Continuities Against Discontinuities – Mother-Infant ‘Communication’ Through Amniotic Fluid, Colostrum, and Milk

Chair: Benoist Schaal, PhD, Laboratoire de Comportement Animal, CNRS-University of Burgundy, France
Chair: Gabriela Chotro, PhD, Department of Psychology, University of the Basque Country UPV/EHU, Spain

Talks and Presenters:

Transnatal Continuity of Amniotic Fluid and Milk: Implications for Behavioral Adaptation of the Newborn
Scott Robinson, PhD, Pacific Ethological Laboratories, USA

Neonatal and Infantile Attraction to Odors from Maternal Diet During Gestation: The Particular Case of Alcohol
M. Gabriela Chotro, PhD, Department of Psychology, University of the Basque Country UPV/EHU, Spain

Synchronicity in Milk Odor and Neonatal Milk Odor Attraction and Suckling in the Laboratory Mouse
Bruno Patris, PhD, Laboratoire de Comportement Animal, CNRS-University of Burgundy, France

Amniotic Odor as a Canalizing Experience
Jeffrey Alberts, PhD, Department of Psychological and Brain Sciences, Indiana University, USA

Human Neonatal Consumption of the Colostrum as a Biocultural Experience
Joël Candau, Department of Sociology and Ethnology, University of Nice, France

New Research on Sensitive Periods in Development

Chair and Discussant: Nathan Fox, PhD, Department of Human Development and Quantitative Methodology, University of Maryland, USA

Talks and Presenters:

The Perception of Time-Compressed Speech at Birth
Judit Gervain, PhD, Laboratoire Psychologie de la Perception, Université Paris Descartes, CNRS, France

Sensitive Periods in Affective Development: Nonlinear Maturation of Fear Learning
Francis Lee, MD, PhD, Department of Psychiatry, Department of Pharmacology, Cornell Weill Medical School, USA

The Effects of Early, Profound Deprivation on Brain and Behavioral Development: Timing is Everything
Charles Nelson, PhD, Department of Pediatrics, Harvard Medical School, USA

Mechanisms of Critical Period Brain Development
Takao Hensch, PhD, Department of Molecular and Cellular Biology, Harvard University, USA

Transgenerational Epigenetic Inheritance

Chair: Tania Roth, PhD, Department of Psychological and Brain Sciences, University of Delaware, USA
Chair: Aron Weller, PhD, Department of Psychology and Gonda Brain Research Center, Bar-Ilan University, Israel

Talks and Presenters:

DNA Methylation Mediating the Impact of Maternal Social State on Offspring Phenotype
Moshe Szyf, PhD, Department of Pharmacology and Therapeutics, McGill University, Canada

Influence of Olfactory Fear Conditioning on Olfactory Neuroanatomy and Sensitivity in Subsequently Conceived Generations
Brian Dias, PhD, Department of Psychiatry and Behavioral Sciences, Emory University, USA

Epigenetic Mechanisms Mediating Perinatal Stress-Induced Transgenerational Neuronal and Synaptic Changes in Prefronto-Limbic-Hypothalamic (PLH) Circuits
Anna Katharina Braun, PhD, Department of Zoology and Developmental Neurobiology, Otto von Guericke University Magdeburg, Germany

Transgenerational Epigenetic Programming of Hypothalamic Mechanisms that Regulate Feeding and Obesity by High Fat Diet
Aron Weller, PhD, Department of Psychology and Gonda Brain Research Center, Bar-Ilan University, Israel
The Complexity of Imitation during Early Childhood: Biological Constraints and Individual Differences

Chair: Rachel Barr, PhD, Department of Psychology, Georgetown University, USA

Talks and Presenters:

Sleep After Learning Enhances Flexibility of Memory Retrieval in 12-Month-Old Infants  
Carolin Konrad, PhD, Department of Psychology, Ruhr-Universität Bochum, Germany

Deferred Imitation, Associative Memory and Communication in 14-Month-Old Children  
Emelie Nordqvist, PhD Candidate, Department of Behavioural Sciences and Learning, Linköping University, Sweden

Investigating the Factors Affecting Young Children's Social and Asocial Learning Preferences  
Emma Flynn, PhD, Centre for Coevolution of Culture and Biology, School of Education, Durham University, UK

Imitation Practice Makes Imitation Perfect: Imitation Enhances Motor-Spatial Learning By Preschoolers in a Brief Training Study  
Rachel Barr, PhD, Department of Psychology, Georgetown University, USA

Mini-Symposia

How Exposure to Language Shapes the Human Infant Brain During the First 6 Months of Life

Chair: Monika Molnar, PhD, Basque Center on Cognition, Brain, and Language, Spain  
Discussant: Manuel Carreiras, PhD, Basque Center on Cognition, Brain, and Language, Spain

Talks and Presenters:

Prenatal Experience Shapes Perception of Prosody at Birth  
Judit Gervain, PhD, Laboratoire Psychologie de la Perception, Université Paris Descartes, CNRS, France

Bilingual Exposure Shapes Resting State Brain Networks by 4 Months of Age  
Monika Molnar, PhD, Basque Center on Cognition, Brain, and Language, Spain

Does Bilingualism Delay Language Acquisition or Speed It Up? Evidence from a Simultaneous EEG-fNIRS Study  
Sonja Rossi, PhD, Department of Medial Psychology, Medical University of Innsbruck, Austria

Infants’ Preference to Look at a Speaker’s Mouth Modulates Activation of Frontal Brain Areas During Speech Perception  
Nicole Altvater-Mackensen, PhD, Max Planck Institute for Human Cognitive and Brain Sciences, Germany

The Neurobiology of Mother-Infant Interaction: Typical vs. Atypical Development

Chair: Regina Sullivan, PhD, Department of Child and Adolescent Psychiatry, Nathan Kline Institute, The Child Study Center at NYU Langone Medical Center, USA  
Discussant: Myron Hofer, PhD, Sackler Institute for Developmental Psychobiology, Columbia University, USA

Talks and Presenters:

Oxytocin, Maternal Behavior, and Excitatory-Inhibitory Balance  
Robert Froemke, PhD, Departments of Otolaryngology and Neuroscience/Physiology, Skirball Institute, Neuroscience Institute, New York University School of Medicine, USA

Oxytocin in the Central Nucleus of the Amygdala Gates Freezing Allowing for Maternal Defense Responses and Transmission of Fear to Offspring  
Marta Moita, PhD, Champalimaud Neuroscience Programme, Portugal

Neurobehavioral Consequences of Early Life Abuse: Fear, Aggression, and Maternal Protection of Pups  
Rosemarie Perry, MS, Emotional Brain Institute, Nathan Kline Institute, NYU Sackler Institute, Department of Child & Adolescent Psychiatry, New York University School of Medicine, USA

Neurobehavioral Consequences of Disrupted Mother-Infant Relationship: Nonhuman Primates  
Mar Sanchez, PhD, Department of Psychiatry & Behavioral Sciences, Emory University School of Medicine, USA
Lunch Workshop

*The Future of Nonhuman Animal Research: Intersections of Science, Public Opinion, Policy, and Practice*

Chair: Allyson Bennett, PhD, Department of Psychology, University of Wisconsin-Madison, USA
Discussant: George Michel, PhD

Talks and Presenters:

*Broader Impacts: Global Intersections and Integrative Ethical Consideration of Animal Research and Policy*
Allyson Bennett, PhD, Department of Psychology, University of Wisconsin-Madison, USA

*At the Intersection of Animal Welfare, Reproducibility, and Policy*
Jeremy Bailoo, PhD, Division of Animal Welfare, University of Bern, Switzerland

*Animal Research: Time to Talk!*
Kirk Leech, PhD, European Animal Research Association, UK