Event-related potentials (ERPs) are one of the most commonly used noninvasive measures of human brain activity. This workshop will provide a practical introduction to using ERPs to answer questions about sensory, cognitive, affective, and motor processes in basic science and clinical research. The goal of the workshop is to provide you with a sufficiently detailed overview so that you can fully understand and evaluate published ERP studies and start on the road to conducting your own ERP studies. It is designed for beginning and intermediate ERP researchers—at any career stage—who would like to obtain a firm grasp of the fundamentals of ERP research.

Workshop Topics:
What are ERPs?
Neural Origins of ERPs
Advantages of the ERP Technique
EEG Data Acquisition
Common ERP Components
Design and Interpretation of ERP Experiments
Overview of Basic Analysis Steps

Outline of Workshop:
A. Introduction
B. Background Concepts
C. MLM Theory
D. Conducting an MLM Analysis Step-By-Step
E. Reporting MLM Results
F. Advanced Applications
   1. Effect Size and Power with MLM
   2. Moderation in MLM
   3. Multilevel Mediation
   4. N-level Models
   5. Nested Growth Curves
   6. Generalized MLM Models
   7. Poisson MLM
   8. Logistic MLM
   9. Bootstrapping MLM Models
  10. Cross-classified Models
Conclusion and Recommendations

Neuroimaging methods such as fMRI, MEG, or EEG are useful for studying brain function non-invasively. Recently, they have been increasingly used in conjunction with complex stimuli such as natural images, video, speech, or texts. We will cover in this workshop the encoding and decoding approaches that are commonly used to analyze the brain activity evoked by complex stimuli. Encoding models are predictive models that learn the relationship between stimulus properties and brain activity, whereas decoding refers to identifying the stimulus from brain activity. Through this workshop, you will learn how to build feature...
spaces that describe different types of stimulus properties, and how to use these feature spaces to fit an encoding model that predicts brain activity. You will also learn how to use this encoding model to build a brain decoder. The goal of the workshop is to teach you the entire pipeline of building encoding models and how to use these models to make inferences about what is being represented in different brain areas. We will focus on experiments that study language representations, but the methodology is easily generalizable to other cognitive modalities.

Outline of Workshop:
1. Introduction to Different Imaging Modalities and Neuroimaging Paradigms
2. Feature Space Representations and How to Build Them
3. Modeling Brain Activity: fMRI Example
4. Hands-on Session: Exploring Dataset
5. Hands-on Session: Building a Feature Space
6. Hands-on Session: Fitting Model and Predicting Results
7. Extensions of the Pipeline: Different Predictive Functions
8. Hands-on Session: Decoding Brain Activity
9. Conclusion: Interpreting Results and Limitations

12:00 noon-5:00 p.m.
Board of Directors Meeting

2:30 p.m.-7:30 p.m.
Registration

5:00 p.m.-7:00 p.m.
Special Symposium
OPEN SCIENCE: FROM PRE-REGISTRATION TO REPLICATION TO DATA SHARING
Session Chairs: Jesse T. Kaye, University of Wisconsin-Madison, William S. Middleton Memorial Veterans Hospital
Anna Weinberg, McGill University

Discussant:
Michael Inzlicht, University of Toronto

Panelists:
Emily S. Kappenman, San Diego State University
Andreas Keil, University of Florida
Michelle N. Meyer, Center for Translational Bioethics & Health Care Policy Geisinger Health System
Michael Larson, Brigham Young University
Annmarie MacNamara, Texas A&M University

7:00 p.m.-9:00 p.m.
Opening Reception, Exhibits Open, and Poster Sessions I and IA
MOTIVATION MODERATES THE IMPACT OF AGING STEREOTYPES ON EFFORT-RELATED CARDIOVASCULAR RESPONSES IN OLDER ADULTS
Thomas M. Hess, North Carolina State University

8:30 a.m.-10:00 a.m.

**Symposium 1.4**
AFFECTIVE FACE PROCESSING: RELATIONS WITH DISPOSITIONAL TRAITS AND CLINICAL SYMPTOMS
Session Chair: Emily R. Perkins, Florida State University

FACIAL MIMICRY AS A TRAIT
Ursula Hess, Humboldt-Universität zu Berlin

COMMON DIMENSIONS OF PEDIATRIC PSYCHOPATHOLOGY ARE ASSOCIATED WITH DIFFERENT AMYGDALA CONNECTIVITY DURING FACE-EMOTION PROCESSING
Joel Stoddard, University of Colorado

INDIVIDUAL DIFFERENCES IN EARLY VISUAL ERPS TO EMOTIONAL FACES: BIOMARKERS FOR THE DEVELOPMENT OF AFFECTIVE PSYCHOPATHOLOGY?
Michelle K. Jetha, Cape Breton University

DISENTANGLING ANTISOCIAL PREDISPOSITIONS USING NEURAL RESPONSES TO AFFECTIVE FACES
Emily R. Perkins, Florida State University

10:00 a.m.-8:00 p.m.

**Exhibits Open**

10:00 a.m.-10:30 a.m.

**Refreshment Break**

10:30 a.m.-10:45 a.m.

**Welcome Remarks**
Kara D. Federmeier
SPR President

10:45 a.m.-11:45 a.m.

**Invited Address**
NEUROBIOLOGY OF INFANT ATTACHMENT: WHY DO THE ABUSED ATTACH?
Regina Sullivan, PhD
Professor, Child and Adolescent Psychiatry, Nathan Kline Institute, Department of Child and Adolescent Psychiatry, New York University Langone Medical Center

11:45 a.m.-1:00 p.m.

**Lunch Break** (on your own)

11:45 a.m.-1:00 p.m.

**Education and Training Committee Roundtable Discussions**
(Pre-registration required; topics to be announced)

1:00 p.m.-2:30 p.m.

**Symposium 2.2**
OPTIMIZING PSYCHOPHYSIOLOGICAL MEASURES FOR THE STUDY OF INDIVIDUAL DIFFERENCES
Session Chair: Annmarie MacNamara, Texas A&M University

INDIVIDUAL DIFFERENCES NEUROSCIENCE: FROM WITHIN-TO BETWEEN-SUBJECTS DIFFERENCES IN PREDICTING PSYCHOPATHOLOGY
Greg Hajcak, Florida State University

THE GOLDILOCKS PRINCIPLES OF RELIABILITY: TRADE-OFFS BETWEEN LARGE AND SMALL GRANULARITY IN FUNCTIONAL CONNECTIVITY MRI ANALYSES
Angus MacDonald, University of Minnesota

ADVANCEMENTS TOWARD INDIVIDUALIZED MEDICINE WITH MACHINE LEARNING CLASSIFIERS IN NEUROSCIENCE
Vaughn R. Steele, National Institute on Drug Abuse

THE USE OF DIFFERENCES VS. RESIDUALS IN INDIVIDUAL DIFFERENCES RESEARCH: KEY CLARIFICATIONS REGARDING RELIABILITY AND SOURCES OF VARIANCE
John J. Curtin, University of Wisconsin

THREE APPROACHES TO IMPROVING ELECTROCORTICAL MEASURES FOR THE STUDY OF INDIVIDUAL DIFFERENCES
Annmarie MacNamara, Texas A&M University

1:00 p.m.-2:30 p.m.

**Symposium 2.3**
UNDERSTANDING THE ROLE OF ATTENTION AND MEMORY AT THE COCKTAIL PARTY
Session Chairs:
Claude Alain, Rotman Research Institute
Kimmo Alho, University of Helsinki

DEVELOPMENT, INDIVIDUAL VARIABILITY, AND MALLEABILITY OF SELECTIVE ATTENTION IN YOUNG CHILDREN FROM LOWER SES BACKGROUNDS
Amanda H. Wray, Michigan State University

EFFECTS OF AUDITORY AND VISUAL QUALITY OF SELECTIVELY ATTENDED SPEECH ON BRAIN ACTIVITY
Kimmo Alho, University of Helsinki

NEURAL REPRESENTATIONS OF COCKTAIL PARTY SPEECH IN HUMAN AUDITORY CORTEX
Jonathan Z. Simon, University of Maryland

ORIENTING ATTENTION TO SPEECH REPRESENTATION IMPROVES WORD IN NOISE IDENTIFICATION
Claude Alain, Rotman Research Institute

1:00 p.m.-2:30 p.m.

**Symposium 2.4**
NEW ADVANCES IN THE STUDY OF APPROACH AND AVOIDANCE IN THE PERIPHERAL NERVOUS SYSTEM
Session Chairs:
Erika H. Siegel, University of California, San Francisco
Jolie B. Wormwood, Northeastern University
ALWAYS LOOK ON THE BRIGHT SIDE OF LIFE: AN INVESTIGATION OF OPTIMISM AND SOCIAL EVALUATIVE THREAT  
Erika H. Siegel, University of California, San Francisco

WHEN IS HAVING HIGH POWER A THREAT? HIERARCHY SECURITY, POWER CONSTRUAL, AND CARDIOVASCULAR INDICES OF CHALLENGE AND THREAT  
Daan Schechpers, Leiden University

A DATA-DRIVEN INVESTIGATION OF PERIPHERAL PHYSIOLOGICAL ACTIVITY DURING MOTIVATED PERFORMANCE  
Jolie B. Wormwood, Northeastern University

TESTOSTERONE’S CAUSAL EFFECTS ON APPROACH/AVOIDANCE IN A COMPETITION DEPEND ON BASAL CORTISOL LEVELS AND OPPONENT GENDER  
Erik L. Knight, Pennsylvania State University

2:30 p.m.-3:00 p.m.  
Refreshment Break

3:00 p.m.-4:30 p.m.  
Symposium 3.1  
BRAIN WAVES MEET REAL LIFE: RECENT ADVANCES IN MOBILE EEG  
Session Chairs:  
Kyle E. Mathewson, University of Alberta  
Olave E. Krigolson, University of Victoria

OUT AND ABOUT WITH SMARTPHONE EEG: SUBSEQUENT MEMORY EFFECT IN A NATURAL ENVIRONMENT  
Maria Pineyro Salvidegoitia, University of Oldenburg

GLOBAL BEHAVIORAL STATES MODULATE VISUAL RESPONSES AND SENSORY CODING IN HUMAN CORTEX  
Barry Giesbrecht, University of California, Santa Barbara

MODULATIONS IN BASELINE OSCILLATIONS AND AUDITORY ERPS AS A FUNCTION OF REAL-WORLD ENVIRONMENTAL NOISE  
Joanna E.M. Scanlon, University of Alberta

CHARACTERIZING POPULATION-LEVEL EEG DYNAMICS THROUGHOUT ADULTHOOD USING CONSUMER DATA FROM A PORTABLE EEG SYSTEM  
Ali Hashemi, McMaster University

USING MOBILE EEG TECHNOLOGY TO ASSESS PHYSICIAN FATIGUE  
Olave E. Krigolson, University of Victoria

3:00 p.m.-4:30 p.m.  
Symposium 3.2  
MECHANISMS AND REPRESENTATIONS IN VISUAL SELECTIVE ATTENTION, PERCEPTION, AND WORKING MEMORY  
Session Chairs:  
Pierre Jolicoeur, Université de Montréal  
Andreas Keil, University of Florida

SELECTING OBJECTS IN WORKING MEMORY, ONE AT A TIME  
Andreas Keil, University of Florida

MECHANISMS OF ATTENTIONAL CONTROL IN SWITCHING FOVEAL AND PERIPHERAL FOCI: EVIDENCE FROM ERPS AND PHASE SYNCHRONY  
Pierre Jolicoeur, Université de Montréal

THE ROLE OF VISUAL WORKING MEMORY IN CONTROLLING ACCESS TO VISUAL LONG-TERM MEMORY STORAGE  
Keisuke Fukuda, University of Toronto Mississauga

SIMULTANEOUS REPRESENTATION OF SENSORY AND MNEMONIC INFORMATION IN HUMAN VISUAL CORTEX  
Rosanne L. Rademaker, University of California, San Diego

3:00 p.m.-4:30 p.m.  
Symposium 3.3  
MULTI-METHOD APPROACHES INCORPORATING PSYCHOPHYSIOLOGICAL INDICES OF EMOTIONAL PROCESSING AND REGULATION ACROSS DEVELOPMENT: LINKS WITH PSYCHOPATHOLOGY AND REAL-WORLD EMOTIONAL FUNCTIONING  
Session Chair: Lauren M. Bylsma, University of Pittsburgh

Discussant: Cecile D. Ladouceur, University of Pittsburgh

CHILDREN’S VISUOCORTICAL PROCESSING OF EMOTIONAL FACIAL EXPRESSIONS AND UNDERLYING PHYSIOLOGICAL REACTIVITY DURING PARENT-CHILD INTERACTION  
Mary L. Woody, University of Pittsburgh

NEURAL INDICES OF EMOTION PROCESSING AND ASSOCIATIONS WITH DAILY LIFE EMOTIONAL FUNCTIONING IN ADOLESCENTS AT HIGH AND LOW FAMILIAL RISK FOR DEPRESSION  
Lauren M. Bylsma, University of Pittsburgh

ERROR-RELATED NEGATIVITY IS ASSOCIATED WITH ALTERED REGULATION OF DAILY LIFE NEGATIVE AFFECT IN ANXIOUS YOUTH  
Patricia Tan, University of California School of Medicine, Los Angeles

RESPIRATORY SINUS ARRHYTHMIA AND SLEEP PATTERNS IN DEPRESSION RISK AMONG EMERGING ADULTS  
Jessica L. Hamilton, University of Pittsburgh

3:00 p.m.-4:30 p.m.  
Symposium 3.4  
MORE THAN JUST A FEELING: PAIN’S IMPACT ON BEHAVIOR AND SOCIAL COMMUNICATION  
Session Chairs:  
Mathieu Roy, McGill University  
Philip Jackson, Université Laval

USING VIRTUAL REALITY TO ASSESS PAIN-RELATED ALTERATIONS IN BODY AND MOVEMENT PERCEPTION  
Catherine Mercier, Centre interdisciplinaire de recherche en réadaptation et intégration sociale (CIRRIS), Institut de réadaptation en déficience physique de Québec (IRDPQ) Département de réadaptation, Université Laval

IMPACT OF PAIN ON LEARNING AND DECISION MAKING  
Mathieu Roy, McGill University

BRAIN REGULATION OF PAIN COMMUNICATION: ENCODING, DECODING, AND TRANSACTION  
Pierre Rainville, Université de Montréal

HOW REPEATED EXPOSURE TO OTHER PEOPLE’S PAIN AFFECTS EMPATHY AND ITS CEREBRAL CORRELATES  
Philip Jackson, Université Laval
SOCIAL COMPARISON IN THE BRAIN: PAINFUL AND REWARDING EXPERIENCES
Sébastien Hétu, Université de Montréal

4:40 p.m.-6:10 p.m.
**Symposium 4.1**
ON GIVING MORE LIGHT THAN HEAT: THE LIFE AND CONTRIBUTIONS OF JOHN T. CACIOPPO (1951-2018)
Session Chair: Catherine J. Norris, Swarthmore College

Participants (alphabetical):
Bruce D. Bartholow, University of Missouri
Gary G. Berntson (in absentia), The Ohio State University
Jos Bosch, University of Amsterdam
Mary Burleson, Arizona State University
Louise C. Hawkley (in absentia), NORC at the University of Chicago
Tiffany A. Ito, University of Colorado Boulder
Jeff T. Larsen (in absentia), University of Tennessee
Greg J. Norman, University of Chicago
Catherine J. Norris, Swarthmore College
Karen S. Quigley, Northeastern University and Edith Nourse Rogers Memorial VA Hospital
Louis G. Tassinary, Texas A&M University
Eric Vanman, University of Queensland

4:40 p.m.-6:10 p.m.
**Symposium 4.2**
IS THE FREQUENCY-FOLLOWING RESPONSE (FFR) AN INDEX OF SUBCORTICAL AUDITORY COGNITION?
Session Chairs:
Carles Escera, University of Barcelona
Emily B.J. Coffey, Eberhard Karls Universität Tübingen

Discussant: Claude Alain, University of Toronto

RELATIVE CONTRIBUTIONS OF AUDITORY NERVE, BRAINSTEM, AND CORTICAL GENERATORS TO THE AUDITORY FREQUENCY-FOLLOWING RESPONSE REVEALED BY EEG
Gavin M. Bidelman, University of Memphis

DISENTANGLING THE GENERATOR STRUCTURE OF THE FREQUENCY-FOLLOWING RESPONSE TO SOUNDS OF DIFFERENT FREQUENCIES WITH MEG
Natàlia Gorina-Careta, University of Barcelona

MONKEYS SHARE THE NEUROPHYSIOLOGICAL BASIS FOR ENCODING SOUND PERIODICITIES CAPTURED BY THE FREQUENCY-FOLLOWING RESPONSE WITH HUMANS
Yaneri A. Ayala, Universidad Nacional Autónoma de México

EXPLORING THE OSCILLATORY NATURE OF THE FREQUENCY-FOLLOWING RESPONSE (FFR) WITH MEG
Emily B.J. Coffey, Eberhard Karls Universität Tübingen

NEURAL PROCESSING OF SOUND IN BILINGUALS
Erika Skoe, University of Connecticut

Friday, October 5, 2018

8:30 a.m.-6:30 p.m.
**Registration**

8:30 a.m.-10:30 a.m.
**Symposium 5.1**
ADVANCES IN UNDERSTANDING THE AGING BRAIN
Session Chairs:
Monica Fabiani, University of Illinois at Urbana-Champaign
Bart Rypma, University of Texas at Dallas

CEREBROVASCULAR CONTRIBUTIONS TO AGE-RELATED CHANGES IN BRAIN ANATOMY AND COGNITION
Monica Fabiani, University of Illinois at Urbana-Champaign

IMPAIRED NEUROVASCULAR COUPLING RESPONSES PREDICT COGNITIVE DYSFUNCTION AND DYSREGULATION OF GAIT COORDINATION IN PRECLINICAL MOUSE MODELS OF AGING
Stefano Tarantini, University of Oklahoma Health Sciences Center

VALIDATING VASCULAR REACTIVITY ACROSS HUMAN LIFE SPAN
Bharat Biswal, New Jersey Institute of Technology
A NEURAL-VASCULAR COMPLEX OF AGE-RELATED CHANGES IN THE HUMAN BRAIN
Bart Rypma, University of Texas at Dallas

8:30 a.m.-10:00 a.m.
**Symposium 5.2**
NEURAL CORRELATES OF PRE- AND POST-NATAL LEARNING
Session Chairs:
Franziska Schleger, University of Tübingen
Julia Moser, University of Tübingen

**NEURAL CORRELATES OF RULE LEARNING IN FETUSES**
Julia Moser, University of Tübingen

**FUNCTIONAL IMAGING OF THE HUMAN BRAIN IN EARLY INFANCY**
Mahdi Mahmoudzadeh, Université de Picardie

**USING NEUROPHYSIOLOGICAL MEASURES TO INVESTIGATE ONLINE LEARNING IN NEWBORNS AND 3-MONTH-OLD INFANTS**
Alexis N. Bosseler, University of Washington

**NEURAL ENTRAINMENT TO TRANSITIONAL PROBABILITIES IN PRE-LINGUAL INFANTS**
Dawoon Choi, University of British Columbia

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**
TOWARD A MECHANISTIC UNDERSTANDING OF TERRA INCOGNITA: THE HUMAN SUBCORTEX
Birte Forstmann, PhD
Professor for Cognitive Neurosciences, University of Amsterdam

11:30 a.m.-1:00 p.m.
**Women in Science and Education (WISE) and Diversity Luncheon**

11:30 a.m.-1:00 p.m.
**Lunch Break** (on your own)

1:00 p.m.-2:30 p.m.
**Symposium 6.1**
ANTICIPATION IN MOTIVATIONAL CONTEXTS: INVOLVEMENT IN DISORDERS OF APPETITE AND AVersion
Session Chairs:
Menton M. Deweese, University of Texas MD Anderson Cancer Center
Christopher T. Sege, Medical University of South Carolina

Discussant: Margaret M. Bradley, University of Florida

**EFFECT OF THE IMMINENT POSSIBILITY OF SMOKING ON BRAIN RESPONSES TO SMOKING-RELATED STIMULI**
Jeffrey M. Engelmann, Medical College of Wisconsin

**LARGER LATE POSITIVE POTENTIAL RESPONSES TO FOOD-RELATED CUES THAN TO HIGH-AROUSING PLEASANT IMAGES PREDICT CUE-INDUCED EATING**
Menton M. Deweese, University of Texas MD Anderson Cancer Center

**AVOIDANCE, ESCAPE, AND UNCONTROLLABLE THREAT CONTEXTS: INDIVIDUAL DIFFERENCES IN DEFENSE**
Christopher T. Sege, Medical University of South Carolina

**ANXIETY RISK AND THE ANTICIPATION OF PREDICTABLE AND UNPREDICTABLE THREAT IN ADOLESCENT GIRLS: EVIDENCE FROM THE STARTLE REFLEX AND EVENT-RELATED POTENTIALS**
Brady D. Nelson, Stony Brook University

1:00 p.m.-2:30 p.m.
**Symposium 6.2**
EFFORT COSTS IN DECISION MAKING: INSIGHTS FROM BRAIN AND BEHAVIOR
Session Chairs:
Akina Umemoto, University of Toronto
Michael Inzlicht, University of Toronto

**MENTAL EFFORT ON THE LONG RUN: THE CONCEPT OF EXECUTIVE FATIGUE**
Mathias Pessiglione, Hôpital de la Pitié-Salpêtrière
ELECTROPHYSIOLOGICAL INDICES OF REWARD VALUATION AND COGNITIVE CONTROL ASSOCIATED WITH SELECTION AND MAINTENANCE OF EFFORT
Akina Umemoto, University of Toronto

NEUROCOMPUTATIONAL MECHANISM UNDERLYING EFFORT-BASED BEHAVIOUR: THE KEY TO UNDERSTANDING AND BIASING DECISION MAKING
Eliana Vassena, Donders Institute for Brain, Cognition, and Behaviour

THE EFFORT PARADOX: EFFORT IS BOTH COSTLY AND VALUED
Michael Inzlicht, University of Toronto

1:00 p.m.-2:30 p.m.
Symposium 6.3
THE HEART OF EMOTION REGULATION: IMPLICATIONS OF CARDIAC MEASURES IN EMOTION REGULATION RESEARCH
Session Chair: Bruce H. Friedman, Virginia Tech
Discussant: John J.B. Allen, University of Arizona

ESCAPING THE FILE DRAWER: IS RESTING HEART RATE VARIABILITY ALWAYS USEFUL AS A BIOMARKER FOR SELF-REGULATION?
Jared J. McGinley, Towson University

PHYSIOLOGICAL CONSEQUENCES OF PERSEVERATIVE COGNITION: AN ECOLOGICAL STUDY IN MAJOR DEPRESSION AND SOCIAL ANXIETY DISORDER
Cristina Ottaviani, Sapienza University of Rome

CARDIAC VAGAL CONTROL IS ASSOCIATED WITH COGNITIVE MECHANISMS OF EMOTION REGULATION
Derek P. Spangler, Army Research Laboratory

COGNITIVE CONTROL AND EMOTIONAL REGULATION: A NEUROVISCERAL INTEGRATION PERSPECTIVE
Julian F. Thayer, The Ohio State University

1:00 p.m.-2:30 p.m.
Symposium 6.4
HOW NEUROPSYCHOLOGICAL TOOLS MAY BE USEFUL IN PSYCHIATRIC CLINICAL SETTING
Session Chair: Salvatore Campanella, Université Libre de Bruxelles

ELECTROENCEPHALOGRAPHY IN PSYCHIATRY: FROM DIFFERENTIAL DIAGNOSIS TO TREATMENT AND PREDICTION
Oliver Pogarell, University of Munich

EMOTION REGULATION IN SCHIZOPHRENIA: A COMPARISON BETWEEN IMPLICIT (EEG AND fNIRS) AND EXPLICIT (VALENCE) MEASURES DURING A NEUROFEEDBACK TRAINING
Michela Balconi, Catholic University of Milan

DEVELOPMENT OF NEUROPHYSIOLOGICAL BIOMARKERS IN EMERGING PSYCHOSIS
Dean Salisbury, University of Pittsburgh School of Medicine

COULD THE EVOLUTION OF SPECIFIC ERP NEUROCOGNITIVE MARKERS DURING A DETOXIFICATION PROGRAM HELP TO PREDICT RELAPSE IN ALCOHOL DEPENDENT PATIENTS?
Salvatore Campanella, Université Libre de Bruxelles

ACCELERATED NEUROSTIMULATION PARADIGMS IN MAJOR DEPRESSION: INSIGHTS FROM BRAIN IMAGING
Chris Baeken, Vrije Universiteit of Brussels

2:30 p.m.-3:00 p.m.
Refreshment Break

3:00 p.m.-4:30 p.m.
Symposium 7.1
DIATHESIS STRESS ACROSS THE LIFE SPAN: MEASURING MARKERS OF RISK FOR PSYCHOPATHOLOGY FROM INFANCY TO ADULTHOOD
Session Chairs:
Kaylin E. Hill, Purdue University
Paige Ethridge, McGill University

ALPHA ASYMMETRY IN MOTHER-INFANT DYADS: PHYSIOLOGICAL COHERENCE AND LINKS WITH THE NATURALISTIC FAMILY ENVIRONMENT
Kaylin E. Hill, Purdue University

PARENT-CHILD COREGULATION OF PARASYMPATHETIC PROCESSES VARIES BY RISK FOR PSYCHOPATHOLOGY AND SOCIAL CONTEXT
Alexandria Meyer, Florida State University

THE IMPACT OF PARENTAL PRESENCE ON THE ERROR-RELATED NEGATIVITY IN YOUNG CHILDREN
Amanda Skoranski, Pennsylvania State University

ASSOCIATIONS BETWEEN PARENTAL CONTROL, THREAT-RELATED AMYGDALA ACTIVITY, AND FUTURE DEPRESSIVE SYMPTOMS
Madeline J. Farber, Duke University

STRESS, REWARD, AND RISK FOR DEPRESSION ACROSS DEVELOPMENT
Paige Ethridge, McGill University

3:00 p.m.-4:30 p.m.
Symposium 7.2
EARLY MODULATION OF THE PRIMARY VISUAL CORTEX BY ATTENTION OR EMOTION REVEALED USING ERP METHODS: CURRENT CHALLENGES AND NEW FINDINGS
Session Chair: Gilles R.C. Pourtois, Ghent University
Discussant: Heleen Slagter, University of Amsterdam

PREDICTIONS AND ATTENTION DO NOT MODULATE THE FIRST FEEDFORWARD SWEEP OF CORTICAL INFORMATION PROCESSING
Heleen Slagter, University of Amsterdam

EXTENSIVE AVERSIVE CONDITIONING CHANGES THE AFFERENT GAIN OF PRIMARY VISUAL CORTICAL POPULATION ACTIVITY
Andreas Keil, University of Florida

ASSOCIATED MOTIVATIONAL SALIENCE SHAPES EARLY VISUAL CORTEX RESPONSES
Annekathrin Schacht, Göttingen University

TOP-DOWN ATTENTION MODULATION OF C1 COMPONENT
Gilles R.C. Pourtois, Ghent University
3:00 p.m.-4:30 p.m.  
**Symposium 7.3**  
INFLUENCES ON TYPICAL AND ATYPICAL LANGUAGE DEVELOPMENT  
Session Chair: Elyse S. Sussman, Albert Einstein College of Medicine

- **EARLY BRAIN TRAJECTORIES AND EVOLVING OSCILLATIONS: BIOMARKER FOR DEVELOPMENTAL DISORDERS?**  
  April A. Benasich, Rutgers University

- **NEURAL RESPONSE TO SPOKEN NON-WORDS PREDICTS EARLY LANGUAGE SKILLS AND READING READINESS**  
  Nicole Landi, University of Connecticut

- **NEURAL PROCESSES UNDERLYING THE TIME COURSE OF PHONOLOGICAL DEVELOPMENT IN MONOLINGUAL AND BILINGUAL CHILDREN AND ADULTS**  
  Valerie L. Shafer, Graduate Center of the City University of New York

- **AUDITORY SCENE ANALYSIS IN ADOLESCENTS WITH AND WITHOUT LANGUAGE DISORDERS**  
  Elyse S. Sussman, Albert Einstein College of Medicine

4:40 p.m.-5:40 p.m.  
**Invited Address**  
NEURAL SIGNATURES OF RISK FOR MENTAL ILLNESS  
Ahmad R. Hariri, PhD  
Professor of Psychology and Neuroscience, Laboratory of NeuroGenetics (LoNG), Duke University

6:00 p.m.-8:00 p.m.  
**Poster Session III**

8:15 p.m.-9:15 p.m.  
**Committee to Promote Student Interests**

10:00 p.m.  
**Student Social**  
(location to be announced)

**Saturday, October 6, 2018**

8:30 a.m.-12:30 p.m.  
**Registration**

8:30 a.m.-10:00 a.m.  
**Symposium 8.1**  
BROADENING THE TIME-COURSE OF ERP COMPONENTS IMPLICATED IN REWARD PROCESSING: IMPLICATIONS FOR EMOTION, COGNITION, AND PSYCHOPATHOLOGY  
Session Chairs: Nicholas J. Kelley, Northwestern University  
James Glazer, Northwestern University

- **DISTINCT PROFILES OF REWARD-RELATED NEURAL ACTIVITY CHARACTERIZE REAPPRaisal VERSUS SUPPRESSION EMOTION REGULATION TENDENCIES**  
  Nicholas J. Kelley, Northwestern University

8:30 a.m.-10:00 a.m.  
**Symposium 8.2**  
THE POWER OF MIND: HOW HYPNOSIS AFFECTS PERCEPTION AND BEHAVIOR  
Session Chair: Barbara Schmidt, University of Jena

- **DIFFERENTIAL MODULATION OF PAIN, SPINAL NOCICEPTIVE FLEXION REFLEX, AND EEG ACTIVITY BY HYPNOSIS, SUGGESTIONS, AND DISTRACTION**  
  Pierre Rainville, Université de Montréal

- **YOU DON'T SEE, YOU DON'T FEEL, AND YOU DON'T HEAR IT ANY MORE: BLOCKING PERCEPTION WITH HYPNOTIC SUGGESTIONS**  
  Barbara Schmidt, University of Jena

- **ATYPICAL FUNCTIONAL CONNECTIVITY AS A CHARACTERISTIC OF HIGH SUGGESTIBILITY**  
  Devin B. Terhune, University of London

- **INVESTIGATING NEURONAL CORRELATES OF HYPNOSIS THAT IMPROVES SUBSEQUENT SLEEP**  
  Mareike Hülsemann, University of Fribourg

- **PHASE COHERENCE OF EEG ACTIVITIES WITHIN THE FRONTO-PARIETAL NETWORK AND ERP AMPLITUDES DURING HYPNOSIS-INDUCED BLOCKADE OF VISION, PAIN, AND AUDITORY PROCESSING**  
  Wolfgang H.R. Miltner, University of Jena

8:30 a.m.-12:30 p.m.  
**Registration**

8:30 a.m.-10:00 a.m.  
**Symposium 8.3**  
CROSSING THE KNOWLEDGE TO PRACTICE DIVIDE: HEART RATE VARIABILITY IN THE ASSESSMENT AND TREATMENT OF PSYCHOPATHOLOGY  
Session Chairs:  
Julian Koenig, University of Heidelberg  
Cristina Ottaviani, Sapienza University of Rome

- **Discussant:** Julian F. Thayer, The Ohio State University

- **HEART RATE VARIABILITY AND PROBLEMATIC INTERNET USE: THE RELATIONSHIP BETWEEN CRAVING FOR INTERNET USAGE AND REDUCED AUTONOMIC FLEXIBILITY**  
  Tania Moretta, University of Padova
THE ROLE OF VAGALLY-MEDIATED HEART RATE VARIABILITY IN ATTENTION DEFICIT HYPERACTIVITY DISORDER (ADHD): CURRENT EVIDENCE AND FUTURE DIRECTIONS
Joshua A. Rash, Memorial University of Newfoundland

HEART RATE VARIABILITY AND SELF-REPORTED EMOTION REGULATION DIFFICULTIES IN ADOLESCENTS WITH ATTENTION DEFICIT HYPERACTIVITY DISORDER
Elisabet Kvadsheim, University of Bergen

DOES HEART RATE VARIABILITY MEASUREMENT HELP IN THE DIAGNOSIS AND TREATMENT OF DEPRESSION IN CARDIAC PATIENTS?
Simone Messerotti Benvenuti, University of Padua

BRAIN STRUCTURAL AND FUNCTIONAL CONNECTIVITY CONCOMITANTS OF HEART RATE VARIABILITY CHANGES DURING WORRY IN GENERALIZED ANXIETY DISORDER
Cristina Ottaviani, Sapienza University of Rome

10:30 a.m.-11:00 a.m.
**Early Career Award Address**
The Erring Brain: Error-related Brain Activity as a Risk-marker for Psychopathology
Anja Riesel, PhD, Humboldt University

11:00 a.m.-11:30 a.m.
**Early Career Award Address**
EEG as a Theoretical and Methodological Hub for the Neural Sciences
James Cavanagh, PhD, University of New Mexico

11:30 a.m.-12:30 p.m.
**Presidential Address**
Kara D. Federmeier
Professor, Department of Psychology, Program in Neuroscience, and the Beckman Institute for Advanced Science and Technology, University of Illinois at Champaign-Urbana

12:45 p.m.-2:45 p.m.
**SPR Business Meeting and Luncheon** (ticket required)

3:00 p.m.-7:00 p.m.
**Free Time to Enjoy Quebec City**

7:00 p.m.-9:00 p.m.
**Poster Session IV**

9:00 p.m.-12:00 midnight
**Saturday Night Social featuring the SPR Blues Band**

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**Sunday, October 7, 2018**

8:00 a.m.-10:30 a.m.
**Farewell Breakfast**

9:00 a.m.-12:00 noon
**Board of Directors Meeting**