

Conference Agenda

Program Overview

Date: Monday, 19/May/2025

11:00am - 12:00pm	Executive Committee Meeting
12:00pm - 1:00pm	Lunch Location: Veranda
12:00pm - 4:30pm	Trainee Workshop: Networking for Success in Science Location: Ratu Makutu Event Centre Chair: Kristin Scaplen <p>Join us for an opportunity to introduce yourself and your science and network amongst your peers before the start of the meeting. In "Networking for Success in Science", trainees will have a chance to practice their scientific elevator pitches during a two-minute lightning talk followed by informal small group discussions to facilitate crossdisciplinary interactions and open windows for potential collaborations. End the workshop with an energetic round of speed mentoring where you can cycle through multiple five-minute Q&A conversations with established IBANGS members and mentors in the field.</p>
5:00pm - 6:00pm	Presidential Address: Professor Margaret McCarthy Location: Ratu Makutu Event Centre Chair: Megan Mulligan Power Play: Enduring Impacts of Adolescent Social Behavior Margaret McCarthy University of Maryland
6:00pm - 8:30pm	Welcome Reception Location: Lagoon Lawn / Beach Entertainment: Fire Dance Performance Hors d'oeuvres & Refreshments

Date: Tuesday, 20/May/2025

8:00am - 10:00am	<p>Symposium 1: Weaving Together the Strands: Cross-Species Insights into the Genetic and Epigenetic Mechanisms of Early Adversity Location: Ratu Makutu Event Centre Chair: Rodrigo Grassi-Oliveira Chair: Tracy Bale</p> <p>Translational methods to capture PTSD-related phenotypes in humans with trauma and PTSD Tanja Jovanovic Wayne State University</p> <hr/> <p>Mechanisms linking early adversity experience with fear and sensory system programming Tracy Bale University of Colorado Anschutz</p> <hr/> <p>ADHD and the Hidden Complexity Behind Contrasting Environments Diego Rovaris University of São Paulo</p> <hr/> <p>Epigenetic Impact of Trauma and Cocaine Use Disorder: Evidence from a Human Cohort Rodrigo Grassi-Oliveira Aarhus University</p>
10:00am - 10:30am	<p>Tea/E-Poster Session 1 Location: Veranda</p> <p>Operant set-shifting in mouse lines selectively bred for ethanol preference Cheryl Reed Oregon Health & Science University</p> <hr/> <p>Investigating the Role of Drosophila Dorsal Paired Medial (DPM) Neurons in Alcohol-Reward Memory. Kristin Scalpen Bryant University</p>
10:30am - 11:30am	<p>Keynote Address: Professor Barry Dickson Location: Ratu Makutu Event Centre Chair: Timothy Bredy</p> <p>Wired for sex: How the mating instinct is programmed into a fly's brain Barry Dickson Queensland Brain Institute</p>
11:30am - 12:00pm	<p>Data Blitz 1 Location: Ratu Makutu Event Centre Chair: André Lucas Silva Borges</p> <p>Effects of Chronic Unpredictable Stress on Dopamine: Stimulated Release, Half-life, and Auto receptor functioning in C57BL/6J and DBA2/J mice. Melloni Cook University of Memphis</p> <hr/> <p>Differential striatal gene expression profiles underlying the propensity for depressionlike behaviour in a mouse model of vertical sleeve Renee Papaluca University of Melbourne</p> <hr/> <p>A possible mechanism to link HTR1B genotype with the callous-unemotional phenotype. Caroline Moul University of Sydney</p> <hr/> <p>The role of context dependant cis-regulatory elements in disease: an intronic region of BDNF gene involved in the modulation of mood and anxiety. Andrew Mcewan University of Aberdeen</p> <hr/> <p>Effects of chronic ethanol exposure on proteolytic processing of the perineuronal net protein brevicin and role for brevicin in aversion-resistant ethanol consumption Jonathas Almeida Virginia Commonwealth University</p>

	<p>Overexpression of OTX2 in Human Neural Cells Links Depression Risk Genes Cathy Barr Krembil Research Institute</p>
	<p>Knockout of the Histone Chaperone Anp32e Alters H2A.Z Distribution, Gene Expression, and Adult Behavior Sandra Youssef University of Ottawa</p>
	<p>Genetic Influences on the Metabolism of Orally Administered Δ9-Tetrahydrocannabinol in the Mouse Winona Booher University of Colorado Boulder</p>
	<p>Endocannabinoids system and alcohol effects across lifespan Emmanuel Onaivi William Paterson University</p>
12:00pm - 1:00pm	<p>Lunch Location: Veranda</p>
1:00pm - 3:00pm	<p>Open</p>
3:00pm - 5:00pm	<p>Symposium 2: RNA Modifications: Implications for Brain Function and Behavior Location: Ratu Makutu Event Centre Chair: Ina Anreiter</p> <p>Epitranscriptomic regulation of feeding behaviour in Drosophila Melanogaster Ina Anreiter University of Toronto</p> <p>Deciphering the roles of m6A and YTHDF proteins in synaptic function and plasticity Mathieu Flamand Centre de Recherche du CHU de Québec - Université Laval</p> <p>CircRNA-derived micropeptides at the synapse: a new mechanism of plasticity and memory? Tim Bredy University of Queensland</p> <p>RNA modulation in brain disorders Yanhong Shi City of Hope</p>
5:00pm - 5:30pm	<p>Tea/E-Poster Session 2 Location: Veranda</p> <p>E-Poster: Differential striatal gene expression profiles underlying the propensity for depressionlike behaviour in a mouse model of vertical sleeve Renee Papaluca University of Melbourne</p> <p>E-Poster: Endocannabinoids system and alcohol effects across lifespan Emmanuel Ovaivi William Paterson University</p>
5:30pm - 6:30pm	<p>Selected Talks 1 Location: Ratu Makutu Event Centre Chair: Andrew Mcewan</p> <p>GWAS of Neuroimaging Derived Subtypes of Alcohol Use Disorder Alexander Hatoum Washington University School of Medicine</p> <p>Genetic basis of paclitaxel-induced mechanical and cold hypersensitivity in a C57BL/6 reduced complexity cross Will Lynch Boston University</p> <p>Phenomic Characterization of C. elegans orthologs of Parkinson's Disease-Associated Genes</p>

	<p>Catharine Rankin University of British Columbia</p> <hr/> <p>A female-specific role for cortical Eph receptors in depression</p> <p>Melissa Perreault University of Guelph</p>
<p>6:30pm - 7:00pm</p>	<p>Data Blitz 2 Location: Ratu Makutu Event Centre Chair: Olivia Williams</p> <hr/> <p>The autism-linked gene ap2s1 modulates acoustically-evoked habituation learning and behavior selection by regulating excitatory drive on hindbrain command neurons</p> <p>Roshan Jain Haverford College</p> <hr/> <p>Impmp2l gene knockdown in mice increases stimulus-driven instrumental behaviour but does not alter goal-directed learning in a model of Tourette syndrome and autism spectrum disorder</p> <p>Teri Furlong University of New South Wales</p> <hr/> <p>Do genetic predictors of poor mental health capture biological or environmental factors in humans?</p> <p>Anna Dearman University of Essex</p> <hr/> <p>Distinct prefrontal cortex neuronal ensembles bidirectionally regulate heroin seeking</p> <p>Jamie Peters University of Alabama at Birmingham</p> <hr/> <p>A Novel Approach for Targeting Brain Long Non-Coding RNA to Influence Behaviour</p> <p>Kelly Clemens University of New South Wales</p> <hr/> <p>Effects of chemogenetic activation of hypothalamic oxytocin neurons on alcohol self-administration in male and female mice</p> <p>Sam Gottlieb Medical University of South Carolina</p> <hr/> <p>A Single-Cell Atlas of Gene Expression and Chromatin Accessibility in the Rat Nucleus Accumbens Reveals Molecular Signatures of Oxycodone Addiction</p> <p>Francesca Telese University of California San Diego</p> <hr/> <p>State-dependent properties of co-transmitting neurons</p> <p>Lewis Sherer Brown University</p> <hr/> <p>LAGS+ an LAGS- two new mouse models based on bidirectional genetic selection to identify death-induced genes in epilepsy</p> <p>Benoit Martin Université de Rennes INSERM</p> <hr/> <p>2. Activity-based anorexia (ABA) in rats: How reward value “drives the wheel”</p> <p>Kaixin Huang Monash Univesity</p>
<p>7:00pm - 10:00pm</p>	<p>Dinner/Resort Restaurants Location: Dinner Resort Restaurants</p>

Date: Wednesday, 21/May/2025

8:00am - 10:00am	<p>Symposium 3: Mechanisms underlying individual variation in motivated behavior Location: Ratu Makutu Event Centre Chair: Karla Kaun</p> <p>Inter-individual differences in Drosophila are shaped by sex, motivational states and physiology. Galit Shohat-Ophir Bar-Ilan University</p> <hr/> <p>Cross-species paradigm for understanding differences in punishment avoidance Philip Jean-Richard-dit-Bressel UNSW Sydney</p> <hr/> <p>Responding on a progressive ratio schedule of reinforcement correlates with nucleus accumbens core dopamine transmission in a genetically diverse inbred mouse panel J. David Jentsch Binghamton University</p> <hr/> <p>Mechanisms for individual variation in alcohol self-administration in Drosophila Karla Kaun Brown University</p>
10:00am - 10:30am	<p>Tea/E-Poster Session 3 Location: Veranda</p> <p>E-Poster: Genetic Influences on the Metabolism of Orally Administered Δ^9-Tetrahydrocannabinol in the Mouse Winona Booher University of Colorado Boulder</p>
10:30am - 11:30am	<p>Early Career Achievement Award Lecture: Caroline Ménard Location: Ratu Makutu Event Centre Chair: Kelly Clemens</p>
11:30am - 12:00pm	<p>Data Blitz 3 Location: Ratu Makutu Event Centre Chair: Sonali Reisinger</p> <p>Acute and chronic psilocybin in mouse models of psychiatric disorders Thibault Renoir University of Melbourne</p> <hr/> <p>Toward an understanding of the therapeutically relevant mechanisms of psilocybin for treating anorexia nervosa Claire Foldi Monash University</p> <hr/> <p>CNS-wide engraftment of Human Monocytes, but not Microglia, induces a chronic proinflammatory state associated with demyelination, astrogliosis, synapse loss, and behavioral dysfunction Hayk Davtyan University of California Irvine</p> <hr/> <p>Specific regulation of extracellular matrix hyaluronan in distinct brain regions following spatial learning. Karen Mifsud University of Bristol</p> <hr/> <p>AKT2 modulates astrocytic nicotine responses in vivo Charles Hoeffler University of Colorado Boulder</p> <hr/> <p>Multiomic Quantification of Strain and Sex Differences in the Acute Behavioral Response to High-dose Delta-9-Tetrahydrocannabinol (THC). Megan Mulligan University of Tennessee Health Science Center</p> <hr/> <p>Maternal immune activation and raloxifene treatment differentially alter neurotransmitter-related transcripts in the dorsal striatum of adult rats Priscila Costa</p>

	Neuroscience Research Australia
	Associations between genetic influences for distinct aspects of impulsivity and early substance use initiation in the ABCD Study Ethan Kinstler Washington University in Saint Louis
12:00pm - 1:00pm	Lunch Location: Veranda
1:00pm - 3:00pm	Open
3:00pm - 5:00pm	Symposium 4: Molecular Switches of Addiction: Unraveling the Role of RNA Splicing in Substance Use Disorders Location: Ratu Makutu Event Centre Chair: Amy Lasek Functional consequences of alternative splicing in polysubstance use Emily Petruccelli Southern Illinois University Edwardsville Chromatin-mediated alternative splicing in cocaine behavior Elizabeth Heller University of Pennsylvania 2. Molecular Mechanisms of Alcohol Withdrawal: The Emerging Role of the RNA-Binding Protein PCBP1 Luana Carvalho Virginia Commonwealth University Elevated intron retention implicates neuroinflammation in brains of individuals with alcohol use disorder Yunlong Liu Indiana University
5:00pm - 5:30pm	Tea / E-poster Session 4 Location: Veranda E-Poster: CNS-wide engraftment of Human Monocytes, but not Microglia, induces a chronic proinflammatory state associated with demyelination, astrogliosis, synapse loss, and behavioral dysfunction Hayk Davtyan University of California Irvine E-Poster: AKT2 modulates astrocytic nicotine responses in vivo Charles Hoeffler University of Colorado Boulder
5:30pm - 6:30pm	Selected Talks 2 Location: Ratu Makutu Event Centre Chair: Renee Papaluca Selective breeding and gut bacteria: enhanced active tameness in mice by administration of <i>Limosilactobacillus reuteri</i> Tsuyoshi Koide National Institute of Genetics Seahorse vision: Regional retinal specialisations support small prey capture Stephanie Heyworth University of Queensland The Role of Novel Histone Modifications in Sleep Regulation Wanhe Li Texas A&M University Fut2 genotype alters ethanol consumption, conditioned place preference, and gut microbiota composition in mice Amanda Barkley-Levenson University of New Mexico
6:30pm - 7:00pm	Data Blitz 4 Location: Ratu Makutu Event Centre Chair: Jonathas Almeida

Developing a model to understand individuality in motivated response in Drosophila

John Hernandez
Brown University

Impact of Repeated Binge Alcohol Consumption on Nucleus Accumbens Splicing

David Linsenbardt
University of New Mexico

The Pedagogy of Neuroscience Research: Bridging Theory with Accessible Practice for Undergraduate Student Success

Colleen Dockstader
University of Toronto

Neonatal opioid withdrawal traits in C57BL/6J and DBA/2J mice: Implications for genetic mapping in BXD recombinant inbred strains

Camron Bryant
Northeastern University

Modelling cognitive and psychiatric behavioural traits in a mouse model of Neurofibromatosis type I

Sonali Reisinger
Florey Institute of Neuroscience and Mental Health

Phenotypic and Genotypic Relationships Among Addiction-Related Traits in Heterogeneous Stock Rats

Paul Meyer
University at Buffalo

Anxiety- and depression-like behavior in Slc39a8 deficient mice

André Lucas S. Borges
University of New Mexico

PKA instructs Drosophila Clock protein in regulating circadian transcription, mediating transcriptional synchrony in the circadian neuronal network.

Deniz Top
University of Alberta

Sex-specific differences in cortical gene expression, neuronal oscillatory function, and behaviour following prenatal valproic acid exposure

Olivia Williams
University of Guelph

Alcohol Conditioned Place Preference and Alcohol Consumption in Dpp6 Knockout Mice.

Maribel Hernández
University of New Mexico Health Sciences Center

7:00pm
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10:00pm

Dinner/Resort Restaurants
Location: [Dinner Resort Restaurants](#)

Date: Thursday, 22/May/2025

8:30am - 9:30am	Distinguished Investigator Award Lecture: Professor Hee-Sup Shin Location: Ratu Makutu Event Centre Chair: Megan Mulligan
9:30am - 10:00am	Tea / E-poster Session 5 Location: Veranda Bergmann glia suppress Purkinje cell firing via interneurons Sang Jeong Kim Seoul National University College of Medicine E-Poster Neonatal opioid withdrawal traits in C57BL/6J and DBA/2J mice: Implications for genetic mapping in BXD recombinant inbred strains Camron Bryant Northeastern University E-Poster: Phenotypic and Genotypic Relationships Among Addiction-Related Traits in Heterogeneous Stock Rats Paul Meyer University at Buffalo
10:00am - 12:00pm	Outstanding Travel Awardees Location: Ratu Makutu Event Centre Chair: Amy Lasek rbfox1 loss of function in zebrafish leads to dysregulation in bdnf/trkb2 and pac1a expression resulting in HPI axis hyperactivation, altered stress response and allostatic overload Adele Leggieri Queen Mary University of London Genetic and cellular sources of individual difference in goal-directed learning Alanna Carey Boston University Assessing Migraine Intensity Using Machine Vision Empowered Ethology Jacob Beierle The Jackson Laboratory High fat diet alters behavior and hippocampal gene expression in mice Melissa Totten Salem College
12:00pm - 1:00pm	IBANGS Business Meeting/Lunch Location: Ratu Makutu Event Centre
1:00pm - 3:00pm	Symposium 5: Moving the needle on eating disorders: novel neurogenetic and behavioral genetic insights Location: Ratu Makutu Event Centre Chair: Claire Foldi Chair: Morgan H James A biological basis for binge eating as 'self-medication' Morgan James Monash Univesity Gut-brain mechanisms underlying disordered eating and mental health impacts of bariatric surgery Robyn Brown University of Melbourne 1. A genetic signature of resistance to activity-based anorexia in corticostriatal projection neurons Kaixin Huang Monash Univesity Characterizing the Genetic Relationship between Binge Eating and Internalizing and Externalizing Disorders Maia Choi Rutgers University
3:00pm -	Tea Location: Veranda

3:30pm	
3:30pm - 5:00pm	<p>Selected Talks 3 Location: Ratu Makutu Event Centre Chair: Lewis Sherer</p> <hr/> <p>Intergenerational Effects Of Chronic Alcohol Exposure On The Mammalian Transcriptome Sean Farris University of Pittsburgh</p> <hr/> <p>The role of gut microbiota on inter-breeder differences of aggression in ICR male mice Aki Takahashi University of Tsukuba</p> <hr/> <p>Genetic mapping of tame behavior in a cross population of Japanese indigenous chickens Tatsuhiko Goto Obihiro University of Agriculture and Veterinary Medicine</p>
6:00pm - 8:00pm	<p>Closing Banquet Location: Lagoon/Beach Entertainment: Meke Performance</p>

Date: Friday, 23/May/2025

6:30am	Breakfast & Checkout
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10:00am	