



ebps
EUROPEAN BEHAVIOURAL PHARMACOLOGY SOCIETY

Biennial Meeting 2017



**PRELIMINARY
SCIENTIFIC PROGRAMME**

31st August - 3rd September
Heraklion, Crete, Greece



THURSDAY, August 31st, 2017

14.00-19.00 REGISTRATION

19.00- 19.30 OPENING CEREMONY

19.30-20.30 OPENING LECTURE
Chair: Dora Duka

The importance of being Dopamine
Prof. Gaetano Di Chiara
Department of Biomedical Sciences, University of Cagliari, Italy

20.30 WELCOME RECEPTION

FRIDAY, September 1st, 2017

08.30-09.00 REGISTRATION

09.00-11.00 SYMPOSIA 1 - MEETING ROOM I

Interoception and Drug Addiction: Preclinical and Clinical Perspectives
Chair: Jennifer Murray, Serge Ahmed

09.00-09.30 Nicotine as an interoceptive guide of appetitive conditioned behaviors
Jennifer Murray
Department of Psychology, University of Nebraska-Lincoln, Lincoln NE, USA

09.30-10.00 Interoceptive drug conditioning and extinction: implications for relapse prevention
Serge Ahmed
Université de Bordeaux, Institut des Maladies Neurodégénératives, Bordeaux, France

10.00-10.30 Endogenous taurine, a key component for ethanol-induced dopamine elevation
Mia Ericson
Addiction Biology Unit, Department of Psychiatry and Neurochemistry, Institute of Neuroscience and Physiology, University of Gothenburg, Sweden

10.30-11.00 Ghrelin is suppressed by intravenous alcohol and is related to stimulant and sedative effects of alcohol.
Elizabeth Ralevski
Department of Psychiatry, Yale School of Medicine, New Haven CT, USA



9.00-11.00 SYMPOSIA 2 - MEETING ROOM II

Novel approaches to dissecting the neurobiology and neuropharmacology of fear extinction

Chair: Andrew Holmes

09.00-09.30 Role of (epi)genetic mechanisms in targeting fear extinction dysfunction

Nicolas Singewald

University of Innsbruck, Innsbruck, Austria

09.30-10.00 Dissecting the role of insular cortical circuits in regulating learned fear

Nadine Gogolla

Max Planck Institute of Neurobiology, Martinsried, Germany

10.00-10.30 Circuit-based approaches to identifying novel anxiolytic medications for trauma-related disorders

Andrew Holmes

NIH, Bethesda, USA

10.30-11.00 Fibroblast Growth Factor-2 is an endogenous anxiolytic and a pharmacological enhancer of fear extinction

Bronwyn Graham

University New South Wales, Sydney, Australia

11.00-11.30 COFFEE BREAK

11.30-13.30 SYMPOSIA 3 - MEETING ROOM I

Sex differences in stress response: insights for pharmacotherapy

Chair: Susan K. Wood, Christina Dalla

11.30-11.54 Sex differences in susceptibility to social stress and the antidepressant-like effects of anti-inflammatory compounds

Susan K. Wood

PhD, Assistant Professor, Department of Pharmacology, Physiology and Neuroscience University of South Carolina School of Medicine, USA

11.54-12.18 Activation of oxytocin receptors promotes defeat-induced social withdrawal in female California mice

Brian Trainor

PhD, Professor, Department of Psychology, University of California, Davis, USA



- 12.18-12.42** Sex differences in models of depression and antidepressant response
Christina Dalla
Assistant Professor, Department of Pharmacology, Medical School, University of Athens, Greece
- 12.42-13.06** Sex Differences in Ketamine's Antidepressant-Like Effects
Mohamed Kabbaj
PhD, Professor of Biomedical Sciences & Neurosciences, College of Medicine, Florida State University, Tallahassee, Florida, USA
- 13.06-13.30** Perinatal SSRIs, social behaviors and neuroplasticity: Are males or females more vulnerable
Jodi Pawluski
Ph.D, IRSET-INSERM U1085, University of Rennes 1, France

11.30-13.30 SYMPOSIA 4 - MEETING ROOM II

Extinction of drug seeking and fear-based memories: Mechanisms and therapeutic implications

Chair: Ryan T. LaLumiere

- 11.30-12.00** Recent insights into the infralimbic cortical regulation of the extinction and inhibition of cocaine seeking
Ryan T. LaLumiere
Assistant Professor, University of Iowa, Iowa City, IA, USA
- 12.00-12.30** Complementary roles for accumbens shell output pathways in promoting extinction versus reinstatement of alcohol seeking
Gavan McNally
Professor, University of New South Wales, Sydney, Australia
- 12.30-13.00** Simulating extinction memory with infralimbic DREADDs
Jamie Peters
Assistant Professor Department of Neuroscience Medical University of South Carolina Charleston, SC, USA
- 13.00-13.30** Vagus Nerve Stimulation Enhances Extinction and Protects Against Reinstatement in a Rat Model of PTSD
Christa McIntyre
Associate Professor, University of Texas-Dallas, TX, USA

13.30-16.00 POSTER SESSION A / LUNCH



16.00-17.00 PLENARY LECTURE
Chair: **George Panagis**

Stress, anxiety and social hierarchies - The role of accumbal energy metabolism
Prof Carmen Sandi
Brain Mind Institute, Swiss Federal Institute of Technology Lausanne (EPFL), Switzerland

17.00-17.30 COFFEE BREAK

17.30-17.50 YOUNG SCIENTIST AWARD LECTURE
Chair: **Terry Robinson**

Prof Amy Milton

17.50- 18.00 BREAK

18.00-19.30 ORAL PRESENTATIONS - MEETING ROOM I & MEETING ROOM II



SATURDAY, September 2nd, 2017

08.30-09.00 REGISTRATION

09.00-11.00 SYMPOSIA 5 - MEETING ROOM I

Monoamines and the developmental origins of psychopathology
Chair: Dirk Schubert

09.00-09.30 Lifetime consequences of SSRI exposure and high serotonin levels during early brain development for the rat somatosensory system

Dirk Schubert

Assistant Professor Cellular Neurophysiology (route 855) Dept. Cognitive Neuroscience Donders Institute for Brain, Cognition and Behaviour Radboud University Nijmegen Medical Centre, The Netherlands

09.30-10.00 Wiring of local and long distance prefrontal cortical circuits during critical developmental periods: role of transiently expressed serotonin transporter and receptors.

Patricia Gaspar

INSERM, France

10.00-10.30 Early life experience and the shaping of adult psychiatric vulnerability: Role of the 5-HT_{2A} receptor

Vaidya Vidita

Tata Institute of Fundamental Research (TIFR), India

10.30-11.00 A dopamine sensitive developmental period impacting adult aggression and impulsivity - mechanistic insight

Mark Ansorge

Columbia University, USA

9.00-11.00 SYMPOSIA 6 - MEETING ROOM II

Vulnerability and resilience to addiction disorders: translational synergy across human and animal studies

Chair: Catharine Winstanley

09.00-09.30 Sex and drug specific risk factors for adolescent substance use

Hugh Garavan

Department of Psychiatry, University of Vermont, USA

09.30-10.00 From early life adversity to addiction: clues and cues

Vedran Lovic

Department of Psychology, University of Calgary, Alberta Children's Hospital Research Institute, Hotchkiss Brain Institute



10.00-10.30 There's risk, and there's risk: dissociable cognitive changes associated with rodent models of iatrogenic gambling disorder and drug addiction

Catharine Winstanley

Associate Professor, Dept of Psychology Associate Member, Division of Neurology, Djavad Mowafaghian Centre for Brain Health University of British Columbia

10.30-11.00 Increased dopamine synthesis capacity in gambling addiction predicts drug-induced enhances in reward learning

Ruth van Holst

Radboud University Nijmegen

11.00-11.30 COFFEE BREAK

11.30-13.30 SYMPOSIA 7 - MEETING ROOM I

Endogenous Cannabinoids in Addiction Vulnerability and Resilience

Chair: Jonathan Morrow

11.30-12.00 Cannabinoid influences on sign- and goal-tracking behavior

Jonathan Morrow

M.D., Ph.D., Assistant Professor of Psychiatry, University of Michigan, USA

12.00-12.30 Endogenous cannabinoids and the pursuit of reward

Joseph Cheer

Ph.D., Associate Professor of Anatomy and Neurobiology, University of Maryland School of Medicine, USA

12.30-13.00 Maternal THC biases the dopamine system towards behavioral metaplasticity

Miriam Melis

Associate professor of Pharmacology at the Dept Biomedical Sciences of the University of Cagliari, Italy

13.00-13.30 Differential control of cocaine self-administration by GABAergic and glutamatergic CB1 cannabinoid receptors

Veronique Deroche-Gamonet

Ph.D., H.D.R., Research Director, INSERM, University of Bordeaux, France



11.30-13.30 SYMPOSIA 8 - MEETING ROOM II

Mood and microbes - Mechanisms of microbiota-brain communication

Chair: Jane A. Foster

11.30-12.00 Host genetic-microbiota interactions influences brain structure and behavior

Jane A. Foster

McMaster University, Canada

12.00-12.30 A potential new mechanism by which microbiota affect CNS function

Rochellys Diaz Hejtz

Associate Professor at the Department of Neuroscience, Karolinska Institutet, Stockholm

12.30-13.00 Prebiotic modulation of emotional and cognitive function in rodents and humans

Phil Burnet

University of Oxford, UK

13.00-13.30 An expanding range of CNS targets for Psychobiotics: Real deal or alternative facts?

Gerald Clarke

Department of Psychiatry and Neurobehavioural Science, University College Cork, Cork, Ireland

13.30-14.30 EBPS MEMBERS MEETING

14.30-16.00 POSTER SESSION B / LUNCH

16.00-17.00 PSYCHOPHARMACOLOGY PLENARY LECTURE

Chair: John F. Cryan

Prof Bitá Moghaddam

17.00-17.30 COFFEE BREAK

17.30-19.30 SYMPOSIA 9 - MEETING ROOM I

Healthy food for healthy mood: on how eating habits impact neural circuits of emotionality and reward

Chair: M. Beatrice Passani, Silvana Gaetani

17.30-18.00 Why did I eat that? Differences in striatal function and motivation that contribute to obesity

Carrie Ferrario

Department of Pharmacology, University of Michigan Medical School, Ann Arbor, MI, USA



18.00-18.30 Influence of gastrointestinal signals on food reward

Thomas Lutz

Institute of Veterinary Physiology, Vetsuisse Faculty, Centre of Integrative Human Physiology, University of Zurich, Zurich, Switzerland

18.30-19.00 Dietary vitamin A alleviates memory alterations induced by obesogenic diet intake: from gut to brain

Essi Biyong

Nutrition et Neurobiologie intégrée, INRA, UMR 1286, Université de Bordeaux, France

19.00-19.30 Deconstruction and functional interrogation of caudal brainstem circuits: feeding and beyond.

Giuseppe D'Agostino

Medical Research Council CDA Fellow, The Rowett Institute, University of Aberdeen, UK

17.30-19.30 SYMPOSIA 10 - MEETING ROOM II

The social context of addictive behaviour: causes, consequences and opportunities for treatment

Chair: Louk J.M.J. Vanderschuren, Viviana Trezza

17.30-18.00 Positive effects of social reinforcement on addictive behaviour in rats

Marco Venniro

Behavioral Neuroscience Branch, IRP-NIDA, Baltimore, MD, USA

18.00-18.30 Interactions between social context and drugs of abuse in humans

Harriet de Wit

Department of Psychiatry and Behavioral Neuroscience, University of Chicago, Chicago, IL, USA

18.30-19.00 Influence of social factors on cocaine self-administration in rats: neural and behavioural mechanisms

Christelle Baunez

Institut de Neurosciences de la Timone, UMR7289 CNRS & Aix Marseille Université, Marseille, France

19.00-19.30 Consequences of early social factors on later alcohol self-administration in rats

Heidi Lesscher

Dept. of Animals in Science and Society, Faculty of Veterinary Medicine, Utrecht University, Utrecht, The Netherlands

20.00 GALA DINNER



SUNDAY, September 3rd, 2017

08.30-09.00 REGISTRATION

09.00-10.00 PLENARY LECTURE
Chair: Terry Robinson

Incubation of drug craving after prolonged voluntary abstinence:
behavior and circuit mechanisms

Dr Yavin Shaham

Branch Chief, Intramural Research Program, NIDA-NIH

10.00-12.00 SYMPOSIA 11 - MEETING ROOM I

Drug treatments for negative symptoms in schizophrenia and depression: animal models and novel clinical strategies

Chair: John D. Salamone

- 10.00-10.30** Animal models and assays related to negative symptoms of schizophrenia: Industrial Perspectives
Cedric Mombereau
Ph.D., Senior Research Scientist, Synaptic Transmission, H. Lundbeck A/S, Ottiliavej 9, 2500 Valby, Denmark
- 10.30-11.00** The development of rodent models of effort-related motivational dysfunction: Characterization of possible drug treatment strategies.
John D. Salamone
Ph.D., Board of Trustees Distinguished Professor, Chair, Interdisciplinary Program in Neuroscience, Head, Behavioral Neuroscience, Department of Psychological Sciences, University of Connecticut, Storrs, CT USA
- 11.00-11.30** Animal models of preference for physical activity vs. inaction: Impact of exercise training and individual differences in dopaminergic parameters
Merce Correa
Ph.D., Profesora Titular (Associate Professor), Área de Psicobiología, Campus de Riu Sec, Universitat Jaume I, 12071 Castelló, Spain
- 11.30-12.00** Effort-based assessment of motivational deficits in psychopathology
Jessica Cooper
Ph.D. Research Fellow, Departments of Psychology and Psychiatry and Behavioral Sciences, Emory University, Atlanta, GA, USA



10.00-12.00 SYMPOSIA 12 - MEETING ROOM II

Mu opioid receptor, reward and social behaviour: from physiology to pathology
Chair: Julie Le Merrer, Jerome Becker

- 10.00-10.30** Mu opioid receptor and autistic syndrome: reward matters
Julie Le Merrer
Research Associate at CNRS, Physiologie de la Reproduction et des Comportements, INRA UMR0085, CNRS UMR7247, Université de Tours Nouzilly, France
- 10.30-11.00** Opioidergic basis of human social interaction
Lauri Nummenmaa
Associate professor in modelling and medical image processing, Turku PET Centre and Department of Psychology, University of Turku, Turku, Finland
- 11.00-11.30** Does mu-opioid modulation of social reward in humans mirror findings from animal models
Guro E. Løseth
Associate Professor in Social and Affective Neuroscience, Department of Psychology, University of Oslo, Oslo, Norway
- 11.30-12.00** New insights into opioid-cannabinoid-dopamine interactions in social play reward
Viviana Trezza
Assistant Professor in Pharmacology, Department of Science, Section of Biomedical Sciences and Technologies, University of Roma Tre, Rome, Italy

12.00-12.30 COFFEE BREAK

12.30-14.30 SYMPOSIA 13 - MEETING ROOM I

Persistent alterations in brain structure and functioning associated with drug addiction, relapse and recovery processes
Chair: Marcello Solinas

- 12.30-13.00** Plasticity of NMDA receptor transmission during the incubation of cocaine craving
Daniel Christian
Rosalind Franklin University of Medicine and Science, USA
- 13.00-13.30** Behavioral and neuronal adaptations associated with excessive cocaine self-administration and recovery by environmental stimulation
Marcello Solinas
INSERM-University of Poitiers, France



- 13.30-14.00** Electromagnetic stimulation in the study and treatment of addiction:
From animal models to human applications
Abraham Zangen
Ben-Gurion University of the Negev, Israel
- 14.00-14.30** From brain to bedside: Using basic science knowledge of fronto-striatal circuitry to shape non-invasive brain stimulation treatment development for substance dependent patients
Colleen Hanlon
Medical University South Carolina, USA

12.30-14.30 SYMPOSIA 14 - MEETING ROOM II

Contribution of astrocytes to the regulation of corticostriatal networks subserving adaptive and maladaptive behaviors
Chair: Benjamin Boutrel

- 12.30-13.00** Lactate release from astrocytes to neurons contributes to the maladaptive plasticity underlying strengthened cocaine related memories
Benjamin Boutrel
PhD, Center for Psychiatric Neuroscience, Lausanne University Hospital, Site de Cery, CH-1008 Lausanne, Switzerland
- 13.00-13.30** Bidirectional modulation of recent and remote traumatic memory by astrocytes
Inbal Goshen
PhD, Edmond and Lily Safra Center for Brain Sciences, The Hebrew University, Givat Ram, Jerusalem 91904, Israel
- 13.30-14.00** PACAP as a molecular bridge linking astrocytes and neurons into an integrated glutamate network in the nucleus accumbens: Implications for Cocaine Seeking
David Baker
PhD, Department of Biomedical Sciences, College of Health Sciences, Schroeder Complex, 429 B, Marquette University, Milwaukee, WI 53201-1881, USA
- 14.00-14.30** Contribution of striatal astrocytes to intrastriatal processes subserving drug seeking habits
David Belin
PhD, Department of Psychology, Behavioural and Clinical Neuroscience Institute, University of Cambridge, Downing Street, Cambridge CB2 3EB, UK

14.30-15.30 CLOSING CEREMONY