# Maryland
# Neuroimaging Retreat

## *Pain Neuroimaging - Advances & Controversies*

April 14, 2017

8:30 AM—5:00 PM

University of Maryland, Baltimore
School of Nursing
Room 140

## Speakers

**Lauren Atlas, Ph.D.**
Chief, Section on Affective Neuroscience and Pain
NIH/NCCIH
Bethesda, MD

**M. Catherine Bushnell, Ph.D.**
Senior Investigator, Pain and Integrative Neuroscience Branch
NIH/NCCIH
Bethesda, MD

**Luana Colloca, M.D., Ph.D.**
Associate Professor, Pain and Translation Symptom Science
University of Maryland, Baltimore
Baltimore, MD

**Cameron Craddock, Ph.D.**
Director of Imaging
Child Mind Institute
New York, NY

**Patrick Finan, Ph.D.**
Assistant Professor, Psychiatry and Behavioral Sciences
Johns Hopkins University
Baltimore, MD

**Martin Lindquist, Ph.D.**
Professor, Department of Biostatistics
Johns Hopkins University
Baltimore, MD

**Raimi Quiton, Ph.D.**
Assistant Professor, Department of Psychology
University of Maryland, Baltimore County
Baltimore, MD

**Ben Seymour, Ph.D.**
Clinical Research Associate, Behavioural and Clinical Neuroscience Institute
University of Cambridge
Cambridge, UK

**Alex Shackman, Ph.D.**
Assistant Professor, Department of Psychology
University of Maryland, College Park
College Park, MD

**Ragini Verma, Ph.D.**
Associate Professor, Center for Biomedical Image Computing and Analytics
University of Pennsylvania
Philadelphia, PA

**Tor Wager, Ph.D.**
Director, Cognitive and Affective Control Laboratory
University of Colorado, Boulder
Boulder, CO

## General Information

**Registration**
Please arrive before 9:00 AM to pick up your folder at the registration desk outside Room 140, School of Nursing.
Complimentary lunch is provided with registration.

**Organizing Committee**
David Seminowicz, Ph.D., Joel Greenspan, Ph.D., Rao Gullapalli, Ph.D., Chandler Sours, Ph.D., Brigitte Pocta, M.L.A., Shiyu Tang, B.S.

## Agenda

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| **8:30-9:00** | **Registration and Breakfast** |
| **9:00-9:05** | **Opening Remarks** |

### Panel 1: Neuroimaging Advances in Pain and Beyond

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| **9:05-9:20** | **Lauren Atlas, Ph.D., NIH/NCCIH** <br> *How Instructions and Expectations Shape Pain and Aversive Learning* |
| **9:25-9:40** | **Cameron Craddock, Ph.D., Child Mind Institute** <br> *Tracking Dynamic Networks in Real Time* |
| **9:45-10:00** | **Martin Lindquist, Ph.D., JHU** <br> *High-dimensional Multivariate Mediation with Application to Pain* |
| **10:05-10:35** | **Panel 1 Discussion** |
| **10:40-11:00** | **Coffee Break** |

### Panel 2: Clinical Decision Making through Neuroimaging

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| **11:05-11:20** | **Ragini Verma, Ph.D., UPenn** <br> *On Connectomes of Sex, Development and Pathology* |
| **11:25-11:40** | **Alex Shackman, Ph.D., UMD** <br> *The Integration of Emotion, Pain, and Cognition in the Brain* |
| **11:45-12:00** | **Patrick Finan, Ph.D., JHU** <br> *fMRI as a Tool to Understand Interactions between Sleep, Emotions, and Pain* |
| **12:00-12:15** | **M. Catherine Bushnell, Ph.D., NIH/NCCIH** <br> *Rodent PET to Examine the Effect of Chronic Pain on the Brain Opioid System* |
| **12:15-12:45** | **Panel 2 Discussion** |
| **12:45-2:00** | **Lunch** |

## Agenda (continued)

### Panel 3: The "Pain Matrix"

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| **2:00-2:15** | **Ben Seymour, Ph.D., UC** <br> *The Computational Pain Matrix* |
| **2:20-2:35** | **Raimi Quiton, Ph.D., UMBC** <br> *Individual Differences in Brain Responses to Pain: Contribution of Sociocultural Factors* |
| **2:40-3:05** | **Luana Colloca, M.D., Ph.D., UMB** <br> *Pain and Placebo* |
| **3:10-3:30** | **Coffee Break** |
| **3:35-3:55** | **Tor Wager, Ph.D., CU** <br> *Pain Generation: Neuroimaging Models and Open Challenges* |
| **4:00-4:45** | **Panel 3 Discussion** |
| **4:50-4:55** | **Closing Remarks** |
| **5:00-6:00** | **Networking Reception (Frank & Nic's West End Grille)** |

*Thank you to our sponsors for their generous support*