14th WORLD CONGRESS ON NEUROHYPOPHYSIAL HORMONES

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 Dinning 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** (*Rotunda and Crystal Dining Room*)
11:30 a.m. - 1:10 p.m.	**Symposium 2** (*Theater*)**:** **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 *In-Vivo*
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** (Rotunda and Crystal Dinning Room)
2:00 – 3:00 p.m.	**Data Blitz** (*Theater*)
3:00 - 4:40 p.m.	**Symposium 3** (*Theater*)**: 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** (*Rotunda and Crystal Dinning Room*)

5:15 - 6:55 p.m.	**Symposium 4** (*Theater*)**:** **Comparative Neuroendocrinology of AVP and OXT Systems** **Chair: Margarita Curras-Collazo** University of California, Riveside, 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.	**Hirotaka 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 Dinning 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 Satiation Pathway Via K-opiod 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 Thyrod Dependent Disruption of Oxytocin and Gut Microbiome in an Environmental Autism Mouse Model

11:10 – 11:30 a.m.	**Coffee Break** (*Rotunda and Crystal Dinning Room*)
11:30 a.m. - 1:10 p.m.	**Symposium 6** (*Theater*)**: 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** (Rotunda and Crystal Dinning Room)
1:10 – 3:00 p.m.	**Poster Session 1** (*Magnolia/Sugarberry/Cottonwood*)
3:00 - 4:40 p.m.	**Symposium 7** (*Theater*)**:** **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 (*Microtus ochrogaster*)
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** (*Theater*)**:** **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** (*Theater*)**:** **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** (*Theater*)**:** **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 Petrulis** 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**