



59TH SPR ANNUAL MEETING  
*Washington, DC*  
Hyatt Regency Washington on Capitol Hill  
September 25 to September 29, 2019  
[www.sprweb.org](http://www.sprweb.org)



## PRELIMINARY PROGRAM

(subject to change)

### Wednesday, September 25, 2019

9:00 a.m.–4:30 p.m.

#### **Pre-Conference Workshop 1 Ambulatory Psychophysiology**

(available at an additional fee)

Organizer: Greg Siegle, University of Pittsburgh

The goal of this pre-conference workshop is to give attendees a soup-to-nuts feeling for what it means to get into ambulatory psychophysiology. We will cover an introduction to what technologies for ambulatory assessment exist, their strengths and limitations, and how to use them. Attendees will have a chance to play with a few technologies live with online data analysis. We will consider both research-grade and consumer-grade technologies. Finally, we will consider, as a group, standards to which it is useful to hold ambulatory technologies to for psychophysiology research.

9:00 a.m.–4:30 p.m.

#### **Pre-Conference Workshop 2 Open Science in Psychophysiology**

(available at an additional fee)

Organizers: Eric Vanman, University of Queensland; Jenny Gutsell, Brandeis University; Andreas Keil, University of Florida; Peter Clayton, University of California, Los Angeles

This workshop/unconference/hackathon will allow participants to learn about and develop scientific practices that promote openness, integrity, and reproducibility of psychophysiological research. We welcome everyone to join us for a full day of workshops, hackathons, and presentations about open science methods and developments in psychophysiology, such as pre-registration, using R for analysis, open source experimental programming, sharing open science software tools, forming large-scale, reproducibility projects, etc. Much of our meeting time will consist of unstructured conversations and workgroups to develop and promote open science practices. Thus, this is a different type of pre-conference workshop, in that we hope to use our time together to start (and learn about ongoing) initiatives. If you would like to attend this workshop, we highly recommend that you contact Eric Vanman, [e.vanman@uq.edu.au](mailto:e.vanman@uq.edu.au), so that you can be added to a group in which we will develop a working agenda in the months preceding the SPR meeting. We will share this agenda on a public site and then use it during the workshop in September. It is also recommended that you bring a laptop to the workshop so that you can access the OSF and Google pages that we will be using during the day.

Sample Agenda Items (to be finalized before the meeting):

- MultiLab Projects on EMG, Impedance Cardiography, Startle Eyeblink, etc.
- Open Workflow Designs: From Data Collection to Analysis to Public Sharing
- Open Software Tools for Data Acquisition and Analysis
- Best Practices for Reporting Psychophysiological Research
- Using R and Related Tools for Statistical Analysis of Psychophysiological Data
- Power Analysis for Within-Subject Analyses
- Pre-registering Your Psychophysiology Study

9:00 a.m.–4:30 p.m.

#### **Pre-Conference Workshop 3 Time-Frequency Principal Components Analysis: A Practical Introduction to Applications with Event-Related Potential Data**

(available at an additional fee)

Organizer: Ed Bernat, University of Maryland, College Park

This workshop will provide a conceptual and practical introduction to the application of principal components analysis (PCA) to time-frequency transforms (TFTs) of event-related potential (ERP) data. This approach has been useful for separating overlapping activity in ERPs (e.g., providing more specific measures of underlying processes).

A primary focus will be on amplitude measures, with extensions provided to time-frequency phase-synchrony measures (intertrial and interchannel), in the same framework. Amplitude reflects regional activity, while interchannel phase synchrony can index functional connectivity between regions during processing (e.g. medial-lateral functional connectivity). Approaches for indexing specific time-frequency activity will be covered (e.g. overlapping theta and delta activity during the N2, ERN, FN, etc.), from several tasks (e.g., gambling feedback, go/no-go, oddball, flanker).

Provided examples and hands-on practice will center on an open-source matlab toolbox developed for this analytic framework. All analytic approaches can be implemented using the same process in the toolbox, which will be detailed in the workshop. The workshop will focus on the reduced interference distribution (RID), from Cohen's class of TFTs, but the concepts and methods introduced are applicable to different TFT approaches (e.g., wavelets).

12:00 noon–5:00 p.m.

#### **Board of Directors Meeting**

2:30 p.m.–7:30 p.m.

**Registration Open**

5:30 p.m.–7:00 p.m.

**Special Symposium**

SPR REPLICATION INITIATIVE: METHODOLOGICAL RIGOR AND MULTI-SITE REPLICATIONS IN PSYCHOPHYSIOLOGY: CHALLENGES AND RECOMMENDATIONS

Session Chairs: Peter Clayson, Veterans Affairs Greater Los Angeles Healthcare System; Michael Larson, Brigham Young University

Discussant: Andreas Keil, University of Florida

5:00 p.m.–8:00 p.m.

**Speaker Ready Room**

(Speakers: check in at the speaker ready room prior to your presentation to download your slides.)

7:00 p.m.–9:00 p.m.

**Opening Reception and Poster Session I**

(Authors present for discussion and questions.)

**Poster Session Schedule**

6:00 p.m.–7:00 p.m.

Posters Assembled

7:00 p.m.–9:00 p.m.

Authors Present for Discussion and Questions

9:00 p.m.–9:30 p.m.

Dismantle Posters

**Thursday, September 26, 2019**

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7:00 a.m.–6:00 p.m.

**Speaker Ready Room**

7:30 a.m.–6:30 p.m.

**Registration Open**

8:00 a.m.–9:15 a.m.

**Chairs of Membership Enhancement Committees**

8:30 a.m.–10:00 a.m.

**Symposium 1.1**

BRAIN AND BODY IN DANGER: CENTRAL AND PERIPHERAL ELECTROPHYSIOLOGY OF STIMULUS PROCESSING UNDER THREAT

Session Chairs: Yuri Pavlov, Ural Federal University; Christian Panitz, University of Marburg

8:30 a.m.–10:00 a.m.

**Symposium 1.2**

NOW YOU SEE IT, NOW YOU DON'T: DELINEATING THE CAUSAL ROLE OF THE AMYGDALAE IN AFFECTIVE PROCESSING

Session Chair: Johanna Kissler, Bielefeld University

8:30 a.m.–10:00 a.m.

**Structured Panel Presentation 1.3:**

ASK ME ANYTHING: RESEARCH DOMAIN CRITERIA (RDOC)

Session Chair: Sarah Morris, National Institute of Mental Health

8:30 a.m.–10:00 a.m.

**Symposium 1.4**

INNOVATIONS IN DYNAMIC PHYSIOLOGICAL MEASUREMENT APPROACHES ACROSS THE LIFESPAN: IMPLICATIONS FOR RISK AND RESILIENCE

Session Chairs: Tracy Dennis-Tiwary, Hunter College, The City University of New York; Sarah Myruski, Hunter College, The City University of New York

Discussant: Tracy Dennis-Tiwary, Hunter College, The City University of New York

10:00 a.m.–8:10 p.m.

**Exhibits Open**

10:00 a.m.–10:30 a.m.

**Refreshment Break**

10:30 a.m.–12:00 noon

**Big Question Session 2.1**

GIVEN THAT AN UNDERLYING THEME FOR THIS YEAR'S CONFERENCE IS MULTI-METHOD INTEGRATION, HOW CAN WE BEST INTEGRATE DATA FROM MULTIPLE PHYSIOLOGICAL MEASURES (BROADLY CONSTRUED) TO ANSWER PSYCHOLOGICAL QUESTIONS OF INTEREST?

Session Chair: James Cavanagh, University of New Mexico

Discussant: Greg Siegle, University of Pittsburgh

10:30 a.m.–12:00 noon

**Symposium 2.2**

PERCEIVING OTHERS AS A FUNCTION OF THREAT OR SAFETY: THE ROLE OF ACQUISITION, GENERALIZATION, REVERSAL, AND EXTINCTION LEARNING

Session Chair: Florian Bublitzky, Central Institute of Mental Health

Discussant: Ottmar Lipp, Curtin University

10:30 a.m.–12:00 noon

**Symposium 2.3**

BEYOND OBSERVATION: TRANSCUTANEOUS VAGUS NERVE STIMULATION IN PSYCHOPHYSIOLOGICAL RESEARCH

Session Chairs: Julian Koenig, Heidelberg University; Mathias Weymar, University of Potsdam

Discussant: Bruce Friedman, Virginia Tech

10:30 a.m.–12:00 noon

**Symposium 2.4**

THE USE OF VIRTUAL REALITY IN PSYCHOPHYSIOLOGY: A CASE FOR GOAL-DIRECTED NAVIGATION RESEARCH

Session Chair: Travis Baker, Center for Molecular and Behavioral Neuroscience, Rutgers University

12:00 noon–1:15 p.m.

**Lunch Break** (on your own)

12:00 noon–1:15 p.m.

**SPR Early Career Luncheon**

(pre-registration required; \$10 fee)

Don't miss this opportunity to discuss early career issues with some of SPR's leading scientists! The focus of this year's discussion is: "How to Brand Yourself (and Your Research) in the World of

Psychophysiology." The event will feature small-group, rotating discussions with senior members of SPR. A light lunch will be included.

To register, please check the appropriate box on the SPR registration form and include the fee of \$10. For questions about this event, please contact Dan Foti at foti@purdue.edu.

12:00 noon–1:15 p.m.

**Psychophysiology Board of Associate Editors Meeting**

12:00 noon–1:15 p.m.

**Committee on Women in Psychophysiology**

(meet in the hotel lobby at 12:00 noon)

12:00 noon–1:15 p.m.

**2020 Program Committee**

(meet in the hotel lobby at 12:00 noon)

12:00 noon–1:15 p.m.

**Diversity and Outreach Committee**

(meet in the hotel lobby at 12:00 noon)

1:15 p.m.–1:30 p.m.

**Opening Remarks**

Ursula Hess

SPR President

Catherine Norris

2019 Program Chair

1:30 p.m.–2:30 p.m.

**Invited Address**

CAN WE IMPROVE BRAIN MECHANISMS OF EMOTION REGULATION BY INCREASING HEART RATE VARIABILITY?

Mara Mather, PhD

Professor of Gerontology and Psychology at the University of Southern California, Los Angeles

2:30 p.m.–3:00 p.m.

**Refreshment Break**

3:00 p.m.–4:30 p.m.

**Presidential Symposium 3.1**

IMITATION, SYNCHRONIZATION AND EMPATHY: EVIDENCE FROM BRAINS, BODIES AND BOTS

Session Chairs: Catherine Norris, Swarthmore College; Ursula Hess, Humboldt University of Berlin

3:00 p.m.–4:30 p.m.

**Symposium 3.2**

METHODOLOGICAL AND STATISTICAL CONSIDERATIONS FOR ASSESSING AND INTERPRETING CHILDREN'S AUTONOMIC STRESS PHYSIOLOGY

Session Chair: Kristen Rudd, University of California, Riverside

Discussant: Elizabeth Davis, University of California, Riverside

3:00 p.m.–4:30 p.m.

**Symposium 3.3**

AN IMPROVED UNDERSTANDING OF THE COGNITIVE CONTROL SYSTEM THROUGH THE INTEGRATION OF COMPUTATIONAL MODELING AND ELECTROPHYSIOLOGY

Session Chair: George Buzzell, University of Maryland

3:00 p.m.–4:30 p.m.

**Symposium 3.4**

DEPRESSION AND BLUNTED NEURAL RESPONSE TO REWARD: INCREASING SPECIFICITY AND PROSPECTIVE ASSOCIATIONS

Session Chairs: Greg Hajcak, Florida State University; Julia Klawohn, Florida State University

Discussant: Greg Hajcak, Florida State University

4:40 p.m.–6:10 p.m.

**Big Question Session 4.1**

(HOW) CAN PHYSIOLOGICAL MEASURES INFORM US ABOUT ETIOLOGY, DIAGNOSIS, AND/OR TREATMENT OF PSYCHOPATHOLOGY (AND VICE VERSA)?

Session Chair: Jason Moser, Michigan State University

Discussant: Peter Lang, University of Florida

4:40 p.m.–6:10 p.m.

**Symposium 4.2**

PSYCHOPHYSIOLOGICAL INSIGHTS ON THE EMOTIONAL EXPERIENCE OF INDIVIDUALS WITH AUTISM

Session Chair: Heather Nuske, University of Pennsylvania

Discussant: John Herrington, Children's Hospital of Philadelphia, University of Pennsylvania

4:40 p.m.–6:10 p.m.

**Symposium 4.3**

CARDIOVASCULAR STRESS REACTIVITY: FROM BASIC CONCEPTS TO MODERN APPROACHES

Session Chairs: Annie Ginty, Baylor University; Ryan Brindle, Washington and Lee University

Discussant: J. Richard Jennings, University of Pittsburgh

4:40 p.m.–6:10 p.m.

**Structured Panel Presentation 4.4**

OUT OF THE LAB AND INTO THE DATA REVOLUTION: AUTONOMIC MULTIMODAL DATA COLLECTION, PROCESSING, AND ANALYSIS IN AMBULATORY SETTINGS

Session Chair: Jolie Wormwood, University of New Hampshire

Discussant: Karen Quigley, Edith Nourse Rogers Memorial VA Hospital

6:10 p.m.–8:10 p.m.

**Poster Session II**

(Authors present for questions and discussion)

**Poster Session Schedule**

8:00 a.m.–9:00 a.m.

Posters Assembled

9:00 a.m.–6:10 p.m.

Posters Available for Viewing

6:10 p.m.–8:10 p.m.

Authors Present for Discussion and Questions

8:10 p.m.–8:40 p.m.

Dismantle Posters

8:15 p.m.–9:45 p.m.

**Education and Training Committee Meeting**

8:30 p.m.

**Past Presidents Dinner**

(meet in the hotel lobby at 8:15 p.m.)

## Friday, September 27, 2019

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7:00 a.m.–6:00 p.m.

### Speaker Ready Room

8:15 a.m.–8:45 a.m.

### Light Breakfast

8:30 a.m.–6:30 p.m.

### Registration Open

8:30 a.m.–10:00 a.m.

### Faces of the Future Flash Talks

Session Chair: Stephen Benning, University of Nevada, Las Vegas

10:00 a.m.–8:00 p.m.

### Exhibits Open

10:00 a.m.–10:30 a.m.

### Refreshment Break

10:30 a.m.–11:30 a.m.

### Invited Address

THE VISUAL PREFRONTAL CORTEX OF PRIMATES: AVAILABILITY, DESIRABILITY, AND AROUSAL

Elizabeth A. Murray, PhD

Chief, Section on the Neurobiology of Learning and Memory;

Chief, Laboratory of Neuropsychology, National Institute of Mental Health

11:30 a.m.–1:00 p.m.

### Lunch Break (on your own)

11:30 a.m.–1:00 p.m.

### Diversity and Outreach Luncheon

(preregistration required; \$10 fee)

DIVERSITY IN THE WORKPLACE: RECRUITMENT, RETENTION, AND PROMOTION

In the context of an increasing motivation to expand the representative diversity in academia, it is important to examine the sometimes-subtle barriers individuals from under-represented groups face. The Diversity and Outreach Committee is thrilled to have Dr. Adrienne R. Carter-Sowell, Associate Professor of Psychological and Brain Sciences at Texas A&M University join us for this year's luncheon to discuss how day-to-day experiences of exclusion impact women and racial minorities in the academic environment. This luncheon explores how every individual, regardless of race, gender, or career stage, has a role and responsibility in contributing to an environment of inclusion and equality. All SPR attendees are encouraged to attend.

Indicate your interest in attending by registering for the event online.

11:30 a.m.–1:00 p.m.

### 2019 Program Committee

(meet in the hotel lobby at 11:30 a.m.)

1:00 p.m.–2:30 p.m.

### Diversity Symposium

ADDRESSING THE REPRESENTATIVE SAMPLES PROBLEM IN PSYCHOPHYSIOLOGICAL RESEARCH: PRACTICAL AND CONCEPTUAL STRATEGIES FOR ADVANCING THE FIELD

Session Chair: Lisa Gatzke-Kopp, Pennsylvania State University

1:00 p.m.–2:30 p.m.

### Symposium 5.2

PHYSIOLOGY TO CHARACTERIZE ROMANTIC AND NON-ROMANTIC DYAD REGULATION

Session Chair: Nicole Prause, Libereros LLC

1:00 p.m.–2:30 p.m.

### Symposium 5.3

THE COGNITIVE DYNAMICS OF SELECTION AND LIMITED CAPACITY: INTEGRATING METHODS, PARADIGMS, AND CONCEPTS

Session Chairs: Andreas Keil, University of Florida; Pierre Jolicoeur, University of Montreal

1:00 p.m.–2:30 p.m.

### Symposium 5.4

CAUSE IT'S YOU, AND ME, AND MY AUTONOMIC ACTIVITY: A MULTI-METHOD EXAMINATION OF PUTATIVE INTERPERSONAL, COGNITIVE, AND BEHAVIORAL MECHANISMS OF DEPRESSION RISK ACROSS DEVELOPMENT

Session Chairs: Ilya Yaroslavsky, Cleveland State University; Xiao Yang, University of Pittsburgh

2:30 p.m.–3:00 p.m.

### Refreshment Break

3:00 p.m.–4:30 p.m.

### Big Question Session 6.1

WHAT HAVE WE LEARNED FROM STUDYING AFFECTIVE CHRONOMETRY (I.E., THE TIME COURSE OF AN AFFECTIVE OR EMOTIONAL RESPONSE) USING PSYCHOPHYSIOLOGICAL MEASURES?

Session Chair: Catherine Norris, Swarthmore College

Discussant: Gregory A. Miller, University of California, Los Angeles

3:00 p.m.–4:30 p.m.

### Symposium 6.2

KICKING THE CAN (CENTRAL AUTONOMIC NETWORK) FROM PREDICTIVE CODING MODELS TO STRUCTURAL AND FUNCTIONAL CONNECTIVITY

Session Chair: Ben Allen, University of Tennessee

Discussant: John R. Jennings, University of Pittsburgh

3:00 p.m.–4:30 p.m.

### Symposium 6.3

FEAR AND LOATHING IN D.C.: THE PSYCHOPHYSIOLOGY OF VARIOUS REASONS OF MALADAPTIVE THREAT PROCESSING

Session Chair: Erik Müller, University of Marburg; Matthias Wieser, Erasmus University Rotterdam

3:00 p.m.–4:30 p.m.

**Symposium 6.4**

THE PSYCHOPHYSIOLOGY OF UNDERSTANDING OTHERS IN A SOCIAL CONTEXT: A MULTI-METHOD APPROACH

Session Chair: Marissa DiGirolamo, Brandeis University

4:45 p.m.–5:15 p.m.

**Early Career Award Address**

NEUROVISCERAL REGULATORY CIRCUITS OF AFFECTIVE RESILIENCE IN YOUTH

Julian Koenig

Universität Heidelberg

5:15 p.m.–5:45 p.m.

**Early Career Award Address**

A MULTIMODAL APPROACH TO EMOTIONAL PROCESSING AND REGULATION IN DEPRESSION

Lauren M. Bylsma

University of Pittsburgh School of Medicine

6:00 p.m.–8:00 p.m.

**Poster Session III**

(Authors present for questions and discussion)

**Poster Session Schedule**

8:00 a.m.–9:00 a.m.

Posters Assembled

9:00 a.m.–6:00 p.m.

Posters Available for Viewing

6:00 p.m.–8:00 p.m.

Authors Present for Discussion and Questions

8:00 p.m.–8:30 p.m.

Dismantle Posters

8:30 p.m.–9:30 p.m.

**Committee to Promote Student Interests**

10:00 p.m.

**Student Social**

(location to be announced)

**Saturday, September 28, 2019**

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7:00 a.m.–11:00 a.m.

**Speaker Ready Room**

8:30 a.m.–12:30 p.m.

**Registration**

8:30 a.m.–10:00 a.m.

**Symposium 7.1**

ELECTROCORTICAL RESPONSES IN EMOTION PROCESSING - INSIGHTS FROM HEALTHY PARTICIPANTS, AMYGDALA-RESECTION AND PSYCHOPATHOLOGICAL PATIENTS

Session Chair: Sebastian Schindler, University of Muenster

8:30 a.m.–10:00 a.m.

**Symposium 7.2**

PSYCHOPHYSIOLOGY OF PAIN PROCESSING: MODULATION BY INDIVIDUAL-DIFFERENCE AND SITUATIONAL FACTORS

Session Chair: Jens Foell, Florida State University

8:30 a.m.–10:00 a.m.

**Symposium 7.3**

TAME YOUR DESIRES: COGNITIVE CONTROL AND REWARD PROCESSING

Session Chairs: Barbara Schmidt, University of Jena; Daniela Pfabigan, University of Oslo

Discussant: James Cavanagh, University of New Mexico

10:00 a.m.–10:30 a.m.

**Refreshment Break**

10:30 a.m.–11:30 a.m.

**Invited Address**

FMRI-BASED MODELS OF AFFECTIVE EXPERIENCE: COMPUTATION, REPRESENTATION, AND BRAIN-BODY COMMUNICATION

Tor D. Wager

Diana L. Taylor Distinguished Professor, Department of Psychological and Brain Sciences, Dartmouth College

11:30 a.m.–12:30 p.m.

**Presidential Address**

WHO TO WHOM AND WHY: THE SOCIAL NATURE OF FACIAL MIMICRY OF EMOTIONS

Ursula Hess

Professor of Psychology, Humboldt University of Berlin

12:45 p.m.–3:00 p.m.

**General Business Meeting and Luncheon**

(ticketed event, \$10 fee; students free if pre-registered)

3:30 p.m.–6:30 p.m.

**Symposium 8.1:**

“SO, WHAT’S NEW?” EMANUEL DONCHIN’S CONTRIBUTIONS TO THE COGNITIVE PSYCHOPHYSIOLOGY OF THE 21ST CENTURY

Session Chairs: Gabriele Gratton, University of Illinois, Urbana-Champaign; Monica Fabiani, University of Illinois, Urbana-Champaign

9:00 p.m.–12:00 midnight

**Saturday Night Social with the SPR Blues Band**

**Sunday, September 28, 2019**

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9:00 a.m.–12:00 noon

**Board of Directors Meeting**