



SOCIETY FOR PSYCHOPHYSIOLOGICAL RESEARCH

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STUDENT NEWSLETTER

2023 SPR Annual Meeting

September 27 - October 1st, 2023

New Orleans Marriot Hotel, New Orleans, Louisiana

Join us for this year's SPR Annual Meeting in New Orleans, Louisiana, USA! This year's in-person meeting promises a collection of interesting and engaging symposia, panel discussions, and presentations!

[https://sprweb.org/page/2023 Annual Meeting](https://sprweb.org/page/2023%20Annual%20Meeting)

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2023 ANNUAL MEETING

For its 63rd meeting, SPR's program will include established components that we know and love, but also new formats that encourage exchange, discussion, and collaboration among members! Not only do we have three invited speakers, but we are welcoming new pre-conference workshops as well as discussion panels on hot topics in psychophysiology. We will also continue the tradition of organizing a presidential symposium on diversity, equity, and inclusion.



INVITED SPEAKERS



Edward F. Chang, MD
University of California



Rita Z. Goldstein, PhD
Mount Sinai



Luiz Pessoa, PhD
University of Maryland



2023 ANNUAL MEETING WORKSHOPS & SYMPOSIA

Presidential Symposium

This year's Presidential Symposium will highlight research on the psychophysiology of music.

3rd Annual Symposium on Diversity, Representation, and Inclusion

The topic for this year's symposium will briefly describe the current state of representation in psychophysiology, discuss challenges to the inclusion of Black participants, particularly in EEG research and strategies for recruitment, as well as practical strategies for overcoming challenges with both recruitment and EEG logistics.

Open Topic Sessions

This year's Open Topic sessions will highlight exciting research on the themes of:

- Psychopathology and Individual Differences
- Interventions and Therapeutic Approaches
- Neuropathology
- Methodological Aspects of Psychophysiology
- Psychopathology and Treatment Strategies
- Neuropsychological Mechanisms of the Life-Span

2023 Workshops

Methods for Analyzing Neural Oscillations and Aperiodic Activity

Andrew Bender, Dillan Cellier, Quirine van Engen, Ryan Hammonds, Eena Kosik, Michael Preston, and Sydney Smith

An Introduction to Machine Learning in Python Using Eye-Tracker Data

Thomas Hartmann

Deciding How Much to Bet on an Idea: Bayesian Data Analysis

Charles Green

2023 ANNUAL MEETING REGISTRATION & SCHEDULE



REGISTRATION

The deadline for registering at the discounted rates is **September 15, 2023**; registration fees increase after September 15th. Consider becoming a member of SPR to save money on the registration form. More information is available [here](#).

SCHEDULE AT A GLANCE

Poster Session Schedule: September 27 – September 29, 2023

Poster Session I (Sept. 27)

7:00 p.m.–9:00 p.m., Authors Present for Discussion and Questions

Poster Session II (Sept. 28)

6:00 p.m.–8:00 p.m., Authors Present for Discussion and Questions

Poster Session III (Sept. 29)

6:30 p.m.–8:30 p.m., Authors Present for Discussion and Questions

Invited Address: September 28

*Enhancing Recovery of the Prefrontal Cortex in Human Drug Addiction:
What Does Language Have to Do with it*

Rita Z. Goldstein, PhD

Neural Code of Speech Sounds

Edward F. Chang, MD

Invited Address: September 30

The Entangled Brain: Integration of Emotion, Motivation, and Cognition

Luiz Pessoa, PhD

Saturday Night Social with the SPR Blues Band: September 30

2023 EARLY CAREER AWARDEES



SATURDAY, SEPTEMBER 30
SALON D (3RD FLOOR)
8:30AM - 9:00AM

**REEVALUATING
PSYCHOPHYSIOLOGY:
THE IMPERATIVE OF
PSYCHOMETRIC RIGOR**

PETER E. CLAYSON, PHD
UNIVERSITY OF SOUTH FLORIDA



SATURDAY, SEPTEMBER 30
SALON D (3RD FLOOR)
9:00AM - 9:30AM

**REWARD RESPONSIVENESS AND
DEPRESSION VULNERABILITY:
TRANSLATIONAL INSIGHTS FROM
EVENT-RELATED POTENTIALS**

AUTUMN KUJAWA, PHD
VANDERBILT UNIVERSITY

UPDATES FROM THE WISE COMMITTEE



The WISE Luncheon returns! This year at the upcoming SPR conference in New Orleans, Dr. Modupe Akinola (Columbia University) and Dr. Elizabeth Page-Gould (University of Toronto) will discuss their research and experiences incorporating equity, diversity, and inclusivity into their psychophysiological research and attempting to create inclusive and vibrant lab environments that support budding psychophysiologicalists during their early careers.

Also, stay tuned for an announcement later this month about SPR Care Grants that will be available again for the Fall 2023 meeting.

The WISE committee has started a social media campaign to increase the visibility and representation of women and gender minorities in psychophysiological research. We want to feature women and gender minorities who are involved in psychophysiological research by sharing stories and experiences to inspire future generations.

- If you want to be featured, please fill out this short interview, [here](#).
- If you want to nominate anyone who might want to be featured, please fill out this nomination form, [here](#).

Contact WISE Committee Chairs Drs. Lauren Bylsma (BylsmaL@pitt.edu) and Karen Quigley (K.Quigley@northeastern.edu) if you have ideas or are interested in getting involved! WISE is interested in recruiting more student and trainee members to join the committee, particularly those from diverse backgrounds.



OTHER HAPPENINGS

2022 SPR STUDENT SURVEY

The Committee to Promote Student Interests, Student Survey Subcommittee presents the results of the 2022 Student Survey of the SPR Hybrid Annual Meeting [here](#).

Thank you to the 83 student members who filled out the 2022 Student Survey!

For questions or comments about the survey, please contact

- Armen Bagdasarov at abb82@duke.edu (Chair of SSS, CPSI)
- Anna Finley at anna.j.finley@gmail.com (Chair of CPSI)
- Rebecca Stilton at rebeccasilton@gmail.com (SPR Secretary)



SPR INTERNATIONAL STUDENTS EXCHANGE FORUM

Interested in working with psychophysiologicalists abroad? Check out the International Students Exchange Forum at sprweb.org/Exchange_Forum! Our forum currently includes SPR labs from the United States, United Kingdom, and Germany. All labs are happy to host (international) students and postdocs who want to learn new psychophysiological methods. We would like to assist you in establishing collaborations between SPR labs.

A Call to All PIs: We are constantly working on adding new SPR labs to our forum. Does your lab welcome (international) exchange students or postdocs but is not yet on our list? We would be incredibly happy to have you on board. Simply send us an e-mail (matthias.sperle@psychol.uni-giessen.de) with your lab's information and we will create a subpage for you. You do not need to provide any funding. If you have any further questions, please get in touch with us!





NEW ORLEANS! WHERE TO GO AND WHAT TO DO

The French Quarter

Often called the Crown Jewel of New Orleans, the French Quarter is one of NOLA's most historic neighborhoods. But you'll find plenty of new mixed in with the old. There's a reimagined French Market, modern boutiques, and artisan cocktails mixed with beloved antique stores and old restaurants.

Jackson Square

Jackson Square is the location of an open-air artist colony, where artists display their work on the outside of the iron fence. Visitors can see the artists at work and have their portraits drawn by one of the many talents utilizing Jackson Square as their studio.

Natchez Harbor

Jump on a harbor cruise! Journey back to when New Orleans was a budding port town that dazzled visitors with its colorful Creole culture. Board a historic riverboat for a morning or afternoon float down the mighty Mississippi. Stroll the deck, admire the iconic paddlewheel, enjoy live music, and snap picturesque shots of the beautiful urban shoreline.

Streets to Visit

Take a walk down New Orleans's streets and squares! The most famous streets in New Orleans are nearly as iconic as the city itself.



HOT OFF THE PRESS: NEW TO SPR



The impact of physical exercise on the consolidation of fear extinction memories

Valerie L. Jentsch, Oliver T. Wolf, Tobias Otto, Christian J. Merz

Based on the mechanisms of fear extinction, exposure therapy is the most common treatment for anxiety disorders. However, extinguished fear responses can reemerge even after successful treatment. Novel interventions enhancing exposure therapy efficacy are therefore critically needed. Physical exercise improves learning and memory and was also shown to enhance extinction processes. This study tested whether physical exercise following fear extinction training improves the consolidation of extinction memories. Sixty healthy men underwent a differential fear conditioning paradigm with fear acquisition training on day 1 and fear extinction training followed by an exercise or resting control intervention on day 2. On day 3, retrieval and reinstatement were tested including two additional but perceptually similar stimuli to explore the generalization of exercise effects. Exercise significantly increased heart rate, salivary alpha amylase, and cortisol, indicating successful exercise manipulation. Contrary to our expectations, exercise did not enhance but rather impaired extinction memory retrieval on the next day, evidenced by significantly stronger differential skin conductance responses (SCRs) and pupil dilation (PD). Importantly, although conditioned fear responses were successfully acquired, they did not fully extinguish, explaining why exercise might have boosted the consolidation of the original fear memory trace instead. Additionally, stronger differential SCRs and PD toward the novel stimuli suggest that the memory enhancing effects of exercise also generalized to perceptually similar stimuli. Together, these findings indicate that physical exercise can facilitate both the long-term retrievability and generalization of extinction memories, but presumably only when extinction was successful in the first place. [Click here to read!](#)

Positive emotion up-regulation is resistant to working memory load: An electrocortical investigation of reappraisal and savoring

Yuhan Cheng, Blaine R. Peters, Annmarie MacNamara

Studies of emotion regulation to-date have mostly focused on negative emotion down-regulation, leaving positive emotion up-regulation poorly understood, particularly regarding factors that may modulate its success. While reappraisal and savoring have been shown to be effective at increasing electrocortical and subjective response to pictures in controlled laboratory settings, it remains unclear whether individuals can effectively enact these techniques to willfully increase positive emotions in everyday life when faced with other concurrent distractions/demands. Here, we used the late positive potential (LPP), an electrocortical measure that is larger for emotional compared to neutral stimuli, to assess the effect of working memory (WM) load on individuals' ability to reappraise or savor positive pictures. Seventy-six participants were randomly assigned to use either reappraisal or savoring to up-regulate positive emotion to pictures. Following training, participants engaged in a positive emotion up-regulation task interspersed with high and low WM load trials, while EEG was recorded. Frequentist and Bayesian statistics showed that although high WM load seemed to consume resources and reduced picture processing overall, it did not interfere with the enhancement of the LPP via positive emotion up-regulation. Nonetheless, WM performance (especially on high-load trials) was worse when participants were engaged in positive emotion up-regulation. Therefore, while both techniques appear to be effective under concurrent WM load, positive emotion up-regulation may interfere with other ongoing tasks. [Click here to read!](#)

This newsletter was created by Elizabeth Bauer, Grace Clements, Katie Garrison, Jeremy Harper, Katie Hoemann, Micayla Lacey, Elizabeth Mulligan, Kayla Wilson, Shannon MacDonald, and Anna Finley of the SPR Committee to Promote Student Interests. This newsletter is sent to current student and general members. Please forward to your students and any interested colleagues!