

## THE GLOBAL OBESITY PREVENTION CENTER

### A global and a systems approach to the obesity epidemic

#### THE GLOBAL OBESITY PREVENTION CENTER (GOPC) IS CHANGING THE WAY THE WORLD FIGHTS THE GLOBAL OBESITY EPIDEMIC WITH A NEW SYSTEMS APPROACH

Because the obesity epidemic is the result of a complex system of factors, from individual behaviors to international economic policies, it requires a systems approach—one that transformed many other fields such as manufacturing and eradicated small pox in the last century. The systems approach integrates research, innovation, education, policy and action. The Center unites experts, stakeholders and projects from around the world, and it is home to researchers with expertise in a wide range of disciplines. Through this global and systems approach, the Center is developing state-of-the-art methods to control the obesity epidemic around the world.

#### THE GOPC IS A GLOBAL CENTER

Communities, cities and countries are increasingly interconnected via food systems, businesses, transportation, media and the internet. Any factor, change, policy or intervention can have world-wide reverberations. Tackling such a far-reaching challenge requires communities, countries and stakeholders to cooperate and learn from one another.

#### THE GOPC BRINGS TOGETHER MANY DISCIPLINES TO WORK ON THE PROBLEM

We convene many disciplines and experts who have not traditionally worked either alone or together on obesity (such as computer science, mathematics and engineering) with those with decades of obesity-related experience and expertise. Bringing aboard new disciplines will help develop state-of-the-art approaches and methods (for instance, computer simulation models, geospatial tools, and social media technology) to control the global obesity epidemic.

#### THE GOPC CONNECTS SCIENCE TO POLICY AND ACTION

The GOPC brings together experts, stakeholders and projects from around the world to develop and implement innovative, organized, systems strategies to control obesity on a global level. We ensure that the results of scientific study are connected to the people who can turn knowledge into action and policy change.

If you would like to learn more about the GOPC, please visit our website [www.globalobesity.org](http://www.globalobesity.org) or contact [globalobesity@jhu.edu](mailto:globalobesity@jhu.edu), 410-955-5906.



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## THE SOCIAL NETWORK: A Systems Approach to #ChildhoodObesity

Wednesday, Oct 22, 2014 • 8:00 a.m. – 5:00 p.m.  
Feinstone Hall • Johns Hopkins Bloomberg School of Public Health

### How social networks influence weight, behavior and health

The past decade has seen increasing interest in social networks, i.e., how people are connected to their families, friends, school mates, and work colleagues. These relationships affect what, where, and how children eat and exercise, and in turn, risk of obesity.

#### Objectives

1. Review state-of-the-art approaches to analyze and understand social networks.
2. Discuss how network analysis and modeling can help with obesity prevention and control.



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PROGRAM

8:00 a.m. – 9:00 a.m.  
Registration and Breakfast Buffet

9:00 a.m. – 9:05 a.m.  
Welcome  
Ann McDermott, PhD, MS, LDN  
Assistant Director, Global Obesity  
Prevention Center (GOPC)  
Johns Hopkins University

9:05 a.m. – 9:35 a.m.  
Networks and Obesity: What’s the  
Connection?  
Bruce Y. Lee, MD, MBA  
Director, GOPC  
Johns Hopkins University

9:35 a.m. – 10: 20 a.m.  
Connecting Threads: A Global  
Perspective of Obesity  
Bert Garza, PhD, MD  
Professor at Boston College  
Visiting Professor at Johns Hopkins  
University

10:20 a.m. – 10:40 a.m.  
Coffee Break

10:40 a.m. – 11:25 a.m.  
Social Influence on BMI  
Ross Hammond, PhD  
Director, Center on Social Dynamics  
and Policy and Senior Fellow, Economic  
Studies, Brookings Institute

11:25 a.m. – 12:40 p.m.  
Lunch

12:40 p.m. – 1:25 p.m.  
No Child is an Island: Addressing Social  
Networks and Environments is Critical  
for Childhood Obesity  
Kayla de la Haye, PhD  
Assistant Professor of Preventive Medicine,  
Institute for Health Promotion and  
Disease Prevention Research (IPR),  
Keck School of Medicine, University  
of Southern California



1:25 p.m. – 2:10 p.m.  
Using Complex Contagions and  
Social Networks to Reduce Obesity: New  
Theory and Experiments  
\*Skype Presentation  
Damon Centola, PhD  
Associate Professor of Communication and  
Engineering  
Annenberg School and School of  
Engineering, University of Pennsylvania

2:10 p.m. – 2:25 p.m.  
Coffee Break

2:25 p.m. – 3:10 p.m.  
Network Modeling Project Presentations  
and Discussion

3:10 p.m. – 3:55 p.m.  
Harnessing the Power of Social Networks  
to Move People, Programs and Policies  
Holly Freishtat, MS  
Director, Baltimore City Food Policy &  
Joel Gittelsohn, PhD, Baltimore Project  
Lead, GOPC

3:55 p.m. – 4:40 p.m.  
Network Analysis in Obesity Research:  
The Road Ahead  
Patty Mabry, PhD  
Senior Advisor for Disease Prevention  
Office of Disease Prevention  
National Institute of Health

4:40 p.m. – 5:00 p.m.  
Closing remarks  
Bruce Y. Lee, MD, MBA

SYMPOSIUM PRESENTERS



Damon Centola, PhD, is an Associate Professor of Communication and Engineering at the University of Pennsylvania, and Director of the Network Dynamics Group. His research interests include social networks, collective behavior, and web-based experiments. Centola’s research has been published in journals such as *Science*, the *American Journal of Sociology*, and the *Journal of Statistical Physics*. His papers have won the Outstanding Article Award from the Mathematical Sociology Section of the American Sociological Association in 2006, 2009, and 2011, and the Outstanding Contribution to Sociological Methodology Award in 2011.



Holly Freishtat, MS, Baltimore City’s first Food Policy Director, began her work with the City of Baltimore in 2010. Freishtat works city-wide to align priorities and projects around improving the Baltimore City food environment. Recognizing that government can’t address food access alone, Freishtat uses a multi-sector perspective and engages with many agencies, nonprofits, community groups and stakeholders to dismantle policy barriers, facilitate new partnerships and leverage funding to implement innovative solutions to address food access issues in Baltimore. Previously, Freishtat spent over a decade working on food issues in a variety of contexts; as a nutritionist, an educator and a farmer.



Cutberto Garza, PhD, MD, is a recognized expert in child and maternal health and nutrition. His most recent contributions relate to new international growth standards for infants and young children. He presently serves as University Professor of Boston College and Visiting Professor at Johns Hopkins University’s and George Washington University’s schools of public health. Previous to his present appointments he served as Provost at BC, Director of the Division of Nutritional Sciences and vice provost at Cornell University, Professor of Pediatrics at Baylor College of Medicine and associate director of the USDA Children’s Nutrition Research Center also at Baylor College of Medicine.



Joel Gittelsohn, PhD, is the Lead for the Baltimore Project with the GOPC and a Professor in the Center for Human Nutrition, Department of International Health, Johns Hopkins Bloomberg School of Public Health. For the past 23 years, Dr. Gittelsohn has focused on developing, implementing and evaluating community-based programs for the primary prevention of chronic disease in disadvantaged ethnic minority populations. With over 175 publications in peer-reviewed journals, Dr. Gittelsohn has led multiple food source-centered intervention trials aimed at improving the food environment and providing skills and nutrition education needed to support healthy food choices in the Marshall Islands, on three American Indian reservations, in Baltimore City, and for Native Hawaiian communities. Dr. Gittelsohn developed a multi-institutional program for diabetes prevention in First Nations, which was extended to five American Indian communities (OPREVENT), and a multi-level program for child obesity prevention in Baltimore City (BHCK). These programs have shown success in increasing knowledge, healthy food purchasing and consumption of healthy promoted foods at the consumer level, in reducing obesity, and in improving stocking and sales at the retail level.



Ross Hammond, PhD, is a Senior Fellow in Economics and Director of the Center on Social Dynamics & Policy at Brookings. His current research topics include obesity etiology and prevention, tobacco control, crime, corruption, and decision-making. Hammond serves on an IOM committee on the food system, and as an advisor to both the National Cancer Institute and the FDA Center for Tobacco Products. He has been a member of three NIH research networks using computational modeling, focused respectively on infectious disease, obesity, and inequality. Hammond holds faculty appointments at the Harvard School of Public Health, the Santa Fe Institute, and Washington University, and he teaches computational modeling at both Harvard and University of Michigan.



Kayla de la Haye, PhD, is an Assistant Professor of Preventive Medicine at the Institute for Health Promotion and Disease Prevention Research (IPR), Keck School of Medicine, USC. She is a behavioral scientist who specializes in applying social network analysis and systems science to health promotion and disease prevention. She has examined the spread of obesity in adolescent peer networks, and produced innovative findings that peer network effects on obesity-related behaviors are important mechanisms underpinning this phenomenon. She collaborates on several projects that explore how socio-ecological systems influence health risk behaviors in youth and families, and in partnership with the National Human Genome Research Institute is developing interventions that activate and harness family social networks to increase healthy behaviors and reduce disease risk across diverse communities.



Bruce Lee, MD, MBA, is an Associate Professor of International Health and Director of the Global Obesity Prevention Center (GOPC) at Johns Hopkins University and Director of Operations Research at the International Vaccine Access Center at the Johns Hopkins Bloomberg School of Public Health. His work focuses on public health operations research, which involves developing and utilizing mathematical and computational methods and tools to better understand and assist public health decision making, processes, and systems. His work has garnered attention in leading media outlets such as the *New York Times*, *Los Angeles Times*, *Businessweek*, *U.S. News and World Report*, *Nature Medicine*, and National Public Radio (NPR).



Patty Mabry, PhD, joined the Office of Disease Prevention (ODP) at the National Institutes of Health in March of 2014. She leads ODP’s strategic priority to systematically monitor NIH investments in prevention research and assess the progress and results of that research. She also leads an effort to promote the use of the best available methods in prevention research, and develop better methods. Formerly, Dr. Mabry was Acting Deputy Director in the Office of Behavioral and Social Sciences Research (OBSSR) at NIH, where she facilitated the use of systems science methods in health-related behavioral and social science research.

Head of Symposium Scientific Committee:  
Ann McDermott, PhD, MS, LDN, GOPC Assistant Director

Symposium Coordinator:  
Maggie Rudinger, GOPC Administrative Coordinator