



SPR Student Newsletter:

54th Annual Conference Highlights

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This newsletter was created by Lauren Browning, Natalie Ulrich, and Jolie Wormwood of the SPR committee to Promote Student Interests and is sent to current student and general members. Please forward to your own students and any interested colleagues!

Student Events at the 54th Annual SPR Conference in Atlanta, GA

Early Career Conversation Hour

This year's annual meeting again featured an Early Career Conversation Hour. As in the past years, several experienced SPR members participated as panelists (Heleen Slagter, Ursula Hess, James Cavanagh, Jason Moser and Lani Shiota). The discussion focused on the needs and questions of the attending early career members, with topics ranging from time management tips to how much involvement in teaching is advisable at an early career stage.

You might wonder whether or not you'll benefit from this event even if you have just started your PhD. The answer is a definite "yes, absolutely!" You'll get the chance to meet new people who also are at the beginning of their careers and you can ask questions and get answers from experienced SPR members who are happy to share their experience. Finally, the Conversation Hour is accompanied by a casual dinner. Since you get all this for free, we can only recommend attending the next Early Career Conversation Hour at the 2015 meeting in Seattle!

Student Social

The SPR Student Social was a highlight of the 54th Annual Meeting. This event includes free drinks and food, and is put together by members of the Committee to Promote Student Interests. The event was held at Park Bar in downtown Atlanta, GA (<http://www.parkbaratlanta.com/>) a local bar with a rooftop patio overlooking the Centennial Olympic Park area. Students took advantage of the opportunity to unwind on Saturday night by meeting other students and catching up with old friends as they enjoyed free drinks and food. The Student Social is always a highlight of the conference, and all students are encouraged to attend next year's student social at the 55th annual conference in Seattle, WA.



Student Poster Awards

Congratulations to our 2014 Student Poster Award Recipients!

Aisha Howard - University of Illinois at Urbana-Champaign - PSYCHOPATHY AND ERP RESPONSES IN THE CONTEXT OF EMOTIONAL PROCESSING AND VISUAL COMPLEXITY

Felicia Jackson - Stony Brook University - SINGLE-SESSION ATTENTION BIAS MODIFICATION REDUCES THE ERN

Ellen Kessel - Stony Brook University - LONGITUDINAL ASSOCIATIONS BETWEEN LABORATORY OBSERVATIONS OF TEMPERAMENT AND THE LATE POSITIVE POTENTIAL IN MIDDLE-LATE CHILDHOOD

Thomas Kraynak - University of Pittsburgh, School of Medicine - CHILDHOOD TRAUMA IS ASSOCIATED WITH EXAGGERATED NEURAL REACTIVITY TO CRITICISM

Yanli Lin - Michigan State University - ON THE "RIGHT SIDE" OF MISTAKES: EVIDENCE FOR A LATERALIZED RELATIONSHIP BETWEEN ANXIETY AND THE ERROR-RELATED NEGATIVITY

Tiffany McNulty - The Ohio State University - BASELINE PEP, BASELINE RSA, AND RSA REACTIVITY TO INCENTIVES PROSPECTIVELY PREDICT LONGITUDINAL CHANGES IN INTERNALIZING AND EXTERNALIZING SYMPTOMS AMONG CHILDREN WITH CONDUCT DISORDER AND/OR DEPRESSION

Christian Panitz – University of Giessen - SINGLE-TRIAL P3 PREDICTS MAGNITUDE OF CARDIAC FEAR RESPONSE

Amri Sabharwal - Stony Brook University - ARE EMOTION PROCESSING DEFICITS SPECIFIC TO SCHIZOPHRENIA? AN FMRI STUDY

David Schaeffer - University of Georgia - DIFFUSION TENSOR IMAGING REVEALS DIFFERENCES BETWEEN PEOPLE WITH SCHIZOPHRENIA AND HEALTHY INDIVIDUALS WITH LOW LEVELS OF COGNITIVE CONTROL

Sebastian Schindler - Center of Excellence Cognitive Interaction Technology, University of Bielefeld - PEOPLE MATTER: PERCEIVED SENDER IDENTITY AMPLIFIES VISUAL PROCESSING OF SOCIO-EMOTIONAL LANGUAGE FEEDBACK.

Emilio Valadez - University of Delaware - FEEDBACK-RELATED NEGATIVITY IN RESPONSE TO EXPLOITATION DURING A REPEATED INVESTMENT GAME

**Read an exciting interview with winner
Christian Panitz on the next page!**

Judging the Student Poster Awards

Want to join our list of winners next year? We spoke with Dr. Alfons Hamm (SPR President 2012-2013) to get more information on how poster award winners are selected for the annual conference:

1. Who selects the poster judges and how many are there?

The judges will be selected by the chair of the Student Poster Award committee who is always the immediate past president. My selection criteria were that I wanted to have people from each topic that is represented in SPR comprising junior and senior researchers distributed internationally if possible. All judges have to be Post-docs at least. According to the bylaws we cannot select students to judge student posters. This year we had selected 20 judges.

2. Are all student posters at SPR being considered for a poster award or are only certain submissions (abstracts) selected ahead of time to be considered? If the latter, how are submissions selected to be considered and how many are selected?

This year we had over 200 student poster submissions which we cannot judge fairly on site. Therefore we always do a preselection based on the evaluations of the program committee. The program committee evaluates each submission on three dimensions and provides an overall score for each contribution. Based on these values we selected 53 posters to be evaluated by our committee this year.

3. What makes a "good" poster, that is, what are the judges looking for? Are they given explicit review criteria (e.g., abstract, layout, content, presentation) or is it up to each individual judge?

Two judges go to each poster that is selected and talk the presenter (each judge was assigned to see six posters this year distributed across four sessions). This year each poster and presentation was then evaluated on four dimensions: visual impression; method quality; impact/significance and oral presentation. Scores were then averaged across dimensions and judges. Based on these scores we selected 11 posters to be awarded this year.

An Interview with 2014 Student Poster Award Winner, Christian Panitz

Christian, congratulations on winning one of the 2014 student poster awards at this year's meeting in Atlanta! Please tell us a bit about yourself (where you work, whom you work with, what you work on).

Thank you very much! I am currently doing my PhD in Psychology at Giessen University in Germany. I am working at the department of Clinical Psychology and Psychotherapy under Christiane Hermann in the project "Catecholaminergic mechanisms of fear extinction" of my PhD supervisor Erik Mueller. My current focus is on investigating the roles of dopamine and norepinephrine in the recall of fear extinction. For that purpose we assess different electrophysiological, hemodynamic, genomic and endocrine as well as personality measures.



You won the award with your poster "SINGLE-TRIAL P3 PREDICTS MAGNITUDE OF CARDIAC FEAR RESPONSE". Can you give us a summary of the content?

We employed a classical fear conditioning and extinction paradigm and assessed functional coupling of cortical and cardiac activity evoked by the conditioned stimuli (CS). We used an analytical approach called Cardio-Electroencephalographic Covariance Tracing (CECT) – developed by my supervisor Erik Mueller – in which stimulus-evoked single-trial EEG and heart period are cross-correlated intraindividually for different time lags. We could show that (a) single-trial EEG at P3 latency (i.e. 300 ms after CS onset) predicts modulation of heart period about 5 s later, (b) the strength of this coupling is increased for fear-associated stimuli (CS+) and (c) reduced again for extinguished CS+. After showing that cortico-cardiac coupling is sensitive to fear learning we hope to use it in further investigations on physiological fear processing, in anxiety disorders for example.

How did you feel when one of the members of the Student Poster Award Committee approached you at your poster? How did you feel your presentation went?

I was a little bit nervous to be honest. However, the two jurors (that I know of), Andreas Keil and Robert Levenson, were really friendly and interested. That made me feel very comfortable and I just enjoyed presenting my work. Eventually it felt much more like casual (nonetheless stimulating) discussions to me.

What do you appreciate about the poster sessions at the SPR meetings?

You'll find a great variety of topics and sophisticated methods at the poster sessions, people really know their field and just are enthusiastic talking about their work and findings. The possibility to get into a discussion is gainful both for the presenter and the interested persons. I appreciated that not only PhD students viewed the poster of their fellows but also experienced researcher took interest and provided valuable questions and advice.

Do you have a special strategy or a set of rules you follow when creating your posters?

If I have one rule it will probably be something like "less is more". I aim to limit the poster to one or two main findings, try to use graphs, diagrams and symbols instead of text wherever I can and resist the temptation to just decrease font size to squeeze in an extra point, for example. I remind myself that a poster is not a journal article. I want my poster to transport a global idea and finding, if people are interested in details they can still ask me.

What software do you use for creating your posters?

I have been using Power Point so far. It is widely used and you can make good posters with relatively little effort. However, since I had some issues with graph formatting and printing, I will probably change to a different software for my next poster.

What would be your advice to aspiring future poster award winners?

Get feedback from your peers. Not only from your colleagues (who are helping a great deal in my case) but also from "laypersons", friends for example. First, they are less familiar with your methods and can point out passages where you may be going too fast. Second they may focus a little bit more on design issues. Another recommendation would be to browse the internet for other people's posters. You get a better feeling on how you want to design your poster by thinking about what you like or don't like in other posters.

Research Fellowship Training Award

Research Fellowship Training Awards are given annually to SPR member students and postdocs. These awards allow recipients to receive mentorship and training in psychophysiological research from an expert in the field that is not a part of their home institution.

The recipients for the 2014 awards include:

- Haley Carroll, University of Washington
- Christian Panitz, Justus Liebig University (Germany)
- Eric Rawls, University of New Orleans
- Blair Saunders, University of Toronto **** *Read an interview with Dr. Saunders on the next page!* ****
- Barbara Schmidt, University of Wurzburg (Germany)
- Brea Walker, University of Memphis

Congratulations to all winners, and good luck in your training and research!

2014 Student Travel Award Winners

Every year, 30 travel awards are distributed to help defer the cost of attending the annual conference: 15 North American student members of SPR are awarded \$500 and 15 Non-North American student members of SPR are awarded \$1000. The winners for the 54th annual conference in Atlanta were:

North American Winners

Juliana Acosta, *Nova Southeastern University*
Tyson Barker, *University of Maryland*
Katie Burkhouse, *Binghamton*
Kaylie Carbine, *Brigham Young University*
Kevin Constante, *John Jay College, CUNY*
Danielle diFilipo, *Graduate Center, CUNY & John Jay College, CUNY*
Brandi Lee Drisdelle, *Université de Montréal*
Eric Drollette, *University of Illinois Urbana-Champaign*
Manon Maheux, *Université de Montréal*
Santiago Morales, *The Pennsylvania State University*
Laura Morgan, *University of Colorado Colorado Springs*
Samantha Reznik, *Northwestern University*
Nhi Thai, *The Pennsylvania State University*
Amy Underwood, *University of Missouri-Columbia*
Darya Zabelina, *Northwestern University*

Non-North American Winners

Lea Ahrens, *University of Würzburg*
Elisa Berdica, *University of Mannheim*
Daniel Best, *University of Trier*
Maisy Best, *University of Exeter*
Raoul Dieterich, *Humboldt University of Berlin*
Geraldine Gvozdanovic, *University of Zürich*
Dion Henare, *University of Auckland*
Mareike Hülsemann, *University of Trier*
Jenny Kokinous, *University of Leipzig*
Jonathan Krygier, *University of Sydney*
Thomas Kustermann, *University of Konstanz*
Katharina Limbach, *The University of Auckland*
Sandra Paul, *Humboldt-Universität zu Berlin*
Johannes Rodrigues, *University of Würzburg*
Sebastian Schindler, *Center of Excellence Cognitive Interaction Technology, University of Bielefeld*

An Interview with Blair Saunders, Ph.D., Winner of a 2014 Research Fellowship Training Award

Congratulations on winning a Research Fellowship Training Award. Can you tell us a little bit about your plans for this Award? (i.e., what new psychophysiological assessment/analysis you plan to learn, and with whom?).

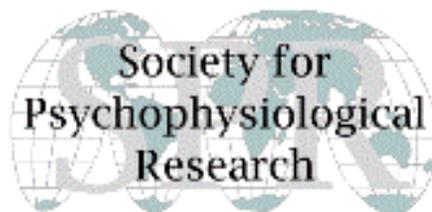
Thanks! I will use the Research Fellowship Training Award to visit Dr. James F. Cavanagh's Cognitive Rhythms and Computation Lab at the University of New Mexico, Albuquerque. During this visit, I will learn how to conduct advanced time series analysis on human EEG data. These techniques allow you to investigate the neural oscillations that underlie cognitive processes, and I'm particularly interested in studying theta oscillations that can provide important insights into prefrontal functions, particularly in relation to cognitive control.

How will this new measure fit with your research interests? What new directions do you help to go in with this new training?

In my current research—in Dr Michael Inzlicht's lab at the University of Toronto—we pursue the hypothesis that cognitive control can be viewed as a type of emotional episode comprising several core elements of emotional experience, such as negatively valenced antecedent events (e.g., cognitive conflict, errors), increased arousal, and subjective emotional experiences, to name a few. Furthermore, we propose that this task-related negative affect can aid the regulation of behaviour, acting as a kind of "affective alarm" signal that alerts people to the present need to increase control. Importantly, we are interested to relate this hypothesis to the neural underpinnings of control, and, so far, we have often tackled this question by measuring event-related potentials—typically the error-related negativity. Despite the high temporal resolution of the ERP technique, I am increasingly aware of the rich and more nuanced analyses that can be gained from advanced signal processing techniques in the time-frequency domain. For example, time-frequency analysis can measure the extent to which oscillation phases are similar at different scalp electrodes. This interchannel phase consistency is thought to facilitate communication between distal brain regions, such as between medial-prefrontal areas that monitor ongoing performance and more lateral regions that can increase the implementation of control. In my on-going research, I hope to use these advanced techniques to better understand how scalp-recorded theta dynamics interact with affective variation in self-control. I hope to understand, for example, how theta phase synchrony between medial and lateral electrode positions might mediate the relationship between affective responses to performance failure and effective remedial control adjustments.

How has your membership in SPR helped you to develop your career?

It would be no overstatement to say that being an SPR member has played an integral role in the development of my career. Foremost, attending SPR seminars and poster sessions is always informative and intellectually stimulating. In addition to these informational benefits, however, SPR is also notable for the collegiality of its members. Well-established members attend poster presentations, and provide friendly, thoughtful, and constructive criticism to early career researchers. It is in this encouraging environment where I presented my first conference poster, first met my current post-doc supervisor, and, more recently, first chaired a symposium. Finally, SPR has also been a source of financial support. In the past I received a SPR student travel award to attend, and now I'm very grateful to have been awarded the Research Training Fellowship Award. So, yes, SPR has helped me develop my career in many ways, making it a great society to be part of as a student or early career member!



Have an exciting opportunity for our student members or a fun student event planned for the 55th annual SPR conference in Seattle? We'd love to highlight it in our next newsletter! Contact Jolie Wormwood at: jbwormwood@gmail.com