NCDEU 2011 Full-Day Workshop Proposal
NCDEU 2011 Annual Meeting, June 13-16, 2011 (Boca Raton, Florida)

Workshop Title: Developing Dynamic, Sequential Treatments that Optimize Mental Health Outcomes: Experiences with a Novel Clinical Trial Design

Chair & Presenter: Susan A. Murphy, PhD, Department of Statistics & Institute for Social Research, University of Michigan
samurphy@umich.edu, Professor, (734) 647-3684

Co-chair & Presenter: Daniel Almirall, PhD, Institute for Social Research, University of Michigan
dalmiral@umich.edu, Faculty Research Fellow, (734) 936-3077

Speakers Panel:
- James McKay, PhD, Department of Psychiatry, University of Pennsylvania Medicine
- William Pelham, PhD, Departments of Pediatrics and Psychiatry, University of Buffalo
- Hendree Jones, PhD, Substance Abuse Treatment Evaluations and Interventions, RTI International
- Connie Kasari, PhD, Education Department, University of California, Los Angeles

Course Type: Half-day (3 hours): 2:45PM – 5:45PM

Course Level: Beginner

Course Limit: No limit on number of attendees

Abstract: The effective management of mental health disorders often requires individualized, sequential decision making whereby treatment is dynamically adapted and re-adapted over time based on a patient’s on-going response to treatment. An adaptive treatment strategy (ATS) operationalizes individualized sequential decision making via a sequence of decision rules that specify whether, how, for whom and when to alter the intensity, type, or delivery of pharmacological and/or psychosocial treatment at critical decision points in the management of chronic mental health. ATSs can be used to develop or supplement clinical treatment guidelines, and they inform the evidence-base for treating mental health disorders. In this workshop, we present a novel, experimental design (namely, sequential multiple assignment randomized trials, or SMARTs) intended specifically for the purpose of developing and optimizing adaptive treatment strategies. The workshop will include an introduction to ATSs and the SMART design, followed by a series of presentations and in-depth discussion by four expert substance use and mental health scientists regarding their experience in planning and implementing SMART trials and developing adaptive treatment strategies. In order to ensure participant involvement in discussions and to further aid with understanding the material, participants will have the opportunity to both verbally pose questions as well as to anonymously submit questions, concerns, or points of confusion. For questions not addressed during the workshop, Drs. Almirall and Murphy will follow-up with participants over email.

Target Audience: The target audience includes clinical scientists from all substantive areas who are interested in developing, optimizing, and evaluating new or existing individualized sequential interventions.

Participant Learning Objectives:
- Learn how adaptive treatment strategies (ATSs) operationalize the tactics and strategies of individualizing treatment for mental health disorders. What are ATSs? Why do we need them?
- Learn about sequential multiple assignment randomized trials (or SMARTs) that can be used to inform the development of individually tailored clinical decision rules in mental health research. Learn about SMART study design principles.
- Learn from expert mental health and substance use investigators about their rationale for wanting to carry out a SMART experiment, and learn about their experiences in designing and executing the SMART.

[ITINERARY AND SPEAKER DETAILS ON NEXT PAGE]
<table>
<thead>
<tr>
<th>TIME SLOT</th>
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| 2:45-3:10pm (25 minutes) | Developing Dynamic, Sequential Treatments that Optimize Mental Health Outcomes: Introduction to Adaptive Interventions and SMART Study Design Principles  
by  
Susan A. Murphy  
Department of Statistics & Institute for Social Research, University of Michigan  
samurphy@umich.edu, Professor, (734) 647-3684  
and  
Daniel Almirall  
Institute for Social Research, University of Michigan  
dalmiral@umich.edu, Faculty Research Fellow, (734) 936-3077 |
| 3:10-3:15pm (5 minutes) | Short Discussion/Q&A                                                                          |
| 3:15-3:45pm (25 minutes) | SMART Studies for Alcohol and Cocaine Dependence  
by  
James McKay  
Department of Psychiatry, University of Pennsylvania Medicine  
mckay_j@mail.trc.upenn.edu, Professor, 215-746-7704 |
| 3:40-3:45pm (5 minutes) | Short Discussion/Q&A                                                                          |
| 3:45-4:10pm (25 minutes) | Adaptive Treatments for Children with ADHD  
by  
William E. Pelham  
Departments of Pediatrics and Psychiatry, University of Buffalo  
wpelham@fiu.edu, Professor, 305 348 0477 |
| 4:10-4:15pm (5 minutes) | Short Discussion/Q&A                                                                          |
| 4:15-4:30pm (15 minutes) | Break for water, coffee, washroom                                                              |
| 4:30-4:55pm (25 minutes) | Testing Variants of Treatments for Substance Use Disorders During Pregnancy  
by  
Hendree Jones  
Substance Abuse Treatment Evaluations and Interventions Program, RTI International  
hjones@rti.org, Research Psychologist, 919-485-2664 |
| 4:55-5:00pm (5 minutes) | Short Discussion/Q&A                                                                          |
| 5:00-5:25pm (25 minutes) | Innovative Communication Intervention for Older Nonverbal Children with Autism  
by  
Connie Kasari  
Education Department, University of California, Los Angeles  
kasari@gseis.ucla.edu, Professor, 310-825-8342 |
| 5:25-5:45pm (20 minutes) | Long Discussion/Q&A                                                                          |