Penn State Childhood Obesity Prevention Training Program (COPT)

Barbara J. Rolls, Director
Kathleen L. Keller, Co-Director
Jennifer Savage Williams, Co-Director
Program Directors

**Program Director:** Barbara J. Rolls, PhD
- Professor and Helen A. Guthrie Chair of Nutritional Sciences
- bjr4@psu.edu

**Co-Director:** Kathleen L. Keller, PhD
- Assistant Professor, Department of Nutritional Sciences & Department of Food Science
- klk37@psu.edu

**Co-Director:** Jennifer Savage Williams, PhD
- Assistant Professor, Department of Nutritional Sciences
- jfs195@psu.edu
Fellows
Overview of the program

To provide pre-doctoral transdisciplinary training in the conduct of research to prevent childhood obesity

- Nutritional Sciences
- Human Development & Family Studies
- Prevention & Intervention Research
- Research Methodology & Statistics
College of Health and Human Development

CHILDHOOD OBESITY PREVENTION TRAINING PROGRAM

NUTRITIONAL SCIENCES

Core Areas
- Human Ingestive Behavior
- Nutrition Education
- Nutritional Epidemiology
- Obesity Management

RESEARCH CENTERS

Childhood Obesity Research
- Dietary Assessment
- Human Ingestive Behavior
- Methodology Center
- Prevention Center

HUMAN DEVELOPMENT & FAMILY STUDIES

Core Areas
- Child Development
- Family Development
- Intervention & Prevention
- Research Methodology

OTHER COLLABORATING PENN STATE UNITS

Department of Biobehavioral Health
Department of Food Science
Department of Health Policy & Administration
Department of Kinesiology
Department of Hotel & Restaurant Management
Department of Pediatric Medicine

Department of Sociology
School of Nursing
Center for Food Innovation
Cooperative Extension
Social Science Research Institute
Penn State Institute for Diabetes & Obesity
Support Provided

- Stipends and tuition for 16 fellows
- Conference travel
- Internship travel and housing
- Day trips
- Distinguished speakers
- Research forums
- 17 Seed grants
**Program Accomplishments**

**Year 1**

- 3 COPT “focus” courses approved as permanent PSU course offerings
- **Visiting scholars** - Bill Dietz, James Hill, and Barry Levin
- Held the Penn State Childhood Obesity Prevention Forum
- Established cross-disciplinary COPT minors in NUTR and HDFS

**Year 2**

- **Visiting scholars** - Jennifer Fisher, Steven Heymsfield, Kirsten Davison, Sharon Donovan
- Macronutrient metabolism course developed for non-nutrition majors
- Established internship guidelines and placed a student at the CDC
Program Accomplishments

**Year 3**
- **Visiting scholars** - Julie Mennella, Jessica Haines, Ellyn Satter, Madeleine Sigman-Grant
- Seed grant funding mechanism launched for graduate student research
- Student interest groups established to build morale, plan educational day trips, start a COPT blog

**Year 4**
- **Visiting scholars** - Simone French, Leonard Epstein, Kathleen Rasmussen, Jennifer Temple, Dianne Ward, Katie Lacey, Elsie Taveras, David Thivel
- Day trip program initiated
- Fellow received a training grant from NSF
Program Accomplishments

**Year 5**

**Visiting Scholars** - Marlene Schwartz, Sheila Fleischhacker (NIH), Michael Wheeler, Martin Yeomans, David B. Allison, Corby Martin

**Awards received:**

**Society for the Study of Ingestive Behavior:** Early-Career Young Professional Travel Grant

**The Obesity Society:** Pediatric Obesity Competition Award

2 students were selected as **American Society for Nutrition’s** Clinical Emerging Leader Award Finalists
Strengths noted by the External Advisory Committee

Adam Drewnowski, James Hill, Christine Taylor, William Cochran

• Training in proposal writing
• Support for seed grants
• Support for student travel to present findings
• Support to attend professional meetings and internships
• Student initiative in outreach via COPT blog
  https://sites.psu.edu/copt/about-copt/
• Cooperative and highly successful trandisciplinary training in Nutritional Sciences and HDFS
Challenges

• Framing goals to represent the transdisciplinary approach

• Coursework
  • Approved courses had to be developed
  • Many earn both a major and minor, but limited elective courses

• Developing individualized training programs

• Internships a challenge
  • Developed a day trip program
Examples of student research

- Development of children’s eating behavior
- Use of technology to disseminate evidence-based nutrition advice
- Psychosocial correlates of childhood obesity
- Interventions designed to prevent childhood obesity
The Seed Grants have facilitated transdisciplinary studies
Developing outreach opportunities to disseminate findings

- Students are working with local public TV (WPSU) to make videos describing their findings
Publications and Presentations by COPT Fellows

- Peer-Reviewed Publications: 32
- Pending/Submitted Publications: 22
- Internal Presentations: 43
- Conference Presentations: 92
Oral Presentations by COPT Fellows at EB 2016

- **KATHERINE BALANTEKIN**
  
  Network social support for healthy and obesogenic behavior influences children's dietary intake and weight change during family-based behavioral obesity treatment  
  **Date:** Saturday, April 2  
  **Session Time:** 3:15 PM – 5:00 PM

- **LAURAL ENGLISH**
  
  Orbitofrontal cortex response to food portion size is linked with obesogenic appetitive profile in children  
  **Date:** Monday, April 4  
  **Session Time:** 8:00 AM - 10:00 AM

- **SAMANTHA KLING**
  
  Title: Does milk portion size or energy density affect preschool children’s lunch intake?  
  **Date:** Monday, April 4  
  **Session Time:** 8:00 AM - 10:00 AM

- **NICOLE FEARNBACH**
  
  Title: Impact of imposed exercise on children’s *ad libitum* energy intake  
  **Date:** Tuesday, April 5  
  **Session Time:** 10:30 AM – 12:30 PM
Multiple day trips to learn more about academic, government, and private sector opportunities
Graduation and Employment

5 Fellows have completed their training

Wendy M. Stein, MS
Nutrition Specialist
The Coca-Cola Company

Dr. Chelsea Rose
Research Coordinator,
Seattle Obesity Study III

Dr. Katherine Balantekin
Postdoctoral Fellow, Washington
University School of Medicine

Dr. Kameron Moding
Postdoctoral Scholar, University of Colorado Denver

Julia Bleser, MS
Research Project Manager
Looking Forward

• Track outcomes of the 17 seed grants
• Disseminate findings through outreach
• Graduate and place remaining Fellows
• Continue to support transdisciplinary training
• Build faculty research and funding in childhood obesity prevention
The biggest challenge now is finding ways to keep such an excellent and productive program funded