

Poster presentations

(the name of the poster presenter is underlined)

Poster session 2 – Wednesday, June 28th – from 5.00 pm to 7.pm

P2.1 Membrane androgen binding in goldfish brains

Richmond Thompson, Venezia Roshko, Chloe Helsens, Srija Potluri
Oxford College of Emory University Neuroscience and Behavioral Biology, Oxford, GA, USA

P2.2 Fighting behaviour in Siamese fighting fish (*Betta splendens*): influence of gonadectomy on aggression and hormone levels

Sara D. Cardoso, Andreia Ramos, David Gonçalves
Institute of Science and Environment, University of Saint Joseph, Rua de Londres 106, Macau SAR

P2.3 Neurotranscriptomic, endocrine, and behavioral mechanisms of social status across life history stages

Tessa K. Solomon-Lane¹, Jessica M. Maurice², Isabela P. Harmon², Findley R. Finseth¹

¹Claremont Colleges, Claremont, CA USA

²Scripps College, Claremont, CA USA

P2.4 Effect of pre-fight manipulation of androgens in aggressive behavior in the Siamese fighting fish *Betta splendens*

David Gonçalves, Andreia Ramos, Sara Cardoso

Institute of Science and Environment, University of Saint Joseph, Rua de Londres 106, Macau SAR, China

P2.5 Injection of oxytocin increases the concentration of serotonin and it derives the submissive behaviors of horses

Youngwook Jung¹ and Minjung Yoon^{1,2,3}

¹Department of Animal Science and Biotechnology, Kyungpook National University, Sangju, Korea;

²Department of Horse, Companion and Wild Animal Science, Kyungpook National University, Sangju, Korea;

³Research Center for Horse Industry, Kyungpook National University, Sangju, Korea

P2.6 Dog bite levels do not correlate with the plasma concentration of serotonin

Junyoung Kim¹, Yeonju Choi¹, Hye-Won Lee², and Minjung Yoon^{1,3,4}

¹Department of Animal Science and Biotechnology, Kyungpook National University, Sangju, Republic of Korea

²Korean Animal Welfare Research Institute, Namyangju, Republic of Korea

³Department of Horse, Companion, and Wild Animal Science, Kyungpook National University, Sangju, Republic of Korea

⁴Research Center for Horse Industry, Kyungpook National University, Sangju, Republic of Korea

P2.7 The Role of Serotonin in the Estradiol-dependent Selectivity of Auditory Regions in Songbirds

Calista J. Henry, Garth W. Casbourn, Scott M. Ramsay, & Scott A. MacDougall-Shackleton

The University of Western Ontario, Canada

P2.8 Hyperprolactinemia in adult female mice alters olfactory behaviors and electrical activity in the accessory olfactory bulb

Benito Ordaz¹, Fernando Peña-Ortega¹, Teresa Morales², Rebeca Corona²

¹Departamento de Neurofisiología y Neurobiología del Desarrollo

²Departamento de Neurobiología Celular y Molecular, Instituto de Neurobiología, UNAM Campus Juriquilla, Querétaro, México.

P2.9 Of Nonapeptides and Boojums: What Rodent Models Are Trying To Tell Us About the Evolution of Sociality.

Christopher Harshaw

University of New Orleans, New-Orléans, USA

P2.10 The genetic basis of steroid levels in biparental deer mice

Jennifer Merritt^{1,2}, Natalie Niepoth², Esther Carlitz³, Wei Gao³, Clemens Kirschbaum³, Andrés Bendesky^{1,2}

¹*Zuckerman Mind Brain Behavior Institute,*

²*Dept. Ecology, Evolution, & Environmental Biology, Columbia University*

³*Dept. Psychology, Technical University of Dresden*

P2.11 Characterizing parental auditory responses to chick begging calls in biparental zebra finches (*Taeniopygia guttata*)

Kristina O. Smiley and Luke Remage-Healey

Department of Psychological and Brain Sciences, University of Massachusetts Amherst, Amherst, MA USA 01003

P2.12 Uncovering contributions of the medial Preoptic Area to maternal sensitivity

Mariana Pereira, Kaitlin Copelas, Keishley Pizarro-Colon, Azaria Anderson, Anushka Gadekar, and Emily Robinson

Department of Psychological and Brain Sciences, University of Massachusetts Amherst, Amherst, MA 01003, USA.

P2.13 The effects of early life stress and pediatric TBI on the developing rat hippocampal transcriptome and exploratory behaviour

Michaela R. Breach¹, Ethan Goodman¹, Jonathan Packer¹, Alejandra Zaleta-Lastra², Habib E. Akouri², Zoe M. Tapp¹, Cole Vonder Haar³⁻⁵, Olga Kokiko-Cochran³⁻⁵, Jonathan Godbout³⁻⁵, Kathryn M. Lenz²⁻⁵

¹*Neuroscience Graduate Program,* ²*Department of Psychology,* ³*Department of Neuroscience,* ⁴*The Institute for Behavioral Medicine Research,* ⁵*The Chronic Brain Injury Program; The Ohio State University, Columbus, Ohio, 43209, USA*

P2.14 Early life adversity increases cortical astrocyte volume and impacts the transcriptome of the orbitofrontal cortex in adult male and female rats

Erin P. Harris¹, Claire Deckers², Emily A. Witt³, Eden Harder³, Katherine J. Reissner³, Debra A. Bangasser¹

¹*Center for Behavioral Neuroscience and the Neuroscience Institute, Georgia State University, Atlanta, GA, USA*

²*Graduate Neuroscience Program, Temple University, Philadelphia, PA, USA*

³*University of North Carolina Chapel Hill, Chapel Hill, NC, USA*

P2.15 Early life adversity produces sex-specific transcriptional changes in the basolateral amygdala but does not produce resilience to cocaine addiction-like behaviors in rats

Amelia Cuarenta¹, Reza Karbalaei², Alexandra Hehn², Sydney Roth², Atiba Ingram², Claire Deckers², Mathieu Wimmer², Debra Bangasser¹

¹*Georgia State University, USA*

²*Temple University, Philadelphia, USA*

P2.16 Egr1 drives estrous cycle-dependent gene regulation and behavioral plasticity

Devin Rocks¹, Eric Purisic¹, Eduardo Gallo¹, John M. Grealley², Masako Suzuki², Marija Kundakovic¹

¹*Fordham University Department of Biological Sciences, USA*

²*Albert Einstein College of Medicine Center for Epigenomics, USA*

P2.17 Fetal HPG and HPA axes components' expression levels are related to intrauterine position and sex

Ariel Yael¹, Ruthie Fishman¹, Devorah Matas¹, Yoni Vortman², Lee Koren¹

¹*Faculty of Life Sciences, Bar Ilan University, Israel*

²*Hula Research Center, Department of Animal Sciences, Tel-Hai College, Israel*

P2.18 Postpartum resource scarcity alters the nature of maternal aggressive behavior in rats

Sydney Ku, Molly Dupuis, Reza Karbalaei, James Flowers, Mathieu Wimmer, Debra Bangasser

Temple University in Philadelphia, Pennsylvania in the Department of Psychology and Neuroscience

P2.19 Estradiol withdrawal following a hormone simulated pregnancy induces deficits in affective behaviors and increases Δ FosB in D1 and D2 neurons in the nucleus accumbens core in mice

William B Foster¹, Katherine F Beach¹, Paige F Carson¹, Kagan C Harris¹, Brandon L Alonso¹, Leo T Costa¹, Roy C Simamora¹, Jaclyn E Corbin¹, Keegan F Hoag¹, Sophia I Mercado¹, Anya G Bernhard¹, Cary H Leung², Eric J Nestler³, Laura E Been⁴

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²Widener University, Department of Biology, Chester, PA, USA.

³Icahn School of Medicine at Mount Sinai, Friedman Brain Institute, New York, NY, USA.

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P2.20 Disruption of vasopressin 1a signaling on embryonic day 16.5 has subtle effects in social interactions in adult male mice

Katlynd Reese, Heather K. Caldwell

Brain Health Research Institute and Kent State University, Kent, Ohio, USA

P2.21 Molecular evolution of neuromodulatory signalling pathways involved in social behaviour across Lake Tanganyika's cichlids adaptive radiation

Pol Sorigue¹, Jingtao Lilue¹, Walter Salzburger², Rui F. Oliveira^{1,3}

¹*Instituto Gulbenkian de Ciência, Oeiras, Portugal*

²*Basel University, Basel, Switzerland*

³*Instituto Universitário, Lisbon, Portugal*

P2.22 Synchronization of preoptic transcriptomes during courtship reveals the molecular basis of behavioral coordination in a highly social cichlid

Isaac Miller-Crews & Hans A. Hofmann.

Department of Integrative Biology, Institute for Neuroscience, The University of Texas at Austin, Austin, TX, USA

P2.23 Investigating the mechanisms of decision-making with cellular and spatial resolution in a pair bonding fish

Ross S. DeAngelis^{1,2}, Jiawei Han^{1,3}, Isaac Miller-Crews¹, Hans A. Hofmann^{1,2,3}

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³ *Interdisciplinary Life Science Graduate Programs, The University of Texas at Austin, USA*

P2.24 KCC2 Deficiency in Zebrafish Leads to Impaired Socio-cognitive Functioning: Insights into the Role of E/I Imbalance in Neurodevelopmental Disorders and Potential Therapeutic Targets

Mohammad Naderi, Thi My Nhi Nguyen, Christopher Pompili, and Raymond Kwong

Department of Biology, York University, Toronto, ON M3J 1P3, Canada

P2.25 Navigation strategy preference among naked mole-rat social phenotypes

Xinye Peng¹, Olya Bulatova¹, Grace Otto¹, Elizabeth Freitas¹ & Melissa M. Holmes^{1,2,3}

¹*Psychology, University of Toronto Mississauga, Mississauga, ON, Canada*

²*Ecology and Evolutionary Biology, University of Toronto, Toronto, ON, Canada*

³*Cell and Systems Biology, University of Toronto, Toronto, ON, Canada*

P2.26 Leveraging individual power to improve racial equity in academia

Patrick K. Monari¹, Emma R. Hammond¹, Candice L. Malone¹, Amelia Cuarenta², Lisa C. Hiura³, Kelly J. Wallace⁴, Linzie Taylor⁵, Devaleena S. Pradhan⁶

¹*Department of Psychology, University of Wisconsin-Madison, Madison, WI, USA*

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³*Department of Cellular, Molecular, & Developmental Biology, University of Colorado Boulder, Boulder, CO, USA*

⁴*Department of Psychology, Emory University, Atlanta, GA, USA*

⁵*Neuroscience Graduate Program, School of Medicine, Emory University, Atlanta, GA, USA*

⁶*Department of Biological Sciences, Idaho State University, Pocatello, ID, USA*

P2.27 Revisiting Neuroendocrinology: New portal pathways in the brain

Rae Silver, Yifan Yao, Ranjan Roy, Javier E Stern

Columbia University, USA

P2.28 VA opsin and the molecular architecture of the avian seasonal clock

Tyler Stevenson¹, Simone Meddle², Jonathan Perez³, Gaurav Majumdar⁴, and Russell Foster⁵

¹*University of Glasgow, UK*

²*University of Edinburgh, UK*

³*University of South Alabama, USA*

⁴*University of Allahabad, India*

⁵*University of Oxford, UK*

P2.29 The Dark Side of Light: Geospatial Analysis and Anatomical Investigation of the Effects of Light Pollution on the Maternal Paraventricular Nucleus During Pregnancy

Inaya Smith, Camara Macon, Trena Harris and Carmel Martin-Fairey
Harris-Stowe State University, Life Sciences Department, St. Louis, MO, 63103

P2.30 Steroid profiling in a juvenile songbird: response to an aggressive interaction

Emma K. Lam¹, Sofia L. Gray², Kiran K. Soma^{1,3,4}

¹ *Djavad Mowafaghian Center for Brain Health, University of British Columbia, Vancouver, Canada*

² *Department of Psychology, University of Washington, Seattle, USA*

³ *Department of Psychology, University of British Columbia, Vancouver, Canada*

⁴ *Department of Zoology, University of British Columbia, Vancouver, Canada*

P2.31 Mapping and comparing androgen receptor expression in the brain of a suboscine and an oscine bird

Juliana da Costa Araujo¹, Manfred Gahr¹, Victor R. Cueto²

¹ *Department of Behavioural Neurobiology, Max Planck Institute for Biological Intelligence*

² *Consejo Nacional de Investigaciones Científicas y Técnicas*

P2.32 Effects of the social and olfactory environment on gonadal characteristics and epididymal sperm count in male prairie voles (*Microtus ochrogaster*).

Jesse Hurd, Shayla. Nguyen, Casey Sergott, Craig Miller, Dale Kelley, and Elizabeth McCullagh
McCullagh Lab Integrative

Biology, Oklahoma State University – Stillwater, OK, USA.

P2.33 Nucleus accumbens dopamine release reflects the selective nature of pair bonds

Anne F. Pierce¹, David S.W. Protter², Gabriel D. Chapel², Ryan T. Cameron², and Zoe R. Donaldson^{1,2*}

¹ *Department of Psychology & Neuroscience, University of Colorado Boulder*

² *Department of Molecular, Cellular, and Developmental Biology, University of Colorado Boulder*

P2.34 Early life social complexity shapes adult social processing in the communal spiny mouse *Acomys cahirinus*

Kelly J Wallace, Solanch Dupeyron, Mark Li, & Aubrey M Kelly

Department of Psychology, Emory University

P2.35 Epigenetic and Behavioral characteristics of Pair Bonding in the Lined Seahorse (*Hippocampus erectus*)

Sabrina L. Mederos¹, Adele M. H. Seelke², Karen L. Bales²

¹ *University of California, Davis; Animal Behavior Graduate Group, USA*

² *University of California, Davis; Department of Psychology, USA*

P2.36 Hyperandrogenism in female mice elicit changes in male sociosexual behaviour via attractivity and receptivity

Taylor B. Irvine, Ashley Monks

Department of Psychology, University of Toronto, Canada

P2.37 Brain circuits activated by wheel running and paced mating evaluated by manganese enhance magnetic resonance imaging

Mendoza Cisneros Laura Julissa., Pérez Salazar Tania., Aguilar Moreno Josué Alejandro., Raúl G. Paredes

Escuela Nacional de Estudios Superiores, Juriquilla e Instituto de Neurobiología UNAM, campus Juriquilla, Querétaro, México

P2.38 Effect of kisspeptin and paced mating on resting state connectivity in female rats

Bedos M.¹, López-Gutiérrez F.², Paredes R.G.^{1,2}, Alcauter S.²

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² *Instituto de Neurobiología, Universidad Nacional Autónoma de México, Querétaro, Mexico*

P2.39 Sexual responses to clitoral stimulation are dependent on estradiol and progesterone in C57Bl/6 mice

Thanh Phung and D. Ashley Monks

Department of Psychology, University of Toronto, Canada

P2.40 Brainwide inputs to estrogen-receptor alpha expressing neurons in the BNSTp

Diane A. Kelly and Joseph F. Bergan

Department of Psychological and Brain Sciences, University of Massachusetts, Amherst

P2.41 Surprising lack of long-term effect of aromatase inhibition on mouse sexual and aggressive behaviour

Philippine Lemoine, Charlotte Cornil

GIGA Neurosciences – Neuroendocrinology Lab - University of Liège, Belgium

P2.42 Consequences of brain aromatase knock-out on cell proliferation, differentiation and behavior in zebrafish

Cassandra Malleret*¹, Mélanie Blanc*², Laëtitia Guillot¹, Pascal Coumailleu¹, Xavier Cousin¹, Thierry D. Charlier¹, Elisabeth Pellegrini¹

**Co-authors*

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² *MARBEC, University of Montpellier, CNRS, Ifremer, IRD, INRAE, Palavas-les-Flots, France*

P2.43 Sex steroids differently modulate social recognition through androgen and estrogen receptors in the male mouse brain

Dario Aspesi¹, Sarah Matta², Taylor Manning², Anjana Varatharajah², Eden Rechteris-McNab², Elena Choleris¹

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P2.44 Effects of ventral subiculum to the anterior BNST projection activation on anxiety-like behaviors and HPA axis activity in male and female mice

Euphemia S. Marsh^{1,2,3}, Cara Teixeira^{1,2}, Salisha Baranwal², Christen N. Snyder^{1,2,3}, Chih-Lin Chang², Shany Yang^{1,2,3}, Colin Johnston², Isaac Agranoff², Joanna L. Spencer-Segal^{1,2,3,4}

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