

## **2017 INGRoup Pre-Conference Workshops**

9am to 4pm, Thursday July 20, 2017

To be held at the WASHINGTON UNIVERSITY IN ST. LOUIS

Snow Way, 1 Brookings Drive, St Louis, MO 63130

*\*will NOT be held at the main conference hotel\**

Single Workshop Cost: \$45 (members), \$100 (non-members)

Full-Day (Morning + Afternoon Workshop) Cost: \$75 (members), \$200 (non-members)

Pre-conference workshop registration deadline is June 30

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*\*Note regarding the Chase Park Plaza hotel: we have heard that the hotel may be sold out the night of Wednesday, July 19. For those that need a hotel room Wednesday evening (e.g., planning to attend pre-conference activities), we strongly encourage you to ask the Chase Park Plaza about Wednesday evening and have them place you on our waiting list. If any rooms open up, these will be made available to those on the waiting list on a first-come, first-serve basis. In the event that rooms do not become available, one nearby alternative hotel option we suggest is the [Moonrise Hotel](#) (2.5 miles from the Chase and 1.2 miles from university campus).*

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### **Funding Your Science:**

#### **Understanding the National Institutes of Health (NIH) Grant Funding Process**

**9:00am-12:00pm**, Lead Facilitator: Veronica Chollette, RN, MS, National Cancer Institute  
(Seats limited to 30)

The Healthcare Delivery Research Program (HDRP) of the National Cancer Institute (NCI) is interested in developing a cadre of scientists interested in applying for grant funding to examine how the science of team-based healthcare delivery and teamwork processes can improve the quality and coordination of care for people with cancer, improve patient outcomes, and potentially reduce disparities. Despite calls to improve care coordination, the scientific study of teaming and coordination processes in cancer care delivery remains relatively sparse (Gagliardi, Dobrow, & Wright, 2011; Taplin et al., 2015; Taplin, Clauser, Rodgers, Breslau, & Rayson, 2010) and opportunities to translate the wealth of existing team science into practice remain. Research developing new methodologies and metrics, multi-level intervention strategies, and other type of innovative studies are necessary to improve our understanding of how team-based care delivery structures, teamwork processes, and related interventions influence patient, clinical and organizational outcomes in a variety of care settings are needed.

This interactive workshop is designed to provide attendees, particularly junior and mid-level participants who may be new to NIH funding mechanisms, with a toolkit of resources designed to help them build competitive R-level funding applications to support their research. We will discuss HDRP's funding priorities. Topics will also include special considerations for new investigators, the process of application submission through award; advice and tips regarding what to consider in grant application; and the anatomy of a successful grant. Participants will have an opportunity to critique example aims statements and engage in interactive discussion with successful HHS sponsored investigators, Dr. Milisa Manojlovich (University of Michigan) and Dr. Lee Ellington (University of Utah). Participants will complete the workshop feeling more prepared to submit an R-level application and will have a toolkit of resources available to field future questions.

Topics will include:

- Cancer Care Delivery Research Program Funding Priorities: Implications for Team Science
- The Grant Writing Process
- The NIH Peer Review Process
- Preparing and Submitting Your Application: The anatomy of a successful R01 grant
- Revising and Resubmitting Your Application
- Feedback on 1-page Specific Aims: Bring your own or consider an example

Requirements:

- No previous grant writing experience is required
- Recommended pre-reading, especially if new to NIH or grant writing:
  - NCI's grant process guide: "The Grants Process: The Life Cycle of a Grant"
  - [www.cancer.gov/grants-training/grants-process/grants-process.pdf](http://www.cancer.gov/grants-training/grants-process/grants-process.pdf)
- If desired, participants may draft a 1-page specific aims page to bring to the workshop to discuss and receive peer feedback

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**Creating Efficient Designs with Bayesian Sequential Testing: An R Tutorial**  
**1:00pm-4:00pm**, Facilitator: Thomas Schultze, University of Goettingen, Germany  
 (Seats limited to 30)

Current debates on the reproducibility of scientific findings have identified underpowered studies as a core problem, resulting in the demand for larger sample sizes. This can pose a major challenge for resource-intensive fields such as group research because extreme sample sizes are often not an option. One solution to this problem is Bayesian Sequential Testing (BST). Compared to regular null hypothesis significance testing (NSHT), BST requires, amongst other advantages, smaller sample sizes without sacrificing information.

In this course, I will introduce the logic of Bayesian hypothesis testing and BST by taking the example of the independent samples  $t$ -test. Using this example, I will compare BST to NSHT in terms of required sample size as well as type I and II errors. I will further demonstrate how the specification of the Bayesian  $t$ -test influences both required sample size and error rates. Finally, I will outline the potential for and benefits of cumulative science that emerge when combining BST with open science (particularly open materials and data).

This is an example-based hands-on workshop that benefits from (but does not necessarily require) basic knowledge of R. In this course, participants will learn to design a study plan and data collection rule using BST as well as analyzing data with Bayesian hypothesis test (again, we will use the independent samples  $t$ -test as an example). The course will also cover some hands-on tips how to deal with real-life obstacles such as resource limitations and inconclusive results.

Topics of the workshop include:

- The conceptual underpinnings of Bayesian Statistics and sequential testing
- Specification of a Bayesian  $t$ -test and selection of the appropriate prior probability
- Interpreting the output of the Bayesian  $t$ -test

Requirements:

- Prior experience with R is helpful but not required
- Basic understanding of elementary statistics (especially the independent samples *t*-test)
- Please ensure that you have a recent version of R installed on your computer (<https://cran.r-project.org/>) and, optionally, RStudio (<https://www.rstudio.com/>) for a nicer user interface
- The course will require the R package “BayesFactor”, so you should either install it beforehand or make sure, you can download and install it during the workshop

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### **Coding Face-to-Face Group Interaction Studies for Status Processes**

**1:00pm-4:00pm**, Facilitator: Jennifer McLeer, The George Washington University  
(No limitation on seats available)

Researchers use face-to-face group interaction studies to examine many important situations—from how groups elect leaders and make decisions to how group members become committed to their group. Examining *precisely* how these dynamics unfold is paramount to answering such questions. However, when coding face-to-face group interaction studies, many issues arise. How do you know when a particular action is an instance of something that you intend on measuring? How should you structure your coding scheme—as counts? Sequences? At what point in the analysis do you make decisions about coding definitions? What constitutes agreement amongst coders and how do you calculate this? Essentially, in one form or another, these questions center on the central problem that this workshop will address: when analyzing face-to-face group interaction data, how do you reliably and validly separate signal from noise?

In this workshop, we will focus on: (i) the logic by which operational coding definitions emerge from theoretical constructs; and (ii) how to apply those definitions when coding data. The course will largely be a hands-on experience where participants incrementally apply what they learn to their coding of footage of real experimental data. In particular, we will focus on the definitional criteria for instances of status processes that have emerged from the expectation states research program (performance opportunities, action opportunities, positive feedback, negative feedback, and influence). We will also address issues related to inter-rater reliability and its calculation in the context of such coding schemes.

The topics of this workshop include:

- Operationalizing theoretical definitions into observable codes
- Actively coding footage of group interaction data
- Calculating inter-rater reliability

#### ***Recommended Reading***

- McLeer, Jennifer, Jake Frederick, Barry Markovsky, and Christopher Barnum. 2011. “Standardizing Open Interaction Coding for Status Processes.” *Advances in Group Processes*. 28:33-58.

Requirements:

- Participants should bring their laptops with Excel installed and headphones.