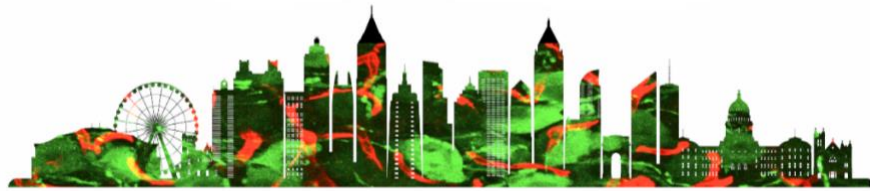


14th WORLD CONGRESS ON NEUROHYPOPHYSIAL HORMONES



A T L A N T A

Thursday, May 16

1:00 - 4:00 p.m.

Registration

3:45 - 4:00 p.m.

Opening session (*Theater*)

4:00 - 5:00 p.m.

Plenary lecture (*Theater*):

Rae Silver Columbia University, USA

Portal pathways in the brain: Their potential for transporting neurovascular peptidergic signals

Chair: Mike Ludwig University of Edinburgh, Scotland

5:00 - 7:00 p.m.

Welcome Reception (*Rotunda and Crystal Dining Room*)

Friday, May 17

8:30 - 9:15 a.m.

Plenary session: *Mortyn Jones Lecture* (*Theater*)

Charles Bourque, McGill University, Canada

Osmotic Control of Vasopressin: What we have learned since Verney and Andersson?

Chair: Colin Brown University of Otago, New Zealand

9:15 - 9:30 a.m.

Coffee Break (*Rotunda and Crystal Dining Room*)

9:30 - 11:10 a.m.

Symposium 1 (*Theater*):

Central Mechanisms in AVP and OXT information processing in health and disease

Chair: Jeff Tasker Tulane University, USA

9:30 - 9:55 a.m.

Alexandre Charlet Centre National de la Recherche Scientifique, France

Astrocytes in Mice Central Amygdala Mediates Oxytocin-dependent Behavioral Adaptation

9:55 - 10:20 a.m.

Tom Cunningham UNT Health Science Center, USA

Sex-based Differences in Control of Neurohypophysial Hormones in a Model of Hyponatremia Adaptation

10:20 - 10:45 a.m.

Zhihua Gao Zhejiang University, China

The Coordinative Role of Oxytocin Endocrine Neurons in Peripheral and Central Regulation

10:45 - 11:10 a.m.

Mike Ludwig University of Edinburgh, Scotland

Salt-loading Reduces Central Osmoresponsiveness in Magnocellular Supraoptic Neurons *In-vivo*

11:10 – 11:30 a.m.	Coffee Break (<i>Rotunda and Crystal Dining Room</i>)
11:30 a.m. - 1:10 p.m.	Symposium 2 (<i>Theater</i>): New Models and Approaches in AVP and OXT Research Chair: Yoichi Ueta University of Occupational and Environmental Health, Japan
11:30 - 11:55 a.m.	Alec Davidson Morehouse School of Medicine, USA Longitudinal Imaging of AVP Neuronal Behavior <i>In-Vivo</i>
11:55 a.m. - 12:20 p.m.	Lang Geng Beijing University, China Development and Optimization of Genetically Encoded Sensors for Oxytocin and Arginine Vasopressin
12:20 - 12:45 p.m.	Quirin Krabichler Heidelberg University, Germany A Novel Transgenic Rat to Tackle the Behavioral Roles of Magnocellular Vasopressin Neurons
12:45 - 1:10 p.m.	Arthur Lefevre University of California San Diego, USA Marmoset Monkeys as a Model of OT Action in Primates
1:10 – 2:00 p.m.	Lunch (<i>Rotunda and Crystal Dining Room</i>)
2:00 – 3:00 p.m.	Data Blitz (<i>Theater</i>)
3:00 - 4:40 p.m.	Symposium 3 (<i>Theater</i>): The Bob Schrier Memorial Symposium Coordinated Central and Periferal Actions of AVP and OXT Chair: Joe Verbalis Georgetown University, USA
3:00 - 3:25 p.m.	Cihan Atila University of Basel, Switzerland Are Patients with AVP-Deficit also Oxytocin deficit?
3:25 a.m. - 3:50 p.m.	Annette de Kloet Georgia State University, USA Exploring Signaling Amongst Neurohypophyseal Hormones: A Complex Discourse that'll Elevate Your Blood Pressure
3:50 - 4:15 p.m.	David Mendelowitz George Washington University, USA Oxytocin Receptor Co-Localization in Brainstem Parasympathetic Cardiac Vagal Neurons
4:15 - 4:40 p.m.	Takumi Oti Okayama University, Japan Oxytocinergic Control Circuits in the Spinal Cord for Male Sexual Behavior
4:40 – 5:15 p.m.	Coffee Break (<i>Rotunda and Crystal Dining Room</i>)

5:15 - 6:55 p.m.

Symposium 4 (*Theater*):

Comparative Neuroendocrinology of AVP and OXT Systems

Chair: Margarita Curras-Collazo University of California, Riverside, USA
Rui Oliveira ISPA Instituto Universitario, Portugal

5:15 - 5:40 p.m.

Christian Gruber Medical University of Vienna, Austria

Biological Function and Pharmacological Potential of Oxytocin Signaling in Ants

5:40 - 6:05 p.m.

Rui Oliveira ISPA Instituto Universitario, Portugal

Evolutionarily Conserved Mechanism of Oxytocin in the Regulation of Social Behavior in Zebrafish

6:05 - 6:30 p.m.

Allison Perkeybile University of Virginia, USA

Making Mothers: Pregnancy, Birth, and Epigenetic Regulation of the Maternal Oxytocin Receptor Gene

6:30 - 6:55 p.m.

Hiroataka Sakamoto Okayama University, Japan

Vasopressin/Oxytocin Peptide-signaling in Marine Planarians Functions as an Antidiuretic before Vascular System Acquisition and Synapse Evolution

Saturday, May 18

8:30 - 9:15 a.m.

Plenary lecture (*Theater*):

Tatsushi Onaka Jichi Medical University, Japan

Metabolic and Stress-coping Actions of Oxytocin

Chair: Sue Carter Indiana University, USA

9:15 - 9:30 a.m.

Coffee Break (*Rotunda and Crystal Dining Room*)

9:30 - 11:10 a.m.

Symposium 5 (*Theater*):

Young Investigators in AVP and OXT Research

Chair: Ryoichi Teruyama Louisiana State University, USA

9:30 - 9:50 a.m.

Shelling Buffington Baylor College of Medicine, USA

Microbial Modulation of the Oxytocin-mesocorticolimbic Dopaminergic Pathway in Mouse for Autism

9:50 - 10:10 a.m.

Alex Castillo-Ruiz Georgia State University, USA

Long-term Effects of Cesarean Birth on Vasopressin and Oxytocin Neurons

10:10 - 10:30 a.m.

Tim Gruber Van Andel Institute, USA

High-calorie Diets Uncouple Hypothalamic Oxytocin Neurons from a Gut-to-Brain Satiety Pathway Via K-opioid Signaling

10:30 - 10:50 a.m.

Matt Kirchner Georgia State University, USA

Changes in Neuropeptide Large Dense Core Vesicle Trafficking Dynamics Contribute towards Adaptive Responses to a Systemic Homeostatic Challenge

10:50 - 11:10 a.m.

Elena Kozlova University of California Riverside, USA

Thyroid Dependent Disruption of Oxytocin and Gut Microbiome in an Environmental Autism Mouse Model

11:10 – 11:30 a.m.	Coffee Break (<i>Rotunda and Crystal Dinning Room</i>)
11:30 a.m. - 1:10 p.m.	Symposium 6 (<i>Theater</i>): The Dr. Larry J. Young Memorial Symposium AVP and OXT in Neuropsychiatric Disorders Chair: Dev Manoli University of California San Francisco (UCSF) & Karen Parker Stanford University, USA
11:30 - 11:55 a.m.	Katrina Choe McMaster University, Canada Investigating the Link Between ASD-risk Genes, Oxytocin, and Social Behavior
11:55 a.m. - 12:20 p.m.	Karen Parker Stanford University, USA Vasopressin: A Trans-primate Biomarker of Social Impairment and Promising Treatment for Autism
12:20 - 12:45 p.m.	Yannis Paloyelis King's College London, UK Unravelling the Pharmacodynamics of Oxytocin Using Functional Neuroimaging
12:45 - 1:10 p.m.	Julia Winter University of Pennsylvania, USA Acute Versus Chronic Matters: Differential Behavioral and Molecular Effects of Oxytocin
1:10 – 3:00 p.m.	Lunch (<i>Rotunda and Crystal Dinning Room</i>)
1:10 – 3:00 p.m.	Poster Session 1 (<i>Magnolia/Sugarberry/Cottonwood</i>)
3:00 - 4:40 p.m.	Symposium 7 (<i>Theater</i>): Developmental Roles of OXT and AVP Chair: Elizabeth Hammock Florida State University, USA
3:00 - 3:25 p.m.	Bice Chini Milan Center for Neuroscience, Italy Neonatal Oxytocin Administration in Mouse Models of Neurodevelopmental Disorders: Long Lasting Rescue Effects
3:25 a.m. - 3:50 p.m.	Heather Caldwell Kent State University, USA Consequences of Altered Oxytocin and Vasopressin Signaling During Embryonic Development
3:50 - 4:15 p.m.	Bruce S. Cushing UT El Paso, USA Neonatal Organizational Effects of Oxytocin and Subsequent Behavioral Expression in Prairie Voles (<i>Microtus ochrogaster</i>)
3:14 - 4:40 p.m.	William Kenkel University of Delaware, USA The Role of Oxytocin in the Metabolic Consequences of Delivery by Cesarean
4:40 - 5:00 p.m.	Journal of Endocrinology: Brief Report and Breaking News (<i>Theater</i>): Presenter: Michael N. Lehman , Editor in Chief, Fundamental and Mechanistic Neuroendocrinology
5:00 p.m.	Free time / ATL activities

Sunday, May 18

8:30 - 9:15 a.m.

Plenary session (*Theater*):
Rob Froemke New York University, USA
Love, Death, and Oxytocin
Chair: Gil Levkowitz The Weizmann Institute, Israel

9:15 – 9:30 a.m.

Coffee Break (Rotunda and Crystal Dinning Room)

9:30 - 11:10 a.m.

Symposium 8 (*Theater*):
Emerging Roles of AVP and OXT on the Neurovascular Unit and Brain Microvessels
Chairs: Maurice Manning University of Toledo, USA &
Bice Chini Milan Center for Neuroscience

9:30 - 9:55 a.m.

Marta Busnelli Consiglio Nazionale delle Reserche, Italy
The Oxytocin System Plays a Key Role in Brain Microvascular Development

9:55 - 10:20 a.m.

Gil Levkowitz The Weizmann Institute, Israel
Oxytocin May Facilitate its Own Peripheral Uptake by Regulating Blood Flow Dynamics

10:20 - 10:45 a.m.

Ranjan Roy Georgia State University, USA
Vasopressin-mediated Neurovascular Coupling in Health and Disease States

10:45 - 11:10 a.m.

Special Talk (*Theater*): **Larry Yong's Scientific Contributions** (*Theater*)
Arjen Boender Emory University, USA
Natural Variation on Oxytocin Receptor Signaling Causes Widespread Changes in Neural Gene Expression: A link to the Natural Killer Gen Complex

11:10 – 11:30 a.m.

Coffee Break (Rotunda and Crystal Dinning Room)

11:30 a.m. - 1:10 p.m.

Symposium 9 (*Theater*):
Neurohypophysial Hormones and Sensory Processing
Chair: Quentin Pittman University of Calgary, Canada

11:30 - 11:55 a.m.

Elizabeth Hammock Florida State University, USA
Oxytocin in Sensory-Dependent Social Development

11:55 a.m. - 12:20 p.m.

Eric Krause Georgia State University, USA
Studying Mechanosensitive Vagal Afferents that Express Oxytocin Receptors: Gut Feelings are Also Matters of the Heart

12:20 - 12:45 p.m.

Michael Perkinson Otago University, New Zealand
Unveiling the Dynamics of Oxytocin Activity and Somatodendritic Release in Freely Behaving Rodents

12:45 – 1:30 p.m.

Lunch (Rotunda and Crystal Dinning Room)

1:10 – 3:00 p.m.

Poster Session 2 (*Magnolia/Sugarberry/Cottonwood*)

3:00 - 4:40 p.m.	Symposium 10 (<i>Theater</i>): The Hal Gainer Memorial Symposium Emerging Areas in the Neurohypophysial Hormones Field Chair: Masha Prager-Khoutorsky McGill University, Canada
3:00 - 3:25 p.m.	James Blevins University of Washington and VA Puget Sound Health care System, USA Efficacy of Oxytocin as a Monotherapy and Combination Therapy to Treat Obesity
3:25 a.m. - 3:50 p.m.	Michael Greenwood University of Bristol, UK Using Quantitative Phosphoproteomics to Explore Hypothalamo-neurohypophysial System Cellular Signalling
3:50 - 4:15 p.m.	Andre Mecawi Federal University of Sao Paulo, Brasil Single-cell Transcriptomics of Hypothalamic Magnocellular Neurons: Unraveling Cellular Diversity, Activity-Associated Genes, and Interspecies Integration
3:50 - 4:15 p.m.	Tian Xue University of Science and Technology of China, China Light Promoted Brain Development: ipRGC, Oxytocin and Synaptogenesis
4:40 – 5:15 p.m.	Coffee Break (Rotunda and Crystal Dinning Room)
5:15 - 6:55 p.m.	Symposium 11 (<i>Theater</i>): Neurohypophysial Hormones Control Social and Defensive Behaviors in a Sex-, Age-, and Receptor-specific Manner Chairs: Hala Harony-Nicholas Icahn School of Medicine, & Joanna Dabrowska Rosalind Franklin University of Medicine and Science, USA
5:15 - 5:35 p.m.	Alice Sanson University of Regensburg, Germany Neuropeptides Trigger Maternal Care and Aggression in Lactating Rats: Influence of the Stress System
5:35 - 5:55 p.m.	Joanna Dabrowska Rosalind Franklin University of Medicine and Science, USA The Integration of Interoceptive Signals and Defensive Behaviors Via Neurohypophysial Hormones in the Bed Nucleus of the Stria Terminalis (BNST)
5:55 - 6:16 p.m.	Aras Petrusis Georgia State University, USA Sex-specific Regulation of Social Motivation by Extrahypothalamic Vasopressin
6:15 - 6:35 p.m.	Brian Trainor University of California, Davis, USA Transcriptional Effects of Social Stress on Oxytocin Neurons in Female California Mice
6:35 - 6:55 p.m.	Samantha Bowden Michigan State University, USA Regulation of Juvenile Social Behaviors by Oxytocin and Vasopressin System in the Brain
7:00 – 9:00 p.m.	Award ceremony and Closing Banquet (Magnolia)
9:00 – 11:00 p.m.	Post-meeting party