



BUILDING HEALTHY COMMUNITIES FOR EVERYONE

**2011 DISABILITY and
HEALTH PARTNERS MEETING**

June 14 - 16, 2011





BUILDING HEALTHY COMMUNITIES FOR EVERYONE

Health promotion research and outreach for persons with intellectual and developmental disabilities

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UMass Medical School-Shriver Center

June 15, 2011





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MISSION STATEMENT

Our mission at the Shriver Center is to advance local, national, and international efforts to improve the quality of life for people with intellectual and developmental disabilities (IDD) and their families.





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Core Team

Linda Bandini, PhD, RD

Carol Curtin, MSW

Richard Fleming, PhD

James Gleason, MS, PT

Melissa Maslin, MEd

Renee Scampini, MS, RD

Heidi Stanish, PhD

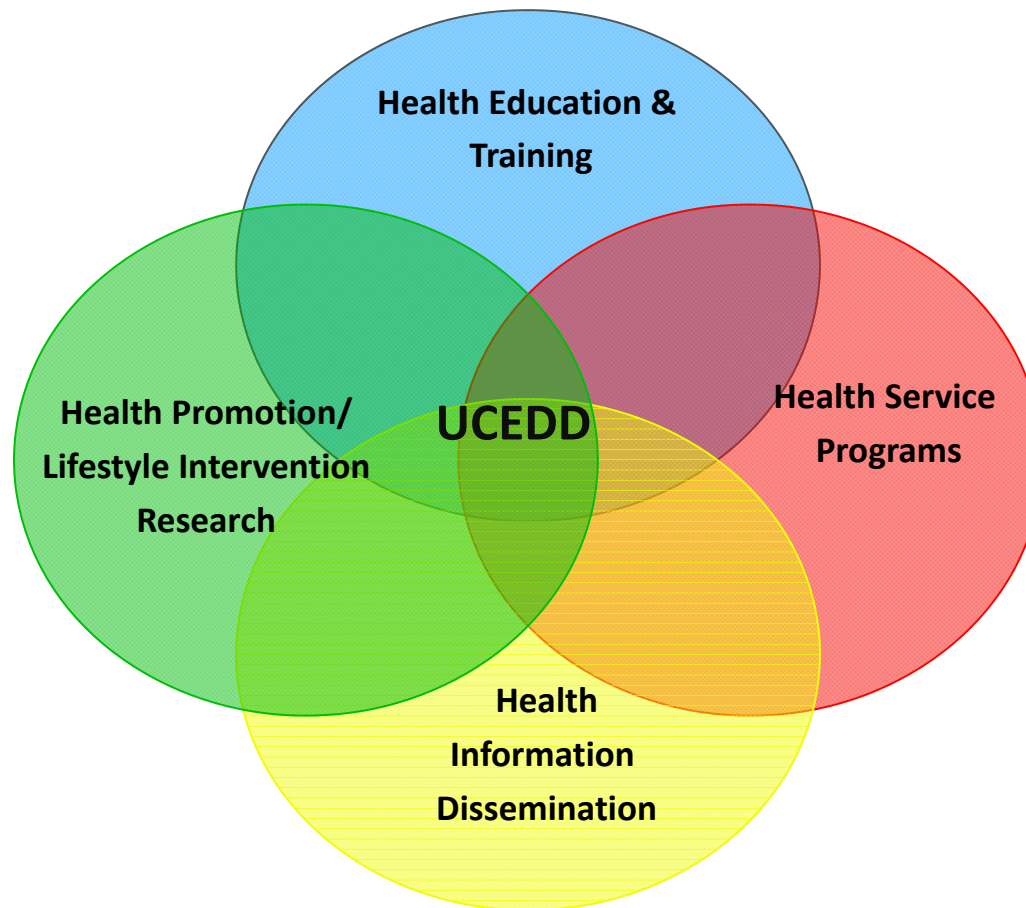
(UMass Boston)

Sarah E. Anderson, PhD

(Ohio State University)

Aviva Must, PhD

(Tufts University School of Medicine)





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Current Programmatic Focus

**OBESITY IN CHILDREN & ADULTS
WITH NEURODEVELOPMENTAL
DISORDERS**

DETERMINATION
OF RISK
FACTORS

INTERVENTION &
PREVENTION
PROGRAMS





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RESEARCH STUDIES





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OBSERVATIONAL STUDIES

- **CHILDREN'S ACTIVITY AND MEAL PATTERNS STUDY (CHAMPS):** Children with autism spectrum disorders
- **TEENS' RECREATIONAL AND ACTIVITY CHOICES (TRAC) STUDY:** Adolescents with intellectual disabilities and autism spectrum disorders





CHAMPS STUDY

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- Children with ASD and typically developing children ages 3-11 years
- Meal patterns of children
- Activity patterns of children

Principal Investigator: Bandini NIH R21HD048989-A2





CHAMPS STUDY

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What we learned in CHAMPS

Dietary factors

- Children with ASD refuse more food and had a more limited food repertoire than typically developing children
- Children with a more limited repertoire of food had more nutrients with an inadequate intake than children with a higher repertoire of food
- Children with ASD refused more fruits and vegetables than typically developing children

J Pediatrics 2010





CHAMPS STUDY

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What we are studying in CHAMPS

Physical Activity

- Comparison of time spent in moderate and vigorous activity among children with ASD and typically developing children
- Comparison of type of physical activities among children with ASD and typically developing children
- Comparison of time spent in a variety of physical activities among children with ASD and typically developing children
- Comparison of numbers of barriers to physical activity among children with ASD and typically developing children





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TRAC STUDY

- Adolescents with intellectual disabilities, autism spectrum disorders, and typically developing children
- Observational study of physical activity

Principal Investigators: Bandini and Stanish NIH R21HD059100-01A2





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TRAC STUDY

What we are studying

Comparisons among adolescents with ID, ASD and typically developing adolescents on:

- Moderate and vigorous activity measured by accelerometers
- Correlates of physical activity including barriers, and psychosocial determinants of physical activity
- Time spent in variety of physical activities
- Screen time (sedentary activity)





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INTERVENTION STUDIES

- **HEALTH U: Weight reduction study**
- **Team Up For Fitness (TUFF)**
- **Supporting Physical Activity & Recreation in the Community (SPARC)**





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HEALTH U

- Family-based weight reduction pilot study for overweight and obese adolescents and young adults with Down syndrome
- Randomized control trial comparing a nutrition education/activity intervention to a nutrition education/activity + behavioral intervention
- Principal Investigator: Fleming NIH RO3DK070627-01A2





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HEALTH U

Nutrition & Activity Sessions

1. Good Nutrition & Healthy Eating
2. Stay Fit, Stay Strong, Keep Moving All Day Long
3. Fruits, Vegetables & Low-Fat Dairy
4. Physical Activity: Warm-Ups & Stretching
5. Serving Sizes
6. Why is Physical Activity Good for Me?
7. Meal Planning
8. More Meals!
9. Activities at Home and in the Community
10. Snack Attack: Healthy Snacking, Mindful Eating
11. Strength-Building Activities
12. Measure Food, Measure Success!
13. Physical Activity Review
14. Eating Around Town: Eating Out
15. Favorite Physical Activities
16. Potluck Dinner Celebration





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Health U.

Family-Based Behavioral Intervention

- **Monitoring**
- **Goal setting**
- **Feedback & Reinforcement**
- **Environmental arrangements**
- **Behavioral contracting**





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Team Up For Fitness

- Community-based fitness study for adolescents with Down syndrome
- Randomized control trial 12-week intervention (aerobic exercise and resistance training) followed by 12-week supported maintenance
- Conducted in YMCAs

Principal Investigators: Fleming and Stanish NIH R21HD062933-01





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SPARC

- Community-based participatory research
- Walking program for adolescents with autism spectrum disorders with intellectual disabilities
- Conducted at 2 YMCAs in the community
- Treadmill, track, games and outdoor hikes

Principal Investigator: Fleming NIH R21HD057806





SERVICE PROJECTS

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Health Promotion/ Lifestyle Intervention Programming

Nutrition:

- ❖ *Cardinal Cushing School (Hanover, MA)*
- ❖ *Cotting School (Lexington, MA)*
- ❖ *Milestones School (Waltham, MA)*
- ❖ *Advocates in Motion (Waltham, MA)*
- ❖ *Mass Down Syndrome Congress*
- ❖ *Special Olympics MA Healthy Athletes Program*

Physical Activity:

- ❖ *All Abilities Active*

