

## Grant Aim 1

Educate a cohort of 11 PhD/MPH students in a transdisciplinary program of study

### 11 Transdisciplinary Scholars

- The scholars completed previous degrees at 10 universities, 7 from out-of-state
- Scholars are enrolled in 5 different PhD programs: Community Health, Kinesiology, Nutritional Sciences, Human Development and Family Studies, and Social Work

### New Graduate Degree

- A new PhD/MPH degree option was created and approved by the Board of Trustees
- All scholars have completed their MPH degree

### Transdisciplinary Courses

- 2 new courses on *Childhood Obesity Prevention* were developed and focused on:
  - *Causes, Correlates and Consequences*
  - *Policies, Programs and Interventions*
- A *Seminar* course taught each semester by I-TOPP faculty covers obesity- and transdisciplinary education-related topics
- Other courses taken by all I-TOPP scholars include: Granstmanship and Ethics; Pediatric Clinical Nutrition; Human Development Research & Theory; and Family Theories

### Scientific Meeting Presentations

- I-TOPP scholars have delivered 114 presentations at over 30 different types of professional meetings
- Examples include American Diabetes Association, American Public Health Association, Cognitive Neuroscience Society, Experimental Biology, International Conference for Eating Disorders, International Society for Behavioral Nutrition and Physical Activity, National Council on Family Relations, The Obesity Society, Society for Psychophysiological Research, Society for Research and Child Development and Society for Social Work and Research

### Publications

- I-TOPP scholars have 44 publications in 26 different journals
- Examples include *American Journal of Clinical Nutrition*, *Brain and Cognition*, *Developmental Cognitive Neuroscience*, *Family Practice*, *International Journal of Environmental Research and Public Health*, *Journal of Parental Enteral Nutrition*, *Journal of Pediatrics*, *Journal of Research in Obesity*, *Journal of Sport Sciences*, *Obesity*, *Appetite*, *Pediatrics* and *Psychophysiology*

# The Illinois Transdisciplinary Obesity Prevention Program

## Summary of Grant Aims and Progress to Date



## Grant Aim 2

Sponsor a Visiting Faculty Program, Lecture Series and Biennial Symposium to build interactions between I-TOPP faculty and scholars and international leaders in childhood obesity prevention

### 12 Symposium Speakers in Three Biennial Symposia

- **Dr. Cynthia Ogden**, The Center for Disease Control
- **Dr. Molly Bray**, University of Alabama at Birmingham
- **Dr. Madeleine Sigman-Grant**, University of Nevada
- **Dr. Stephen Matthews**, The Pennsylvania State University
- **Dr. Jayson Lusk**, Oklahoma State University
- **Dr. Leann Birch**, University of Georgia
- **Dr. Dianne Ward**, University of North Carolina
- **Dr. Jason Mendoza**, University of Washington
- **Dr. Russell Pate**, University of South Carolina
- **Ms. Dawn Melchiorre**, Greater Chicago Food Depository
- **Dr. Bonnie Spring**, Northwestern University
- **Dr. Terry Huang**, City University of New York School of Public Health

### 13 Lecture Series Speakers

- **Dr. Myles Faith**, University of North Carolina
- **Dr. Ellen Wartella**, Northwestern University
- **Dr. Robert Whitaker**, Temple University
- **Dr. Maureen Black**, University of Maryland School of Medicine
- **Dr. Daniel Stokols**, University of California, Irvine
- **Dr. Anthony Comuzzie**, Texas Biomedical Research Institute
- **Dr. Sheryl Hughes**, Baylor College of Medicine
- **Dr. Dianne Neumark-Sztainer**, University of Minnesota
- **Dr. Kim Greder**, Iowa State University
- **Dr. Jayne Fulkerson**, University of Minnesota
- **Dr. Melissa Munn-Chernoff**, University of North Carolina
- **Dr. David Stodden**, University of South Carolina
- **Dr. Kirsten Davison**, Harvard T.H. Chan School of Public Health

### 2 Visiting Faculty

- **Dr. Madeleine Sigman-Grant**, University of Nevada
- **Dr. Kirk Erickson**, University of Pittsburgh

## Grant Aim 3

Assess student transdisciplinary knowledge, attitudes, and research outputs at baseline and multiple time points and compare transdisciplinary orientation of I-TOPP scholars to MPH and PhD students

### Measures

- **Misra Questionnaires:** Behavior Change Collaborative Activities Index, and Interdisciplinary Perspectives Index.
- **Short Answer:** Questions related to notions, experiences, and expectations related to TD education and childhood obesity.
- **Focus Groups:** Faculty and Scholar focus groups held to determine and discuss characteristics of TD research, i.e., program attributes, barriers, goals, investments. Recordings were transcribed, and thematically coded.
- **Kinetic Drawing:** Five minutes allotted to draw a transdisciplinary research intervention team, doing something that prevents or reduces childhood obesity. Each scholar described the drawing, identified emotions or feelings when drawing, and described how it reflected their career state at this time as well as insights or opportunities or challenges of TD training.
- **Statement of Purpose:** Each student composed a statement of purpose for their graduate school application. These documents were analyzed for content related to expectations.
- **Two Annual Review Questions:** We ask two questions related to TDE as part of each annual review conducted in January. 1) What if any barriers to transdisciplinary research/education have you encountered? 2) What resources would enhance your transdisciplinary research/education if they were made available?
- **Childhood Obesity II course:** Group project ratings and video of presentations
- **Abstract Ratings:** Dissertation abstracts will be rated on transdisciplinarity.
- **Number of I-TOPP scholar publications and variety of disciplines represented by authors**
- **Number and variety of professional meetings attended by I-TOPP scholars**



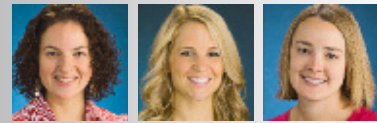
This project is supported by the National Institute of Food and Agriculture, U.S. Department of Agriculture, under award number 2011-67001-30101.

# Timeline of the Illinois Transdisciplinary Obesity Prevention Program (I-TOPP)



Start of the \$4.5 Million grant over 5 years

New PhD/MPH degree approved by University of Illinois



First cohort of scholars started—Mary Christoph, Katie Robinson, Lauren Raine



Craig Gundersen, PhD, presented "The Supplemental Nutrition Assistance Program, Financial Stress, and

Childhood Obesity" at the Agricultural & Applied Economics Association meeting, Pittsburgh, PA.

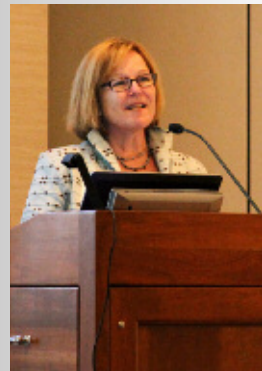
2011



## I-TOPP

ILLINOIS TRANSDISCIPLINARY OBESITY PREVENTION PROGRAM

Barbara Fiese, PhD, gave the invited plenary lecture "Promoting healthy eating and lifestyles for children and their families" at Head Start's 11th National Research Conference. Washington D.C.

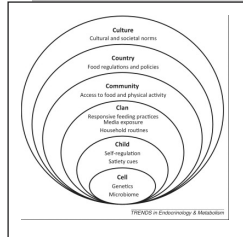


2012

Sharon Donovan, PhD - keynote speaker at the "Interdisciplinary Graduate Instruction in Obesity State-of-the-Art Conference," at the University of Georgia, was selected based on her I-TOPP experience.



Publication "Childhood obesity prevention from cell to society" by the I-TOPP faculty: Fiese BH, Bost KK, McBride BA, and Donovan SM in Trends in Endocrinology and Metabolism.



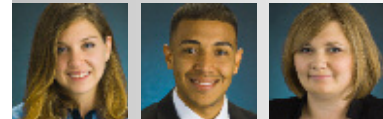
Third cohort of scholars started—Natasha Cole, Liliana Aguayo, Jessica Jarick, Julia Kim, Maria Pinos-Leano

2013

First Biennial I-TOPP Symposium



Diana Grigsby-Toussaint, PhD and Barbara Fiese, PhD published "Where they live, how they play: Neighborhood greenness and outdoor physical activity among preschoolers" in the International Journal of Health Geographics.



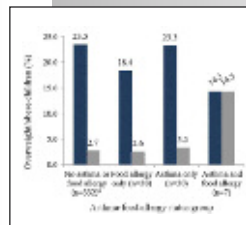
Second cohort of scholars started—Anneliese Fied, Roger Figueroa, Jaclyn Saltzman



Mary Christoph, scholar, received the Obesity Society Epidemiology Section Student Award for Excellence in Obesity Research.



Second Biennial I-TOPP Symposium

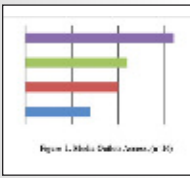


New Class Offering: NUTR 530 Childhood Obesity I

Publication by Katie Robinson, scholar, Teran-Garcia M., Donovan SM & Fiese BH, the STRONG Kids Research Team titled "Childhood Overweight/ Obesity and Pediatric Asthma: The Role of Parental Perception of Child Weight Status" in Nutrients.

2014

Publication by Roger Figueroa, scholar "Health Communication and Obesity Prevention in Hispanic Communities: A Qualitative Exploration of Media's Roles" in Research in Obesity.

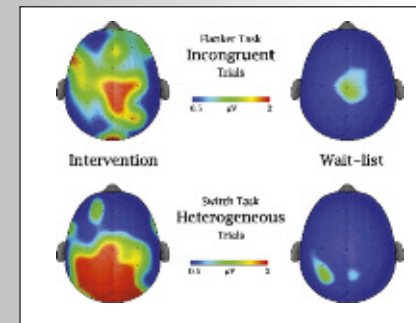


Julia Kim, scholar, presenting her MPH Practicum project which she worked to increase breastfeeding rates and promote breastfeeding culture in Champaign County through the Champaign-Urbana Public Health District.



Natasha Cole, Jessica Jarick, and Katie Robinson, scholars, ranked as "outstanding" on the University of Illinois List of Teachers Ranked as Excellent by their students.

New Class Offering: NUTR 531 Childhood Obesity II



2015

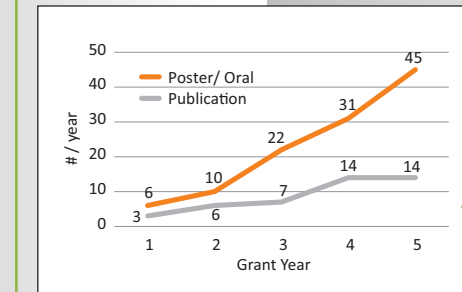
Mary Christoph and Katie Robinson, scholars received the 2015 Emerging Leaders in Nutrition Science Poster Competition Finalist, American Society for Nutrition.



Anneliese Feld, scholar, and Bost KK, Wiley A, Fiese BH, presented a poster "Attachment security as a moderator of the relations between maternal and child BMI" at the Society for Research in Child Development Biennial Meeting, Philadelphia, PA.

Maria Pinos-Leano, scholars, published "Clinic staff attitudes towards the use of mHealth technology to conduct perinatal depression screenings: a qualitative study" in Family Practice.

All 11 I-TOPP scholars completed the MPH portion of the program.



Publications and presentations per each grant year (2011-9/2015) by the 11 scholars.

Liliana Aguayo, scholar, awarded the Britta L. and Charles J. Wolfe Award for her research on Diabetes

2016

I-TOPP Team selected by peers for the 2015 Team Award For Excellence: College of ACES and Paul A. Funk Recognition Awards



Third Biennial Symposium

Publication by Lauren Raine, scholar, and Charles Hillman, PhD, "Effects of the FITKids randomized controlled trial on executive control and brain function" in Pediatrics.

Jaclyn Saltzman, scholar and Janet Liechty, PhD, published "Health Literacy is Associated with Parent Attitudes about Weight Control for Children" in Appetite.

1 year no-cost grant extension



Joint Scientific Sessions at Experimental Biology "Transdisciplinary Training in Childhood Obesity Prevention: Approaches, Successes and Challenges" by Dr. S. Donovan, I-TOPP, and Dr. G. Jensen, Childhood Obesity Prevention Training Program, Pennsylvania State University