & Adam, M. B. (2003). Fuzzy-trace theory, risk communication, and product labeling in sexually transmitted diseases. *Risk Analysis*, 23, 325-342.
- Reyna, V. F., Lloyd, F. J., & Brainerd, C. J. (2003). Memory, development, and rationality: An integrative theory of judgment and decision-making. In S. Schneider & J. Shanteau (Eds.), *Emerging perspectives on judgment and decision research* (pp. 201-245). New York: Cambridge University Press.
- Reyna, V. F., Holliday, R., & Marche, T. (2002). Explaining the development of false memories. *Developmental Review*, 22, 436-489.
- Reyna, V. F., & Hamilton, A. J. (2001). The importance of memory in informed consent for surgical risk. *Medical Decision Making*, 21, 152-155.
- Reyna, V. F., Lloyd, F., & Whalen, P. (2001). Genetic testing and medical decision making. *Archives of Internal Medicine*, 161, 2406-2408.
- Reyna, V.F. (2000a). Data, development, and dual processes in rationality. *Behavioral and Brain Sciences*, 23, 694-695.
- Reyna, V. F., & Brainerd, C. J. (1995). Fuzzy-trace theory: Some foundational issues. *Learning and Individual Differences*, 7, 145-162.
- Reyna, V. F., & Ellis, S. C. (1994). Fuzzy-trace theory and framing effects in children's risky decision making. *Psychological Science*, 5, 275-279.
- Reyna, V. F., & Brainerd, C. J. (1994). The origins of probability judgment: A review of data and theories. In G. Wright & P. Ayton (Eds.), *Subjective probability* (pp.239-272). New York, NY: Wiley.
- Reyna, V. F., & Brainerd, C.J. (1991). Fuzzy-trace theory and framing effects in choice: Gist extraction, truncation, and conversion. *Journal of Behavior and Decision Making*, 4, 249-262.

**Gladys Strain**

*Title and Affiliation:* Director of Laparoscopic and Bariatric Research, Assoc. Res. Prof. in Nutritional Sciences in Surgery, Weill Cornell School of Medicine

*Mailing Address:* 525 E 68<sup>th</sup> St NYC, NY 10065

*Email Address and Telephone:* [gls2010@med.cornell.edu](mailto:gls2010@med.cornell.edu), 212-746-5661

*Webpage Address:* <http://www.med.cornell.edu/research/gladysstrain/>

*Discipline:* Nutrition

*Research Interests:* The effects of bariatric surgery on the mind and body

*Obesity Foci:* Treatment, consequences

*Biography:*

I had a calling to study Nutrition at Michigan State. After a Dietetic internship, I worked as a graduate assistant while completing my Master Degree in Public Health Nutrition and was the first doctoral student in nutrition at Case Western. With family responsibilities I stopped medical school after three years. I began my research career in New York with the first funded Obesity Research Center. When surgical interventions produced sustained weight loss, my attention focused on the resultant metabolic changes.

*Research Summary:*

My nutrition research studies began with studies related to malnutrition and protein nutriture which were in the foreground of research in the 1950s. Using an animal model we studied protein malnutrition which was so prevalent in children in the developing world. In the mid 70's obesity came to the spotlight with the first Obesity Research Center funded at St. Lukes'-Roosevelt by NIH. My own research on the hormonal abnormalities of obesity was originally funded by NIH due to the increased incidence of cancer in the obese population. This work was supported by a General Clinical Research Center providing laboratory facilities and in-patient beds for careful monitoring of patients. Over time the research was moved to Rockefeller University where the work with hormone changes was continued.

Psychiatric fellows began projects looking at psychological status in the morbidly obese. Other research expanded to the diabetic population that continued to increase rapidly with the increasing weight status of the population.

I had worked with weight loss surgeons at St. Lukes to assist patients with obtaining significant weight loss that could be more sustained. In 1999 while at Mt. Sinai I joined the weight loss surgeons to study the effects of the caloric deficit resultant from the surgeries. When the surgical group moved from Mt Sinai to Cornell in 2003, I joined them full time in the department of surgery as Director of Research for Laparoscopic and Bariatric Surgery. We had obtained NIH funding which was activated at Cornell as part of the Longitudinal Assessment of Bariatric Surgery ( LABS). These multi-centered studies have been ongoing for the last 5 years and a renewal has been submitted for their continuation.

Treatment (Surgery) and the effects of that treatment are under continual review and development. Comparative studies on weight loss and body composition changes with the 4 procedures currently used have been reported. Quality of life issues describing the severely obese and the changes that result with the change in weight status have been reported. In progress are ongoing studies on the resolution of diabetes with surgical interventions. Changes in cognitive function after surgery are being documented and modifications in brain activity have been identified for the response to food cues before and after surgery.

At the current time we are not participating in the Teen LABS, but I would be pleased as a LABS investigator to provide a short summary on the basic demographics of teen LABS and the outcome data available to date.

*Selected Bibliography:*

Strain GW, Strain JJ. Psychological; impediments to weight loss. *Internat J Obes* 3:167-170. 1979.

Strain GW, Zumoff B, Strain JJ, Levin J, Fukushima DK. Cortisol production in obesity. *Metabolism* 29:980-985, 1980.

Zumoff B, Strain GW, Levin J and Fukushima DK. Sex difference in the influence of obesity on the retention of a tracer of H estradiol. *Metabolism* 30:568-571, 1981.

Zumoff B, Strain GW, Kream J, O'Connor J, Levin J, Fukushima DK. Obese young men have elevated plasma estrogen levels but obese premenopausal women do not. *Metabolism* 30:1011-1014, 1981.

Strain GW, Zumoff B, Levin J, Kream J, and Fukushima DK. Sex difference in the influence of obesity on the 24-hour mean plasma cortisol concentration. *Metabolism* 31:209-212, 1982.

- Strain GW, Zumoff B, Kream J, Strain JJ, Deucher R, Rosenfeld RS, Levin J, and Fukushima DK. Mild hypogonadotropic hypogonadism in obese men. *Metabolism* 31:871-875, 1982.
- Schneider J, Bradlow L, Strain GW, Levin J, Anderson K, and Fishman J. Effects of obesity on estradiol metabolism: decreased formation of nonuterotropic metabolites. *J Clin Endocrinol Metab* 56:978-993, 1983.
- Strain GW, Strain J, Knittle J, Zumoff B. Do fat-cell morphometrics predict weight-loss maintenance? *Internat. J. Obesity* 8:53-39, 1984.
- Strain GW, Strain JJ, Zumoff B. L-tryptophan does not increase weight loss in carbohydrate-craving obese subjects. *Internat. J. Obes.* 9:375-380, 1985.
- Ellsworth GA, Strain GW, Strain JJ, Knittle J, Vaillant GE, Zumoff B. Defensive maturity ratings and sustained weight loss obesity. *Psychosomatics* 27:772-781, 1986.
- Zumoff B, Strain GW, Miller LK, Levit CD, Miller EH, Rosenfeld RS. Partial reversal of the hypogonadotropic hypogonadism of obese men by administration of corticosteroid doses of dexamethasone. *Internat. J. Obesity* 12:525-531, 1988.
- Strain GW, Zumoff B, Miller LK, Rosner W, Levit C, Kalin M, Rosenfeld RS. Effect of massive weight loss on the abnormal hypothalamic-pituitary-gonadal function in obese men. *J. Clin. Endocrinol. Met.* 66:1019-1023, 1988.
- Zumoff B, Strain GW, Miller LK, Rosner W, Senie RT, Rosenfeld RS. Plasma free and non-sex-hormone-globulin-bound testosterone is decreased in obese men in proportion to their degree of obesity. *J Clin Endocrinol Met* 71:929-931, 1990.
- Strain, GW, Hershcopf RJ, Zumoff B. Food intakes of very obese persons: Qualitative and quantitative aspects. *J. Amer. Dietet. Assn.* 92:199-203, 1992.
- Strain GW, Zumoff B. The relationship of weight-height indices of obesity to body fat content. *J. of the Amer. College of Nut.* 11:715-719, 1992.
- Zumoff B, Strain GW. A perspective on hormonal abnormalities in obesity: cause or effect? *Obes. Research* 2:56-67, 1994.
- Strain GW, Zumoff B, Rosner W, and Pi-Sunyer FX. Serum insulin and sex-hormone-binding globulin in obese men and their changes with weight loss. *J Clin. Endocrin. and Met.* 79:1173-1176, 1994.
- Katz G, Strain GW, Rodriguez M, Roman S. Impact on short term diabetes outcomes of an interdisciplinary diabetes team at an inner city community health center. *Endocrin Pract* 4:27-31, 1998.
- Strain GW. Point-Counterpoint: Response to promoting size acceptance in weight management counseling. *JAm Dietet Assn* 99:926-928, 1999.
- Zumoff B, Miller LK, Strain GW. Reversal of the hypogonadotropic hypogonadism of obese men by an aromatase inhibitor testolactone. *Metabolism* 2003, 52:1126-28.
- Strain, GW, Zumoff, B The effect of bariatric surgery on the abnormalities of the pituitary- gonadal axis in obese men. *Surg Obes Related Dis* 2006 2: 75-77.
- Strain GW, Wang J, Gagner M, Pomp A, Inabnet WB, Heymsfield SB. Bioimpedance for severe obesity: Comparing research methods for total body water and resting energy expenditure. *Obesity*, 2008; 16: 1953-1956.
- Segal H, Strain GW, Reeves R, Markis A. Position Statement of the American Dietetic Assn: Weight Management. *J Amer Dietet Assn* (Feb 2009 in press)

## Participants

### **Abraham Bornstein**

*Title and Affiliation:* Cardiologist, Weill Cornell Medical College

*Mailing Address:* 525 east 68<sup>th</sup> St, F-695, New York, New York, 10021

*Email Address and Telephone:* [abb2006@med.cornell.edu](mailto:abb2006@med.cornell.edu); 917-846-1346; 212-746-3566

*Webpage Address:* [http://www.med.cornell.edu/publichealth/about\\_us/faculty.html](http://www.med.cornell.edu/publichealth/about_us/faculty.html)

*Discipline:* Public health, global health

*Research Interests:* Childhood & adolescent obesity, the metabolic syndrome, and subclinical coronary disease

*Obesity Focus:* Mechanisms

#### *Biography:*

I am a physician who is currently an Assistant Professor of Medicine at Weill Cornell Medical College, but who has also had more than 25 years of clinical practice experience in invasive & interventional cardiology, as well as critical care medicine. Along with recently attained experience in medical informatics (telemedicine), medical education, and medical research, I have accrued a combination of skills that should enhance my ability to fully participate in my next venture, 'Hospitals Without Borders', a new global telemedicine initiative in partnership with New York Presbyterian Hospital. In an attempt to stay true to my academic roots, I feel it is critically important for me to get further training in the area of clinical investigation so that I may be better able to assess the impact that our new technology makes in terms of clinical outcomes and cost-effective analysis.

#### *Research Summary:*

At Weill Cornell Medical College, I have been extensively involved at many levels of medical education, including medical student (PBL and MPS I), pediatric housestaff, medical housestaff, and cardiology fellow training. I have also participated in provision of content for the 'Problem Based Learning' medical school curriculum, as well as content for CME and teleconferencing. Additionally, I am currently involved in the deployment of a Telemedicine-based Adult Congenital Heart Disease Service as a joint project involving the divisions of Pediatric Cardiology at the Weill Cornell and Columbia Campuses of New York Presbyterian Hospital as well as SUNY-Downstate College of Medicine.

Throughout my career, I have tried to be instrumental in promoting medical education as the backbone for the ongoing process of establishing clinical excellence, receiving multiple teaching awards in the process. At every stage of my career in medicine, I have always contributed to the development of the teaching programs including CME programs. I have delivered and continue to deliver numerous medical/scientific presentations at conferences, medical meetings and at conferences for hospital house staff. Additionally, I have lectured extensively for a number of pharmaceutical companies as a member of their speakers' bureau and medical educational panels. As a result, I have developed excellent writing, public speaking and presentation skills.

My clinical trials experience began in 1998-1999 when I became a Clinical Research Associate with Stamford Therapeutics Consortium (STC) in Stamford, CT a clinical investigational site specializing in phase III, and IV clinical trials for the pharmaceutical and biotechnology industries.

I have collaborated with the Division of Pediatric Cardiology to establish an obesity council as well as in obesity research working group which will include physicians and medical researchers from all the pediatric subspecialties as well as the Weill Cornell Medical College Clinical Research Center (GCRC), who currently meet on a monthly basis in order to help design and implement research protocols addressing childhood obesity, the metabolic syndrome, diabetes mellitus, as well as subclinical vascular disease. In conjunction with The Rogosin Institute, the Division of Pediatric Cardiology, and Vascular Surgery, I have worked to help establish a vascular screening program to detect undiagnosed or subclinical vascular disease in overweight and or obese children, as well as children with the metabolic syndrome or DM. A comprehensive coronary risk factor assessment and profile will be developed for each child. Modalities utilized to evaluate the status of their vascular system will include flow mediated forearm vasodilation, carotid ultrasound to assess intimal-medial thickness, CT angiography, and intravascular ultrasound (IVUS) as clinically indicated.

We have also designed a protocol to look at the effects of soluble rice bran products on blood glucose levels and on multiple cardiovascular risk factors in children with the metabolic syndrome or Type II diabetes mellitus.

My expertise with the metabolic syndrome and type 2 diabetes mellitus as major coronary risk factors and coronary risk equivalents, respectively, evolved while I served as the medical director for Cerebrio, an independent professional CME company within the Corbett Accel Healthcare Group, an Omnicom Group Company. Cerebrio has been nationally recognized to develop highest quality, CME activities scientifically rigorous certified educational activities and independent programming for healthcare professionals that deliver new science with impact and integrity. The programs are designed to enhance the practice of medicine, and, as a result, clinical outcomes. At Cerebrio, I developed educational programming, CME content, as well as the multimedia content, in the areas of the metabolic syndrome, type 2 diabetes mellitus, and atherosclerotic cardiovascular disease, for nationally recognized physician experts from major academic medical centers who

would lecture at national meetings such as Prime Med, the American College of Cardiology Meetings, the American Heart Association Meetings, the Heart Failure Society of North America, etc. I was also responsible for the development of tools to determine educational outcomes assessment.

Prior to that, I participated as a member of the Educational Speakers Bureau for GlaxoSmithKline, lecturing on the use of thiazolidinediones in patients with insulin resistance, as well as Type II diabetes mellitus, and their potential in the prevention of the atherosclerotic process. Lectures, which I delivered included 'Insulin Resistance as a Coronary Risk Factor', delivered as Endocrine Grand Rounds at St. Luke's-Roosevelt Hospital, in New York City, and 'Insulin Resistance Syndrome and Coronary Disease', as GlaxoSmithKline sponsored Medical Symposia for practicing physicians.

**Gilbert J. Botvin**

*Title and Affiliation:* Professor and Chief, Division of Prevention and Health Behavior, Department of Public Health, Weill Cornell Medical College

*Mailing Address:* Weill Cornell Medical College, 525 E. 68th St., New York, NY 10065

*Email Address and Telephone:* [gjbotvin@med.cornell.edu](mailto:gjbotvin@med.cornell.edu), 212-746-1270

*Webpage Address:* <http://www.med.cornell.edu/research/gjbotvin/>

*Discipline:* Psychology and public health

*Research Interests:* Health promotion; behavioral risk factors associated with major public health problems; tobacco, alcohol, drug abuse, and violence prevention

*Obesity Focus:* Prevention, treatment

*Biography:*

Dr. Gilbert J. Botvin is an internationally known expert on tobacco, alcohol, and drug abuse prevention. He holds a Ph.D. in psychology from Columbia University and has been a member of the Cornell faculty for 30 years. He is a tenured professor of psychology in public health and a professor of psychiatry at Weill Cornell Medical College, and Chief of the Division of Prevention and Health Behavior. Dr. Botvin has published 250 scientific papers and book chapters, has received 28 major federal grants including a Center grant from the National Institute on Drug Abuse. Dr. Botvin is the founding editor of *Prevention Science*, is past president of the Society for Prevention Research, and has served on numerous NIH expert panels.

*Research Summary:*

Lifestyle patterns or health risk behaviors play a major role in the development of chronic diseases such as heart disease, cancer, chronic, and HIV/AIDS. These risk behaviors have their roots in childhood and adolescence. Our research at Weill Cornell Medical College has focused on increasing our understanding of the etiology of these risk behaviors and the development of interventions for preventing them. Chief among these health risk behaviors are tobacco, alcohol, and illicit drug use. Research at WCMC's division of prevention and health behavior has identified key etiologic factors promoting tobacco, alcohol, and illicit drug use and tested school-based prevention approaches. Our prevention work has examined a multi-component drug abuse prevention program, called *Life Skills Training* (LST), which teaches generic personal and social skills, anti-drug use norms, and drug resistance skills. The LST approach has demonstrated positive behavioral effects on alcohol, tobacco, and other drug use. The focus of our initial evaluation studies was on cigarette smoking and involved predominantly white middle-class populations. This research consisted largely of small-scale pilot studies testing the short-term effects of the intervention on cigarette smoking and related risk factors. Several early studies demonstrated that this prevention approach effectively reduces cigarette smoking among youth receiving the program compared to a control group that does not (e.g., Botvin, & Eng, 1980, 1982). During the first decade of evaluation research on this approach, additional studies examined the effectiveness of the LST approach with different delivery formats, different program providers, and with different substances. These studies found that the prevention approach was made more effective by the inclusion of booster sessions after the initial year of intervention and that it is equally effective when taught by teachers, peer leaders, and health educators (Botvin, Renick, & Baker, 1983). Additional studies found that the approach produced behavioral effects on alcohol (e.g., Botvin et al., 1984). These initial studies were among the first school-based prevention studies to show consistent behavioral effects on adolescent substance use.

The second decade of evaluation research on the LST approach, from 1990 to the present, has focused increasingly on the intervention's long-term effects on drug use, effects on more serious levels of drug involvement including illicit drug use, and its impact on hypothesized mediating variables, and has increasingly focused on effects when used with inner-city minority populations. The evaluation designs have become increasingly sophisticated with time, including two large-scale multi-site randomized prevention trials with long-term follow-up. The first of these prevention trials focused on predominantly white, suburban youth and more recent trials have examined prevention effects with predominantly minority inner-city youth. Beginning in 1985, a large randomized controlled prevention trial examined the short- and long-term effects of the prevention approach among close to 6,000 students from 56 junior high schools in New York State. This study was one of the largest and most methodologically rigorous drug abuse prevention trials ever conducted and included adolescents that were predominantly white (91%). Students in the prevention condition received the intervention in the 7th grade and booster sessions during the eighth and ninth grades. Significant prevention effects were found among intervention participants at the end of the ninth grade in terms of cigarette smoking, marijuana use, and immoderate alcohol use (Botvin, Baker, Dusenbury, Tortu, & Botvin, 1990) as well as at the end of the twelfth grade (Botvin, Baker, Dusenbury, Botvin, & Diaz, 1995). In the latter follow-up study, there were significantly fewer smokers, heavy drinkers, marijuana users and polydrug users among students who received the prevention program relative to controls. The strongest prevention effects were produced for the students who received the most complete implementation of the prevention program. A related study using data from a confidential and random subsample of these students (N = 447) found that there were lower levels of overall illicit drug use and lower levels of use for hallucinogens, heroin and other narcotics in the intervention group relative to controls (Botvin et al., 2000). More recently, several large-scale prevention trials testing the LST approach have been conducted with inner-city minority youth in New York City. One randomized controlled trial tested the effectiveness of the prevention program in a

sample of predominantly African-American (61%) and Hispanic (22%) sample of students (N = 3,621) in 29 urban schools. Results at the posttest and one-year follow-up indicated that those who received the prevention program reported less smoking, drinking, drunkenness, inhalant use, and polydrug use relative to those in the control group who did not receive the intervention (Botvin, Griffin, Diaz, & Ifill-Williams, 2001a). Additional studies using data from this large-scale trial focused on prevention effects of the intervention program in terms of cigarette smoking onset, binge drinking, and effects for youth at high risk for substance use initiation. The first of these studies examined the effectiveness of the prevention program in reducing the initiation and escalation of smoking in a sub-sample of girls from the larger study (Botvin, Griffin, Diaz, Miller, & Ifill-Williams, 1999). One-year follow-up data indicated that girls who participated in the intervention condition were significantly less likely to initiate smoking relative to controls, and 30% fewer of participants escalated to monthly smoking relative to students in the control group. A second study showed that this intervention approach had protective effects in terms of binge drinking (5 or more drinks per drinking occasion) among inner-city middle-school boys and girls (Botvin, Griffin, Diaz, & Ifill-Williams, 2001b). In this study, the proportion of binge drinkers was over 50% lower in those who received the prevention program relative to the control group at both the one-year and two-year follow-up assessments. Finally, a recent study examined the effectiveness of the prevention program among a subset of youth at high risk for substance use initiation and found that those students who had poor grades in school and friends that engage in substance use were less likely to engage in smoking, drinking, inhalant use, or poly-drug use compared to similarly matched controls that did not receive the intervention (Griffin, Botvin, Nichols, & Doyle, 2003). Taken together, the results from several large-scale randomized prevention trials provide strong evidence of the effectiveness of this prevention approach, both with suburban white youth as well as inner-city minority youth.

*Selected Bibliography:*

Botvin, G.J., Baker, E., Renick, N., Filazzola, A.D., and Botvin, E.M. (1984). A cognitive-behavioral approach to substance abuse prevention. *Addictive Behaviors*, 9, 137-147.

Botvin, G.J., Dusenbury, L., Baker, E., James-Ortiz, S., and Kerner, J. (1989). A skills training approach to smoking prevention among Hispanic youth. *Journal of Behavioral Medicine*, 12, 279-296.

Botvin, G.J., Baker, E., Dusenbury, L., Tortu, S., and Botvin, E.M. (1990). Preventing adolescent drug abuse through a multimodal cognitive-behavioral approach: Results of a three-year study. *Journal of Consulting and Clinical Psychology*, 58, 437-446.

Botvin, G.J., Baker, E., Botvin, E.M., Dusenbury, L., Cardwell, J. and Diaz, T. (1993). Factors promoting cigarette smoking among black youth: A causal modeling approach. *Addictive Behaviors*, 18, 397-405.

Botvin, G.J., Epstein, J.A. Schinke, S.P., & Diaz, T. (1994). Predictors of cigarette smoking among inner-city minority youth. *Journal of Developmental and Behavioral Pediatrics*, 15, 67-73.

Botvin, G.J., Schinke, S.P., Epstein, J.A., & Diaz, T. (1994). Effectiveness of culturally-focused and generic skills training approaches to alcohol and drug abuse prevention among minority youths. *Psychology of Addictive Behaviors*, 8, 116-127.

Botvin, G.J., Schinke, S.P., Epstein, J.A., Diaz, T. & Botvin, E.M. (1995). Effectiveness of culturally-focused and generic skills training approaches to alcohol and drug abuse prevention among minority adolescents: Two-Year follow-up results. *Psychology of Addictive Behaviors*, 9, 183-194.

Botvin, G.J., Baker, E., Dusenbury, L., Botvin, E.M. & Diaz, T. (1995) Long-term follow-up results of a randomized drug abuse prevention trial in a White middle-class population. *Journal of the American Medical Association*, 273(14), 1106-1112.

Botvin, G.J., Malgady, R.G., Griffin, K.W., Scheier, L.M., & Epstein, J.A. (1998). *Alcohol and marijuana use among rural youth: Interaction of social and intrapersonal influences*. *Addictive Behaviors*, 23(3), 379-387.

Botvin, G.J., Griffin, K.W., Diaz, T., Scheier, L., Williams, C., & Epstein, J.A. (2000). *Preventing illicit drug use in adolescents: Long-term follow-up data from a randomized control trial of a school population*, *Addictive Behaviors*, 5, 769-774.

Botvin, G. J., Griffin, K. W., Diaz, T., & Ifill-Williams, M. (2001). *Drug abuse prevention among minority adolescents: Posttest and one-year follow-up of a school-based prevention intervention*. *Prevention Science*, 2, 1-13.

Botvin, G. J., Griffin, K. W., Diaz, T., & Ifill-Williams, M. (2001). *One- and two-year follow-up of a school-based preventive intervention*. *Psychology of Addictive Behaviors*, 15, 360-365.

Botvin, G. J., & Diaz, T. (2001). *The Hutchinson Smoking Prevention Project: A lesson on inaccurate media coverage and the importance of prevention advocacy*. *Prevention Science*, 2, 67-70.

## *Participants*

### **Matthew E. Brashears**

*Title and Affiliation:* Assistant Professor of Sociology, Cornell University

*Mailing Address:* Uris Hall Rm. 323, Department of Sociology, Cornell University, Ithaca, NY 14853

*Email Address and Telephone:* [meb299@cornell.edu](mailto:meb299@cornell.edu), 607-255-4925

*Webpage Address:* <http://www.soc.cornell.edu/faculty/brashears.html>

*Discipline:* Sociology; social network analysis

*Research Interests:* Obesity, social network analysis, diffusion and innovation, dynamic networks, gender

*Obesity Focus:* Social causes

### *Biography:*

Matt Brashears is an Assistant Professor of Sociology at Cornell University. He has published papers in the *American Sociological Review* (with Miller McPherson and Lynn Smith-Lovin) as well as in *Social Psychology Quarterly* and *Social Science Research*. He is primarily interested in network evolution and the co-determination of network structure and content.

### *Research Summary:*

My research on obesity employed social network analysis and the National Longitudinal Survey of Adolescent Health or Add Health. The Add Health is the largest survey of adolescents ever undertaken in the United States and includes information on community, school, family, and individual factors. Data were gathered on respondent nutrition habits, hobbies, sexual activity, and so forth. Particularly, respondent BMI was obtained as well as measures of respondent body image. A/CASI technology was used to allow respondents to answer socially sensitive questions and bioassay data were gathered to provide indicators of actual levels of drug use.

Besides typical survey items, the Add Health collected data on the patterns of association among adolescents in the sampled high schools. In the case of approximately a dozen schools, however, the effort was made to sample the entire student population. This yielded nearly complete network data for an entire school and, moreover, these schools were resampled approximately a year later, providing longitudinal network data that can be matched with respondent level characteristics.

My research focused on selection, the tendency to associate with those like oneself, and harmonization, the tendency to become like those with whom we associate. I examined the factors predicting actual respondent BMI, respondent weight self-perceptions and respondent intentions to lose weight. Analysis proceeded using the Siena longitudinal analysis software developed by Tom Snijders, which employs a simulation-based approach to estimate the parameters determining network structure and respondent covariates. The results indicate that respondent BMI and weight self-perceptions are partly determined by our associates (i.e. social influence) and partly reciprocally determine each other. Additionally, it appears that while weight self-perceptions influence intentions to lose weight, those intentions are NOT influenced by actual BMI. Thus, level of obesity does not trigger a weight loss intention unless the respondent perceives themselves to be overweight. The results do not differ between males and females.

This research is ongoing as I am hoping to confirm the finding with additional schools as the Siena approach can only accommodate one school at a time.

### *Selected Bibliography:*

Brashears, Matthew E. 2008. "Picking and Choosing, Accepting and Changing: The Effects of Selection and Harmonization on Network Structure and Content." Ph.D. Dissertation, University of Arizona.

**Richard V. Burkhauser**

*Title and Affiliation:* Professor, PAM/Economics, Cornell University

*Mailing Address:* 125 MVR, Cornell University, Ithaca, NY 14853

*Email Address and Telephone:* [rvb1@cornell.edu](mailto:rvb1@cornell.edu), 607-255-2071

*Webpage Address:* <http://www.human.cornell.edu/che/bio.cfm?netid=rvb1>

*Discipline:* Economics

*Research Interests:* Economics of obesity, especially how obesity relates to disability and retirement programs

*Obesity Focus:* Consequences

*Biography:* Richard V. Burkhauser is the Sarah Gibson Blanding Professor of Policy Analysis in the Department of Policy Analysis and Management and Professor of Economics at Cornell University. He has published widely on issues related to vulnerable populations including—older workers, working age people with disabilities, and low skilled workers—in the fields of demography, economics, gerontology, and public policy. He received his Ph.D. in Economics from the University of Chicago.

*Research Interests:*

I am an economist broadly interested in disability issues. My primary interest with respect to obesity as with other health conditions is how they impact on social success indicators—employment, wage earnings, early exits from the labor market via disability, early retirement programs, etc. In general, my work involves evaluating the consequences of government policies or programs that attempt to impact on these populations. But I am also interested in more fundamental measurement issues. With respect to obesity, I am interested in better capturing fatness and obesity in social science data sets.

*Selected Bibliography:*

## Books:

Houtenville, Andrew J., David C. Stapleton, Robert R. Weathers II, Richard V. Burkhauser (eds.) *Counting Working-age People with Disabilities: What Current Data Tell Us and Options for Improvement*. Kalamazoo, MI: W.E. UpJohn Institute for Employment Research, (forthcoming)

Stapleton, David C. and Richard V. Burkhauser (eds.) *The Decline in Employment of People with Disabilities: A Policy Puzzle*. Kalamazoo, MI: W.E. UpJohn Institute for Employment Research, (2003).

## Articles:

Burkhauser, Richard V. and John Cawley. “Beyond BMI: The Value of More Accurate Measures of Fatness and Obesity in Social Science Research.” *Journal of Health Economics*, 27 (2) (March 2008): 519-529.

Weathers, Robert R., Gerard Walter, Sara Schley, John Hennessey, Jeffrey Hemmeter and Richard V. Burkhauser. “How Postsecondary Education Improves Adult Outcomes for Supplemental Security Income Children with Severe Hearing Impairments.” *Social Security Bulletin*. 67 (2) (2007): 101-131. <http://www.ssa.gov/policy/docs/ssb/v67n2/v67n2p101.pdf>

Burkhauser, Richard V. and Mathis Schroeder. “A Method for Comparing the Economic Outcomes of the Working-Age Population with Disabilities in Germany and the United States.” *Schmollers Jahrbuch: Journal of Applied Social Science Studies*, 127 (2) (2007): 227-258.

## Participants

### **Sahara Byrne**

*Title and Affiliation:* Assistant Professor, Communication, Cornell University

*Mailing Address:* 314 Kennedy Hall, Cornell University, Ithaca, NY 14853

*Email Address and Telephone:* [seb272@cornell.edu](mailto:seb272@cornell.edu), 607-255-8085

*Webpage Address:* [http://www.comm.cornell.edu/staff/employee/sahara\\_byrne.html](http://www.comm.cornell.edu/staff/employee/sahara_byrne.html)

*Discipline:* Communication

*Research Interests:* Media effects, strategic communication and cognitive development

*Obesity Focus:* Prevention and treatment

### *Biography/Research Summary:*

Sahara received her Ph.D. in Communication from the University of California, Santa Barbara. Sahara's research focuses on the intersection of media effects, strategic communication and cognitive development. She is currently examining why health campaigns are sometimes ineffective or actually cause harm. Her most recent research aims to explain why this 'boomerang effect' is likely to occur in response to many types of strategic messages, and is especially focused on messages aimed at children and adolescents. She has been the principal investigator on several field experiments investigating children and media effects. Her work on overcoming children's resistance to health messages through the use of interactive media and mobile gaming technology is currently funded by the Robert Wood Johnson Foundation. [Mindless Eating Challenge: Persuasive mechanisms in mobile games. Gay, G. (PI); Byrne, S. (co-PI). (Funded for \$164,319).]

### *Selected Bibliography:*

Byrne, S. & Hart, P. S. (in press). The 'boomerang' effect: A synthesis of findings and a preliminary theoretical framework. In C. Beck (Ed.), *Communication Yearbook 33*(pp. 3-37).Mahwah, NJ: Lawrence Erlbaum Associates.

Byrne, S., Linz, D., & Potter, W. J. (in press). A test of competing cognitive explanations for the boomerang effect in response to anti-aggression media literacy interventions. *Media Psychology*.

Cantor, J. A., Byrne, S., Moyer-Gusé, E. & Riddle, K. (in press). Young children's reports of media induced fear reactions and coping strategies. *Journal of Children and Media*.

Byrne, S. (2009). Media literacy interventions: What makes them boom or boomerang? *Communication Education*, 58, 1-14.

**John Cawley**

*Title and Affiliation:* Associate Professor, Policy Analysis and Management, Cornell University

*Mailing Address:* 124 Martha Van Rensselaer Hall, Cornell University, Ithaca, NY 14853

*Email Address and Telephone:* [jhc38@cornell.edu](mailto:jhc38@cornell.edu), 607-255-0952

*Webpage Address:* <http://www.human.cornell.edu/bio.cfm?netid=jhc38>

*Discipline:* Health economics

*Research Interests:* The economics of obesity

*Obesity Focus:* Causes, consequences, treatment/prevention

*Biography:*

John Cawley is an associate professor in the Department of Policy Analysis and Management at Cornell University. John is also a Research Associate of the National Bureau of Economic Research and serves on the board of directors of Shaping America's Health. His primary field of research is health economics, with a focus on the economics of obesity. John received his Ph.D. in economics from the Univ. of Chicago in 1999 and graduated magna cum laude from Harvard in 1993.

*Research Summary* (Note: The abbreviations and dates below refer to journal articles listed on the following bibliography.)

*Causes of Obesity:* I have outlined the economic model of eating and physical activity (AJPM 2004) and provided an overview of the interaction between markets, childhood obesity, and obesity policy (FoC 2006). I have encouraged social scientists to use more accurate measures of fatness (such as percent body fat and waist circumference) given the limitations of body mass index (JHE 2008). Ongoing research concerns the impact of food advertising on the consumption of specific branded food items by children and youth.

*Consequences of Obesity:* I have extensively studied the labor market consequences of obesity. For example, I have found that weight lowers wages for white females but not for other groups (JHR 2004). Obesity also hinders the transition from welfare to work for white (but not African-American) former welfare mothers (JPAM 2005). I have also studied the impact of obesity on employment disability (HSR 2000) and job absenteeism (JOEM 2007, JOEM 2008). Ongoing research concerns how robust these findings are to the use of more accurate measures of fatness than BMI.

Among adolescent girls, higher body weight increases the probability of smoking initiation; there is no such effect for boys (JHE 2004). I have also studied the impact of obesity on adolescent dating and sexual activity (book chapter 2001; R&S 2006) and on relationship matching among young adults (JMF 2008). Recent work documents that overweight children as young as 2-3 years already exhibit lower skill attainment (E&HB 2008) than their healthy-weight peers.

*Treatment/Prevention of Obesity:* I have documented the reduction in obesity-related comorbidities six months after bariatric surgery (OS 2006), and used obesity-related comorbidities to predict complications after bariatric surgery (OS 2007). I've also studied the demand for anti-obesity drugs (AHEHSR 2007), and am currently studying the effect of magazine and television advertisements on the demand for over-the-counter weight loss products. A 2007 article in APAM provides an overview of what is known about the cost-effectiveness of programs to prevent or reduce obesity. Other work assesses the cost effectiveness of a variety of obesity prevention interventions (AJPM 2008). I have found no detectable impact of high school physical education classes on BMI or the probability of overweight, but do find that PE classes increase self-reported physical activity (HE 2007). A 2007 article in Obesity documents the correlates of state legislative action to prevent childhood obesity. I have also studied the willingness of voters to pay higher taxes to reduce childhood obesity (E&HB 2008). I am currently evaluating the effectiveness of a school-based anti-obesity program in New York City, and a workplace intervention that offers financial incentives for weight loss.

*Selected Bibliography:*

Cawley, John. "An Instrumental Variables Approach to Measuring the Effect of Body Weight on Employment Disability." *Health Services Research*, December 2000, 35(5, Part II): 1159-1179.

Cawley, John. "Body Weight and the Dating and Sexual Behaviors of Young Adolescents." In *Social Awakening: Adolescent Behavior as Adulthood Approaches*, edited by Robert T. Michael. (Russell Sage: New York), 2001.

Cawley, John, Sara Markowitz, and John Tauras. "Lighting Up and Slimming Down: The Effects of Body Weight and Cigarette Prices on Adolescent Smoking Initiation." *Journal of Health Economics*, March 2004, 23(2): 293-311.

Cawley, John. "The Impact of Obesity on Wages." *Journal of Human Resources*, Spring 2004, 39(2): 451-474.

Cawley, John. "An Economic Framework for Understanding Physical Activity and Eating Behaviors." *American Journal of Preventive Medicine*, October 2004, 27(3): 1-9.

## Participants

- Cawley, John, Markus Grabka, and Dean R. Lillard. "A Comparison of the Relationship Between Obesity and Earnings in the U.S. and Germany." *Journal of Applied Social Science Studies (Schmollers Jahrbuch)*, 2005, 125(1): 119-129.
- Cawley, John, and Sheldon Danziger. "Morbid Obesity and the Transition From Welfare to Work." *Journal of Policy Analysis and Management*, Fall 2005, 24(4): 727-743.
- Cawley, John, Kara Joyner, and Jeff Sobal. "Size Matters: The Influence of Adolescents' Weight and Height On Dating and Sex." *Rationality and Society*, February 2006, 18(1): 67-94.
- Cawley, John. "Markets and Childhood Obesity Policy." *The Future of Children*, Spring 2006, 16(1): 69-88.
- Cawley, John, Timothy Prinz, Susan Beane, and the New York State Bariatric Surgery Workgroup. "Health Insurance Claims Data as a Means of Assessing Reduction in Comorbidities Six Months After Bariatric Surgery." *Obesity Surgery*, July 2006, 16(7): 852-858.
- Cawley, John, and John A. Rizzo. "One Pill Makes You Smaller: The Demand for Anti-Obesity Drugs." *Advances in Health Economics and Health Services Research*, 2007, 17: 149-183.
- Cawley, John. "The Cost Effectiveness of Programs to Prevent or Reduce Obesity: The State of the Literature and a Future Research Agenda." *Archives of Pediatrics & Adolescent Medicine*, June 2007, 161(6): 611-614.
- Cawley, John, Matthew J. Sweeney, Marina Kurian, Susan Beane, and the New York State Bariatric Surgery Workgroup. "Predicting Complications after Bariatric Surgery Using Obesity-Related Comorbidities." *Obesity Surgery*, November 2007, 17(11): 1451-1456.
- Cawley, John, Chad Meyerhoefer, and David Newhouse. "The Impact of State Physical Education Requirements on Youth Physical Activity and Overweight." *Health Economics*, December 2007, 16(12): 1287-1301.
- Cawley, John, John A. Rizzo, and Kara Haas. "Occupation-Specific Absenteeism Costs Associated with Obesity and Morbid Obesity." *Journal of Occupational and Environmental Medicine*, December 2007, 49(12): 1317-1324.
- Cawley, John, and Feng Liu. "Correlates of State Legislative Action to Prevent Childhood Obesity." *Obesity*, January 2008, 16(1): 162-167.
- Burkhauser, Richard V., and John Cawley. "Beyond BMI: The Value of More Accurate Measures of Fatness and Obesity in Social Science Research." *Journal of Health Economics*, March 2008, 27(2): 519-529.
- Cawley, John, John A. Rizzo, and Kara Haas. "The Association of Diabetes with Job Absenteeism Costs Among Obese and Morbidly Obese Workers." *Journal of Occupational and Environmental Medicine*, May 2008, 50(5): 527-534.
- Cawley, John. "Contingent Valuation Analysis of Willingness to Pay to Reduce Childhood Obesity." *Economics and Human Biology*, July 2008, 6(2): 281-292.
- Cawley, John and C. Katharina Spiess. "Obesity and Skill Attainment in Early Childhood." *Economics and Human Biology*, December 2008, 6(3): 388-397.
- Roux, Larissa, Tammy O. Tengs, Michelle M. Yore, Teri L. Yanagawa, Jill Van den Bos, Candace Rutt, Ross C. Brownson, Kenneth E. Powell, Gregory Heath, Harold W. Kohl III, Steven Teutsch, John Cawley, I-Min Lee, Linda West, and Michael Pratt. "Are public health efforts to promote physical activity cost-effective? A cost-effectiveness analysis of the Guide to Community Preventive Services recommendations for increasing physical activity." *American Journal of Preventive Medicine*, December 2008, 35(6): 578-588.
- Carmalt, Julie H., John Cawley, Kara Joyner, and Jeffery Sobal. "Body Weight and Matching with a Physically Attractive Partner." *Journal of Marriage and the Family*, December 2008, 70(5): 1287-1296.

**Chris Chen**

*Title and Affiliation:* Assistant Scientist/Assistant Professor, Hospital for Special Surgery

*Mailing Address:* 535 East 70<sup>th</sup> Street, New York, New York 10021

*Email Address and Telephone:* [Chench@hss.edu](mailto:Chench@hss.edu), 212-606-1068

*Webpage Address:* [http://www.hss.edu/research-staff\\_chen-chris.asp](http://www.hss.edu/research-staff_chen-chris.asp)

*Discipline:* Bioengineering & biochemistry

*Research Interests:* Osteoarthritis, cartilage repair, tissue engineering

*Obesity Focus:* Consequences

*Biography:*

Dr. Christopher T Chen is an Assistant Scientist at Hospital for Special Surgery / Weill Cornell Medical College and an Assistant Professor at NY Center for Biomedical Engineering. Dr. Chen has more than 20 peer-reviewed publications. His research focuses on osteoarthritis pathology/prevention, cartilage mechanobiology, and joint inflammation. More recently, Dr. Chen has been working with an interdisciplinary group to determine the effect of pediatric obesity on joint deformity and osteoarthritis.

*Research Summary:*

The percentage of overweight/obese children and adolescents in the United States is growing at an alarming rate in the last two decades with over seven million children (or 18%) severely overweight. Data demonstrate that overweight children are likely to be obese as adults (e.g., Venn, Thompson et al., 2007), thus at risk for the myriad health complications that accompany obesity. Obesity presents numerous problems to these young individuals. In addition to the greater chances of developing diabetes, non-alcohol fat-liver disease, and coronary heart diseases, they are also at a greater risk of bone deformity and osteoarthritis.

Osteoarthritis currently affects over 20 million individuals and is expected to significantly increase by the year 2020 because of aging in the baby boomer generation. Osteoarthritis is the number one cause of disability in the United States and there is a growing concern that overweight children may develop osteoarthritis at younger ages than previous generations.

Osteoarthritis is a disease that affects all tissues in the diarthrodial joint. These tissues can be stressed by the changes in biomechanics that occur through increased BMI and joint malalignment. Recent studies suggest that obesity also affects child's locomotor system both functionally and structurally, which can further increase the burden of the whole diarthrodial joint. Together, these findings suggest that obesity deposits significant risks on the initiation and progress of osteoarthritis. Given that little or no treatment exists to reverse the course of OA, it is important to determine how obesity and gait patterns affect cartilage degradation in young patients.

My previous and current research has been focused on osteoarthritis pathology / prevention, cartilage mechanobiology, and joint inflammation. In the last two years, I have been working closely with an interdisciplinary investigational team at Weill Cornell Medical College and Hospital for Special Surgery. With a seeding funding from NIH CTSC center, we are currently studying the association between lower extremity alignment, gait, and joint pathophysiology in overweight as compared with normal weight children. We postulate that the additional joint stress and tissue damage at the subchondral level resulting from overweight will promote the onset of osteoarthritis and associated pathophysiology.

*Selected bibliography:*

Chen C.T., Burton-Wurster N., Lust G., Bank R.A., and Tekoppele J.M. (1999) Compositional and metabolic changes in damaged cartilage are loading-duration and loading-rate dependent. *J Ortho Res* 17:870-9.

Chen C.T., Burton-Wurster N.I., Borden C., Hueffer K., Bloom S.E., and Lust G. (2001) Chondrocyte necrosis and apoptosis in impact damaged articular cartilage. *J. Orthop Res* 19:703-11.

Levin A., Burton-Wurster N.I., Chen C.T., and Lust G. (2001) Cellular signaling as a cause of cell death in cyclically impacted cartilage explants. *Osteoarthritis and Cartilage* 9: 702-711.

Hidaka C., Goodrich L., Quitariano M., Bent S., Brower-Toland B., Chen C.T., Crystal R., and Nixon A. (2003) Acceleration of cartilage repair by genetically modified chondrocytes over expressing bone morphogenetic protein-7. *J. Orthopaedic Research* 21:573-83.

Chen C.T., Torzilli P.A., Fishbein K. W., Spencer R.G.S., Hilger A., and Horton W.E. Jr. (2003) Matrix fixed charge density as determined by magnetic resonance microscopy of bioreactor-derived hyaline cartilage correlates with biochemical and biomechanical properties. *Arthritis & Rheumatism* 48(4): 1047-56.

Chen C.T., Bhargava M., Lin P.M., and Torzilli P.A. (2003) Time, stress, and location dependent chondrocyte death and collagen damage in cyclically loaded articular cartilage. *J. Orthopaedic Research* 21:888-898.

## Participants

- Williams R., McCarthy D., and Chen C.T. (2004) Chondrocyte survival and biomechanical Properties of fresh cold-stored whole femoral condyles: An evaluation of tissue used in osteochondral allograft transplantation. *Am J Sports Med.* 32:132-9.
- Lin P.M., Chen C.T., Torzilli P.A. (2004) Increased localization of stromelysin-1 and proteoglycan degradation in Mechanically Injured Articular Cartilage. *Osteoarthritis and Cartilage* 12:485-96.
- Strauss E., Hidaka C., Chen C.T., Goodrich L., Nixon A. (2006) Biochemical and biomechanical properties of lesion and peri-lesion tissue after cartilage repair with genetically modified chondrocytes in an equine model. *Am. J. Sport Medicine* 2006; 33:1647-53.
- Ranawat A.S., Vidal A.F., Chen C.T., Zelken J., Turner A.S., and Williams R.J. (2008) The material properties of fresh cold-stored allografts used for the reconstruction of osteochondral defects after one year *in vivo*. *Clin Ortho & Rel Research, in Press*.
- Gulotta L., Rudzki J.R., Kovacevic D., Milentijevic D., Chen C.T.; Williams R. (2008) Chondrocyte Death and Cartilage Degradation Following Autologous Osteochondral Transplantation Surgery in a Rabbit Model *Am J Sports Med (accepted)*
- Chen C.T., Narayanan S, Song M, Torzilli PA (2007) Intermittent daily load increases collagen cleavage in injured cartilage. *Osteoarthritis and Cartilage (in review)*
- Chan G, CT Chen, Green DW, Musculoskeletal Effects of Obesity, 2008, Journal of pediatric Orthopedics (in review)
- Torzilli PA, Bhargava M, Park S, Chen C.T. (2008) Mechanical load interleukin-1 induced matrix degradation in cartilage. *Osteoarthritis and Cartilage (in review)*

**Sunita Cheruvu**

*Title and Affiliation:* Fellow, Pediatric Endocrinology, New York Presbyterian Hospital, Weill Cornell Medical Center

*Mailing Address:* 525 East 68th Street, Box 103, NY, NY 10021

*Email Address and Telephone:* [snc9008@nyp.org](mailto:snc9008@nyp.org), 212-746-3462

*Discipline:* Pediatric endocrinology

*Research Interests:* My research during fellowship will be a clinical study, looking at the relationship between vitamin D, obesity, and glucose metabolism.

*Obesity Focus:* Mechanism

## Participants

### Stephen Cook

*Title and Affiliation:* Assistant Professor of Pediatrics, Univ. of Rochester Medical Center

*Mailing Address:* 601 Elmwood Ave, Box 777 Rochester, NY 14642

*Email address and Telephone:* [Stephen\\_cook@urmc.rochester.edu](mailto:Stephen_cook@urmc.rochester.edu), 585-275-9279

*Webpage Address:*

[http://www.urmc.rochester.edu/web/index.cfm?event=doctor.profile.show&person\\_id=1002054&display=for\\_researchers](http://www.urmc.rochester.edu/web/index.cfm?event=doctor.profile.show&person_id=1002054&display=for_researchers)

*Discipline:* Pediatrics and internal medicine

*Research Interests:* Cardiovascular risk factors in childhood obesity, primary care training for management and prevention of childhood obesity

*Obesity Focus:* Mechanisms, consequences, treatment/prevention

### Biography:

Dr. Cook is an assistant professor of Pediatrics, he is trained and board certified in both pediatrics and internal medicine, and he has a master's in public health. Dr. Cook's research focuses on childhood and adolescent obesity with cardiovascular risk factors and clinical studies on approaches to prevention and intervention. Dr. Cook pioneered the first national report to describe the metabolic syndrome in U.S. adolescents. Metabolic syndrome is a clustering of metabolic and cardiovascular complications of obesity involving excess abdominal fat, elevated cholesterols, high blood pressure, insulin resistance and high blood glucose. He's described the association of metabolic syndrome with smoking and exposure to second hand smoke in adolescents. The other area of focus is Community and Health Services Research: involving identification, screening, prevention, and management of childhood obesity. In addition, his focus on health services research related to obesity features a national description for the diagnosis of obesity and counseling behaviors for children.

### Research Summary:

Ongoing research projects include:

1. Developing a community level cohort of children to study and follow for the development of obesity related risk factors that comprise the metabolic syndrome and tobacco exposure;
2. Providing an effective practice-level intervention for improved obesity screening, identification and lifestyle counseling

Greater Rochester Health Foundation, Stephen Cook, MD, MPH (PI) 4/01/08 – 12/31/2010

“Greater Rochester Clinical Training Initiative for Childhood Obesity Prevention”

This project aims to deliver a clinical training intervention for quality improvement of clinical prevention strategies for the prevention and treatment of overweight in primary care practices in Monroe County.

Greater Rochester Health Foundation, Principle Investigator: Stephen Cook, MD, MPH, 20% 11/01/07 – 12/31/2010

“Greater Rochester Healthy Childcare 2010”

This project aims to deliver a clinical training intervention for quality improvement of clinical prevention strategies for the prevention and treatment of overweight in primary care practices in Monroe County.

Principle Investigator: Dirk Hightower (Stephen Cook, MD, MPH consultant, 3%)

NIH/NHLBI 1 K23 HL 086946-01A1, Stephen Cook, MD (PI) 07/01/07-06/30/12

“Metabolic Syndrome in Adolescents: Contribution of Tobacco and Central Fat”

The major goals of this project provide 75% protected time for the development of Dr Cook's research career with mentorship on childhood obesity, cardiovascular risk factors, pediatric and health services research and community based participatory research. The project with in the career development award will focus on recruiting and tracking pre-adolescent children and the development of obesity and CVD risk factors prior to, during and after pubertal development as well as examine mechanistic influence of tobacco use or exposure on CVD risk factors in childhood and adolescences during this critical period.

The Greater Rochester Health Foundation, Stephen Cook, MD, MPH (PI) 5/01/07-12/31/08

“Childhood Obesity Community Report Card”

Community wide epidemiology project to: 1) collect anthropometric data from ~7000 medical records to provide a county wide estimation of the prevalence of childhood obesity, and 2) link early childhood experiences and development to the distribution of obesity among children entering kindergarten in the City of Rochester.

### Selected Bibliography:

Dandona, P., Thusus, K., Cook, S., Snyder, B., and Nicotera, T., “Oxidative Damage of Deoxyribonucleic Acid (DNA) in Insulin Dependent Diabetes Mellitus.” *Diabetes* 43 (1): 35A, May 1994

Dandona, P., Thusus, K., Cook, S., Snyder, B., Makowski, J., Armstrong, D., and Nicotera, T. “Increased Oxidative Damage of Deoxyribonucleic Acid and Proteins in Diabetes Mellitus.” *Lancet* 347(8999): 444-445. February 17, 1996

Cook, S.R., Weitzman, M., Auinger, P., Nguyen, M., Dietz, W., "Prevalence of a Metabolic Syndrome Phenotype in Adolescents: Findings from the National Health And Examination Survey III, 1988-1994." *Archives of Pediatric and Adolescent Medicine*; 157:821-827. August 2003.

Cook, S.R., "The Metabolic Syndrome: Antecedent of Adult Cardiovascular Disease in Pediatrics." *The Journal of Pediatrics*; 145(4): 427-430. October 2004

Cook, S., Weitzman, M., Auinger, P., Barlow, S., "Screening and Counseling Associated with Obesity Diagnosis in a National Survey of Ambulatory Pediatric Visits." *Pediatrics*; 116(1); 112-116. July 2005.

Weitzman, M., Cook, S., Auinger, P., Florin, T., Daniels, S., Nguyen, M., Winickoff, J., "Tobacco Exposure is Associated with the Metabolic Syndrome in Adolescents", *Circulation*; 112(6); 862-869. August 2005.

Li, C., Ford, E., Mokdad, A., Cook, S., "Recent Trends in Waist Circumference and Waist-to-Height Ratio among US Children and Adolescent", *Pediatrics*. Vol 118, No.5, November 2006, e1390-e1398.

Ford, E., Li, C., Imperatore, G., Cook, S., "Age, Gender, and Ethnic Variations in Serum Insulin Concentrations among US Youth: Findings from the National Health and Nutrition Examination Survey 1999-2002", *Diabetes Care*, December, 2006; 29(12): 2605-2611.

Cook, S. Gidding, S.S. "Modifying Cardiovascular Risk in Adolescent Obesity" *Circulation*; 115(17): 2251-2253. May 1, 2007

Ford, E., Li, C., Cook, S., Choi, H., "Serum Concentrations of Uric Acid and the Metabolic Syndrome among U.S. Children and Adolescents", *Circulation*, Vol 115, No. 19, May 15, 2007. 2528-2532.

Stahlhut, R.W., van Wijngaarden, E., Dye, T.D., Cook, S., Swan, S.H. "Concentrations of Urinary Phthalate Metabolites are Associated with Increased Waist Circumference and Insulin Resistance in Adult U.S. Males", *Environmental Health Perspectives*, Vol 115 No.6, June 2007. 876-882.

Loucks, E.B., Magnusson, K.T., Cook, S., Rehkopf, D.H., Ford, E.S., Berkman, L.F., "Socioeconomic Position and the Metabolic Syndrome in Early, Middle and Late Life: Evidence from NHANES 1999-2002", *Annals of Epidemiology*, Vol 17, No. 10, October 2007. 782-790.

Kelishadi, R., Cook, S.R., Motlagh, M.E., Gouya, M.M., Ardalan, F., Motaghian, M., Majdzadeh, R., Ramezani, M.A., "Metabolically Obese Normal Weight and Phenotypically Obese Metabolically Normal Youths: CASPIAN Study", *Journal of the American Dietetic Association*, Vol 108, No. 1, Jan 2008. 82-90.

Cook, S., Auinger, P., Li, C., Ford, E., "Metabolic Syndrome Rates in U.S. Adolescents, from the National Health and Nutrition and Examination Survey 199-2002", *Journal of Pediatrics*, Vol 152, No. 2, February, 2008, 165-170.

Schwimmer, J.B., Pardee, P.E., Lavine, J.E., Blumkin, A.K., Cook, S., "Cardiovascular Risk Factors and the Metabolic Syndrome in Pediatric Nonalcoholic Fatty Liver Disease", *Circulation*, Vol 118, No. 3, July 15, 2008, 277-283

Rossi, B., Sukalich, S., Droz, J., Griffin, A., Cook, S., Blumkin, A., Guzik, D., Hoeger, K., "Prevalence of Metabolic Syndrome and Related Characteristics in Obese Adolescents with and without Polycystic Ovary Syndrome", *The Journal of Clinical Endocrinology and Metabolism*, -- In press --

Kelishadi, R., Cook, S., Amra, B., Adibi, A., "Factors Associated with Insulin Resistance and Non-alcoholic Fatty Liver Disease among Youths", *Atherosclerosis*, -- In press --

Cook, S., Auinger, P., Huang, TK. A., "Growth Curves for Cardio-Metabolic Risk Factors in Children and Adolescents", *Journal of Pediatrics*, -- In press

## Participants

### Rubin Cooper

*Title and Affiliation:* Co-Chair of the Obesity Council at The Komansky Center for Children's Health, Professor of Clinical Pediatric Cardiology, Weill Medical College, Cornell University

*Mailing Address:* 1300 York Avenue, New York, New York, 10021

*Email Address and Telephone:* [rsc2002@med.cornell.edu](mailto:rsc2002@med.cornell.edu), 212-746-3561

*Webpage Address:* <http://www.med.cornell.edu/research/rscooper/>

*Discipline:* Pediatric cardiology

*Research Interests:* Congenital heart disease, coronary artery disease, Kawasaki disease, Rheumatic fever, telemedicine and telehealth

*Obesity Research Interests:* Effects of obesity on the cardiovascular system: specifically the endothelium (EndoPAT Study)

*Obesity Focus:* Consequences

### Biography:

Voted one of New York Magazine's Best Doctors (2008) Pediatric Cardiologist Rubin S. Cooper, M.D. is a specialist in congenital heart disease and rheumatic fever. He is active in several research projects and is the principal investigator of a Endothelial Dysfunction Study: "Differences in Vascular Compliance in Pediatric Patients at Risk for Cardiovascular Disease as Measured by EndoPAT Technology." His interests include: coronary and congenital heart disease, adult congenital heart disease, Rheumatic heart disease, telehealth and telemedicine.

### Research Summary:

Pediatric Cardiology Research Study: "Differences in Vascular Compliance in Pediatric Patients at Risk for Cardiovascular Disease as Measured by EndoPAT Technology".

Endothelial dysfunction (ED) is a vascular marker for underlying subclinical cardiovascular disease. In the adult population, endothelial dysfunction has been observed in a variety of pathologic conditions, such as obesity, type 2 diabetes mellitus, hypertension, and atherosclerotic cardiovascular disease. Numerous studies have established the validity of the Endo-PAT technique when compared to flow mediated dilation (FMD) measurement of the brachial artery, intracoronary acetylcholine infusion, and, to a limited extent, carotid Intima-Media Thickness (IMT). Recent pediatric population studies of obese, hypertensive, diabetic, as well as Kawasaki patients have demonstrated abnormalities in endothelial function noninvasively. Recently, a less cumbersome and user-independent technique to assess endothelial function has been developed by Itamar Corporation using the Endo-PAT technology. Currently, many large adult cardiovascular programs have replaced FMD with the Endo-PAT technique.

We propose a pilot observational and feasibility study to measure the utility of Endo-PAT in the pediatric population, and ultimately incorporate its utilization into our overall pediatric cardiovascular preventive program. We plan to concurrently measure carotid artery intimal-medial thickness (IMT), as it is a standard of experimental design for assessing preliminary subclinical atherosclerosis *anatomically* in conjunction with *physiologic* assessment by Endo-PAT.

EndoPAT is a new, noninvasive technique to measure the stiffness and endothelial function of the arteries. A new and safe method to measure the health of the arteries (blood vessels that carry blood with oxygen) has been developed. Arteries may become stiffer with age or other conditions such as: overweight, high blood pressure, high cholesterol (fat) in the blood, or fatty liver. The Endo-PAT is a non-invasive machine that is similar to a blood pressure machine. A small soft rubber cup is placed on the middle finger of each hand. One arm will have a blood pressure cuff inflated (squeezed) above the elbow for 5 minutes and then released. The machine will record the pulse waves in the finger tips on the computer. The test will be performed once in a quiet area at the time of enrollment and should take approximately 60 minutes. An automated computer software program will immediately analyze the information. The child will have this measurement repeated between 3-6 months and 12 months later. After completion of the Endo-PAT test, an ultrasound picture of the thickness of the walls of the main arteries in the neck (carotid arteries) will be obtained at the time of enrollment and repeated 12 months later. We hope to be able to use this new non-invasive test to detect whether the child's arteries are healthy or not and whether the treatment received, such as diet, exercise, or medication, improves his/her condition. This test could be a way of detecting early changes in the arteries of children and adolescents that may lead to significant cardiovascular disease in adulthood.

**Primary Aims:** To demonstrate the feasibility of Endo-PAT technology to measure 1) endothelial function (EF) as reflected in changes in peripheral arterial tone (PAT) and 2) arterial stiffness (Augmentation Index) non-invasively in pediatric patients at high risk for early cardiovascular disease.

### Secondary Aims:

- 1) To observe changes (and/or improvements) in PAT after interventions (treatments) appropriately tailored for each cohort:
  - Overweight: reduction in BMI or weight as the result of a comprehensive weight management program intervention.
  - Familial hypercholesterolemia and dyslipidemia: pre-and post-LDL apheresis, diet, and/or statin therapy.
  - Nonalcoholic Fatty Liver Disease (NAFLD): pre-and post-vitamin E treatment.

- 2) To correlate PAT with carotid intimal medial thickness (IMT).
- 3) To correlate PAT with risk factors for vascular disease (markers of abnormal lipid, glucose and vitamin D metabolism, inflammation, blood clotting, blood pressure, family history).

*Selected Bibliography:*

- Kuvin JT, Patel AR, Sliney KA, Pandian NG, Sheffy J, Schnall RP, Karas RH, Udelson JE. Assessment of peripheral vascular endothelial function with finger arterial pulse wave amplitude. *Am Heart J.* 2003; Jul;146(1):168-74.
- Kuvin JT, Mammen A, Mooney P, Alsheikh-Ali AA, Karas RH. Assessment of peripheral vascular endothelial function in the ambulatory setting. *Vasc Med.* 2007; Feb; 12(1): 13-16.
- Kuvin JT, Patel AR, Sliney KA, et al. Peripheral vascular endothelial function testing as a noninvasive indicator of coronary artery disease. *J Am Coll Cardiol.* 2001; Dec; 38(7): 1843-1849.
- Bonetti PO, Pumper GM, et al. Noninvasive identification of patients with early coronary atherosclerosis by assessment of digital reactive hyperemia. *J Am Coll Cardiol.* 2004; Dec 7;44(11):2137-41.
- Jambrik Z, Venneri L, Varga A, Rigo F, Borges A, Picano E. Peripheral vascular endothelial function testing for the diagnosis of coronary artery disease. *Am Heart J.* 2004;148(4):684-9.
- Chenzbraun A, Levin G, Scheffy J, et al. The peripheral vascular response to exercise is impaired in patients with risk factors for coronary artery disease. *Cardiology.* 2001;95(3):126-30.
- Celermajer DS, Sorensen KE, Gooch VM, Spiegelhalter DJ, Miller OI, Sullivan ID, Lloyd JK, Deanfield JE: Non-invasive detection of endothelial dysfunction in children and adults at risk of atherosclerosis. *The Lancet.* 1992;340:1111-1115.
- Deanfield JE, Halcox JP, Rabelink TJ. Endothelial function and dysfunction: testing and clinical relevance. Recent comprehensive methodological summary of techniques for clinical assessment of endothelial function. *Circulation.* 2007; 115:1285–1295.
- Jadhav UM, Kadam NN. Non-invasive assessment of arterial stiffness by pulse-wave velocity correlates with endothelial dysfunction. *Indian Heart J.* 2005; 57(3):226-32.
- Giannotti G, Landmesser U. Endothelial dysfunction as an early sign of atherosclerosis. *Herz.* 2007 Oct; 32(7): 568-572.
- Głowińska-Olszewska B, Tołwińska J, Urban M. Relationship between endothelial dysfunction, carotid artery intima media thickness and circulating markers of vascular inflammation in obese hypertensive children and adolescents. *J Pediatr Endocrinol Metab.* 2007; Oct; 20(10):1125-36.
- Schiel R, Beltschikow W, Radón S, Kramer G, Perenthaler T, Stein G. Increased carotid intima-media thickness and associations with cardiovascular risk factors in obese and overweight children and adolescents. *Eur J Med Res.* 2007; Oct 30; 12(10):503-8.
- Aggoun Y, Farpour-Lambert NJ, Marchand LM, Golay E, Maggio AB, Beghetti M. Impaired endothelial and smooth muscle functions and arterial stiffness appear before puberty in obese children and are associated with elevated ambulatory blood pressure. *Eur Heart J.* 2008; Mar; 29(6):792-9.
- Meyer AA, Kundt G, Lenschow U, Schuff-Werner P, Kienast W. Improvement of early vascular changes and cardiovascular risk factors in obese children after a six-month exercise program. *J Am Coll Cardiol.* 2006; Nov 7; 48(9):1865-70.
- Nieminen T, Kähönen M, Islam S, Raitakari OT, Hutri-Kähönen N, Marniemi J, Juonala M, Rontu R, Viikari J, Lehtimäki T. Apolipoprotein A-I/C-III/A-IV SstI and apolipoprotein B XbaI polymorphisms do not affect early functional and structural changes in atherosclerosis: the Cardiovascular Risk in Young Finns study. *Circulation.* 2007;71(5):741-5.
- Yekeler E, Dursun M, Emeksiz E, Akkoyunlu M, Akyol Y, Demir F, Gökçay G, Demirkol M. Prediction of premature atherosclerosis by endothelial dysfunction and increased intima-media thickness in glycogen storage disease types Ia and III. *Turk J Pediatr.* 2007; Apr-Jun; 49(2):115-9.

## Participants

### Susanna Cunningham-Rundles

*Title and Affiliation:* Professor of Immunology in Pediatrics and Vice Chair for Academic Affairs, Department of Pediatrics, Weill Cornell Medical College

*Mailing Address:* Weill Cornell Medical College, 1300 York Avenue, New York, New York, 10021

*Email Address and Telephone:* [scrundle@med.cornell.edu](mailto:scrundle@med.cornell.edu), 212-746-3414

*Webpage Address:* <http://www.med.cornell.edu/research/scunningham-rundles/>

*Discipline:* Immunobiology

*Research Interests:* Role of micronutrients in immune response; inflammation markers and Vitamin D deficiency in obesity

*Obesity Focus:* Mechanism

### Biography:

Susanna Cunningham-Rundles, Ph.D. is an immunologist. She is PI of an NIH NCI training grant on nutrition and cancer prevention and Cornell PI of the Memorial Sloan Kettering (MSK) Research Center for Botanical Immunomodulators. Dr. Cunningham-Rundles received her PhD in Biochemical Genetics from New York University and was a postdoctoral fellow at MSK in Immunobiology. Dr. Cunningham-Rundles has published on human immune response to infection and micronutrients and edited two books: *Nutrient Modulation of Immune Response* and *Persistent Bacterial Infections*.

### Research Summary:

Our laboratory has a long standing interest in nutrient modulation of immune response, the role of micronutrients on development of immune response, and the effect of nutrient deficiency on host defense and cancer prevention. Obesity is increasingly a subject. We are currently involved in a study on the effects Vitamin D supplementation on immune response in obese, vitamin D deficient adults. We are also interested in the role of inflammation in fatty liver disease, which is prevalent among obese children and adolescents.

### Selected Bibliography:

#### Publications

Cunningham-Rundles, S. 1983. Nutritional factors in immune response In *Malnutrition: Determinants and Consequences*. (EDS., P.L. White, N. Selvey) Alan R. Liss, NY, pp. 233-244.

Berry, E.M., Hirsch, J., Most, J., Mc Namara, D.J, and Cunningham- Rundles, S. 1987. Dietary fat, plasma lipoproteins, and immune function in middle-aged American men. *Nutr Cancer* 9: 129-142.

Boeck, M.A., Chin, C. , and Cunningham-Rundles, S. 1993 Altered immune response in morbid obesity. *Annals N.Y.Acad.Sci.* 699: 253-256

S. Cunningham-Rundles. (Editor) 1993 "Nutrient Modulation of Immune Response" Marcel Dekker, Inc., New York, New York, 556 pgs.

Cunningham-Rundles S. 1994: Malnutrition and gut immune function. *Curr Op Gastroenterol.*10: 664-670.

Miller, D.G., Sepkovic, D.W., Bradlow, H.L., Martucci, C.P., Levine, B.S., and Cunningham-Rundles, S. 1996 The effect of nutritional intervention on immune function and other biomarkers in genetic risk of cancer *J. Nutritional Immunol* (2): 9-15

Cunningham-Rundles, S. Cervia, J.S. 1996 "Malnutrition and Host Defense" in *Nutrition in Pediatrics: Basic Science and Clinical Application* 2nd Edition. W.A. Walker, J.B. Watkins (eds) BC Decker, Hamilton, Ontario 295-307.

Cunningham-Rundles, S. and Lin, D.H. 1998 Nutrition and the immune system of the Gut. *J Nutrition* 14: 573-579

Cunningham-Rundles, S. 1998 Analytical Methods for Evaluation of Nutrient Intervention *Nutrition Reviews* s27-s37.

Cunningham-Rundles, S. 2001 Nutrition and the mucosal immune system *Current Opinion in Gastroenterology* 17:171-176.

Cunningham-Rundles, S. 2002 Evaluation of Nutrient Interaction In Immune Function In "Nutrition and Immune Function" Ed P.C. Calder, C.J., Field, and H.S. Gilled CABI Oxon. UK pp21-39.

Cunningham-Rundles, S. 2003 Is the fatty acid composition of immune cells the key to normal variations in human immune response? *Am J Clin Nutr*;77:1096-7.

Rivlin, RS and Cunningham-Rundles, S. 2003 "Malnutrition and Cancer" in *Nutrition in Pediatrics :Basic Science and Clinical Application* 3rd Edition. W.A. Walker, J.B. Watkins,C. Duggan (eds) BC Decker, Hamilton, London. pp 699-708.

Cunningham-Rundles, D. McNeeley, J.S. 2003 "Malnutrition and Host Defense" in *Nutrition in Pediatrics: Basic Science and Clinical Application* 3rd Edition. W.A. Walker, J.B. Watkins,C. Duggan (eds) BC Decker, Hamilton, London. pp.367-385

Cunningham-Rundles, S. 2003 Issues in the Study of Human Immune Function In "Dietary Enhancement of Human Immune Function" Eds: DA Hughes, LG Darlington, A Bendich Humana Press pp17-34.

Cunningham-Rundles, S. McNeely, David, and Ananworanich, Jean M 2004 Immune Response in Malnutrition In 5<sup>th</sup> Edition of *Immunologic Disorders in Infants and Children* (Ed. ER Stiehm, HD Ochs, and JA Winkelstein) Elsevier Saunders pp 761-784

Cunningham-Rundles, S. McNeely, D., Moon, A. mechanisms of nutrient modulation of immune response 2005 *J. Allergy Clin Immunol.* 115 1119-1128

Cunningham-Rundles, S. Moon, A, McNeely, D. 2008 "Malnutrition and Host Defense" in *Nutrition in Pediatrics: Basic Science and Clinical Application* 4th Edition. C. Duggan, J.B. Watkins, W.A. Walker, (eds) BC Decker, Hamilton, London (261-271).

Cunningham-Rundles, S, Lin, H, Ho-Lin, D, Dnistrian, A, Cassileth, BR, Perlman, J 2008 Role of nutrients in development of the neonatal immune response (*Nutr Rev* in press)

#### Abstracts

Boeck, M.A., Cunningham-Rundles, S., Chen (X), C. 1993. Altered Immune Function in a Morbidly Obese Pediatric Population New York Academy of Sciences Conference: Prevention of Childhood Obesity. Bethesda, MD.

Nowak KM, Cunningham-Rundles S, Granady LC. 1999. Prevalence of Overweight Among Healthy and Asthmatic Patients at the Cornell Pediatric Residency Group Practice. *Annals of Allergy, Asthma & Immunology.*

Solomon, A. Fan, L., Greendyk, T., Sockolow, T, Cunningham-Rundles, S. 2006 Meal choice and awareness of caloric intake in children. *Weill Cornell Ped Res Day Journal* Vol 4 2006.

Patel, N, Tripp, E. 2, Solomon, A, Cunningham-Rundles, S. Sockolow, R., Moon, A. The relation between childhood obesity and gastroesophageal reflux disease *Weill Cornell Ped Res Day Journal* Vol 4 2006.

Erdélyi I, Liu T, Cunningham-Rundles S, Lipkin M, Holt P: A high fat Western style diet induces early genetic and inflammatory changes in mouse colorectal cancer model. *Gastroenterology*, 2007, 132, A306.

Richard Rosencrantz, Hong Lin, Yin Yan Xu. and Susanna Cunningham-Rundles, Oxidative Stress Profiles in Pediatric Nonalcoholic Fatty Liver Disease (NAFLD) *AASLD*, November, 2007.

Aliza Solomon, A., Cunningham-Rundles, S., Greendyk, T. and Sockolow R. 2008 Will Knowledge Of Caloric Values Alter Food Choices? A Food Labeling Study In Children. *Annual Scientific Meeting of The Obesity Society.*

**Carol M. Devine**

*Title and Affiliation:* Professor, Division of Nutritional Sciences, Cornell University

*Mailing Address:* 377 MVR Hall, Cornell University, Ithaca, NY 14853

*Email Address and Telephone:* [cmd10@cornell.edu](mailto:cmd10@cornell.edu), 607-255-2633

*Webpage Address:* <http://www.human.cornell.edu/che/bio.cfm?netid=cmd10>

*Discipline:* Nutrition and community nutrition

*Research Interests:* Work-family integration and food choices, worksite weight gain prevention interventions, work to family transmission of weight gain prevention strategies

*Obesity Foci:* Social causes, prevention

*Biography:*

Dr. Carol Devine is Professor in the Division of Nutritional Sciences at Cornell University. She studies how low income working parents integrate work, family, and food choices. Her outreach focuses on creating food and physical activity environments in large and small workplaces and community organizations that prevent weight gain. She is co-author of a Cornell NutritionWorks course to promote the use of an ecological approach in obesity prevention by health professionals.

*Research Summary:*

*Work-family spillover and time scarcity: contributors to the relationship between the low wage work, poor dietary quality, and obesity.* Our group has conducted basic investigations of relationships between work-family spillover and time scarcity (Jabs, 2006), and dietary quality among low/moderate income working parents. Most U.S. parents are employed, and work-family conflict makes competing demands on parents' time and energy. Obesity and weight gain have been associated with work conditions such as long hours and high job strain. We have reported how employed parents use food choice coping strategies in response to work and family demands to: manage stress and fatigue, reduce meal time and effort, reduce food and eating expectations, and trade off food and eating against other family needs (Devine, 2003, 2006). Food choice coping strategies include: food prepared at/away from home, missing meals, individualizing meals, speeding up, and planning. Food choice strategies are associated with working conditions (e.g. long hours, non-standard schedules) and with dietary quality (Devine, in review). Gender differences in parents' evaluations of work-family integration and in their food choice coping strategies, support intersecting economic and gender explanations for differences in food choice strategies (Blake, in review). Analysis of timestyles by working mothers describe how the meaning, constructions, and allocation of time by study participants were linked to their food choice strategies (Jabs, 2007).

*Images of a Healthy Worksite: trial of an environmental intervention for weight gain prevention at a large urban worksite.* In collaboration with researchers at the University of Rochester, I am Co-PI of a NHLBI-funded randomized controlled trial of an environmental intervention for weight gain prevention in a large industrial worksite in Rochester, NY. The intervention aims to provide easy worksite access to healthy foods and to reduce weight gain. Formative research provided a broad understanding of the social/cultural role of food and eating among workers, and elicited worker perspectives on socially feasible and culturally acceptable strategies for weight gain prevention (Devine, 2007). The intervention is underway in six worksites with interventions in cafeterias, vending, and the overall worksite environment.

*Small Steps are Easier Together: an environmental intervention for weight gain prevention in rural worksites.*

We have worked with CCE partners to test a worksite environmental intervention to prevent weight gain in rural worksites, funded by USDA CSREES. *Small Steps are Easier Together* features close collaboration between community health and nutrition professionals, worksite leaders, and researchers. Each site carries out: environmental needs assessment, identification and ranking of intervention options, and site-specific environmental intervention strategies to increase physical activity and healthful food choices (Maley 2007, in review). In 2007-2008, 221 (43%) study participants in 10 worksites (mean BMI =28.2) increased walking steps 2000 or more a day for 3 or more days a week. The proportion meeting walking goals increased from 38% to 65% over the intervention (Warren, in review).

*Preventing Childhood Obesity: An Ecological Approach, an interactive on-line course via Cornell NutritionWorks (CNW)* CNW is Cornell's on-line professional development platform for health and nutrition professionals. The course, developed by DNS faculty, helps participants assess and prioritize local factors related to childhood obesity, build and facilitate collaborations, and develop an action plan for community intervention. This course is offered three times annually through CNW, at [www.nutritionworks.cornell.edu](http://www.nutritionworks.cornell.edu).

*RHEALTH: A Nutrition Program for Men in Residential Treatment Facilities for Drug and Alcohol Addictions.*

Doctoral candidate Jennifer Cowan is testing the impact of an environmental and educational intervention on the diets and weight of men in recovery from drug and alcohol addiction at 6 sites in Rochester, NY (Cowan, 2008).

*Selected Bibliography:*

Cowan J, Devine C. Food, eating and weight concerns of men in recovery from substance addiction. *Appetite*. 2008; 50:33-42.

- Blake C, Devine C, Wethington E, Jastran M, Farrell T., Bisogni, C. Employed parents' satisfaction with food choice coping strategies: influence of gender and household structure. In review *Appetite*.
- Devine C, Connors M, Sobal J, Bisogni C. Sandwiching it in: Managing food and work in low and moderate income urban households *Social Science & Medicine* 2003; 56: 617-630.
- Devine CM, Jastran M, Jabs J, Wethington E, Farrell T, Bisogni C. "A lot of sacrifices:" Work-family spillover and the food choice coping strategies of low wage employed parents. *Social Science & Medicine*.2006;63(10):2591-2603.
- Devine CM, Nelson J, Chin N, Dozier A, Fernandez ID. "Pizza is cheaper than salad:" assessing workers' views for an environmental food intervention. *Obesity*. 2007;15S:57S-68S.
- Devine C, Farrell T, Blake C, Jastran M, Bisogni C, Wethington E. Work conditions and the food choice coping strategies of employed parents. In review *Journal of Nutrition Education and Behavior*.
- Jabs J, Devine CM. Time Scarcity and Food Choices: An Overview. *Appetite*. 2006 47: 196-204.
- Jabs J, Devine C, Jastran M, Bisogni C, Farrell T, Jastran M, Wethington E. Trying to find the quickest way: Employed mothers' constructions of time for food. *Journal of Nutrition Education and Behavior*. 2007;39:18-25.
- Maley M. "Learning the lay of the land: needs assessment for a community environmental approach to obesity prevention" 2007. MS thesis Cornell University.
- Maley M, Devine C, Warren B. Perceptions of the environment for eating and exercise in a rural community. In review. *Journal of Nutrition Education and Behavior*.
- Sobal J, Devine CM, Social Aspects of Obesity: Influences, Assessments, and Interventions Chapter 15 in Sharron Dalton (ed) *Overweight and Weight Management* 2nd Edition. Gaithersburg, MD: ASPEN Publishers, 1997.
- Warren B, Devine C, Maley M. Increasing walking steps at small rural worksites using locally determined strategies and web-based reporting (In preparation).

## Participants

### **Jamie Dollahite**

*Title and Affiliation:* Associate Professor, Division of Nutritional Sciences, Cornell

*Mailing Address:* 342A MVR Hall, Cornell University, Ithaca, NY 14853

*Email Address and Telephone:* [jsd13@cornell.edu](mailto:jsd13@cornell.edu), 607-255-7715

*Webpage Address:* <http://www.human.cornell.edu/che/bio.cfm?netid=jsd13>

*Discipline:* Nutrition

*Research Interests:* Community based interventions for limited-resource audiences designed to prevent obesity and chronic disease

*Obesity Focus:* Prevention

*Biography:* Jamie Dollahite received her BS in Nutrition from the University of Texas in 1970, her MS in Human Nutrition from the University of Iowa in 1974, and her PhD in Biological Sciences from the University of Texas in 1990. She has conducted research in animal models, clinical research in humans, epidemiology, and community based interventions all focused on prevention of obesity and chronic diseases, especially heart disease. In the last 15 years, she has worked in community nutrition, focusing on prevention of nutrition-related chronic diseases among low income populations. At Cornell, she is the Director of Food and Nutrition Education in Communities (FNEC). Funded by USDA and delivered through Cornell Cooperative Extension in 54 counties and New York City, FNEC reaches over 19,000 adults and 10,000 youth per year with education designed to promote health through improved food choice and active living. Dollahite's research is closely integrated with and informs FNEC outreach. The outreach programs provide a unique sustainable context in which to develop, test, and disseminate interventions.

*Research Summary:*

*Collaboration for Health, Activity, and Nutrition in Children's Environments (CHANCE):* We are currently undertaking this community-based intervention study designed to build parenting skills among low SES participants that will support healthy lifestyles and prevent childhood obesity. We have developed a conceptual model of parental influences on children's food choice and active play behaviors that is guiding our work. The model uses the socio-ecological framework to take into account individual behaviors of children and parents, and environmental influences. In this model, parents affect children through role modeling, shaping of child behavior by parenting and the home environment, and influencing other environments where the child spends time. We are particularly interested in how low SES families are able to carry out the healthy lifestyle recommendations and what barriers they encounter.

Because we believe that obesity is a complex problem that requires changes in the social and physical environment to support individual behavior change, I am also interested in studying how environmental changes are made. With a doctoral student I am studying what organizational supports are necessary for professionals to make the paradigm shift in their practice from focus on individual behavior change to a more inclusive model that also addresses environmental influences on obesity. Worksite wellness projects at each CHANCE site are providing an important learning opportunity to study the process staff use to implement collaborative projects aimed at environmental change. In addition we are working with CHANCE staff using a participatory action research approach to work towards change in larger community environments that impact children.

*Selected Bibliography:*

Dollahite J, Hosig KW, White KA, Rodibaugh R, Holmes TM. Impact of a school-based community intervention program on nutrition knowledge and food choices in elementary school children in the rural Arkansas Delta. *J Nutr Educ.* 1998; 30:289-301.

Hosig K, Dollahite J, Rodibaugh R, White KA. Development and evaluation of a consortium to support a school-based community nutrition education program in the rural Arkansas Delta. *J Nutr Educ.* 1998;30:281-288.

Dollahite J, Nelson J, Frongillo E, Griffin M. Building Community Capacity Through Enhanced Collaboration in the Farmers' Market Nutrition Program. *J. Agriculture and Human Values.* 2005;22:339-354.

Dollahite J, Olson C, Scott-Pierce M. The impact of nutrition education on food insecurity among low-income participants in EFNEP. *Family Consumer Sci Res J.* 2003; 32:127-139.

Dickin KL, Dollahite JS, Habicht JP. Behavior change among EFNEP beneficiaries is higher in well-managed sites where front-line nutrition educators value the program. *J Nutr.* 2005;135:2199-2205.

Dollahite JS, Kenkel DS, Thompson CS. An economic evaluation of the Expanded Food and Nutrition Education Program. *J Nutr Educ Behav* 2008;40:134-143.

## Participants

### Jane Fajans

*Title and Affiliation:* Associate Professor, Anthropology, Cornell

*Mailing Address:* 202 McGraw Hall, Cornell University, Ithaca, NY 14853

*Email Address and Telephone:* [jf20@cornell.edu](mailto:jf20@cornell.edu), 607-255-8662

*Webpage Address:* [http://falcon.arts.cornell.edu/anthro/faculty/faculty\\_JFajans.php](http://falcon.arts.cornell.edu/anthro/faculty/faculty_JFajans.php)

*Discipline:* Anthropology

*Research Interests:* Anthropology of food, family, child socialization, identity

*Obesity Focus:* Causes, treatment/prevention

### Biography:

Jane Fajans is a sociocultural anthropologist who has researched food and identity issues in Papua New Guinea, France and Brazil. As a sociocultural anthropologist she is interested in the complex interface between food patterns, concepts of bodiliness, and the context of eating behavior. She is particularly interested in the way social factors such as race, class, ethnicity, and lifestyle affect attitudes about bodies, health, exercise, and family relations. She brings a perspective on how factors often considered unrelated to food choices may have significant impacts on how and why people eat what they eat. Research on regional foods and regional identities in Brazil (including factors of race, class, ethnicity, and regional cultures) will form a good comparative background to research in the U.S. and elsewhere.

### Research Summary:

Jane Fajans is particularly interested in continuing her research on food and identity. She studies how people use certain foods and combinations of food to provide or project aspects of identity to themselves and others. Many foods embody symbolic properties pertaining to ethnicity, cosmopolitanism, gender, wealth, and other aspects of identity. When consumed, shared, or given to others they create both bodily essence and social ties. In order to understand why people choose certain foods we need to examine the range of meanings that food conveys. My research examines these non-nutritive components of food and eating. I want to focus on different food values across a range of ethnic, regional, class, and age groups to examine how what we eat symbolizes who we are even if the product appears flawed from a bio-medical perspective.

### Selected Bibliography:

In Process. *Regional Recipes and Alimentary Identities: Gender, Race and Place in Brazilian Cuisine*. Manuscript in process.

Forthcoming. Seria A Moqueca Apenas Uma Peixada? Alimentação E Identidade Em Salvador, Bahia (Brasil) in "Anthropology of Food", special number Modelos alimenticios y recomposiciones sociales en América Latina/ Modelos alimentares e recomposições sociais na America Latina", C.E. de Suremain & E. Katz (eds).

2008 "Can *moqueca* just be fish stew? Food and identity in Salvador, Bahia (Brazil)" reprinted simultaneously on the OCHA website Online at: <http://www.lemangeur-ocha.com>.

2008 "Can Moqueca Just Be Fish Stew? Bahian Food and Bahian Identity." In *Anthropology of Food*. EditionS 4 Modèles alimentaires et recompositions sociales en Amérique Latine, que editei com Charles-Edouard de Suremain. Online at: <http://aof.revues.org/>

1999 "Transforming Nature, Making Culture: Why the Baining are not Environmentalists" in *Identity, Nature and culture: Sociality and Environment in Melanesia*. Ed by. Sandra Bamford. In *Social Analysis* 42(3): 12-27.

1997 *They Make Themselves: Work and Play among the Baining of Papua New Guinea*. Chicago: University of Chicago Press.

1993 "Producing Exchange, Exchanging Products" in *Exchanging Products, Producing Exchange*. ed. by Jane Fajans. *Oceania Monographs No.43*.

1993 "The Alimentary Structures of Kinship" in *Exchanging Products, Producing Exchange*. ed. by Jane Fajans. *Oceania Monographs No. 43*.

1988 "The Transformative Value of Food: A Review Essay." in *Food and Foodways: Explorations in the History and Culture of Human Nourishment*. Vol.3 pp. 143-166.

**Ann Forsyth**

*Title and Affiliation:* Professor, City and Regional Planning, Cornell

*Mailing Address:* 106 West Sibley Hall, Cornell university, Ithaca, NY 14853

*Email Address and Telephone:* [forsyth@cornell.edu](mailto:forsyth@cornell.edu), 607-277-0506

*Webpage Address:* [http://www.aap.cornell.edu/aap/crp/people/faculty-profile.cfm?customel\\_datapageid\\_7102=49334](http://www.aap.cornell.edu/aap/crp/people/faculty-profile.cfm?customel_datapageid_7102=49334)

*Discipline:* Urban Planning

*Research Interests:* Health and the built environment, physical activity, food environments

*Obesity Focus:* Causes, measurement

*Biography/Research Summary:*

Trained in planning and architecture, Ann Forsyth works mainly on the social aspects of physical planning and urban development exploring how to make more sustainable and healthy cities. Professor Forsyth's contributions have been to analyze the success of planned alternatives to sprawl, particularly exploring the tensions between social and ecological values in urban design. Several issues prove to be the most difficult to deal with in planning better places and provide a focus for some of her more detailed investigations: suburban design, walkability, affordable housing, social diversity, and appropriate green space.

In doing this work she has created a number of new tools and methods in planning—an urban design inventory for measuring walkability; GIS protocols for measuring the connections between physical activity, food, and the built environment; health impact assessments; and participatory planning techniques. Her work on walkability was funded by the Robert Wood Johnson Foundation and on food, physical activity, and the built environment is funded by the National Institutes of Health.

*Bibliography:*

----- Forthcoming, Ann Forsyth, Kevin Krizek, Daniel Rodriguez. Non-motorized Travel Research and Contemporary Planning Initiatives. *Progress in Planning*.

----- Forthcoming, J. Michael Oakes, Ann Forsyth, Mary Hearst, and Kathryn H. Schmitz. Recruiting a Representative Sample for Neighborhood Effects Research: Strategies and Outcomes of the Twin Cities Walking Study. *Environment and Behavior*.

----- Forthcoming, Kevin Krizek, Susan Handy, and Ann Forsyth. Explaining Changes in Walking and Bicycling Behavior: Challenges for Transportation Research. *Environment and Planning B*.

----- Forthcoming, Ann Forsyth, Carissa Schively Slotterback, and Kevin Krizek. Health Impact Assessment for Planners: What Tools are Useful? *Journal of Planning Literature*.

2009 Forthcoming, Ross Brownson, Christy Hoehner, Kristin Day, Ann Forsyth, Jim Sallis, Measuring the Built Environment for Physical Activity: State of the Art. *American Journal of Preventive Medicine*.

2009 Keryn E. Pasch, Mary O. Hearst, Melissa C. Nelson, Ann Forsyth, Leslie A. Lytle. Alcohol Outlets and Youth Alcohol Use: Exposure in Suburban Areas. *Health and Place* 15: 642-646.

2009 Ann Forsyth, J. Michael Oakes, and Kathryn H. Schmitz, Test-Retest Reliability of the Twin Cities Walking Survey. *Journal of Physical Activity and Health* 6, 1: 119-131.

2009 Ann Forsyth, J. Michael Oakes, Brian Lee, and Kathryn H. Schmitz, The Built Environment, Walking, and Physical Activity: Is the Environment More Important to Some People than Others? *Transportation Research Part D* 14: 42-49.

2008 Daniel Rodriguez, Semra Aytur, Ann Forsyth, J. Michael Oakes, and Kelly Clifton. Relation of Modifiable Neighborhood Attributes to Walking. *Preventive Medicine* 47: 260-264.

2008 Ann Forsyth, Mary Hearst, J. Michael Oakes, M. Kathryn Schmitz, Design and Destinations: Factors Influencing Walking and Total Physical Activity. *Urban Studies* 45, 9: 1973-1996.

2007 J. Michael Oakes, Ann Forsyth, and Kathryn H. Schmitz, The Effect of Neighborhood Density and Street Connectivity on Walking Behavior: The Twin Cities Walking Study. *Epidemiologic Perspectives & Innovations* 4, 16: <http://www.epi-perspectives.com/content/4/1/16/>.

2007 Ann Forsyth, J. Michael Oakes, Kathryn H. Schmitz, and Mary Hearst, Does Residential Density Increase Walking and Other Physical Activity? *Urban Studies* 44, 4: 679-697.

*Participants*

2006 Ann Forsyth, Kathryn H. Schmitz, J. Michael Oakes, Jason Zimmerman, and Joel Koeppe, Standards for Environmental Measurement using GIS: Toward a Protocol for Protocols. *Journal of Physical Activity and Health* 3, S1: 241-257.

2006 Kristen Day, Marlon Boarnet, Mariela Alfonzo, Ann Forsyth, The Irvine Minnesota Inventory to Measure Built Environments: Development. *American Journal of Preventive Medicine* 30, 2: 144-152.

2006 Marlon Boarnet, Kristen Day, Mariela Alfonzo, Ann Forsyth, J. Michael Oakes, The Irvine Minnesota Inventory to Measure Built Environments: Reliability Tests. *American Journal of Preventive Medicine* 30, 2: 153-259.

**Geri Gay**

*Title and Affiliation:* Kenneth J. Bissett, Professor and Chair, Department of Communication and Information Science, Cornell University

*Mailing Address:* 339 Kennedy Hall, Cornell University, Ithaca, NY 14853

*Email Address and Telephone:* [gkg1@cornell.edu](mailto:gkg1@cornell.edu), 607-255-7737

*Webpage Address:* [http://www.comm.cornell.edu/staff/employee/geri\\_gay.html](http://www.comm.cornell.edu/staff/employee/geri_gay.html)

*Discipline:* Communication

*Research Interests:* Social and technical issues in the design of interactive communication technologies

*Obesity Focus:* Prevention

*Biography:*

Dr. Geri Gay is the Kenneth J. Bissett Professor and Chair of Communication at Cornell University and a Stephen H. Weiss Presidential Fellow. She is also a member of the Faculty of Computer and Information Science and the director of the Human Computer Interaction Lab at Cornell University. She is co-directing the Institute of Social Sciences theme project on social networks and networking. Her research focuses on social and technical issues in the design of interactive communication technologies. Specifically, she is interested in social navigation, affective computing, social networking, mobile computing, and design theory.

*Research Summary:*

The Mindless Eating Challenge is a mobile phone-based health game based on Dr. Brian Wansink's Mindless Eating Challenge. In the game, players are tasked with caring for a virtual pet or plant, similar to the popular Tamgotchi. Pet care requires the user to follow a variety of health and eating recommendations and verify their actions with photos taken with their phone's camera. For example, the recommendation "Eat a hot breakfast" would require the player to submit a photo of him/ herself eating a bowl of oatmeal. Photos and compliance are then judged either by judges or peers. Based on compliance to these recommendations, the pet or plant changes its appearance and gains features or accessories--a tree might grow taller or grow more leaves or fruit in response. Alternatively, leaves might fall off if the players performance is poor. A social portion of the game allows the user to see various depictions of their performance in comparison to the performance of others in their group, as well as of their group in comparison to other groups. The game is designed so that various features can be easily enabled and disabled so it can be used as a platform from which to conduct research into the mechanisms of mobile persuasion in the context of improving health and well-being.

This project is funded by the Robert Wood Johnson Foundation. The game was designed by Geri Gay and JP Pollak, Ph.D. student, in Prof. Gay's HCI Lab, and developed by Sara Lin and Emily Wagner, two students. Also collaborating on the project is Sahara Byrne, Assistant Professor in Communication, who studies media effects in children.

*Selected Bibliography:*

Gay, G. & Hembrooke, H. (2004). *Activity Centered Design*. Boston: MIT Press.

Nomura, S., Birnholtz, J. P., Rieger, O., Leshed, G., Trumbull, D., and Gay, G., (2008). Cutting into Collaboration: Understanding Coordination in Distributed and Interdisciplinary Medical Research. Will be presented at Computer Supported Cooperative Work (CSCW) 2008 Conference in November 2008. San Diego, CA.

Wesler, H.T., Cosley, D., Kossinets, G., Lin, A., Dokshin, F., Gay, G., and Smith, M., (2008). Finding Social Roles in Wikipedia. Proc ASA 2008

Cho, H. C., Gay, G., Davidson, B. D., and Ingraffea, A., (2007). Communication Styles, Social Networks, and Learning Performance in a CSCL. *Journal of Computers and Education*, Vol. 49, No. 2, pp. 309-329.

Joachims, T., Granka, L., Pan, B., Hembrooke, H., Radlinski, F., & Gay, G. (2007). Evaluating the Accuracy of Implicit Feedback from Clicks and Query Reformulations in Web Search. *ACM Transactions on Information Systems (TOIS)*, 25( 2).

Leshed, G., Hancock, J., Cosley, D., McLeod, P., Gay G. (2007). Feedback for Guiding Reflection on Teamwork Practices. GROUP Proceedings, Conference, Sanibel Island, FL., November.

### *Participants*

Pai, S., Kuryloski, P., Yip, H., Yennamandra, S., Wicker, S., Boehner, K., & Gay, G. (2007). Networks of Sensors in Public Spaces: Combining Technology With Art. In the IEEE International Symposium on Ubiquitous Computing and Intelligence (IEEE UCI'07). Niagara Falls, Ontario, Canada.

Pan, B., Hembrooke, H., Joachims, T., Lorigo, L., Gay, G., and Granka, L., (April 2007). In Google We Trust: Users Evaluations of Google Results. *Journal of Computer-Mediated Communication*, 2(3), article 3.

**Diane Gibson**

*Title and Affiliation:* Associate Professor, School of Public Affairs, Baruch College - CUNY

*Mailing Address:* 17 Lexington Avenue, Box D-901, New York, New York, 10010

*Email Address and Telephone:* [Diane.Gibson@baruch.cuny.edu](mailto:Diane.Gibson@baruch.cuny.edu), 646-660-6845

*Webpage Address:* [http://www.baruch.cuny.edu/spa/facultystaff/facultydirectory/bio\\_diane\\_gibson.php](http://www.baruch.cuny.edu/spa/facultystaff/facultydirectory/bio_diane_gibson.php)

*Discipline:* Public policy

*Research Interests:* Social program participation and obesity; the neighborhood food and retail environment and obesity

*Obesity Focus:* Causes

*Biography:*

I am currently an Associate Professor at the School of Public Affairs at Baruch College – CUNY and the Executive Director of the New York Census Research Data Center. I received my Ph.D. in Public Policy from the University of Chicago. My research focuses on the relationship between means-tested social program participation and weight status, other factors that are expected to influence an individual's weight status such as the neighborhood food environment, and the relationship between a neighborhood's demographic characteristics and the availability of amenities and economic development incentives in the neighborhood.

*Research Summary:*

My research can be best categorized as attempting to understand the causes of obesity. My published research focuses on the relationship between Food Stamp Program (FSP) participation and weight status. My research underway currently examines the relationship between the neighborhood food environment and weight status.

My research on FSP participation and weight status has considered adults and children separately as well as mothers and daughters in the same family. This research uses data from the National Longitudinal Survey of Youth 1979 (NLSY79) or the NLSY79 Child Sample. These papers attempt to deal with concerns about omitted variable bias by including detailed individual, family and environment characteristics as well as individual fixed effects in the empirical models of weight status.

In my paper on low-income adults, current and long-term FSP participation were significantly related to the obesity of low-income women ( $p < 0.05$ ), but not of low-income men. For low-income women, current participation in the FSP was associated with a 9.1% increase in the predicted probability of current obesity. Participation in the FSP in each of the previous five years compared to no participation over that time period was associated with approximately a 20.5% increase in the predicted probability of current obesity.

In my paper on children, models were estimated separately for younger (aged 5-11 y) and older (aged 12-18 y) children. Long-term FSP participation was positively and significantly related to overweight in young girls ( $P = 0.048$ ), and negatively and significantly related to overweight in young boys ( $P = 0.100$ ). Compared to girls and boys whose families did not participate in the FSP during the previous five years, FSP participation during all of the previous five years was associated with a 42.8% increase for young girls and a 28.8% decrease for young boys in the predicted probability of overweight. Long-term FSP participation was not significantly related to overweight in older children.

Given that my previous research found a positive and significant relationship between FSP participation and overweight in young girls and obesity in low-income women, I was interested in whether these relationships occurred simultaneously for members of the same family. Using longitudinal data on mothers and daughters, long-term FSP participation was positively and significantly related to the likelihood that mothers were obese and young daughters were overweight at the same time.

I am currently working on a set of projects that consider the relationship between the availability of food retail and food service establishments in a person's neighborhood of residence (often referred to as the "neighborhood food environment") and weight status. Preliminary results suggest that the neighborhood food environment is not significantly related to adult weight status. Future work will consider this relationship for children, and will also test whether the relationships for adults and children are sensitive to the definition of a "neighborhood" or the "neighborhood food environment."

*Selected Bibliography:*

Diane Gibson. 2006. "Long-term Food Stamp Program Participation is Positively Related to Simultaneous Overweight in Young Daughters and Obesity in Mothers" *Journal of Nutrition*, 136, pp. 1081-1085.

Ted Joyce, Diane Gibson and Silvie Coleman. 2005. "The Changing Association between Prenatal Participation in WIC and Birth Outcomes in New York City." *Journal of Policy Analysis and Management*, 24(4), pp. 661-683.

Diane Gibson. 2004. "Long-Term Food Stamp Program Participation is Differentially Related to Overweight in Young Girls and Boys." *Journal of Nutrition*, 134, pp. 372-379.

*Participants*

Diane Gibson. 2003. "Food Stamp Program Participation is Positively Related to Obesity in Low Income Women." *Journal of Nutrition*, 133, pp. 2225-2231.

Diane Gibson. 2001. "Food Stamp Program Participation and Health: Estimates from the NLSY97" in *Social Awakening: Adolescent Behavior as Adulthood Approaches*, edited by Robert T. Michael. New York: Russell Sage Foundation, pp. 258-295.

**Christine L. Himes**

*Title and Affiliation:* Maxwell Professor of Sociology, Syracuse University  
*Mailing Address:* 426 Eggers Hall, Syracuse University, Syracuse, New York  
*Email Address and Telephone:* [clhimes@syr.edu](mailto:clhimes@syr.edu), 315-443-9064  
*Webpage Address:* <http://www-cpr.maxwell.syr.edu/faculty/himes/index.htm>

*Discipline:* Sociology

*Research Interests:* Obesity and health problems in the elderly

*Obesity Foci:* Consequences, causes

*Biography:*

Christine L. Himes, Ph.D. is Maxwell Professor of Sociology at the Maxwell School, Syracuse University. She is a Senior Researcher within the Center for Policy Research. Dr. Himes' expertise is in the area of the demography of health and aging. Her recent research examines the role of obesity in health and functioning at older ages. Himes received her Ph.D. in demography and sociology from the University of Pennsylvania in 1989.

*Research Summary:*

I am primarily interested in the consequences of obesity, particularly the role that increasing levels of obesity will play in later life health. Using data from several large national surveys (HRS, AHEAD, LSOA), I have examined trends in both obesity rates and health status of the older population. Among the very old, obesity is not clearly linked to an increased risk of death, but it is related to disability and health. Obesity lowers functional status later in life. Those who are obese are more likely to have limitations in their mobility, including walking, getting out of bed, and using transportation. In addition, some health conditions are clearly linked to obesity, particularly diabetes. These health problems often begin earlier in life and have implications for the employment status of individuals. As a result, those who are obese often enter old age in poorer health and with fewer economic resources than those who are not obese.

My secondary interest is in the causes of the obesity trends. With co-author Sandra Reynolds, University of South Florida, I have used data from the National Health Interview Survey to focus on how compositional changes in the population are related to obesity rates. We find that in contrast to expectations, the increased educational level of the adult population has not resulted in a decline in obesity. Although future cohorts of older adults are likely to be better educated, they also are more likely to be obese, leading to increased risk of heart disease and diabetes. In addition, while increasing racial and ethnic diversity in the older population will still likely result in higher rates of obesity for adults in the future, the impact of our increasingly sedentary lives and the uncertain impact of smoking cessation on weight gain outweigh population composition effects.

*Selected Bibliography:*

Himes, Christine L. and Madonna Harrington Meyer. Forthcoming. "Gender and Race Differences in the Impact of Obesity on Work and Economic Security in Later Life in the U.S." *Hallym International Journal of Aging*.

Reynolds, Sandra L. and Christine L. Himes. 2007. "Cohort Differences in Adult Obesity in the U.S.: 1982-1996." *Journal of Aging and Health* 19:831-850.

Himes, Christine L. and Sandra L. Reynolds. 2005. "The Changing Relationship between Obesity and Educational Status." *Gender Issues* 22:45-57.

NaPier, Emily, Harrington Meyer, Madonna, and Christine L. Himes. 2005. "Overweight Over the Life Course." *Generations* 29:31-36.

Himes, Christine L. 2005. "Health Status in Later Life." *Public Policy and Aging Report* 15(3):

Himes, Christine L. 2004. "Obesity in Later Life: An Overview of the Issues." *Research on Aging* 26:3-12.

Himes, Christine L. 2000. "Obesity, Disease, and Functional Limitation in Later Life." *Demography* 37:73-82.

## Participants

### **Lisa Cooper Hudgins**

*Title and Affiliation:* Assoc. Prof. of Pediatrics in Medicine, The Rogosin Institute/Weill Cornell Medical College

*Mailing Address:* 1167 York Avenue, New York, New York 10065

*Email Address and Telephone:* [hudgins@rockefeller.edu](mailto:hudgins@rockefeller.edu), 212-702-9600, ext. 107

*Webpage Address:* <http://www.med.cornell.edu/research/lhudgins/>

*Discipline:* Pediatrics, lipid disorders

*Research Interests:* Effects of dietary carbohydrate on fatty acid synthesis and triglyceride levels, treatment and noninvasive monitoring of atherosclerosis

*Obesity Foci:* Mechanisms, consequences

### *Biography:*

Lisa C. Hudgins, M.D., received her medical degree from The University of Pennsylvania in 1979 and was board-certified in pediatrics after completing her residency at the Albert Einstein and Jacobi Hospitals in the Bronx, New York in 1982. She then joined The Rockefeller University as a clinical scholar, first studying cholesterol metabolism in infants, children and adults in the laboratory of Edward Ahrens and then dietary fat and carbohydrate, obesity and fatty acid synthesis in the laboratory of Jules Hirsch. Upon Dr. Hirsch's retirement in 1995, she continued patient-oriented research at Rockefeller as a full-time member of The Rogosin Institute, a not-for-profit institution in research and patient care, affiliated with Weill Medical College and The Rockefeller University. She is currently Associate Professor of Pediatrics in Medicine at Weill-Cornell Medical College, an adjunct professor at Rockefeller, and Director of Pediatric Lipid Control, The Rogosin Institute Comprehensive Lipid Control Center, where, for the past 13 years, she has cared for children referred for evaluation and treatment of lipid disorders, including obesity.

### *Research Summary:*

Obesity, prediabetes and diabetes are associated with elevated triglycerides, small dense LDL and low HDL, a dyslipidemia that is a component of the metabolic syndrome and contribute to the accelerated atherosclerosis in these disorders. Fructose and glucose are consumed in large and increasing quantities in the US and other countries where obesity is epidemic. They are present in nearly equivalent quantities in high fructose corn syrup and table sugar (sucrose), both common caloric sweeteners. My research carried out in lean and overweight adult volunteers at The Rockefeller University Hospital Clinical Translational Science Center demonstrated that chronic ingestion of a weight-maintaining, very low fat, high sugar diet caused a large increase in hepatic de novo lipogenesis (DNL) and blood levels of saturated fat that correlated with an increase in serum triglycerides and decrease in HDL cholesterol. In contrast, adipose tissue DNL was minimally responsive to dietary carbohydrate and there was no evidence for weight gain. More recent preliminary data show that fructose, unlike glucose, given as a single oral dose or as multiple doses over 6 hours acutely stimulated the production of saturated fat and triglycerides due to its unique hepatic metabolism. The magnitude of the lipogenic response was significantly correlated with fasting insulin levels and inversely correlated with fasting HDL. These results support the concept that dietary sugars, particularly fructose, not only cause or exacerbate dyslipidemia but promote deposition of fat in the liver that may cause or exacerbate insulin resistance that progresses to diabetes. There is a need to better understand the heterogeneity of increase in triglycerides in response to dietary carbohydrate as a clue to the precursors, diagnosis, treatment and prevention of metabolic syndrome and diabetes.

Elevated triglycerides and other components of the metabolic syndrome are frequent in overweight children and may precede excessive weight gain, but the lipogenic responsiveness to dietary carbohydrate has not been explored in this age group. In future studies, I hope to develop a simple, outpatient, standardized fructose lipogenic test to evaluate the role of obesity, insulin resistance, age, and genetics in the variations in DNL, a key pathway controlling triglyceride levels and storage in liver and adipose tissue. These studies should ultimately yield valuable new information about the relationship between dietary sugars and dyslipidemia, diabetes and cardiovascular disease.

### *Selected Bibliography:*

Hudgins, L.C., E. Emken and J. Hirsch. Correlation of isomeric fatty acids in human adipose tissue with clinical risk factors for cardiovascular disease. *Am. J. Clin. Nutr.* 53:474-482, 1991.

Hudgins, L.C. and J. Hirsch. Changes in abdominal and gluteal adipose tissue fatty acid compositions in obese subjects after weight gain and weight loss. *Am. J. Clin. Nutr.* 53:1372-1377, 1991

Petrek, J.A., L.C. Hudgins, B. Levine, M. Ho and J. Hirsch. Breast cancer risk and fatty acid composition of breast and abdominal adipose tissue. *J. Natl. Cancer Inst.* 86:53-56, 1994.

Hudgins, L.C., M. Hellerstein, C. Seidman, J. Diakun, and J. Hirsch. Human fatty acid synthesis is stimulated by a eucaloric, low fat, high carbohydrate diet. *J. Clin. Invest.* 97:2081-2091, 1996

Hudgins, L.C., C. Seidman, J. Diakun, and J. Hirsch. Human fatty acid synthesis is reduced after the substitution of dietary starch for sugar. *Am. J. Clin. Nutr.* 67: 631-639, 1998

Hudgins, L.C., M.K.Hellerstein, C. Seidman, R.A.Neese, J. Tremaroli, J. Hirsch. Relation between carbohydrate-induced hypertriglyceridemia and fatty acid synthesis in lean and obese subjects. *J. Lipid Res.* 41: 595-604, 2000

Hudgins, L.C. Effect of high carbohydrate feeding on triglyceride and saturated fatty acid synthesis. *P.S.E.B.M.* 225:178-183, 2000

Hudgins, L.C., A. Baday, M.K. Hellerstein, T.S. Parker, D.M. Levine, C.E. Seidman, R.A. Neese, J.D. Tremaroli, J. Hirsch. The effect of dietary carbohydrate on the genes for fatty acid synthase and inflammatory cytokines in adipose tissue from lean and obese subjects. *J Nutr Biochem* 19: 237-245, 2008.

## Participants

### David Just

*Title and affiliation:* Associate Professor, Applied Economics and Management, Cornell University

*Mailing address:* 254 Warren Hall, Ithaca, NY 14850

*Email Address and Telephone:* [drj3@cornell.edu](mailto:drj3@cornell.edu), 607-255-2086

*Webpage Address:* <http://www.aem.cornell.edu/profiles/just.htm>

*Discipline:* Behavioral economics

*Research Interests:* Psychology and economics of food decisions in the marketplace.

*Obesity Focus:* Mechanism, prevention

### *Biography:*

David R. Just (Ph.D, University of California, Berkeley 2001) joined the department of Applied Economics and Management at Cornell University in 2002 and currently serves as associate professor and director of graduate studies. Employing the tools of behavioral economics, Dr. Just's work examines how consumer misperceptions interact with profit motive to shape the marketplace. His work has been reported on in numerous popular publications and on television including *Discover Magazine's* top science stories of 2006.

### *Research Summary:*

Dr. Just uses the tools of experimental and behavioral economics to examine behavior related to food. Individuals make tremendous numbers of food related decisions every day, limiting the amount of attention given to any particular decision. Due to the constraints on these decisions, individuals often fail to make decisions that are consistent with their own health and weight goals. Food decisions are often influenced by subtle factors within the decision-making environment. Individuals often respond to consumption norms suggested by the food environment (e.g., by package size, or plate size). Additionally, individuals often fail to monitor the amount of food they have consumed especially in distracting environments. Importantly food consumers do not recognize that they are influenced by these factors and thus do not take account of them when making food choices.

Food manufacturers, marketers, and retailers, motivated by profit, use tremendous resources to experiment with food and restaurant design. These efforts may unwittingly take advantage of these food behaviors by increasing food consumption volume and simultaneously reducing the health value of the food consumed. For example, we have found that using debit or credit cards to purchase food will often lead individuals to consume more calorie dense foods than when using cash. This appears to occur because the use of debit cards allows the individual to make purchases without as much cognitive involvement.

Because individuals make food decisions without much thought, it is unlikely that health policies designed to appeal to highly conscious thought will have much of an impact (e.g., health information or fat taxes). Alternatively, there is the potential for marketers to increase profits by charging consumers for access to food packaging or environments that set smaller consumption norms, or offer fewer distractions. Further, individuals may be taught ways to manipulate their own environment to make healthier eating more convenient or likely.

Common behavioral economic phenomena can substantially contribute to food consumption decisions. For example, due to time inconsistent preferences, individuals may burn through money quickly, not fully accounting for future needs. Food assistance programs may unwittingly interact with these behavioral tendencies to increase the likelihood of becoming overweight. Food stamp benefits given monthly may lead an individual to consume relatively large quantities of food at the beginning of a cycle, but consume much less toward the end of a cycle. Redesigning the benefit transfer to smooth consumption may help to reduce this cycle of consumption. Alternatively, the sunk cost fallacy can lead individuals to over-consume when faced with higher priced food. Rather than consuming until they are satisfied, consumers may consume until they feel they have gotten their money's worth. Thus the relative prices of foods can play unintuitive roles in consumption volume.

Policy makers must account for food behavior in trying to reduce obesity. Without accounting for the behavioral impacts of their policies, they may unwittingly exacerbate problems with weight and food consumption control.

### *Selected Bibliography:*

Wansink, Brian, David R. Just and Collin R. Payne. "Mindless Eating and Healthy Heuristics for the Irrational." *American Economic Review* Vol. 99 No. 2 (2009).

Just, David R. and Brian Wansink. "The Fixed Price Paradox: Conflicting Effects of 'All-You-Can-Eat' Pricing" *Review of Economics and Statistics*. Conditionally accepted September 16, 2008.

Just, David R., Brian Wansink and Callum G. Turvey. "Biosecurity Terrorism, Food Safety, and Food Consumption Behavior: Using Experimental Psychology to Analyze Economic Behavior." *Journal of Agricultural and Resource Economics*. Vol. 34, No. 1. (2009).

Just, David R., Brian Wansink, Lisa Mancino and Joanne Guthrie. "Behavioral Economic Concepts to Encourage Healthy Eating in School Cafeterias: Experiments and Lessons From College Students." *Economic Research Report* No. 68, Economic Research Service, USDA, December 2008.

Just, David R., Amir Heiman and David Zilberman. "The Interaction of Religion and Family Members' Influence on Food Decisions" *Food Quality and Preference* Vol. 18 No. 5 (2007): 786 – 794.

Chang, Hung-Hao, and David R. Just. "Health Information Availability and the Consumption of Eggs: Are Consumers Bayesians?" *Journal of Agricultural and Resource Economics* Vol 32. No. 1 (April 2007): 77 – 92.

Just, David R., Lisa Mancino and Brian Wansink. "Could Behavioral Economics Help Improve Diet Quality for Nutrition Assistance Program Participants." *Economic Research Report* No. 43, Economic Research Service, USDA, June 2007.

Gomez, I. Miguel, Laoura M. Maratou and David R. Just. "Factors Affecting the Allocation of Trade Promotions in the US Food Distribution System." *Review of Agricultural Economics* Vol 29 No. 1 (Spring 2007): 119 – 140.

Just, David R. "Behavioral Economics, Food Assistance, and Obesity." *Agricultural and Resource Economics Review*. Vol. 35, No. 2 (October 2006): 1 – 10.

Heiman, Amir, David R. Just, Bruce McWilliams, and David Zilberman, 2004. "Religion, Religiosity, Lifestyles and Food Consumption." *Agricultural and Resource Economics Update*, Giannini Foundation of Agricultural Economics, University of California, Vol. 8. No. 2 (November – December, 2004).

Heiman, Amir, David R. Just, and David Zilberman. "The Effect of Religion, Education and Income on the Level of Acceptance of Biotechnology." *International Journal of Biotechnology*. Vol. 3, No.3/4 (2001): 257 – 259.

Heiman, Amir, David R. Just, Bruce McWilliams, and David Zilberman. "Incorporating Family Interactions and Socio-Economic Variables into Family Production Functions: The Case of Demand for Meats." *Agribusiness, an International Journal*. Vol. 17, No. 4 (Fall 2001): 455 – 468.

Heiman, Amir, David R. Just, and David Zilberman. "The Role of Socio-economic Factors and Lifestyle Variables in Attitude and the Demand for Genetically Modified Foods." *Journal of Agribusiness*. Vol. 18, No. 3 (Fall 2000): 249 – 260.

## Participants

### Rogan Kersh

*Title and Affiliation:* Associate Dean/Prof. of Public Policy, NYU Wagner School

*Mailing Address:* 295 Lafayette Street, NYC, NY 10012

*Email Address and Telephone:* [rk79@nyu.edu](mailto:rk79@nyu.edu), 212-998-7466

*Webpage Address:* <http://wagner.nyu.edu/faculty/facultyDetail.php?whereField=facultyID&whereValue=412>

*Discipline:* Political science/public policy

*Research Interests:* Health policy, with focus on obesity politics

*Obesity Focus:* Consequences, treatment/prevention, causes

*Biography:* Rogan Kersh is academic dean and a professor of public policy at NYU's Wagner School, where he moved in 2006 from Syracuse's Maxwell School. He spent spring 2006 as Distinguished Fellow at Yale's Rudd Center for Food Policy & Obesity. Kersh has been a RWJ Fellow in Health Policy and a Mellon Fellow in the Humanities. His publications include *two books* and more than 50 articles and book chapters. He is also a frequent media commentator on U.S. politics and health policy. Kersh is currently completing a book on the politics of obesity and another on interest-group lobbying around health care.

#### *Research Summary:*

My work on obesity has been from a public-policy perspective. Is obesity/overweight a legitimate subject of policymakers' activity? How do other "private" matters compare, such as alcohol or smoking? And if there's a government role, what policies might have the most impact—and feasibility, as in actually having a chance of becoming law? I've tried to answer these questions from both a historical and forward-looking perspective. Recently I've turned as well to empirical testing, specifically of New York City's law mandating calorie labels on fast-food menus. Here I remain driven by the same basic questions: does this policy *work* in practice? And how might it be revised to work better?

#### *Selected Bibliography:*

"The Influence of Calorie Labeling on Food Choice: A First Look from Low-Income Communities" (co-authored), under review at *American Journal of Public Health*.

"The Politics of Obesity: A Current Assessment & Look Ahead," *Milbank Quarterly* 87:1 (forthcoming 2009).

"Obesity and Reproduction: Policy and Political Implications," *Journal of the Society of Reproductive Medicine* 7:1 (forthcoming 2009).

"Anti-Fett Politik: Übergewicht und staatliche Interventionspolitik in den USA" (w/J. Morone), in H. Schmidt-Semisch & F. Schorb, eds., *Kreuzzug gegen Fette* [Political Crusade Against Fat]. Translated fm. original. Wiesbaden, Germany: VS Verlag/Springer Publishing (2008).

"Assessing the Feasibility and Impact of Federal Childhood Obesity Policies" (co-authored), *Annals of the American Academy of Political & Social Science* 615 (2008).

"Obesity, Courts, and the New Politics of Public Health" (with J. Morone), *Journal of Health Politics, Policy, & Law* 30:5 (2005).

"The Politics of Obesity: Seven Steps to Government Action" (with J. Morone), *Health Affairs* 21:6 (Nov./Dec. 2002).

"How the Personal Becomes Political" (w/J. Morone), *Studies in American Political Development* 16 (2002).

**David A. Levitsky**

*Title and Affiliation:* Professor of Nutrition and Psychology, Cornell University

*Mailing Address:* 112 Savage Hall, Cornell University, Ithaca, NY 14853

*Email Address and Telephone:* [dal4@cornell.edu](mailto:dal4@cornell.edu), 607-255-3263

*Webpage Address:* <http://www.human.cornell.edu/che/bio.cfm?netid=dal4>

*Discipline:* Nutrition, Psychology

*Research Interests:* Regulation of energy balance, control of food intake and energy expenditure, regulation of body weight.

*Obesity Focus:* Environmental causes

*Biography:*

David Levitsky has been a member of the Division of Nutritional Sciences and the Department of Psychology since 1968. He has spent his career investigating the factors that influence the control of food intake and the energy expenditure in mammals. He has published widely in both the fields of Nutrition and Psychology. He has won several prestigious teaching awards including New York State Chancellors Award and has been a Steven H. Weiss Fellow since 1994. He currently teaches the introductory nutrition course, *Nutrition, Health, and Society*, and an advance course in Obesity, *Obesity and the Control of Body Weight*.

*Research Summary:*

Much of my work has focused on the precision to which humans adjust for imposed energetic errors (i.e., meal skipping, overeating, changes in energy density of the diet). I have concluded from these studies and my analysis of the literature that humans are extremely imprecise in their adjustment to any kind of energy challenge. On the other hand, our studies and those reported in the literature demonstrate that people are very sensitive, at least in the short term, to environmental cues such as the amount of food that is on their plate or the number of foods available at a meal. The paradox is if the intake of humans is altered so easily by changes in environmental cues, then why is it so difficult for humans resist weight gain and even lose weight. I believe the answer lies in the tremendous vulnerability of humans to the “occasion” to eat. The occasion can either be direct as in offering one food or more abstract such as seeing or hearing advertisements about food. The critical question is whether it is possible to overcome this vulnerability sufficiently to prevent weight gain or even lose weight? We propose that it is. We have recently published the results of two studies where we described the use of daily weight monitoring (Caloric Titration) as a method that completely prevented first semester freshman from gaining weight. The technique requires one to view their recent history of daily body weight and make changes in their subsequent intake or expenditure in order to hold their weight constant. We believe that this method allows people to make the kind of changes that best fits with their lifestyle. We are currently testing this technique to help people lose and sustain a weight loss. Besides the novelty of requiring regular weight monitoring, the method requires a slow weight loss, only 1 percent weight loss at a time, until they reach a maximum of ten percent weight loss. We also will be measuring the degree to which the use of the Caloric Titration Method increases one’s sense of control over the seductiveness of food in their environment.

*Selected Bibliography:*

Levitsky, D. A. *Macronutrients and the Control of Body Weight*. In: Coulston AM, Rock CL, Mosen ER. *Nutrition in the Prevention and Treatment of Disease*. Academic Press: San Diego, 2008 (second edition)

Levitsky, D. A. *The Control of Food Intake and the Regulation of Body Weight in Humans*. In: Harris, RBS, Mattes, R. *Appetite and Food Intake: Behavioral and Physiological Considerations*. CRC Press: Boca Raton, 2008

Speakman, J. and Levitsky, D. A. *The Aetiology of Obesity: genetics or environment, intake or expenditure*. Williams, G, Fruhbeck, G. *Obesity: science to practice*. In press.

Obarzanek E, Levitsky DA. Eating in the laboratory: Is it representative? *Am J Clin Nutr* 1985;42:323-28.

Lissner L, Levitsky DA, Strupp BJ, Kalkwarf HJ, Roe DA. Dietary fat and the regulation of energy intake in human subjects. *Am J Clin Nutr* 1987;46:886-92.

Levitsky DA, Obarzanek E, Stallone D, Strupp BJ. Unusual mechanism of expending energy. *Internat J Obesity* 1987;11:48.

Stevens J, Levitsky DA, Van Soest PJ, Robertson JB, Kalkwarf HJ, Roe DA. Effect of psyllium gum and wheat bran on spontaneous energy intake. *Am J Clin Nutr* 1987;16:812-17.

Lissner L, Stevens J, Levitsky DA, Rasmussen KM, Strupp BJ. Variations in energy intake during the menstrual cycle: implications for food-intake research. *Am J Clin Nutr* 1988;48:956-62.

Lissner L, Habicht J-P, Strupp BJ, Levitsky DA, Haas J, Roe DA. Body composition and energy intake: Do overweight women overeat and underreport? *Am J Clin Nutr* 1989;49:320-25.

## Participants

- Troiano RP, Levitsky DA, Kalkwarf HJ. Effect of dl-fenfluramine on thermic effect of food in humans. *Internat J Obesity* 1990;14:647-55.
- Kendall A, Levitsky DA, Strupp BJ, Lissner L. Weight loss on a low fat diet: Consequence of the imprecision of the control of food intake in humans. *Am J Clin Nutr* 1991;53:1124-29.
- Levitsky DA, Troiano R. Metabolic consequences of fenfluramine for the control of body weight. *Am J Clin Nutr* 1992;55:167S-72S.
- Troiano R P, Frongillo EA Jr, Sobal J, Levitsky D A. The relationship between body weight and mortality: A quantitative analysis of combined information from existing studies. *Intern. J. Obesity*, 1996; 20: 63-75.
- Levitsky, D. Putting Behavior back into Feeding Behavior: A Tribute to George Collier. *Appetite* 2001; 38, 1-6.
- Mrdjenovic, G. & Levitsky, D. A. (2003) Nutritional and energetic consequences of sweetened drink consumption in 6- to 13-year-old children. *J Pediatr* 2003; 142: 604-610.
- Levitsky, D. A., Halbmaier, C. A. & Mrdjenovic, G. The freshman weight gain: a model for the study of the epidemic of obesity. *Int J Obes Relat Metab Disord* 2004, 28: 1435-1442.
- Levitsky, D. A. & Youn, T. The more food young adults are served, the more they overeat. *J Nutr* 2004, 134: 2546-2549.
- Levitsky DA, Obarzanek O, Mrdjenovic G, Strupp BJ. Imprecise Control of Energy Intake: Absence of a Reduction in Food Intake following Overfeeding in Young Adults. *Physiol Behav* 2005; 84: 669-675.
- Mrdjenovic G, Levitsky D. Children eat what they are served: the imprecise regulation of energy intake. *Appetite*, 2005, 273-282.
- Levitsky, DA. The non-regulation of food intake in humans: hope for reversing the epidemic of obesity. *Physiol Behav*, 2006, 86(5): 623-32.
- Levitsky DA, Garay J, Nausbaum M, Neighbors L, DellaValle DM. Monitoring weight daily blocks the freshman weight gain: A model for combating the epidemic of obesity. *Int J Obes (Lond)* 2006;30:1003-10.

**Marla E. Lujan**

*Title and Affiliation:* Assistant Professor, Human Nutrition, Cornell University

*Mailing Address:* 216 Savage Hall, Cornell University, Ithaca, NY 14853

*Email Address:* [mel245@cornell.edu](mailto:mel245@cornell.edu), 607-255-3153

*Webpage Address:* <http://www.human.cornell.edu/che/bio.cfm?netid=mel245>

*Discipline:* Physiology, reproductive endocrinology, ultrasonography

*Research interests:* Nutritional regulation of fertility, obesity-induced infertility, polycystic ovary syndrome

*Obesity Foci:* Mechanisms, Consequences

*Biography:*

Marla Lujan received her BSc degree in Life Sciences from Queen's University in 1998, and her MSc and PhD degrees in Physiology in 2001 and 2004 from Queen's University. She was a Saskatchewan Health Research Foundation and Canadian Institutes of Health Research Postdoctoral Fellow in Obstetrics, Gynecology and Reproductive Sciences at the University of Saskatchewan from 2005 to 2008. She became an Assistant Professor in the Division of Nutritional Sciences at Cornell University in 2008.

Loss of regular menstrual cycles – termed amenorrhea – has emerged as a highly prevalent symptom of obesity in women. Currently, overweight and obese women account for over 50% of couples undergoing fertility therapy making obesity the leading cause of anovulatory infertility in North America and the UK. While lifestyle intervention is heralded as the best treatment and defense against obesity-related amenorrhea, very little is known about how obesity inhibits ovulation or what accounts for the tremendous variability seen in the return of menses in women following weight loss. A recent call by experts to ban fertility treatments in obese women, due to extremely poor maternal and fetal outcomes, has brought to the forefront the urgent need for studies aimed at understanding these newly recognized pathophysiological consequences of obesity. Since amenorrhea compounds the risk of developing chronic diseases such as, depression, anxiety, hyperandrogenism, polycystic ovary syndrome, endometrial hyperplasia and uterine cancer, the consequence of obesity-related amenorrhea should be viewed as broad-spectrum issue impacting Women's Health.

Our laboratory investigates the link between nutrition, metabolism and fertility in women. Specific interests include deciphering the endocrine, cellular and molecular mechanisms that lead to amenorrhea in overweight and obese women as well as improving the diagnosis of polycystic ovary syndrome - a condition of impaired fertility that is tightly linked to obesity, insulin resistance and excess male hormone production. We use high-resolution serial ovarian ultrasonography in women to track changes in follicle development and to identify key periods during the menstrual cycle in which follicle development and ovulation are most sensitive to metabolic cues (e.g., energy balance, body composition, fat-derived hormones, glucose, insulin, androgens). By understanding the physiological mechanisms governing obesity-related amenorrhea, the long-term goal of our laboratory is to develop nutritional, lifestyle and pharmaceutical regimens that promote and preserve reproductive health and wellness in women.

*Selected Bibliography:*

Lujan ME, Chizen DR, Pierson RA. Diagnostic criteria for polycystic ovary syndrome: pitfalls and controversies. *Journal of Obstetrics & Gynaecology Canada* 2008; 30(8):671-9.

Lujan ME, Chizen DR, Peppin AK, Leswick D, Kriegler S, Bloski TG, Pierson RA. Improving inter-observer variability in the evaluation of ultrasonographic features of polycystic ovaries. *Reproductive Biology and Endocrinology* 2008; 6(1):30.

Mircea CN, Lujan ME, Pierson RA. Metabolic Fuel and Clinical Implications for Female Reproduction. *Journal of Obstetrics and Gynaecology Canada* 2007; 29(11):887-902.

Van Vugt DA, Lujan ME, Froats M, Krzemien AA, Couceyro PR, Reid RL. Effect of fasting on cocaine-amphetamine-regulated transcript, neuropeptide Y, and leptin receptor expression in the non-human primate hypothalamus. *Neuroendocrinology* 2006; 84(2):83-93.

Lujan ME, Krzemien AA, Reid RL, Van Vugt DA. Effect of leptin administration on ovulation in food-restricted rhesus monkeys. *Neuroendocrinology* 2006; 84(2):103-14.

Lujan ME, Krzemien AA, Reid RL, Van Vugt DA. Developing a model of nutritional amenorrhea in rhesus monkeys. *Endocrinology* 2006; 147(1):483-92.

*Participants*

Lujan ME, Krzemien AA, Reid RL, Van Vugt DA. Caloric restriction inhibits steroid-induced gonadotropin surges in ovariectomized rhesus monkeys. *Endocrine* 2005; 27(1):25-31.

Lujan ME, Krzemien AA, Van Vugt DA. Hypoglycemia does not affect gonadotrope responsiveness to gonadotropin-releasing hormone in rhesus monkeys. *Endocrine* 2003; 21(2):109-14.

Lujan ME, MacTavish PJ, Krzemien AA, Bradstock MW, Van Vugt DA. Estrogen-induced gonadotropin surge in rhesus monkeys is not inhibited by cortisol synthesis inhibition or hypoglycemia. *Endocrine* 2002; 19(2):169-76.

**Jeff Niederdeppe**

*Title and Affiliation:* Assistant Professor, Department of Communication, Cornell University

*Mailing Address:* 328 Kennedy Hall, Cornell University, Ithaca, NY 14853

*Email address and Telephone:* [jdn56@cornell.edu](mailto:jdn56@cornell.edu), 607-255-9706

*Webpage Address:* [http://comm.cornell.edu/staff/employee/jeff\\_niederdeppe.html](http://comm.cornell.edu/staff/employee/jeff_niederdeppe.html)

*Discipline:* Communication, Population Health Science

*Research Interests:* (1) Media campaigns, news coverage and health behaviors (e.g., smoking, diet, exercise) and (2) Communication about structural and environmental causes of obesity

*Obesity Focus:* Prevention

*Biography:*

Jeff Niederdeppe (Ph.D., University of Pennsylvania) is an Assistant Professor of Communication. His research explores the effects of media campaigns and news coverage on health behavior and social policy. His recent work examines why media campaigns to promote behavior change are often less effective, sometimes equally effective, and rarely more effective among socioeconomically disadvantaged populations relative to more advantaged populations. He is also testing persuasive message strategies to change determinants of obesity through policy change.

*Research Summary:*

Jeff Niederdeppe, PhD and Assistant Professor of Communication, conducts research on the prevention of obesity through individual behavior change and larger-scale policy changes to create healthier environments for behavior. His work, supported by a Loan Repayment Grant from the National Center on Minority Health and Health Disparities and a grant from the Robert Wood Johnson Foundation, focuses on the role of strategic communication in reducing SES disparities in behaviors related to obesity (e.g., diet and exercise). He is conducting several studies to develop and test message strategies to reduce SES disparities by raising public and policymaker support for policies to change social conditions associated with obesity. He is also working on a study to better understand the roles of news coverage, federal food labeling policy, and neighborhood SES context on dietary decisions related to high fat and obesogenic foods.

*Using Personal Stories to Raise Public Support for Social Policies to Reduce Obesity Rates.* This study, funded by Cornell's Institute for Social Sciences, seeks a greater understanding of how and when personal stories can influence attributions of responsibility for obesity and thus generate support for policies to address the problem. We are conducting a randomized, controlled 3-group experiment to test whether a personal story that emphasizes environmental barriers to healthy eating and active living can increase societal attributions of responsibility for obesity relative to a control group and a standard summary of research evidence. Formative research was conducted to gain a broad understanding of public attitudes about who is responsible for causing and addressing SES disparities in obesity and to elicit feedback on a series of personal stories aimed at increasing public understanding of the issue. Study findings will aid the continued development of messages to generate support for efforts to change social and structural conditions associated with SES disparities in obesity.

*Developing Messages to Improve Social Determinants of Health and Reduce Health Disparities.* This project, funded by the Robert Wood Johnson Foundation via a subcontract through the University of Wisconsin for a larger grant project, will identify a series of messaging best practices and disseminate a message design "toolkit" for use in local communities to support efforts to mobilize action toward community health. These goals will require the development and empirical testing of innovative strategies that highlight social determinants of health and social/structural barriers to behavior change. Over a period of three years, the study will conduct a series of focus groups, in-depth interviews, and randomized message testing studies to clarify specific message strategies that hold the greatest promise for mobilizing action toward community health by changing social conditions. The project's primary research question asks whether messages that incorporate personal stories, visual imagery, or both, are more effective than standard research summaries or statistical data at raising concern for and motivating effort to address social determinants of health and health disparities. While not specific to obesity or dietary decisions, the project will elucidate effective message strategies for efforts to reduce SES disparities in obesity by changing social conditions that influence multiple behaviors in local communities.

*News Coverage and Sales of Products Containing Trans Fats.* The FDA mandated that food products list the amount of trans fat per serving on Nutrition Facts labels by January 1<sup>st</sup>, 2006. There have been no coordinated efforts to raise awareness about trans fats since the policy went into effect, but news coverage may promote informed decisions about food purchases. This project assessed whether news coverage influenced sales of products containing trans fats between December 13, 2004 and June 24, 2007, both before and after the labeling policy went into effect. Furthermore, we examined whether news and price effects differ as a function of neighborhood socioeconomic status. We used a unique combination of retail scanner data from a major grocery chain with stores throughout Los Angeles County, news coverage data from Lexis-Nexis and Pro-Quest, and neighborhood SES data from the US Census. Overall, we found that news coverage about trans fat, combined with labeling information, appears to influence consumer behavior in the short-term. However news coverage and product labeling may not be sufficient to promote sustained changes in trans fat purchases. Prices were lower in poor neighborhoods but price effects were greater in these areas.

## *Participants*

### *Selected Bibliography:*

Niederdeppe, J. & Frosch, D. (2009). News coverage and sales of products with trans fats: Effects before and after changes in federal labeling policy. *American Journal of Preventive Medicine*. Forthcoming.

Niederdeppe, J., Bu, L., Borah, P, Kindig, D., & Robert, S. (2008). Message design strategies to raise public awareness of social determinants of health and population health disparities. *The Milbank Quarterly*, 86, 481-513.

Niederdeppe, J. (under review). On the role of public communication campaigns in reducing, reinforcing or widening socioeconomic disparities in health behaviors.

Niederdeppe, J., Robert, S. & Kindig, D. (in preparation). Perceptions about causes of and solutions to high rates of overweight and obesity: Implications for messaging about policy change to improve population health.

**Christine M. Olson**

*Title and Affiliation:* Professor, Division of Nutritional Sciences, Cornell University

*Mailing Address:* 376 MVR Hall, Cornell University, Ithaca, NY 14853

*Email Address and Telephone:* [cmo3@cornell.edu](mailto:cmo3@cornell.edu), 607-255-2634

*Webpage Address:* <http://www.human.cornell.edu/che/bio.cfm?netid=cmo3>

*Discipline:* Nutrition

*Research Interests:* Food insecurity and obesity; pregnancy weight gain and risk of obesity in offspring (children)

*Obesity Focus:* Prevention, causes, mechanisms

*Biography:*

Christine M. Olson is Professor of Community Nutrition, Division of Nutritional Sciences. She received her BS in Experimental Foods in 1970 and her MS and PhD in Nutritional Sciences in 1972 and '74 respectively from the University of Wisconsin-Madison. In 2002, she received the Excellence in Dietary Guidance award from the American Public Health Association. In 2006, her article "Tracking of Food Choices across the Transition to Motherhood" received the Best Article Award from the *Journal of Nutrition Education and Behavior*.

*Research Summary:**Role of Childbearing in Weight Gain and Development of Obesity in Women and Their Offspring*

The nutritional concerns of women, infants, and children are the focus of Olson's scholarly work. Our research group is conducting a major extension-outreach project (the Healthy Start Partnership) focused on building the capacity of community-based health and nutrition professionals to design and implement environmental interventions promoting healthy weights in women and their infants. We are conducting an evaluation of the impact of the Healthy Start Partnership on women's gestational and postpartum weights and their infants' rate of growth in the first 6 months of life.

We are examining the inter-relationships between the food and socio-demographic environments in which women live, their diets, and body weight. We are particularly interested in the inter-relationships of these variables in rural settings which have typically not been included in the research to date on this topic.

The design and evaluation of clinical and patient education interventions to promote healthy weight gains in pregnancy and appropriate weight loss postpartum is a final interest area. We are interested in using contemporary electronic technology in these interventions.

The above work falls within the broad area of translational research aimed at prevention of obesity.

We have also done research on the links between maternal weight variables and the risk of obesity in offspring. This work links within the "fetal programming of obesity" area of study and is thus focused on causes and mechanisms.

*Socioeconomic Disadvantage, Food Insecurity and Obesity in Women*

I have long been interested in the strong inverse association between socioeconomic status and body weight in women. I've conducted a series of studies trying to understand the role of food insecurity and hunger as well as exposure to deprivation in early life as explanations. This work falls into the areas of causes and mechanisms.

*Selected Bibliography:**Role of Childbearing in Weight Gain and Development of Obesity in Women and Their Offspring:*

Olson CM, Strawderman MS. Modifiable behavioral factors in a biopsychosocial model predict inadequate and excessive gestational weight gain. *Journal of the American Dietetic Association* 103:48-54, 2003.

Olson CM, Strawderman MS, Hinton PS, Pearson TA. Gestational weight gain and postpartum behaviors associated with weight change from early pregnancy to 1 y postpartum. *International Journal of Obesity* 27:117-127, 2003.

Olson CM, Strawderman MS, Reed RG. Efficacy of an intervention to prevent excessive gestational weight gain. *American Journal of Obstetrics and Gynecology* 191(2):530-6, 2004.

Olson CM Tracking of food choices across the transition to motherhood. *Journal of Nutrition Education* 37:129-136, 2005.

Olson CM. A call for intervention in pregnancy to prevent maternal and child obesity. *American Journal of Preventive Medicine* 33(5):435-436, 2007.

## Participants

Olson CM. Achieving a healthy weight gain during pregnancy. *Annual Review of Nutrition* 28:411-23, 2008.

Fernandez ID, Olson CM, De Ver Dye T. Discordance in the assessment of prepregnancy weight status of adolescents: a comparison between the Centers for Disease Control and Prevention sex- and age-specific body mass index classification and the Institute of Medicine-based classification used for maternal weight gain guidelines. *Journal of the American Dietetic Association* 108(6): 998-1002, 2008.

Olson CM, Strawderman MS, Dennison BA. Maternal weight gain during pregnancy and child weight at age 3 years. *Maternal and Child Health Journal*. 2008. DOI 10.1007/s10995-008-0413-6.

Davis EM, Zyzanski SJ., Olson CM, Stange KC, Horowitz RI. Racial, ethnic and socioeconomic differences in the incidence of obesity related to childbirth. *American Journal of Public Health* 99(2):294-299, 2009.

### *Socioeconomic Disadvantage, Food Insecurity and Obesity in Women:*

Olson CM. Food insecurity in women: A recipe for unhealthy trade-offs. *Topics in Clinical Nutrition* 20(4):321-328, 2005.

Bove CF, Olson CM. Obesity in low-income rural women: Qualitative insights about physical activity and eating patterns. *Women & Health* 44(1):57-78, 2006.

Wells NW, Olson CM. The Ecology of Obesity: Perspectives from life course, design and economics. *Journal of Hunger & Environmental Nutrition* 1(3):99-129, 2006.

Olson CM, Bove CF, Miller EO. Growing up poor: Long-term implications for eating patterns and body weight. *Appetite* 49:198-107, 2007.

Olson CM, Strawderman MS. The relationship between food insecurity and obesity in rural childbearing women. *Journal of Rural Health* 24(1):60-66, 2008.

**S. Nena Osorio**

*Title and Affiliation:* Assistant Professor of Pediatrics & Medical Director Inpatient Service, The New York Presbyterian-Weill Cornell Medical Center

*Mailing Address:* 525 East 68th St. NY, NY 10065

*Email Address and Telephone:* [snm2001@med.cornell.edu](mailto:snm2001@med.cornell.edu), 212-746-3457

*Webpage Address:* <http://www.med.cornell.edu/research/snm2001/>

*Discipline:* Pediatrics

*Research Interests:* Angiogenic and vasculogenic markers among overweight children

*Obesity Focus:* Causes

*Biography:*

Dr. Snezana Nena Osorio is an Assistant Professor of Pediatrics in the Division of General Pediatrics at The New York Presbyterian-Weill Cornell Medical Center. She works as a Pediatric Hospitalist. She is also a Medical Director for the Inpatient Unit. Her primary research interest is in obesity and genetic link to cancer. Dr. Osorio is enrolled in a Master's Program in Clinical and Translational Research.

*Research Summary:*

Title of the project: Angiogenic and Vasculogenic Markers among Overweight Children:

Profiles of Bone Marrow-Derived Hematopoietic Stem Progenitor Cells, Endothelial Progenitor Cells, and Chemokines

Obesity is an established epidemiological risk factor for cancers of the colon, breast, endometrium, kidney and esophagus . Low fat diets and/or increased physical activity decrease the risk for cancers of cervix, gall bladder, prostate and thyroid suggesting the link between obesity and these types of cancer as well. In particular, obesity is a risk factor for breast cancer in post-menopausal women. Obese women, regardless of their menopausal status, are likely to have metastatic breast cancers when they are first diagnosed and to have poor outcomes. In addition, high BMI in early adulthood may increase the risk of ovarian cancer among postmenopausal women. Specifically, among older women who never took hormone replacement therapy, obese women were 2.83 times more likely to have developed ovarian cancer than women of normal weight.

The mechanisms underlying the association between obesity and metastasis have not been fully elucidated. Substantial evidence shows that neoplastic and non-neoplastic tissue growth is dependent on angiogenesis. Neovascularization and adipogenesis are temporally and spatially coupled processes during prenatal life and they continue to reciprocally interact via paracrine signaling systems throughout adult life. Activated adipocytes produce multiple angiogenic factors including leptin, angiopoietins, HGF, GM-CSF, VEGF, FGF-2, and TGF- $\beta$ , which either alone or collectively stimulate neovascularization during fat mass expansion.

Studies in humans have demonstrated that angiogenic factors are elevated in overweight and obese adults . Similar to malignant tissue growth, expansion of fat mass would not be achieved without switching on an angiogenic phenotype. (Substantial evidence implicates VEGF as an angiogenic mediator in tumors. Recent data from Drs. Kaplan and Lyden demonstrate that adult patients with breast, lung, and colorectal carcinomas showed elevated levels of circulating HPCs by flow cytometry and hematopoietic colony-forming assays, as compared with normal controls (see Figure 1. The same results were obtained from pediatric patients with rhabdomyosarcomas A recent study suggests that adipocytes and their accompanying endothelial cells might share a common progenitor that could differentiate into adipocytes or endothelial lineages depending upon exposure to different environments

## Participants

### **Christine K. Ranney**

*Title and Affiliation:* Associate Professor

*Mailing Address and Telephone:* 351 Warren Hall, Cornell University, Ithaca, NY 14853

*Email Address and Telephone:* [ckr2@cornell.edu](mailto:ckr2@cornell.edu), 607-255-3095

*Webpage Address:* <http://www.aem.cornell.edu/profiles/ranney.htm>

*Discipline:* Applied Economics

*Research Interests:* Policy analysis -- well-being of vulnerable households

*Obesity Focus:* Prevention, causes

#### *Research Summary:*

As an associate professor in AEM, my research involves how government programs, particularly food and nutrition programs, affect poverty and problems associated with poverty in the U.S. Over the years I have studied food consumption, food assistance programs (FSP, WIC, and School Lunch-Breakfast), and diet quality. Currently, I'm investigating 1) linkages among FSP participation, food sufficiency and the health status of U.S. elderly and 2) the ability of U.S. food systems to deliver nutritious food.

#### *Selected bibliography:*

Ranney, C. K. (2008) Determining Food Expenditures and Measuring Poverty: The Work of Mollie Orshansky: Discussion. \*Review of Agricultural Economics\* 30(3) forthcoming.

Meyerhoefer, C. D., C. K. Ranney and D. Sahn (2005) Consistent Estimation of Censored Demand Systems using Panel Data. \*American Journal of Agricultural Economics\* 87(3): 660-672.

Wilde, P. and C. K. Ranney (2000) /The Monthly Food Stamp Cycle Shopping Frequency and Food Intake De Endogenous Switching Regression Framework. \*American Journal of Agricultural Economics\* 82(1):200-213. / /

Wilde, P., P. McNamara and C.K. Ranney (1999). "The Effect of Income and Food Programs on Dietary Quality: A Seemingly Unrelated Regression Analysis with One-way Error Components." (Parke Wilde, Paul McNamara and Christine Ranney). /American Journal of Agricultural Economics, 81(4): 959-971./ /

McNamara, P., C.K. Ranney, L.S. Kantor and S. Krebs-Smith (1999). "The Gap Between Food Intakes and the Pyramid Recommendations: Measurement and Food System Ramifications." (Paul McNamara, Christine Ranney, Linda Scott Kantor, and Sue Krebs-Smith) /Food Policy 24(2-3): 117-133.

**Kathleen M. Rasmussen**

*Title and Affiliation:* Professor, Division of Nutritional Sciences, Cornell University

*Mailing Address:* 111 Savage Hall, Cornell University, Ithaca, NY 14853

*Email Address and Telephone:* [kathleen.rasmussen@cornell.edu](mailto:kathleen.rasmussen@cornell.edu), 607-255-2290

*Webpage Address:* <http://www.human.cornell.edu/che/bio.cfm?netid=kmr5>

*Discipline:* Nutrition

*Research Interests:* Maternal and child nutrition

*Obesity Focus:* Consequences

*Biography:*

Dr. Kathleen M. Rasmussen is internationally known for her research on maternal and child nutrition, which has included studies in experimental species, observational and intervention studies in human subjects, and epidemiologic studies. The results of this research have that women who are obese at conception have problems establishing and maintaining breastfeeding and have babies who are heavier at one year of age than those of normal-weight women. She is currently the chair of the Institute of Medicine's committee that is reexamining the guidelines for weight gain during pregnancy.

*Research Summary:*

I am broadly interested in the effect of obesity on the outcome of pregnancy and success in breastfeeding. These are important both for the mother and for her child and in both the short and long-term. Based on our studies in rats, we proposed that maternal obesity would be deleterious for the success of breastfeeding in women. We found this to be the case in white women living in the US and also Denmark, where the environment for breastfeeding is much more supportive and the association was attenuated but nonetheless highly significant. This association was also present in Hispanic but not black women living in the US. Taken together these findings suggest that there is both a biological and sociocultural aspect of this association.

We have shown that some of the biological underpinnings of lactation are affected by obesity, namely the rise in prolactin in response to the suckling stimulus and how rapidly the milk "comes in" after delivery. From studies in production species by others, there is reason to think that obesity may negatively affect the mammary gland both before and during pregnancy as well as during the immediate postpartum period. We have also examined whether maternal psychosocial factors play a role in this association, but were unable to demonstrate this. Our sample was small, so this issue merits further investigation in a larger group of women. Based on all of these findings, we have conducted two preliminary studies among obese women. In the first, we assigned them to better care during the immediate postpartum period or not. In the second, we assigned them to receive a manual or electric breast pump or not. None of these interventions was effective in prolonging breastfeeding, so new approaches are needed.

There is a complex interplay between obesity before conception, weight gain during pregnancy, breastfeeding and maternal and infant health. Excessive weight gain during pregnancy exacerbates the negative effects of prepregnant obesity on the duration of breastfeeding and increases postpartum weight retention. We have also shown that for any given prepregnant BMI and weight gain during pregnancy, breastfeeding attenuates postpartum weight retention. This is good news if American women can be persuaded to increase the duration of their breastfeeding, which may be difficult for those who are obese and need to do this the most. In addition, we have shown that women who are too heavy before pregnancy have larger babies than women who are not, they breastfeed for a shorter period and their babies are heavier at a year of age for these reasons and also because shorter breastfeeding is associated with other differences in the overall pattern of infant feeding.

Recently, we have explored the delicate trade-off between mother and infant that occurs with weight gain during pregnancy and varies with prepregnant fatness. It has long been known that this trade-off affects birthweight, but our findings suggest that when postpartum weight retention is included in the analysis, women would be advised to gain less weight than previously considered desirable.

*Selected Bibliography:*

Hilson JA, Rasmussen KM, Kjolhede CL. Maternal obesity and breast-feeding success in a rural population of white women. *Am J Clin Nutr* 1997;66:1371-8.

Hilson JA, Rasmussen KM, Kjolhede CL. High prepregnant body mass index is associated with poor lactation outcomes among white, rural women independent of psychosocial and demographic correlates. *J Hum Lact*. 2004;20:18-29.

Kugyelka JG, Rasmussen KM, Frongillo Jr EA. Maternal obesity and breastfeeding success among Black and Hispanic women. *J Nutr*. 2004;134:1746-1753.

## *Participants*

Rasmussen KM, Kjolhede CL. Prepregnant overweight and obesity diminish the prolactin response to suckling in the first week postpartum. *Pediatrics* 2004;113:e465-471.

Baker JL, Michaelsen KF, Rasmussen KM, Sørensen TIA. Maternal prepregnant body mass index, duration of breastfeeding and timing of solid food introduction are associated with infant weight gain. *Am J Clin Nutr*. 2004;80:1579-1588.

Hilson JA, Rasmussen KM, Kjolhede CL. Excessive weight gain during pregnancy is associated with earlier termination of breastfeeding among white women. *J Nutr* 2006;136:140-146.

Nøhr EA, Bech BH, Væth M, Rasmussen KM, Hendriksen TB, Olsen J. Obesity, gestational weight gain and preterm birth. A study within the Danish National Birth Cohort. *Pædiatr Perinat Epidemiol*. 2007;21:5-14.

Rasmussen KM. Association of maternal obesity before conception with poor lactational performance. *Annu Rev Nutr* 2007;27:103-21.

Baker JL, Michaelsen KF, Sørensen TIA, Rasmussen KM. High prepregnant body mass index is associated with early termination of full and any breastfeeding among Danish women. *Am J Clin Nutr* 2007;86:404-11.

Nohr EA, Væth M, Baker JL, Sørensen TIA, Olsen J, Rasmussen KM. Combined associations of prepregnancy BMI and gestational weight gain with the outcome of pregnancy. *Am J Clin Nutr*. 2008;87:1750-1759.

Rasmussen KM. Maternal obesity and the outcome of breastfeeding. In: Hale TW, Hartmann PE, eds. *Hale & Hartmann's Textbook on Human Lactation*. Amarillo, TX: Hale Publishing, 2007, pp. 387-402 (Chapter 20).

**Valerie Reyna**

*Title and Affiliation:* Professor, Human Development, Cornell University

*Mailing Address:* B44 Martha Van Rensselaer Hall, Cornell University, Ithaca, NY 14853

*Email Address and Telephone:* [vr53@cornell.edu](mailto:vr53@cornell.edu), 607-319-0655

*Webpage Address:* <http://www.human.cornell.edu/che/HD/reyna/index.cfm>

*Discipline:* Psychology

*Research interests:* Risk taking and decision making; impulsivity

*Obesity Foci:* Treatment/prevention

*Biography:*

Valerie Reyna is Co-director of the Center for Behavioral Economics and Decision Research and Professor of Human Development, Psychology, Cognitive Science, and Neuroscience at Cornell University. She holds a Ph.D. in experimental psychology from Rockefeller University, and publishes regularly in such journals as *Psychological Science* and *Medical Decision Making*. Her research focuses on dual processes in memory, judgment, and decision making, on how these processes change with age and expertise, and on their implications for risky decision making. She is a developer of fuzzy-trace theory, a model of the relation between mental representations and decision making that has been widely applied in law, medicine, and public health.

*Research Summary:*

Valerie Reyna has published extensively on developmental differences in risky decision making across the lifespan, with particular emphasis on adolescence, and is the creator of an influential theory of risk taking, fuzzy-trace theory (Reyna, 2004). She also has a track record of funded research, including serving as Principal Investigator of a large NIH grant entitled "Interventions for Risk Reduction and Avoidance in Youth," which targeted adolescent risk taking relevant to premature pregnancy and sexually transmitted diseases. She has written several comprehensive reviews of the literature on risky decision making (e.g., Reyna & Farley, 2006), conducted numerous empirical studies on risky decision making across the lifespan (e.g., Reyna & Brainerd, 1991; Reyna & Ellis, 1994) and recently edited a special issue of a leading developmental journal on this topic (see Reyna & Rivers, 2008).

Reyna's research on adolescent decision making is directly relevant to the study of youth obesity. Adolescence is a time of risks. With greater freedom and independence, young people face new choices involving sexuality, addictive substances, and lifestyle choices such as what to eat and how to be fit. Poor choices can have long-lasting consequences for individuals, families, and society. To help young people make better choices, a different approach is needed: one that recognizes how young people reason.

Research by Valerie Reyna has revealed that adolescents rationally weigh benefits and risks, but may make poor choices because to them the benefits outweigh the risks. Adults make more decisions based on "gist," an overall sense of what is the best course of action. This approach enables adults to reach the bottom line more quickly and thereby reduce their risky behaviors.

Through empirical research Reyna has developed a new approach to adolescent risk prevention which encourages less deliberative, more categorical thinking and helps youth recognize cues in the environment that signal risk before it is too late to act. Reyna is planning research to further develop and test this new approach and to apply it to the critical issue of youth obesity.

*Selected Bibliography:*

Reyna, V. F. & Rivers, S. E. (2008). Editorial: Current theories of risk and rational decision making. *Developmental Review*, 28, 1-11.

Rivers, S. E., Reyna, V. F. & Mills, B. A. (2008). Risk taking under the influence: A fuzzy-trace theory of emotion in adolescence. *Developmental Review*, 28, 107-144.

Reyna, V. F., & Brainerd, C. J. (2007). The importance of mathematics in health and human judgment: Numeracy, risk communication, and medical decision making. *Learning and Individual Differences* 17, 147-159.

Reyna, V. F., & Farley, F. (2006). Risk and rationality in adolescent decision making: Implications for theory, practice, and public policy. *Psychological Science in the Public Interest*, 7(1), 1-44.

Reyna, V. F., & Lloyd, F. J. (2006). Physician decision-making and cardiac risk: Effects of knowledge, risk perception, risk tolerance, and fuzzy processing. *Journal of Experimental Psychology: Applied*, 12, 179-195.

Reyna, V. F. (2005). Fuzzy-trace theory, judgment, and decision-making: A dual-processes approach. In C. Izawa & N. Ohta (Eds.), *Human Learning and Memory: Advances in theory and applications*: (pp. 239-256). Mahwah, NJ: Erlbaum

## Participants

- Reyna, V. F., Adam, M. B., Poirier, K., LeCroy, C. W., & Brainerd, C. J. (2005). Risky decision-making in childhood and adolescence: A fuzzy-trace theory approach. In J. Jacobs & P. Klaczynski (Eds.), *The development of judgment and decision making in children and adolescents* (pp. 77-106). Mahwah, NJ: Erlbaum.
- Reyna, V. F. (2004). How people make decisions that involve risk: A dual-process approach. *Current Directions in Psychological Science*, *13*, 60-66.
- Reyna, V. F., & Adam, M. B. (2003). Fuzzy-trace theory, risk communication, and product labeling in sexually transmitted diseases. *Risk Analysis*, *23*, 325-342.
- Reyna, V. F., Lloyd, F. J., & Brainerd, C. J. (2003). Memory, development, and rationality: An integrative theory of judgment and decision-making. In S. Schneider & J. Shanteau (Eds.), *Emerging perspectives on judgment and decision research* (pp. 201-245). New York: Cambridge University Press.
- Reyna, V. F., Holliday, R., & Marche, T. (2002). Explaining the development of false memories. *Developmental Review*, *22*, 436-489.
- Reyna, V. F., & Hamilton, A. J. (2001). The importance of memory in informed consent for surgical risk. *Medical Decision Making*, *21*, 152-155.
- Reyna, V. F., Lloyd, F., & Whalen, P. (2001). Genetic testing and medical decision making. *Archives of Internal Medicine*, *161*, 2406-2408.
- Reyna, V.F. (2000a). Data, development, and dual processes in rationality. *Behavioral and Brain Sciences*, *23*, 694-695.
- Reyna, V. F., & Brainerd, C. J. (1995). Fuzzy-trace theory: Some foundational issues. *Learning and Individual Differences*, *7*, 145-162.
- Reyna, V. F., & Ellis, S. C. (1994). Fuzzy-trace theory and framing effects in children's risky decision making. *Psychological Science*, *5*, 275-279.
- Reyna, V. F., & Brainerd, C. J. (1994). The origins of probability judgment: A review of data and theories. In G. Wright & P. Ayton (Eds.), *Subjective probability* (pp.239-272). New York, NY: Wiley.
- Reyna, V. F., & Brainerd, C.J. (1991). Fuzzy-trace theory and framing effects in choice: Gist extraction, truncation, and conversion. *Journal of Behavior and Decision Making*, *4*, 249-262.

**Michael Rosenbaum**

*Title and Affiliation:* Associate Professor, Clinical Pediatrics and Medicine, and Associate Program Director, General Clinical Research Center, Columbia University College of Physicians & Surgeons

*Mailing Address:* 450 West End Ave., New York, NY 10024 or Naomi Berrie Diabetes Research Pavilion, 1150 St. Nicholas Avenue, New York, NY 10032

*Email Address and Telephone:* [mr475@columbia.edu](mailto:mr475@columbia.edu), 212-305-9949

*Webpage Address:* <http://nyp.org/FPHTML/1168360120749.html>

*Discipline:* Pediatrics

*Research interests:* Body weight regulation and prevention of type 2 diabetes and obesity in adults and children

*Obesity Focus:* Mechanisms, causes, treatment

*Brief Biography:* Dr. Rosenbaum received his M.D. degree from Cornell in 1982. He completed a residency in pediatrics at Columbia Presbyterian Medical Center in 1985 and a fellowship in Pediatric Endocrinology at The New York Hospital in 1988. From 1988-97 he was a research associate and then an assistant professor at Rockefeller University. In 1997 he moved to Columbia University Medical Center where he is currently an Associate Professor of Clinical Pediatrics and Medicine and an Associate Director of the Clinical Research Center.

*Research Summary:*

We wish to understand the physiological mechanisms by which human body weight is regulated and, in specific, to define the physiological predicates for the over 75-95% recidivism to obesity following otherwise successful therapeutic weight loss. Our central hypothesis is that the molecular physiology of the regulation of somatic energy (fat) stores is designed to alter energy intake and expenditure so as to maintain body fat above a minimal level that is determined by genetic and developmental factors. These studies focus on the regulation of body energy stores by the adipocyte-derived hormone leptin acting via effects on central nervous system (CNS) tracts regulating energy intake, energy output, autonomic nervous system (ANS) function, and neuroendocrine function. We have shown that all of these systems are altered following weight loss in a manner that favors weight gain. Maintenance of a weight-reduced state in lean or obese individuals is characterized by decreases in energy expenditure, sympathetic nervous system (SNS) tone, circulating concentrations of bioactive thyroid hormones and, of course, leptin; accompanying these changes are increases in skeletal muscle work efficiency and parasympathetic nervous system (PNS) tone. These metabolic and behavioral adjustments act coordinately to favor regain of lost weight. Most of these changes are reversed by doses of exogenous leptin sufficient to restore circulating leptin concentrations to those present prior to weight (fat) loss. Therefore, the changes in weight stable weight-reduced subjects in energy intake, energy expenditure, skeletal muscle work efficiency and fuel utilization, regional neuronal activity, autonomic nervous system function, and neuroendocrine function are substantially mediated by weight-loss associated declines in hypothalamic signaling by the adipocyte-derived hormone, leptin. The critical role of CNS leptin signaling in this regard is supported by the similarity of metabolic/behavioral phenotypes of animals with systemic disruptions of leptin signaling and disruptions limited to the CNS as in isolated CNS/hypothalamic neuronal leptin receptor deficiency or hypomorphic alleles of POMC,  $\alpha$ -MSH, and MC4R.

The consequences of this mechanistic dissection of systems regulating body weight are relevant to social, biological, and epidemiological scientists. The potent sustained metabolic opposition to prolonged weight loss implies that the tendency to gain weight and to regain it after weight loss are the biological products of gene x environment interactions over many millennia and are equally operant in lean and obese individuals only at different “thresholds” of energy stores. The overwhelming body of evidence is that these thresholds can be manipulated upwards but not downwards. Obesity prevention and treatment strategies need to be designed within the context of a biological system that has been honed over millennia to favor weight gain and resists attempts at both weight loss and sustained weight reduction in the service of reproductive integrity. Societal interventions designed to alter behavior in a manner that decreases the likelihood that an individual will become obese are more likely to be successful than interventions designed to help sustain weight loss. Pharmacological interventions designed to assist in maintaining a reduced weight are more likely to be successful than those designed to prevent weight gain. In all instances, the difficulties in preventing weight gain or sustaining weight loss must be acknowledged as physiological and not as the product of sloth and gluttony. The goal of weight loss is good health and not an arbitrary cosmetic standard. There are substantial health benefits to even a small degree of sustained weight loss and many of the methods utilized to lose weight, including exercise and a more healthful diet, have independent health benefits even if weight loss is neither achieved nor sustained.

*Selected Bibliography:*

Leibel, R.L., M. Rosenbaum, and J. Hirsch. Changes in energy expenditure resulting from altered body weight. *N. Eng. J. Med.*, 332:621-28, 1995.

## Participants

- Aronne, L.J., et al. Autonomic nervous system activity and energy expenditure during weight gain and weight loss. *Am. J. Physiol.*, 38:R222-25, 1995.
- Rosenbaum, M., et al. A comparative study of different means of assessing long-term energy expenditure in humans. *Am. J. Physiol.*, 270:R496-504, 1996.
- Rosenbaum, M., et al. Effects of gender, body composition, and menopause on plasma concentrations of leptin. *J. Clin. Endocrinol. Metab.*, 81:3424-27, 1996.
- Campfield, L.A. et al. Human eating: Evidence for a physiological basis using a modified paradigm. *Neurosci. Biobehav. Rev.*, 20:133-37, 1996.
- Rosenbaum, M., et al. Effects of weight change on plasma leptin concentrations and energy expenditure. *J. Clin. Endocrinol. Metab.*, 82:3647-54, 1997.
- Aronne, L.J., et al. Cardiac autonomic nervous system activity in obese and never-obese young men. *Obes. Res.*, 5:354-59, 1997.
- Wu-Peng, S., et al. Effects of exogenous gonadal steroids on leptin homeostasis in rats. *Obes. Res.*, 84:1784-89, 1999.
- Rosenbaum, M., R.L. Leibel. Role of gonadal steroids in sexual dimorphisms in body composition and circulating concentrations of leptin. *J. Clin. Endocrinol. Metab.*, 84:1784-89, 1999.
- Boschmann M, et al. Physical activity exhibits differences in the action of fat metabolism in men and women- a microdialysis study. *Forsch Komplementarmed*; 6:52-3, 1999.
- Chung, W.K., et al. Genetic and physiologic analysis of the role of uncoupling protein 3 in human energy homeostasis. *Diabetes*, 48:1890-95, 1999.
- Vidal-Puig, A., et al. Effects of obesity and stable weight reduction on UCP2 and UCP3 gene expression in humans. *Obes. Res.*, 7:133-40, 1999.
- Rosenbaum, M., et al. The effects of changes in body weight on carbohydrate metabolism, catecholamine excretion, and thyroid function. *Am. J. Clin. Nutr.*, 71:1421-32, 2000.
- Boschmann M. et al. Metabolic and hemodynamic responses to exercise in subcutaneous adipose tissue and skeletal muscle. *Int. J. Sports Med.*. 23:537-43.
- Rosenbaum, M., et al. Effects of weight perturbation on skeletal muscle work efficiency in human subjects. *Am. J. Physiol.*, 285:5183-92, 2003.
- Weisberg, S., et al Obesity is associated with Increased macrophage accumulation in adipose tissue. *J. Clin. Invest.* 112:1796-808, 2003.
- Rosenbaum, M., et al, Effects of exogenous leptin on skeletal muscle, autonomic, metabolic, and neuroendocrine changes associated with the maintenance of a reduced body weight. *J. Clin. Invest.*, 115: 3579-3586, 2005.
- Rosenbaum, M., The epidemiology of obesity in children. *Pediatric Ann.*, 36:89-95, 2007
- Rosenbaum, M., et al. Effects of weight loss and leptin on *in vivo* regional neuron activity in response to visual food stimuli. *J Clin Invest.*, 118:2583-91, 2008.
- Rosenbaum, M. et al. Long-term persistence of adaptive thermogenesis in subjects who have successfully maintained a reduced body weight. *Am. J. Clin. Nut.* 88:906-12, 2008.
- Swinburn, B.A., et al Estimating the changes in “energy flux” which characterize the rise in obesity prevalence. *Am. J. Clin. Nutr.* In Press, 2009
- Goldsmith R. et al. Effects of experimental weight perturbation on skeletal muscle fuel utilization and biochemistry in human subjects (Submitted 2009).
- Kissileff, H.K., et al. Maintenance of a reduced body weight in humans is associated with a leptin-reversible decline in satiety. (Submitted 2009).

**David Sahn**

*Title and Affiliation:* Professor of Economics in the Division of Nutritional Science and Dept. of Economics, Cornell University

*Mailing Address:* B44 Martha Van Rensselaer Hall, Cornell University, Ithaca, NY 14853

*Email Address and Telephone:* [david.sahn@cornell.edu](mailto:david.sahn@cornell.edu), 607-255-8931

*Webpage Address:* <http://www.people.cornell.edu/pages/des16/>

*Discipline:* Economics

*Research Interests:* The economics of nutrition; public policy

*Obesity Focus:* Measurement

*Biography:*

David E. Sahn is a professor of economics at Cornell University in the Division of Nutritional Sciences and Department of Economics. He received his PhD from the Massachusetts Institute of Technology and Masters of Public Health from the University of Michigan. Previously he was an economist at the World Bank and served as a visiting distinguished scholar the International Monetary Fund. Dr. Sahn has published widely on issues of poverty, inequality, and health and serves as an advisor to several international organizations and various governments in Africa.

*Research Summary:*

My research on obesity has been focused on first, examining and quantifying changes in the prevalence of overweight and obesity in developing countries. In that context, I have employed tests of stochastic dominance to compare distributions intertemporally. In addition I have developed cardinal measures of BMI inequality. I have also decomposed changes in levels of overweight and BMI inequality over time, and estimated "BMI growth curves" which indicate the percent increase in BMI at each point along the distribution. Examining whether the proportionate increase in weights is more concentrated in certain percentiles of the initial BMI distribution provides further insight into the nature of the emerging epidemic. Finally, I have applied the techniques for measuring BMI inequality to examine the existing of Kuznets relationships between level of well-being and inequality at both inter-country and intra-household levels. This is possible, and indeed, straightforward, because BMI is measured for individuals, not households.

*Selected Bibliography:*

Sahn, David E. and Stephe Younger, "Measuring Intra-Household Inequality: Explorations Using the Body Mass Index," *Health Economics* Forthcoming

Sahn, David E. "Weights on the Rise: Where and for Whom?" *Journal of Economic Inequality* Forthcoming

## *Participants*

### **Kosali Simon**

*Title and Affiliation:* Associate Professor, Policy Analysis and Management, Cornell University

*Mailing Address:* MVR Hall, Cornell University, Ithaca, NY 14853

*Email Address and Telephone:* [kis6@cornell.edu](mailto:kis6@cornell.edu), 607-255-7103

*Webpage Address:* <http://www.human.cornell.edu/che/bio.cfm?netid=kis6>

*Discipline:* Economics

*Research Interests:* Health economics

*Obesity Focus:* Causes

### *Biography:*

Kosali Simon is an associate professor in the Department of Policy Analysis and Management at Cornell University. She is also a Faculty Research Fellow of the National Bureau of Economic Research and a Research Associate of the Census Bureau. She is the 2007 Recipient of the John D. Thompson Prize for Young Investigators (given by the Association of University Programs in Health Administration) and is on the Board of Directors of the American Society of Health Economists (ASHE). Kosali's primary field is health economics. Her research investigates the impact of state and federal regulations attempting to ease the availability of private and public health insurance for vulnerable populations (through state 'small-group' reforms, public health insurance expansions, Medigap rate regulations and adding prescription drug coverage to Medicare) on health insurance, health and labor market outcomes. As examples of other work on the economics of health insurance, she has investigated the effect of factors such as unemployment, involuntary job loss, and minimum wage laws on health insurance. A secondary research focus is the determinants of health and care use, e.g. she has studied the income elasticity of demand for prescription medications. Kosali received her PhD in Economics from the University of Maryland at College Park.

### *Research Summary:*

John Cawley, John Moran and I have conducted research on the causal impact of income on body weight and clinical weight classification of elderly Americans using a natural experiment that led otherwise identical retirees to receive significantly different Social Security payments based on their year of birth. We estimate models of instrumental variables using data from the National Health Interview Surveys and find no significant effect of income on weight.

**Jeffrey Sobal**

*Title and Affiliation:* Professor, Division of Nutritional Science, Cornell University

*Mailing Address:* 303 MVR Hall, Cornell University, Ithaca, NY 14853

*Email Address and Telephone:* [js57@cornell.edu](mailto:js57@cornell.edu), 607-255-6015

*Webpage Address:* <http://www.human.cornell.edu/che/bio.cfm?netid=js57>

*Discipline:* Sociology

*Research Interests:* Social causes of overweight (marital status, socioeconomic status, rural/urban residence, religion, modernization, built environments) and social consequences of body weight (stigmatization, weight bias, obesity discrimination, and the treatment of obesity as a social problem)

*Obesity Foci:* Social causes, social consequences

*Biography:*

Jeffery Sobal is Professor of Nutritional Sciences at Cornell University. He previously taught at University of Maryland School of Medicine and Gettysburg College. He has a B.A. in Biology from Bucknell University, Ph.D in Sociology University of Pennsylvania, and M.P.H. from Johns Hopkins University. His research focuses on the sociology of food, eating, and nutrition; social aspects of obesity; food choice processes; and food systems. He has co-edited 3 books, authored over 15 book chapters, and published over 150 journal articles.

*Research Summary:*

I am a sociologist who applies a variety of social science concepts, theories, and methods to examine body weight. I primarily examine social causes of overweight, like marital status, socioeconomic status, rural/urban residence, religion, modernization, built environments, and others. I also examine social consequences of body weight, like stigmatization, weight bias, obesity discrimination, and the treatment of obesity as a social problem.

A major research program that I have pursued is the relationship between marriage and body weight. Marriage is one of the most important roles in society, and is involved with body weight in a number of ways. We have conducted several studies of marital selection that examine prejudice against obese girls (and to a lesser extent obese boys) in dating, showing that those who are obese begin dating later, date less often, and date less attractive partners than thinner individuals. Similarly, we have found that obese women (and less so men) marry later and marry less attractive partners than thinner people. However, once people are married, our research suggests that the quality of marriages of obese individuals is not substantially different than the reported marital happiness, problems, and satisfaction of thinner individuals. We also have examined marital causation of obesity, finding that married men (more so than women) are heavier and that married people are more likely to gain weight than those who remain unmarried. Finally, we find that exit from marriage tends to be associated with weight loss, particularly among men. Some of our research has examined how often married individuals eat together, finding that spouses are the primary eating partners, and how newly married couples negotiate their food choices to establish joint eating patterns.

Another research interest is the larger social patterns and dynamics of obesity in contemporary society. We have identified rural-urban weight differences in U.S. adults, with rural women (and less so men) more likely to be obese than suburban and urban residents. However, it is not clear how this is changing and what underlying social mechanisms are involved. Also, we have documented the relationship between acculturation into U.S. society and rising body weight, but the trends and underlying mechanisms for this relationship have not yet been clearly identified. Finally, there has been a worldwide increase in obesity, but the specific processes involved in globalization of obesity have not been clearly articulated, and we are working on that topic.

Finally, I have been working on how obesity is interpreted as a social issue in the U.S. by examining how it is constructed as a social problem by some groups but discounted as an issue by other groups. The social and cultural beliefs about the extent, form, and solutions to deal with body weight are being contested in many social arenas. Specific individuals and groups are involved in framing obesity as a medical problem, moral issue, political dilemma, cultural quandary, economic consequence, and environmental outcome. The social dynamics of struggles over the way obesity is interpreted are important to document and understand because they will play a significant role in the allocation of attention and resources to obesity and the willingness of citizens, corporations, governments, and other social entities to be involved in dealing with obesity.

*Selected Bibliography:*

*Books:*

Sobal, J. and Maurer, D. (eds). *Weighty Issues: Fatness and Thinness as Social Problems*. Hawthorne, NY: Aldine de Gruyter. 1999.

Sobal, J. and Maurer, D. (eds). *Interpreting Weight: Social Management of Fatness and Thinness*. Hawthorne, NY: Aldine de Gruyter. 1999.

## *Participants*

### *Selected Book Chapters:*

Sobal, J. Social and Cultural Influences on Obesity. In: Bjorntorp, P. (ed). *International Textbook of Obesity*. London: John Wiley and Sons. 2001. pp 305-322.

Sobal, J. Social consequences of weight bias by partners, friends, and strangers. In: Brownell K.D., Puhl, R.M., Schwartz, M.B., and Rudd, L. (eds). *Weight bias*. New York: Guilford. 2005. Pp 150-164.

Sobal, J., and Wansink, B. Built Environments and obesity. Chapter 9 In: Blass, E. (ed). *Obesity*. Sunderland, MA: Sinauer Associates. 2008. pp 281-299.

Sobal, J. Sociological Analysis of the Stigmatisation of Obesity. In: Germov, J. and Williams, L. (eds). *A Sociology of Food and Nutrition*. Melbourne: Oxford University Press. 3<sup>rd</sup> ed. 2008. pp 381-400.

### *Selected Journal Articles:*

Sobal, J., Stunkard, A.J. Socioeconomic Status and Obesity: A Review of the Literature. *Psychological Bulletin* 1989, 105(2):260-75.

Sobal, J., Troiano, R.P., Frongillo, E.A. Rural-urban differences in obesity. *Rural Sociology* 1996;61(2):289-305.

Khan, L.K., Sobal, J., Martorell, R. Acculturation, socioeconomic status, and overweight in US Hispanics. *International Journal of Obesity* 1997;21:91-96.

Wolfe, W.S., Sobal, J., Olson, C.A., Frongillo, E.A., Williamson, D. Parity-associated weight gain and its modification by sociodemographic and behavioral factors: A prospective analysis of U.S. Women. *International Journal of Obesity* 1997;21:802-10.

Sobal, J., Rauschenbach, B., Frongillo, E.A. Marital status changes and body weight changes: A U.S. longitudinal analysis. *Social Science and Medicine* 2003;56(7):1543-1555.

Kim, K.H., Sobal, J., Wethington, E. Religion and body weight. *International Journal of Obesity* 2003;27:469-77.

Lee, S., Sobal, J. Socio-economic, dietary, activity, nutrition, and body weight transitions in South Korea. *Public Health Nutrition* 2003;6(7):665-674.

Cawley, J., Joyner, K., Sobal, J. Size matters: The influence of adolescents' weight and height on dating and sex. *Rationality and Society* 2006;18(1):67-94.

Neighbors, L., Sobal, J., Liff, C., Amiraian, D. Weighing weight: Trends in body weight evaluation among young adults, 1990 and 2005. *Sex Roles* 2008;59:68-80.

Carmalt, J.H., Joyner, K., Cawley, J.H., Sobal, J. Body weight and matching with a physically attractive romantic partner. *Journal of Marriage and Family* 2008;70(6):1287-1296.

**Aliza Solomon**

*Title and Affiliation:* Assistant Professor of Pediatrics, NY Presbyterian-Weill Cornell Medical College  
*Mailing Address:* Pediatric Gastroenterology and Nutrition, 525 East 68th St, Suite J114 NY, NY 10065  
*Email Address and Telephone:* [als9047@med.cornell.edu](mailto:als9047@med.cornell.edu), 212-746-3520  
*Webpage Address:* <http://www.Weillcornell.org/asolomon/>

*Discipline:* Pediatric gastroenterology

*Research Interests:* Obesity, Celiac disease, inflammatory bowel disease

*Obesity Foci:* Prevention, treatment

*Biography:* Dr. Aliza Solomon is Assistant Professor of Pediatrics at Weill Cornell Medical College. She received her B.A. in Psychology from Queens College in 1997. She completed medical training at New York College of Osteopathic Medicine in 2002, her Pediatric Residency at Maimonides Medical Center in 2005 and her Fellowship in Pediatric Gastroenterology at New York-Presbyterian Weill Cornell in 2008. She completed the American Neurogastroenterology and Motility Society's training program in 2008. She serves as a research mentor for pediatric residents and medical students.

*Research Summary:*

The focus of Dr. Solomon's research work is prevention of childhood obesity and treatment. The main objective of these studies is to test the hypothesis that age appropriate educational intervention will be effective in the prevention of childhood obesity. In addition, Dr Solomon is currently working on a protocol for treatment of the consequences of pediatric obesity.

Dr Solomon's work focuses on effects of age appropriate education on foods choices. The first "Will Knowledge Of Caloric Values Alter Food Choices?" is a food labeling study in children in the outpatient setting. The specific aims are: 1.) To determine if labeling fast food menu items with caloric values, alters meal selection and 2.) To determine if age, sex, ethnicity or BMI affects menu selection. This project has been completed and is in the process of being written for publication. The second project "Children's Health Attitudes on Nutrition and Good Eating at School (CHANGES) is a school-based project with the following specific aims: 1.) To promote knowledge of caloric intake in childhood via classroom teacher education in an age appropriate manner with reinforcement via a food labeling system in the cafeteria; 2.) To establish biomarkers (height, weight, blood pressure) of weight reduction/BMI to assess changes that reflect the effectiveness of the educational program. In addition, Dr Solomon is a co-investigator in "Differenced in Vascular Compliance in Pediatric Patients at Risk for Cardiovascular Disease as Measured by Endo-PAT Technology" with Dr. Rubin Cooper, and is currently working on a protocol studying NASH in the pediatric population.

*Selected Bibliography:*

Solomon A, Cunningham-Rundles S, Greendyk T, Sockolow R. Will Knowledge of Caloric Values Alter Food Choices? A Food Labeling Study in Children. *Obesity*. 16(S1): S208; 2008.

## Participants

### Gladys Strain

*Title and Affiliation:* Director of Laparoscopic and Bariatric Research, Assoc. Res. Prof. in Nutritional Sciences in Surgery, Weill Cornell School of Medicine

*Mailing Address:* 525 E 68<sup>th</sup> St NYC, NY 10065

*Email Address and Telephone:* [gls2010@med.cornell.edu](mailto:gls2010@med.cornell.edu), 212-746-5661

*Webpage Address:* <http://www.med.cornell.edu/research/gladysstrain/>

*Discipline:* Nutrition

*Research Interests:* The effects of bariatric surgery on the mind and body

*Obesity Foci:* Treatment, consequences

### Biography:

I had a calling to study Nutrition at Michigan State. After a Dietetic internship, I worked as a graduate assistant while completing my Master Degree in Public Health Nutrition and was the first doctoral student in nutrition at Case Western. With family responsibilities I stopped medical school after three years. I began my research career in New York with the first funded Obesity Research Center. When surgical interventions produced sustained weight loss, my attention focused on the resultant metabolic changes.

### Research Summary:

My nutrition research studies began with studies related to malnutrition and protein nutriture which were in the foreground of research in the 1950s. Using an animal model we studied protein malnutrition which was so prevalent in children in the developing world. In the mid 70's obesity came to the spotlight with the first Obesity Research Center funded at St. Lukes'-Roosevelt by NIH. My own research on the hormonal abnormalities of obesity was originally funded by NIH due to the increased incidence of cancer in the obese population. This work was supported by a General Clinical Research Center providing laboratory facilities and in-patient beds for careful monitoring of patients. Over time the research was moved to Rockefeller University where the work with hormone changes was continued.

Psychiatric fellows began projects looking at psychological status in the morbidly obese. Other research expanded to the diabetic population that continued to increase rapidly with the increasing weight status of the population.

I had worked with weight loss surgeons at St. Lukes to assist patients with obtaining significant weight loss that could be more sustained. In 1999 while at Mt. Sinai I joined the weight loss surgeons to study the effects of the caloric deficit resultant from the surgeries. When the surgical group moved from Mt Sinai to Cornell in 2003, I joined them full time in the department of surgery as Director of Research for Laparoscopic and Bariatric Surgery. We had obtained NIH funding which was activated at Cornell as part of the Longitudinal Assessment of Bariatric Surgery (LABS). These multi-centered studies have been ongoing for the last 5 years and a renewal has been submitted for their continuation.

Treatment (Surgery) and the effects of that treatment are under continual review and development. Comparative studies on weight loss and body composition changes with the 4 procedures currently used have been reported. Quality of life issues describing the severely obese and the changes that result with the change in weight status have been reported. In progress are ongoing studies on the resolution of diabetes with surgical interventions. Changes in cognitive function after surgery are being documented and modifications in brain activity have been identified for the response to food cues before and after surgery.

At the current time we are not participating in the Teen LABS, but I would be pleased as a LABS investigator to provide a short summary on the basic demographics of teen LABS and the outcome data available to date.

### Selected Bibliography:

Strain GW, Strain JJ. Psychological; impediments to weight loss. *Internat J Obes* 3:167-170. 1979.

Strain GW, Zumoff B, Strain JJ, Levin J, Fukushima DK. Cortisol production in obesity. *Metabolism* 29:980-985, 1980.

Zumoff B, Strain GW, Levin J and Fukushima DK. Sex difference in the influence of obesity on the retention of a tracer of H estradiol. *Metabolism* 30:568-571, 1981.

Zumoff B, Strain GW, Kream J, O'Connor J, Levin J, Fukushima DK. Obese young men have elevated plasma estrogen levels but obese premenopausal women do not. *Metabolism* 30:1011-1014, 1981.

Strain GW, Zumoff B, Levin J, Kream J, and Fukushima DK. Sex difference in the influence of obesity on the 24-hour mean plasma cortisol concentration. *Metabolism* 31:209-212, 1982.

- Strain GW, Zumoff B, Kream J, Strain JJ, Deucher R, Rosenfeld RS, Levin J, and Fukushima DK. Mild hypogonadotropic hypogonadism in obese men. *Metabolism* 31:871-875, 1982.
- Schneider J, Bradlow L, Strain GW, Levin J, Anderson K, and Fishman J. Effects of obesity on estradiol metabolism: decreased formation of nonuterotropic metabolites. *J Clin Endocrinol Metab* 56:978-993, 1983.
- Strain GW, Strain J, Knittle J, Zumoff B. Do fat-cell morphometrics predict weight-loss maintenance? *Internat. J. Obesity* 8:53-39, 1984.
- Strain GW, Strain JJ, Zumoff B. L-tryptophan does not increase weight loss in carbohydrate-craving obese subjects. *Internat. J. Obes.* 9:375-380, 1985.
- Ellsworth GA, Strain GW, Strain JJ, Knittle J, Vaillant GE, Zumoff B. Defensive maturity ratings and sustained weight loss obesity. *Psychosomatics* 27:772-781, 1986.
- Zumoff B, Strain GW, Miller LK, Levit CD, Miller EH, Rosenfeld RS. Partial reversal of the hypogonadotropic hypogonadism of obese men by administration of corticosteroid doses of dexamethasone. *Internat. J. Obesity* 12:525-531, 1988.
- Strain GW, Zumoff B, Miller LK, Rosner W, Levit C, Kalin M, Rosenfeld RS. Effect of massive weight loss on the abnormal hypothalamic-pituitary-gonadal function in obese men. *J. Clin. Endocrinol. Met.* 66:1019-1023, 1988.
- Zumoff B, Strain GW, Miller LK, Rosner W, Senie RT, Rosenfeld RS. Plasma free and non-sex-hormone-globulin-bound testosterone is decreased in obese men in proportion to their degree of obesity. *J Clin Endocrinol Met* 71:929-931, 1990.
- Strain, GW, Hershcopf RJ, Zumoff B. Food intakes of very obese persons: Qualitative and quantitative aspects. *J. Amer. Dietet. Assn.* 92:199-203, 1992.
- Strain GW, Zumoff B. The relationship of weight-height indices of obesity to body fat content. *J. of the Amer. College of Nut.* 11:715-719, 1992.
- Zumoff B, Strain GW. A perspective on hormonal abnormalities in obesity: cause or effect? *Obes. Research* 2:56-67, 1994.
- Strain GW, Zumoff B, Rosner W, and Pi-Sunyer FX. Serum insulin and sex-hormone-binding globulin in obese men and their changes with weight loss. *J Clin. Endocrin. and Met.* 79:1173-1176, 1994.
- Katz G, Strain GW, Rodriguez M, Roman S. Impact on short term diabetes outcomes of an interdisciplinary diabetes team at an inner city community health center. *Endocrin Pract* 4:27-31, 1998.
- Strain GW. Point-Counterpoint: Response to promoting size acceptance in weight management counseling. *JAm Dietet Assn* 99:926-928, 1999.
- Zumoff B, Miller LK, Strain GW. Reversal of the hypogonadotropic hypogonadism of obese men by an aromatase inhibitor testolactone. *Metabolism* 2003, 52:1126-28.
- Strain, GW, Zumoff, B The effect of bariatric surgery on the abnormalities of the pituitary- gonadal axis in obese men. *Surg Obes Related Dis* 2006 2: 75-77.
- Strain GW, Wang J, Gagner M, Pomp A, Inabnet WB, Heymsfield SB. Bioimpedance for severe obesity: Comparing research methods for total body water and resting energy expenditure. *Obesity*, 2008; 16: 1953-1956.
- Segal H, Strain GW, Reeves R, Markis A. Position Statement of the American Dietetic Assn: Weight Management. *J Amer Dietet Assn* (Feb 2009 in press)

## *Participants*

### **Peter A. Torzilli**

*Title and Affiliation:* Senior Scientist, Hospital for Special Surgery, and Professor, Orthopaedics, Weill Medical College

*Mailing Address:* Hospital for Special Surgery, 535 East 70th St, New York, NY 10021

*Email Address and Telephone:* [TORZILLIP@HSS.EDU](mailto:TORZILLIP@HSS.EDU), 212-606-1087

*Webpage Address:* <http://www.hss.edu/11549.asp>

*Discipline:* Mechanical engineering/bioengineering

*Research Interests:* Osteoarthritis, cartilage, joint biomechanics, mechanobiology

*Obesity Foci:* Consequences

#### *Biography:*

Peter Torzilli received a PhD in engineering mechanics from Rensselaer Polytechnic Institute in 1974. He is a Senior Scientist and Director of the Tissue Engineering, Regeneration and Repair (TERR) Program at Hospital for Special Surgery, and Professor in Orthopaedics at Weill Medical College of Cornell University. The TERR Program is a multi-disciplinary research group of scientists, engineers and physicians studying soft tissue injuries to the musculoskeletal system.

#### *Research Summary:*

Currently I do not do any specific research related to obesity. However, I do research in the area of osteoarthritis, of which obesity has become one of the major areas of concern in the adolescent and young and older adults. My research program is beginning to focus on the issue of pediatric obesity and its affect on bone and cartilage growth abnormalities leading to osteoarthritis. Our research would best fit areas related to biological and mechanical mechanisms of the initiation and progression of degenerative joint diseases, and methodologies for the detection, prevention and reversal of the progression of the degradation of articular cartilage.

**Brian Wansink**

*Title and Affiliation:* John S. Dyson Professor Endowed Chair of Marketing and the Director of the Cornell Food and Brand Lab in the Department of Applied Economics and Management, Cornell

*Mailing Address:* 110 Warren Hall, Cornell University, Ithaca, NY 14853

*Email Address and Telephone:* [wansink@cornell.edu](mailto:wansink@cornell.edu), 607-254-6302

*Webpage Address:* [www.foodpsychology.cornell.edu](http://www.foodpsychology.cornell.edu), [www.mindlesseating.org](http://www.mindlesseating.org), [www.smallplatemovement.org](http://www.smallplatemovement.org)

*Discipline:* Consumer behavior, marketing, food psychology

*Research Interests:* The psychology behind what people eat and how often they eat it, helping people eat more nutritiously and to help control how much they eat, reducing childhood obesity through a focus on nutritional gatekeepers, improving school lunches with unduly restricting choice

*Obesity focus:* Causes, prevention

*Biography:*

Brian Wansink (Ph.D. Stanford 1990) holds the John S. Dyson Endowed Chair in the Applied Economics and Management Department at Cornell University, where he is Director of the Cornell Food and Brand Lab. His research findings have also contributed to the introduction of smaller packages (to prevent overeating), the use of taller glasses in some bars (to prevent the overpouring of alcohol), and the use of mouth-watering descriptions on some restaurant menus (to improve enjoyment of the food).

*Research Summary:*

A consumer psychologist, Wansink is best known for his work on food psychology and eating behavior and their relationship to the causes of obesity. This work focuses on how the environment leads or even tricks people into buying and eating food in ways they are unaware. While some of these insights are directed toward responsible food manufacturers and marketers, the majority are focused specifically at parents, dieters, and at the medical and nutrition community. Using a combination of lab studies and field studies, he has used movie popcorn, refillable soup bowls, bartender glasses, candy dishes, Chinese buffets, and ice cream socials to show how various environment cues influence the food intake of unknowing consumers. Although such environmental factors appear unrelated, they generally influence intake by inhibiting consumption monitoring and by suggesting alternative consumption norms.

In contrast to focusing on the macro-food environment as being the cause of the American obesity problem, Wansink's work focuses on the intermediate micro-environment that he contends people can control -- their home and their daily habits. In counterpoint to social criticism of the obesigenic nature of our "foodscape," recent work has focused on the more promising changes that can be made in what Wansink refers to as the obesigenic nature of our "kitchenscapes" and "tablescapes."

In examining the wider range of what is referred to as "mindless eating," Wansink has made contributions to three principal areas of food-related consumption: 1) consumption norms, 2) taste evaluation, and 3) food selection.

*Consumption Norms:*

Consumption norms are influenced by the wide range of factors that can bias an unknowing person to eat or drink more than they otherwise would. For instance, the size of a serving bowl, a plate, or a package has repeatedly been shown to bias how much a person serves himself and eats by an average of 20-30%. In addition, the perceived variety (color of candies) in an assortment and the proximity of candy on one's desk has been shown to double how much a person eats over the course of a day. Because people are estimated to make over 200 food-related decisions a day that they are unaware of making, the seemingly inconsequential impact of environmental cues can have a sizable impact on daily food intake. Over the course of year, even a 200 calorie daily change in how much one eats would translate into a 20 pound loss in weight or a 20 pound gain in weight.

*Taste Evaluation:*

The extent to which people enjoy food can be influenced by subtle environmental cues. The names of a food can create either positive or negative predispositions that can unfairly bias a person's perceived taste of a food. Wansink shows this is one reason why advertising or promoting a food as "healthy" unfairly biases people against the taste of a food. Yet using names and visual cues to guide a person's expectations can also enhance their perceived taste of a food.

*Food Selection:*

The food a person eats at a given time is related to sensory issues, but it is also related to how appropriate they perceive this food for that situation. People are more likely to adopt a food into a new situation (say, eating soup for breakfast) if they focus on the benefits of the food instead of on how it differs from prototypical breakfast foods.

*Selected Bibliography:*

Wansink, Brian and Junyong Kim (2005), "Bad Popcorn in Big Buckets: Portion Size Can

Influence Intake as Much as Taste," *Journal of Nutrition Education and Behavior*, 37:5 (Sept-Oct), 242-5.

## Participants

- Wansink, Brian (2006), "Position of the American Dietetic Association: Food and Nutrition Misinformation," *Journal of the American Dietetic Association*, 106:4 (April), 601-607.
- Wansink, Brian, James E. Painter and Yeon-Kyung Lee (2006), "The Office Candy Dish: Proximity's Influence on Estimated and Actual Candy Consumption," *International Journal of Obesity*, 30:5 (May), 871-5.
- Wansink, Brian, Ganaël Bascoul, and Gary T. Chen (2006), "The Sweet Tooth Hypothesis: How Fruit Consumption Relates to Snack Consumption," 47:1 (July), *Appetite*, 107-110.
- Wansink, Brian, Koert van Ittersum, and James E. Painter (2006), "Ice Cream Illusions: Bowl Size, Spoon Size, and Serving Size," *American Journal of Preventive Medicine*, 145:5 (September), 240-243.
- Wansink, Brian and Pierre Chandon (2006), "Meal Size, Not Body Size, Explains Errors in Estimating the Calorie Content of Meals," *Annals of Internal Medicine*, 145:5 (September 5), 326-32.
- Wansink, Brian (2006), "Nutritional Gatekeepers and the 72% Solution," *Journal of the American Dietetic Association*, 106:9 (September), 1324-6.
- Wansink, Brian and Pierre Chandon (2006), "Can "Low-Fat" Nutrition Labels Lead to Obesity?," *Journal of Marketing Research*, 43:4 (November), 605-17.
- Sobal, Jeffery and Brian Wansink (2007), "Kitchenscapes, Tablesapes, Platescapes, and Foodscapes: Influences of Microscale Built Environments on Food Intake," *Environment and Behavior*, 39:1 (January), 124-42.
- Garg, Nitika, Brian Wansink, and J. Jeffrey Inman (2007), "The Influence of Incidental Affect on Consumers' Food Intake," *Journal of Marketing*, 71:1 (January), 194-206.
- Wansink, Brian and Jeffrey Sobal (2007), "Mindless Eating: The 200 Daily Food Decisions We Overlook," *Environment and Behavior*, 39:1 (January), 106-23.
- Chandon, Pierre and Brian Wansink (2007), "Is Obesity Caused by Calorie Underestimation? A Psychophysical Model of Fast-Food Meal Size Estimation," *Journal of Marketing Research*, 44:1 (February), 84-99.
- Wansink, Brian and Collin R. Payne (2007), "Counting Bones: Environmental Cues that Decrease Food Intake," *Perceptual and Motor Skills*, 104 (March), 273-7.
- Wansink, Brian, Collin R. Payne, and Jill North (2007), "Fine as North Dakota Wine: Sensory Expectations and the Intake of Companion Foods," *Physiology and Behavior*, 90:5 (April), 712-16.
- Van Ittersum, Koert and Brian Wansink (2007), "Do Children Really Prefer Large Portions? Visual Illusions Bias Their Estimates and Intake," *Journal of the American Dietetic Association*, 107:7 (July), 1107-1110.
- Wansink, Brian and Koert van Ittersum (2007), "Portion Size Me: Downsizing Our Consumption Norms," *Journal of the American Dietetic Association*, 107:7 (July), 1103-1106.
- Chandon, Pierre and Brian Wansink (2007), "The Biasing Health Halos of Fast Food Restaurant Health Claims: Lower Calorie Estimates and Higher Side-Dish Consumption Intentions," *Journal of Consumer Research*, 34:3 (October) 301-314.
- Wansink, Brian, Collin R. Payne, Pierre Chandon (2007), "Internal and External Cues of Meal Cessation: The French Paradox Redux?" *Obesity*, 15 (December), 2920-2924.
- Wansink, Brian and Collin R. Payne, (2008) "Eating Behavior and Obesity at Chinese Buffets," *Obesity*, 16:8, 1957-1960.
- Wansink, Brian, Collin R. Payne and C. Werle, (2008), "Consequences of Belonging to the 'Clean Plate Club,'" *Archives of Pediatrics & Adolescent Medicine*, 162:10, 994-995.
- Vartanian, LR, CP Herman, and B Wansink, (2008), "Are We Aware of the External Factors that Influence Our Food Intake?" *Health Psychology*, 27:5, 533-538.

**Mary J. Ward**

*Title and Affiliation:* Associate research professor of psychology in pediatrics and psychiatry, Weill Cornell Medical Center

*Mailing Address:* 525 East 68th Street, New York, NY 10065

*Email Address and Telephone:* [mjward@med.cornell.edu](mailto:mjward@med.cornell.edu), 212-746-3582

*Discipline:* Psychology

*Research Interests:* Child-parent attachment, feeding behavior in young children, and research ethics

*Obesity Focus:* Mechanisms

*Biography:*

Dr. Ward earned a Ph.D. in developmental psychology from the Institute of Child Development, University of Minnesota. She came to Cornell University Medical College (now Weill Cornell Medical College) in 1983, where she is now associate research professor of psychology in pediatrics and psychiatry. In the past 25 years, she has conducted studies of children with malnutrition, adolescent mothers and their children, children adopted from overseas, and the grandchildren of adults with HIV. She has remained at the forefront of research on attachment, including assessment of attachment in infants, preschool children, adolescents, and adults. Her work has been supported by grants from the National Institutes of Health and private foundations. In addition to her research activities, Dr. Ward has maintained a commitment to education at Weill Cornell, providing didactic instruction to medical students and residents and mentoring pediatric residents and fellows, as well as undergraduate and graduate students in psychology. She serves on the Weill Cornell Institutional Review Board, the Pediatrics Resident Research Oversight Committee, and the Pediatrics Scholarship Oversight Committee. She is co-chair of the Pediatric Obesity Research Working Group. From 2002 to 2008, she served on the Pediatric Scientific Advisory Committee of the Clinical and Translational Research Center (CTSC); from 2008 to the present, she serves as a Research Subject Advocate for the CTSC, representing the Department of Pediatrics. Her greatest pride derives from her work on a community service project: the Heads Up! literacy program, which serves over 9,000 children in New York City each year, providing over 30,000 free books and parent guidance about the importance of reading aloud.

*Research Summary:*

I am a developmental psychologist with expertise in child-parent attachment, feeding behavior in young children, research design and methodology, statistics, and research ethics. A focus on development in overweight children represents a change in my line of research. I chose to shift the emphasis of my research program from underweight (or failure-to-thrive) to overweight in young children, given major shifts in prevalence of the two disorders. Until about 10 years ago, those of us who study the development of children in poverty were concerned primarily about children who took in too few calories and suffered from malnutrition. Today, our concern is for children who take in excessive calories and suffer from overweight.

Over two years ago, a group of colleagues and I began monthly meetings with the goal of creating a program of multi-disciplinary research focused on overweight children. Data from the proposed pilot study will allow conclusions about the risks associated with overweight status and the family correlates of children's overweight. The goal of this study is to gather pilot data to validate and refine a clinical pathway for the evaluation and treatment of overweight in children. We plan to enroll 200 children aged 5 to 16 years who have BMI above the 85<sup>th</sup> percentile for age and gender. Each child will be entered into the study for what we have termed Level 1 evaluations (history and physical plus laboratory studies). We postulate that there are four phenotypes that can be distinguished with the proposed pathway. Individual children may present with or a combination of these phenotypes: (1) atypical sugar/insulin metabolism, (2) atypical lipid metabolism, (3) atypical liver function and structure, (4) Vitamin D deficiency or insufficiency. Data from this study will clarify the prevalence of these four phenotypes and their overlap in this group of children.

*Selected Bibliography:*

Ward, M.J., Kessler, D.B., & Altman, S.C. (1993). *Patterns of infant-mother attachment in children with failure-to-thrive. Infant Mental Health Journal, 14*, 208-220.

Polan, H. J., & Ward, M.J. (1994). The role of maternal touch in failure-to-thrive. *Journal of the American Academy of Child and Adolescent Psychiatry, 33*, 1098-1105.

Ward, M.J., Lipper, E.G., Lee, S.L. (2000). Failure-to-thrive is associated with disorganized infant attachment and unresolved maternal attachment. *Infant Mental Health Journal, 21*, 428-442.

Ward, M.J., Fink, C.A., Master, M.G., Perez, E.A., & Greenfield, J.F. (2008). *Oral-motor dysfunction in children with failure-to-thrive*. Manuscript submitted for publication, *Pediatric Psychology*

Ward, M.J., Lipper, E.G., Brathwaite, J., Lee, S.L., & Wong, M.Y. (2008). Malnutrition in young children is associated with dysregulation in adrenal cortical function. Manuscript in preparation.

## Participants

### **Nancy Wells**

*Title and Affiliation:* Associate Professor, Design and Environmental Analysis, CHE, Cornell University

*Mailing Address:* 3M13A MVR Hall, Cornell University, Ithaca, NY 14853

*Email Address and Telephone:* [nmw2@cornell.edu](mailto:nmw2@cornell.edu), 607-254-6330

*Webpage Address:* <http://www.human.cornell.edu/che/bio.cfm?netid=nmw2>

*Discipline:* Environmental psychology

*Research Interests:* Environmental influences on physical activity and diet

*Obesity Focus:* Environmental causes, prevention

### *Biography:*

Nancy Wells is an Associate Professor in the Department of Design and Environmental Analysis (DEA) in the College of Human Ecology at Cornell University. She received a joint PhD in Psychology and Architecture from the University of Michigan and then completed an NIMH post-doc at the University of California Irvine's School of Social Ecology. As an environmental psychologist, Dr. Wells examines the influence of the built and natural environment on human health and well-being.

### *Research Summary:*

Key words: environment, physical activity, walking, diet, poverty, health-impact assessment

The research I conduct related to obesity addresses environmental factors contributing to obesity, and by extension, that the role the environment can play in prevention. I am particularly interested in the rare, but compelling, opportunity provided by natural experiments (e.g., relocations, interventions, or redesigns) to employ quasi-experimental designs and move beyond correlational data toward a more causal understanding of environmental and policy influences on both physical activity and diet.

My research funded by the Robert Wood Johnson Foundation's Active Living Research program has focused on how rates of walking among low-income, primarily minority women are affected by neighborhood environment features such as housing density, street network patterns, and proximity to retail. This work has employed a longitudinal quasi-experimental research design by studying families who were relocating to new homes and new neighborhoods through their partnership with the self-help housing program, Habitat for Humanity. Findings suggest that when women relocate to places with fewer cul-de-sacs and, unexpectedly, less land use mix, they walk more (Wells & Yang, 2008).

In addition to my interest in the impact of the environment on physical activity, my work has included the influence of the environment on the other side of the energy balance equation: dietary intake. Recently, I have served as co-PI on a USDA-funded project led by Christine Olson (DNS) to examine environmental interventions as a mechanism to promote physical activity, healthy eating, and breastfeeding among new mothers in rural upstate New York. Other research I am conducting related to the food environment and diet asks how far do people travel for food shopping? Does the nearby food environment influence diet? And, if there is an influence of the environment on diet, for whom is this the case? Does this relationship vary by socioeconomic status, for example? Currently, I am also beginning to focus on how research evidence linking the food environment to dietary intake can be integrated into the practice of urban and regional planning through the use of "health impact assessment" (HIA). HIA is a tool intended to link health-related research evidence to the field of planning ([www.cdc.gov/healthypplaces/hia.htm](http://www.cdc.gov/healthypplaces/hia.htm)). While HIA has been developed to address a wide range of health issues, little attention has focused on the food environment and diet. Because HIA is more advanced in several other countries, I intend to spend part of my sabbatical (2009) in Australia study HIA methods.

While most of my work has focused on causes of obesity, I am also interested in the mechanisms that might link characteristics of vulnerability with obesity. For example, in some ongoing work with my colleague Gary Evans we examine the possible mediating role of chronic stress (Wells & Evans, in preparation).

I have also written some conceptual articles examining the role of the ecological model in obesity research (Wells & Olson, 2007), the need for interdisciplinary approaches to examine the environmental factors contributing to obesity (Wells, Ashdown, Davies, Cowett & Yang, 2007) and the evidence linking environment and obesity (Evans & Wells, In press). With Barbara Brown, I co-edited a special issue of *Environment and Behavior* dedicated to environmental influences on both physical activity and diet (Brown & Wells, 2007).

### *Selected Bibliography:*

Wells, N.M. & Donofrio, G. (In press). Urban planning, the natural environment, and public health. *Encyclopedia of environmental health*.

Evans, G.W. & Wells, N.M. (In press). On poverty, health, and lifestyle. *Obesity Prevention Handbook: The role of society and brain on individual behavior*.

- Wells, N.M., Evans, G.W. and Yang, Y. (In press). Environment and health: Planning decisions as public health decisions. *Journal of Architectural and Planning Research*.
- Wells, N.M. and Yang, Y. (2008). Neighborhood Design & Walking: A quasi-experimental longitudinal study of low-income Southern women moving to neotraditional or suburban neighborhoods. *American Journal of Preventive Medicine*, 34(4), 313-319.
- Brown, B.B., and Wells, N.M. (Guest Editors) (2007). Special Issue - Environment and Obesity: Environmental influences on physical activity and dietary intake. *Environment and Behavior*, 39 (1).
- Wells, N.M. and Olson, C.M. (2007). The Ecology of Obesity: Perspectives from life course, design, and economics. *Journal of Hunger & Environmental Nutrition*, 1(3), 99-129.
- Wells, N.M., Ashdown, S.P., Davies, E.H.S., Cowett, F.D. and Yang, Y. (2007). Environment, Design and Obesity: Opportunities for interdisciplinary collaborative research. *Environment and Behavior*, 39 (1), 6 – 33.
- Wells, N.M. and Lekies, K.S. (2006). Nature and the Life Course: Pathways from childhood nature experiences to adult environmentalism. *Children, Youth, and Environment*. 16 (1), 1-24.
- Wells, N.M. and Evans, G.W. (2003). Nearby Nature: A buffer of life stress among rural children? *Environment and Behavior*, 35 (3), 311-330.
- Wells, N.M. (2000). At home with nature: effects of “greenness” on children’s cognitive functioning. *Environment and Behavior*, 32(6), 775-795.

*Participants*

**Rosemary Avery**

*Title and Affiliation:* Professor/Chair, Policy Analysis and Management, Cornell University

*Mailing Address:* 119 MVR Hall, Cornell University, Ithaca, NY 14853

*Email Address and Telephone:* [rja7@cornell.edu](mailto:rja7@cornell.edu); 607-255-2578

*Webpage Address:* <http://www.human.cornell.edu/che/bio.cfm?netid=rja7>

*Discipline:* Public policy

*Research Interests:* Child welfare and obesity

*Obesity Focus:* Treatment

**Karene Booker**

*Title and Affiliation:* Extension Support Specialist, Human Development, Cornell University

*Mailing Address:* G5 Martha Van Rensselaer Hall, Cornell University, Ithaca, NY 14853

*Email Address and Telephone:* [ktb1@cornell.edu](mailto:ktb1@cornell.edu), 607-255-7735

*Webpage Address:* <http://www.human.cornell.edu/che/bio.cfm?netid=ktb1>

*Discipline:* Organization Development

*Research interests:* Risk taking and decision making; impulsivity

*Obesity Foci:* Treatment/prevention

*Biography:*

Karene Booker is an Extension Support Specialist in the Department of Human Development. She manages Outreach & Extension initiatives designed to make lessons from faculty research more accessible to extension educators and other professionals, policy makers, and the public. She holds a M.S. in Organization Development from the Weatherhead School of Management at Case Western Reserve University. She joined the Department in 2006 after working extensively in human services policy, planning, and administration.

**Federica Del Genio**

*Title and Affiliation:* Visiting Research Fellow, Gastroenterology and Nutrition, Weill Medical College, Cornell University

*Mailing Address:* 1300 York Avenue, New York, New York, 10021

*Email Address and Telephone:* [frd2005@med.cornell.edu](mailto:frd2005@med.cornell.edu)

*Discipline:* Nutrition

*Research Interests:* Nutrition after bariatric surgery

*Obesity Focus:* Treatment

*Biography:*

I am part of an Italian family of medical doctors: my brother and my father are both surgeons. After my degree in Medicine, with magna cum laude, I have done my Residency and my PhD both in Clinical Nutrition. My Clinical Fellowship focused on Eating Disorders and then on Nutrition after gastrointestinal surgery. Since the beginning of my Ph.D. I have been working on obesity and obesity-related comorbidities and their improvements after bariatric surgery.

*Research Summary:*

My first interest was on the nutritional deficiencies and the bowel modifications after total gastrectomy for gastric cancer. Then at S. Raffaele Hospital (Milan, Italy) I had the possibility to assess the food intake of patients after different surgical procedures for gastrointestinal and pancreatic cancer; to evaluate furthermore their need of an early nutritional (enteral/parenteral) supplementation.

Since the beginning of my Ph.D., I have been working on obesity and obesity-related comorbidities and their improvements after bariatric surgery. I've focused on Non-alcoholic fatty liver disease and metabolic syndrome. I evaluated their prevalence in a metropolitan area of south Italy (Naples) and their changes (together with those of the body composition) following 10% weight loss in severe obese patients treated with laparoscopic bariatric surgery vs integrated medical treatment. Furthermore, I assessed all the metabolic abnormalities and hepatic steatosis changes following 10% and 25% weight loss in severe obese patients treated with laparoscopic gastric bypass.

At Weill Cornell Medical College, Department of Surgery, Section of Gastrointestinal Metabolic Surgery, our research aims to elucidate the mechanisms of diabetes control that may ultimately lead to a better understanding of diabetes and obesity. Indeed, metabolic surgery may help shape the future of diabetes care in the next few years, and is possibly the best promise we have ever had to cure the disease. In particular, I've been working on a study that aims to clarify if the early improvement/resolution of diabetes after bariatric surgery is due to the reduced food intake or to the surgery itself. We will compare the early effects (5 days post operative) of Roux-en-Y gastric bypass (RYGB) on glucose homeostasis with that of period of equivalent caloric restriction in matched patients.

*Selected Bibliography:*

Di Martino N, del Genio F, Bruscianno L. La sindrome da agastia. Aspetti fisiopatologici e nutrizionali. *CIRANAD-ISA. Scientific Meeting*. Avellino, Italy 4 Maggio 2000 (pp 36-43)

Colicchio P, Tarantino G, del Genio F, Sorrentino P, Saldamacchia G, Finelli C, Conca P, Contaldo F, Pasanisi F. Non-alcoholic fatty liver disease in young adult severely obese non-diabetic patients in South Italy. *Annals of Nutrition and Metabolism* 2005; 49(5): 289-295.

del Genio F. Clinica e terapia delle patologie del pavimento pelvico. Il ruolo del nutrizionista. In: *Le emorroidi dieci anni dopo. Il pavimento pelvico anno zero*. del Genio A, Bruscianno L. (eds). Ed: Grafica Nappa, Aversa (CE), Italy 2005, pag. 155-163.

del Genio G, del Genio A, Bruscianno L, Russo G, Pizza F, del Genio F, Rossetti G. Laparoscopic cardioplasty to avoid esophageal resection in patient not responsive to Heller myotomy. *Ann Thorac Surg* 2007; 83: 2235-8.

del Genio F, Alfonsi L, Marra M, Finelli C, del Genio G, Rossetti G, del Genio A, Contaldo F, Pasanisi F. Metabolic and nutritional status changes following 10% weight loss in severe obese patients treated with laparoscopic surgery vs integrated medical treatment. *Obesity Surgery* 2007; 17(12):1592-8.

del Genio G, Rossetti G, Bruscianno L, Russo G, Russo F, Pizza F, Tolone S, del Genio F, Di Martino M, Sagnelli C, del Genio A. Laparoscopic Duodenal Switch for pathologic duodenogastric reflux: initial experience. *Surg Laparosc Endosc Percutan Tech* 2007; 17: 517-520.

Contaldo F, del Genio F, Pasanisi F. Il danno epatico nell'obesità. In: *Aggiornamenti in Nutrizione Clinica* 15: Nutrizione Clinica e patologie correlate. Maria Gabriella Gentile Editor. Ed: Mattioli 1885, Firenze, Italy 2007, pag 21-26.

- del Genio G, Tolone S, Rossetti G, Bruscianno L, del Genio F, Pizza F, Russo F, Di Martino M, Napoletano V, del Genio A. Total Fundoplication does not obstruct the esophageal secondary peristalsis: investigation with pre- and postoperative 24-hour pH-Multichannel Intraluminal Impedance. *Eur Surg Res* 2008; 40: 230-234.
- del Genio G, Gagner M, Nocca D, Cuenca-Abente, Biertho L, Waage A, Faife B, del Genio F, Boza C, Aggarwal R, del Genio A. Endoscopic cervical bariatric surgery: follow-up study in a porcine model. *Obesity Surgery* 2008; 18(9): 1188-91.
- del Genio G, Tolone S, del Genio F, Aggarwal R, d'Alessandro A, Allaria A, Rossetti G, Bruscianno L, del Genio A. Prospective assessment of patient selection for antireflux surgery by combined multichannel intraluminal impedance pH monitor. *Journal of Gastrointestinal Surgery* 2008; 2: 1491–1496
- del Genio G, Tolone S, Bruscianno L, Rossetti G, Pizza F, del Genio F, Fei L, del Genio A. The total fundoplication controls acid and non-acid reflux. Evaluation by pre- and postoperative 24 hour pH-multichannel intraluminal impedance. *Surgical Endoscopy* 2008; 14 (in press)
- del Genio G, Tolone S, Bruscianno L, Rossetti G, Pizza F, Russo F, Di Martino M, Barra L, Lucido F, del Genio F, Maffettone V, Napolitano V, del Genio A. Objective assessment of gastroesophageal reflux after extended Heller myotomy and total fundoplication for achalasia with the use of 24 hour combined multichannel intraluminal impedance and pH monitoring (MII-pH). *Disease of the Esophagus* 2008 (in press)
- del Genio G, Gagner M, Cuenca-Abente F, Nocca D, Biertho L, del Genio F, Assalia A, Del Genio A. Laparoscopic sleeve gastrectomy with duodeno-jejunal bypass: a new surgical procedure for weight control. Feasibility and safety study in a porcine model. *Obesity Surgery* 2008 (in press)

*Participants*

**Lisa Ipp**

*Title and Affiliation:* Associate Director, Adolescent Medicine Weill Cornell Medical College; Chief of Pediatric Medicine, The Hospital for Special Surgery

*Mailing Address:* 525 East 68th Street, Box 139, New York, NY 10021

*Email Address and Telephone:* [lsi9001@med.cornell.edu](mailto:lsi9001@med.cornell.edu), 212-746-3372

*Webpage Address:* <http://www.med.cornell.edu/research/lisaipp/>

*Discipline:* Adolescent medicine

*Research Interests:* Obesity and musculoskeletal effects

*Obesity Focus:* Consequences

*Biography:*

Lisa Ipp is an Assistant Professor of Pediatrics at the Weill Cornell Medical College, and the Associate Director of Adolescent Medicine. She is also the Chief of Pediatrics at the Hospital for Special Surgery (HSS). Dr. Ipp is the co-author of an on-going joint Weill Cornell/HSS study entitled, "Effect of Weight on Lower Extremity Function and Development." which examines the musculoskeletal effects of obesity. Dr. Ipp received her MD degree from Weill Cornell Medical College and completed her pediatric residency training at the Hasbro Children's Hospital/Brown University School of Medicine. Her adolescent sub-specialty training was completed at the Mount Sinai School of Medicine.

**Saroj Nimkarn**

*Title and Affiliation:* Pediatric Endocrinology, New York Presbyterian Hospital, Weill Cornell Medical Center

*Mailing Address:* 525 E 68th Street, Box 103, New York, NY 10065

*Email Address and Telephone:* san2002@med.cornell.edu

*Discipline:* Pediatric endocrinology

*Obesity Focus:* Mechanism