SBM 2019 Course and Seminar Descriptions

Course 1: Incorporating Economic Analyses into Behavioral Medicine Research (2:30 p.m. - 5:00 p.m.)

This seminar will provide behavioral medicine investigators with the basic knowledge and skills needed to incorporate economic analyses into their interventional research in collaboration with experts in health economics. We will discuss the rationale for integrating economic analyses into behavioral medicine research, an overview of the most widely used methods of economic evaluation, and a consideration of the importance of perspective in economic analyses. We will then review economic analysis methodology applicable to interventional studies in behavioral medicine. Case examples of behavioral medicine research relevant primarily to cancer prevention and control that have incorporated economic analyses will be featured. A discussion session will allow attendees to receive guidance about economic analyses specific to their research interests.

Course 2: Trauma Informed Care as a Universal Precaution: Practical Applications for Behavioral Medicine Practitioners and Researchers (8:30 a.m. - 11:00 a.m.)

Patients may not always disclose past trauma to care providers, but it is imperative for healthcare providers to understand implications of trauma for patient outcomes. This workshop will review the diverse ways a trauma impacts health and lifestyle in the population, and discuss specific strategies healthcare providers, researchers, and organizations can implement to use trauma-informed care (TIC) as a universal precaution. We will explore policies and practices on an organizational level that promote a culture of TIC. Finally, we will discuss the implications of trauma on behavioral health research and provide specific measures and research design strategies to help researchers control for effects of trauma, and measure trauma-related outcomes.

Course 3: Practical Leadership Strategies for Early Career Professionals Working Within Interprofessional Healthcare Settings (11:45 a.m. - 2:15 p.m.)

The workshop will begin with an overview of practical leadership strategies in healthcare settings. Then, a panel of healthcare professionals will discuss their experiences and challenges as academics, researchers, clinical supervisors, and managers with a focus on practical strategies used to develop and implement interprofessional leadership skills across multiple settings and leadership roles. Participants will apply knowledge gained through an activity to develop a plan to address identified leadership challenges they face in their workplace.

Course 4: Use of Nationally Representative, Population-Based Datasets for Health-Related Research (8:30 a.m. – 11:00 a.m.)

This pre-conference workshop will provide an overview of several publicly available datasets that can be used by behavioral researchers to obtain population-level estimates of important health-related outcomes or to test hypotheses. Topics to cover include how to access the data, an assessment of their strengths and limitations, ethical considerations, methodological considerations including complex sampling and weighted statistical analyses and merging and linking data, and interpretation of results. This workshop will provide an overview of several datasets, and provide applied examples from two datasets – the National Health Information Trends Survey and the National Health and Nutrition Examination Survey.

SBM 2019 Course and Seminar Descriptions

Course 5: Innovative Approaches to Physical Activity Promotion and Sedentary Behavior Reduction Interventions (11:45 a.m. – 2:15 p.m.)

> This session will include 5 brief presentations on real-world examples followed by a discussion of funding opportunities and strategies for success for research in these areas. Emphasis will be placed on practical strategies and lessons learned in the areas of targeting behavior change. Presenters will touch on topics including interventions for the 24 hour day, activity pattern interventions, wearable devices, designing and implementing smartphone applications, integrating wearables into the electronic health record, and innovative research methodologies including ecological momentary interventions and the multiphase optimization strategy. Participants are encouraged to bring real-world challenges to the session to gain feedback from presenters and attendees.

Course 6: Practical Steps for Increasing Openness and Reproducibility in Behavioral Medicine Research (2:30 p.m. - 5:00 p.m.)

> This workshop introduces issues related to transparent and reproducible research while presenting concrete and proactive steps researchers can take to address those issues in their own research. Participants will gain hands-on experience incorporating reproducible, transparent practices into their current workflows by creating a reproducible project from start to finish. Topics include project documentation, version control, Pre-Analysis plans, and open source tools like the Center for Open Science's OSF to easily implement these concepts in a scientific workflow. The workshop will be hands-on and is aimed at graduate students, postdocs, and faculty across disciplines. No knowledge of programming or other specialized tools is required. Attendees will need to bring their own laptop in order to fully participate.

Course 7: Learning How to Effectively Communicate Your Science (2:30 p.m. - 5:00 p.m.)

> The workshop will start with an overview of 1) visual displays, 2) social media, and 3) traditional media. Presenters include: Mr. Matt Brems, a statistician who has taught workshops on how to approach effective visual displays of complex statistical data or findings; Dr. John Torous, an academic psychiatrist who is influential on Twitter will provide the basics on how to utilize and approach communicating about science via social media; and Dr. Jamie Bodenlos will review ways to prepare a researcher to talk to the media via traditional media outlets by formulating press releases and prepping for interviews. The session will end with participant work groups with consultants, where they can practice skills described on their current data.

Course 8: Using the Insight Platform to Rapidly Create Innovative Smartphone Based Assessments and Just-in-Time Adaptive Interventions (2:30 p.m. – 5:00 p.m.)

> This seminar will showcase the versatile Insight mHealth Platform, which enables researchers to rapidly create mobile applications that can utilize ecological momentary assessments (EMAs), and sensor data to identify environmental, cognitive, affective, physiological, and behavioral antecedents of health risk behaviors and deliver context-specific just-in-time adaptive interventions (JITAI). Three presentations will showcase Insight capabilities. Attendees will then choose one of three breakout sessions wherein they will work with the workshop presenters to follow the step-by-step Insight Platform procedures to create an app. At the conclusion of this seminar, attendees will have a clear understanding of what is involved in the creation of smartphone based health behavior change applications.

SBM 2019 Course and Seminar Descriptions

Course 9: Creating and Delivering a Powerful Pitch: Expanding your Arsenal of Presentation Skills (8:30 a.m. - 2:15 p.m.)

> In this half-day pre-conference workshop, attendees will learn about what a pitch is, how to craft one, and will be given the opportunity to develop and deliver a pitch. We will start with a brief introduction to pitches, view relevant pitch examples, and discuss when a pitch might be used to disseminate information and advance behavioral science. The next section of the workshop will go into detail about strategies for crafting and delivering an effective and engaging pitch. For the second half of the workshop, attendees will be given the opportunity to develop, deliver, and receive feedback on a pitch of their own while working with an external consultant familiar with pitch coaching.

Course 10: DHC Presents: Playing in the Co-Designer's Toy Box - Learning, Applying, and Taking Home the Techniques (11:45 a.m. – 2:15 p.m., lunch included)

> The purpose of this seminar is to provide an opportunity to experience co-design in real life, and to equip the audience will practical techniques and tangible tools to plan, execute, and evaluate the use of co-design to improve their own projects. Presentations will demonstrate the application of concepts into a real-world scenario by providing an overview of the context and processes for co-designing the translation of several behavior change programs into a mobile-based application called Odyssey. The audience will be provided with a collection of use cases, lessons learned, and prompting questions. The audience will then be immersed in a replication of the co-design process that took place to develop Odyssey, as well the technology-enabled service that wraps around it. Attendees will work with health coaches, game designers, public health practitioners, programmers, and funders.

Course 11: Health Habit Change Workshop: Using Motivational Interviewing and the Science of Behavior Change for Health Behavior Change (8:30 a.m. - 5:00 p.m.)

> We will present an overview of MI theory and skills accompanied by intentional practice and feedback to provide participants with an opportunity to enhance ability to effectively utilize MI in helping ambivalent patients make and sustain health-related behavior changes. We will also discuss MI in the context of the broader science of behavior change as a practical foundation for having productive conversations with patients in support of achieving their health behavior change goals. The course is best suited for those with beginner/intermediate experience with MI who work in any helping profession that involves assisting patients in making health related behavior changes. Health behavior researchers may find this workshop useful to inform the design of treatment protocols for studies which incorporate MI as an intervention technology.

Course 12: Introduction to MOST for Building More Effective, Efficient, Economical, and Scalable Behavioral Interventions (8:30 a.m. - 5:00 p.m.)

> This seminar will introduce an innovative methodological framework for optimizing behavioral interventions, the multiphase optimization strategy (MOST). MOST is based on ideas inspired by engineering methods, which stress careful management of research resources and ongoing improvement of products. MOST is a comprehensive strategy that includes three phases: preparation, optimization, and evaluation. MOST can be used to build a new intervention or to improve an existing intervention. Using MOST it is possible to engineer an intervention targeting a particular effect size, level of cost-effectiveness, or any other criterion. During the seminar we will teach the development of conceptual models, experimental design, and decision making, and discuss how the concepts presented can be applied in the research of seminar attendees.

SBM 2019 Course and Seminar Descriptions

Seminar 1: Going Global: What You Always Wanted to Know About Developing a Career in Global Behavioral Medicine but Were Afraid to Ask? (2:30 p.m. - 5:00 p.m.)

As the field of behavioral medicine makes an increasing contribution to solutions for many of the world's major health challenges, opportunities arise for young researchers to participate in research and training with a global focus. However, pathways for building a global health-focused research career are often unclear. This seminar will present case studies by public health and behavioral medicine researchers who have been successful at globalizing their programs, which will illustrate importance of mentoring, funding, networking, working in cross-disciplinary teams and serendipity in developing their own careers. Participants will use material presented to identify steps to enable them to build a career in global behavioral medicine.

Seminar 2: Using Project Management Skills in Behavioral Research (11:45 a.m.-2:15p.m.)

Project management skills are crucial in ensuring all phases, tasks, and logistics of a research project are organized and completed within deadline and scope. The goal of this seminar is to provide a guide for managing a research project using a project management approach: understanding the scope, setting goals, considering the costs, implementation (i.e., intervention/data collection), and close-out. A hypothetical project will be used to present each point. Team organization, communication, important considerations, timelines, charts, and reports will be reviewed to aid in organization, and project management software ideas will be provided along with a tutorial of the Basecamp software. This seminar is geared toward new faculty, managers, coordinators, postdoctoral fellows and graduate students.

Seminar 3: Designing and Evaluating Multilevel Interventions in Behavioral Medicine: Innovations in Theory, Designs and Methods (8:30 a.m. - 11:00 a.m.)

This seminar will present results of an NIH/NCI-supported effort to develop a comprehensive list of multilevel intervention core competencies, an associated curriculum outline, and to compile and augment available curriculum content. Individual presentations in the seminar will feature key experts describing (1) the background and motivation for innovations in multilevel intervention design and research, (2) guidance in selecting and combining multiple theories, and creating a theory-based causal model to guide intervention design and evaluation, (3) appropriate study designs and methods and their strengths and weaknesses, (4) guidance in data sources, measures and measurement; and (5) examples of how these approaches have been used in previous studies of multilevel interventions.

Seminar 4: What You Need to Know about Writing Grants: Tips and Techniques from Experts (8:30 a.m. - 11:00 a.m.)

This session focuses on how to integrate successful grantsmanship strategies into your career. A panel of experts in cancer and ethnic minority & multicultural health research will address tips for developing successful grant proposals with specific attention to the NIH R series and similar grant mechanisms. Then, we will demonstrate a study section review for previously-selected proposals. Finally, we will host roundtables on 1) crafting specific aims pages, 2) grant critiques: to resubmit or start fresh/package resubmissions, and 3) proposing a grant idea/decide which program announcement is most appropriate. Attendees will discuss questions with veteran SBM researchers; observe the study section process; gain insight into research career considerations; and have the opportunity to gain feedback on their specific grant ideas.

SBM 2019 Course and Seminar Descriptions

Seminar 5: Evidence-Based Behavioral Treatment of Headache Disorders (2:30 p.m. - 5:00 p.m.)

The purpose of this seminar will be to educate behavioral medicine professionals interested in headache interventions about the application of relaxation, biofeedback and CBT techniques to headache disorders. The seminar will cover: 1) Types of Headache Disorders; 2) Evidence Base for Behavioral Treatments; 3) Assessment of Headache Disorder Patients; 4) Biofeedback and Relaxation Techniques; 5) Thermal, EMG, and BVP biofeedback modalities; 6) Deep breathing, progressive muscle relaxation and muscle scanning, visualization and autogenic training; 7) CBT: Description of maladaptive automatic cognitive and behavioral responses in people with headache disorders and rationale for modification of these responses to improve headache symptoms, functional outcomes and quality of life; and 8) Application of cognitive behavioral therapy techniques.

Seminar 6: N-of-1 Design as a Tool for Precision Behavior Change Medicine (2:30 p.m. - 5:00 p.m.)

Knowledge of how to employ N-of-1 methods enables researchers to capitalize on the recent technology developments to design behavioral studies and interventions which are tailored to each individual. Using unobtrusive data capture such as wearables and smartphone sensors, combined with self-report Ecological Momentary Assessment data, allows us to develop truly personalized treatments. We are therefore at an opportune time to expand our use of within-person designs to better understand health behavior and to deliver precision behavior change interventions. The objectives of this seminar are: 1) to introduce how N-of-1 methods can be applied to identify predictors of behavioral outcomes; 2) to provide examples of practical personalized behavior change interventions; and 3) to prioritize types of behavioral issues most amenable to N-of-1 approaches.

Seminar 7: How Do We Motivate Adults to Meet Recommended Physical Activity Guidelines? Hint: It's Not with Traditional Exercise! (2:30 p.m. - 5:00 p.m.)

This hands on seminar will provide evidence-based best practices and skills to participants along with creative and innovative intervention strategies to improve PA levels among adults. Methods will include learning and sharing discussions, break-out groups, clear directives for each activity, lifestyle PA within the actual seminar (such as walking meetings and stand, stretch and strengthen activities) and informal presentations. A strategy to market, motivate and educate all Americans and Canadians to improve their PA level will be addressed. Partakers will also learn how to apply intervention strategies geared towards the home and work site to reflect various options for obtaining the recommended PA guidelines through one's daily routines, tasks and responsibilities.

Seminar 8: How Rhode Island is Advancing Care Transformation: Evaluation of a Statewide Integrated Behavioral Health (IBH) Pilot Program (11:45 a.m. - 2:15 p.m.)

This seminar will provide attendees with an introduction to the IBH model, an in-depth discussion of the analyzed qualitative and APCD data findings, and lessons learned/recommendations for IBH program development and expansion. Attendees will have the opportunity to consider application of these recommendations to their own settings for establishment or improvement of IBH programs.

SBM 2019 Course and Seminar Descriptions

Seminar 10: Meta-Analysis and Assessing Publication Bias Using R and Jamovi (2:30 p.m. - 5:00 p.m.)

Meta-analysis is a statistical technique for combining effect sizes from multiple studies and is often used to assess interventions or to evaluate the association between two psychological constructs. This seminar will cover how to select and code studies for use in a meta-analysis, running a meta-analysis using free and open source software, addressing important issues in meta-analysis including heterogeneity and assessing publication bias, and how to create graphs and report your results. After completing this seminar participants will be able to design, analyze and report their results of a meta-analysis.

Seminar 11: The 'Nuts and Bolts' of Behavioral Intervention Development: Study Designs, Methods and Funding Opportunities (8:30 a.m. - 2:15 p.m.)

This seminar will provide investigators who are interested in the design and preliminary testing of health-related behavioral interventions an opportunity to learn (1) a new framework for behavioral treatment development -- the ORBIT model; (2) appropriate study designs and methods for early-phase behavioral intervention research; (3) apply the ORBIT model and knowledge about relevant methodologies to their own projects; and (4) identify early-phase translational research funding opportunities and develop grant applications to support intervention development research. The format will include didactic presentations and small group discussion in which participants will be provided with advice to help them design their own behavioral intervention development project.

Seminar 12: Using Responsive and Adaptive Survey Design to Improve Data Collection Efficiency (8:30 a.m. - 2:15 p.m.)

This seminar will introduce SBM attendees to the concepts of responsive and adaptive survey design (R/ASD), which are techniques for increasing the efficiency and representativeness of data collections. The seminar will describe tools for implementing these techniques in practice, including indicators of cost and data quality, dashboards that can be used to monitor trends in the indicators as a data collection proceeds, and real-time interventions/protocol changes based on decision rules informed by monitoring of the indicators. The seminar will then continue with the presentation of several case studies, both large and small, illustrating how the use of these designs has increased the efficiency and representativeness of studies employing a variety of data collection modes. The concepts that will be introduced in this seminar can be applied at any scale, including graduate students planning data collection(s) for their dissertations.

Seminar 13: A Practical Guide to Creating Effective Digital Health Programs with Behavioral Science (8:30 a.m. - 2:15 p.m.)

In this hands-on seminar, tools and strategies to create effective digital health programs will be presented. Participants should come prepared to apply their learnings to their work as they:
1) Expand their toolkit of strategies for efficiently building and evaluating effective patient care programs and assessments;
2) Complete a behavior-mapping exercise with their own use cases;
3) Learn which behavioral tools support their desired behaviors; and
4) Build a "pattern" based on the behavior map and tools using the Pattern Health Platform Participants should bring their expertise, ideas and challenges, and will create solutions they can implement in their practice.