



EDUCATION AND TRAINING PROGRAM

IMPACT

Applying systems modeling to the study of the obesity epidemic is a novel approach. The Global Obesity Prevention Center (GOPC) brings together experts from disciplines not traditionally associated with obesity—such as engineering and computer science—to work with experts with decades of obesity-related experience to bridge research, education, policy, and action and bring innovative system-oriented solutions to the global obesity epidemic. Training public health researchers to use systems methods and engineers to work on public health problems will create an entirely new cohort of researchers with a new and integrative perspective—both on the causes of obesity and possible tools and tailored solutions for real-world settings.

The ability to create and use models is beneficial because systems models are inherently visual and can be used to present complex ideas in an intuitive way and create a common language for diverse groups of stakeholders, including policy makers, the health community and general public. Models can examine impact in a variety of ways and enable stakeholders to observe the virtual results without actually having to implement a policy, for example: financial costs and impact on specific populations regarding consequences, both intended and unintended.

MISSION

Design, implement and monitor an array of educational and training programs to increase the number of public health researchers with capacities in systems science theories and methods that are needed to advance our understanding of the causes of, and solutions to, the epidemic of obesity.

CURRENT WORK

The Education and Training Program (ETP) has recruited trainees of various levels (including pre-doctoral, post-doctoral and visiting scholars), built collaborations with external academic and research institutions, and begun to develop training courses and systems science workshops for use in the US and around the globe. Strong leadership and mentors from across the Johns Hopkins colleges have been assembled to guide and collaborate on systems science.

- Focused training experiences: Candidates for the training program can be drawn from any field of study (e.g., public health, medicine, business, engineering, computer science, economics, political science, sociology, geography etc.), many of which may be beyond the traditional domains of medicine and public health, as long as it can be demonstrated their expertise and interest are relevant to problems in the public health arena. These scholars will develop an integrative line of expertise, be better positioned for research funding, and expand the human capital needed to bring systems thinking to bear.
- Systems science workshops and courses: The development of additional training workshops and courses will enable systems science methodologies to be effectively introduced to individuals from a variety of backgrounds, such as public health, engineers, and policy makers, and thereby create a value, vision and common language to facilitate collaboration across fields.

FUTURE DIRECTIONS

Our future research will broadly focus on providing the guidance and training needed to develop a new wave of regional, national and global science and policy experts able to think with a systems science perspective and successfully work across disciplines to address obesity in ways that are appropriate, effective and impactful.

CONTACT

ETP Director: Timothy H. Moran, PhD
Email: tmoran@jhmi.edu

Co-Director: Thomas A. Glass, PhD
Email: tglass1@jhu.edu

