

IBANGS 2016

A Announcements **F** Free Time **P** Poster **D** Product Demo **R** Registration **S** Shuttle **C** Special Event **L** Special Lecture **Y** Symposium

MAY 12 • THURSDAY

8:30am – 9:00am	S Shuttle Service to JAX Single Shuttle	TBA
	8:30am Departs Harborside Hotel to Bar Harbor Grand Hotel to Cromwell Harbor Motel Drops off at The Jackson Laboratory Main Entrance	
9:00am – 12:00pm	Y Satellite Symposium: Advanced Mouse Genetics: CRISPR/Cas9 <i>Moderators: Vivek Kumar</i> <i>Speakers: Bill Buaas, Wen-bo Wang, Michael V. Wiles</i> Join us for a day of cutting edge mouse genetic techniques. The morning session will consist of an overview of how to use CRISPR/Cas9 system to edit the mouse genome. The afternoon session will be a tutorial on how to use the Diversity Outcross (DO) resources.	LCC Auditorium (TJL, 600 Main St, Bar Harbor, ME 04609)
9:01am – 9:45am	Y Mini-Symposium: CRISPR I <i>Speakers: Michael V. Wiles</i>	LCC Auditorium (TJL, 600 Main St, Bar Harbor, ME 04609)
9:50am – 10:35am	Y Mini-Symposium: CRISPR II <i>Speakers: Wen-bo Wang</i>	LCC Auditorium (TJL, 600 Main St, Bar Harbor, ME 04609)
10:40am – 11:25am	Y Mini-Symposium: CRISPR III <i>Speakers: Bill Buaas</i>	LCC Auditorium (TJL, 600 Main St, Bar Harbor, ME 04609)
11:30am – 12:00pm	Y Mini-Symposium: CRISPR Panel Discussion <i>Speakers: Bill Buaas, Wen-bo Wang, Michael V. Wiles</i>	LCC Auditorium (TJL, 600 Main St, Bar Harbor, ME 04609)
12:00pm – 1:00pm	F Lunch - vouchers for Roscoe's will be provided	Roscoes (TJL, 600 Main St, Bar Harbor, ME 04609)
12:30pm – 1:00pm	S Shuttle Service to JAX Single Shuttle	TBA
	12:30pm Departs Harborside Hotel to Bar Harbor Grand Hotel to Cromwell Harbor Motel Drops off at The Jackson Laboratory Main Entrance For those not attending both symposiums, a shuttle will be provided from JAX back to hotels.	
1:00pm – 4:00pm	Y Satellite Symposium: Advanced Mouse Genetics: Diversity Outcross <i>Moderators: Vivek Kumar</i> <i>Speakers: Kwangbom Choi, Dan Gatti, Narayanan Raghupathy, Petr Simecek</i> Join us for a day of cutting edge mouse genetic techniques. The morning session will consist of an overview of how to use CRISPR/Cas9 system to edit the mouse genome. The afternoon session will be a tutorial on how to use the Diversity Outcross (DO) resources. Gary Churchill's intro to DO.	LCC Auditorium (TJL, 600 Main St, Bar Harbor, ME 04609)
3:30pm – 4:30pm	S Shuttle Service to JAX Shuttle Services to JAX depart Hotels every 15 Minutes	TBA
	BUS A 3:30pm Departs Harborside Hotel to Bar Harbor Grand Hotel to Cromwell Harbor Motel Drops off at The Jackson Laboratory Main Entrance BUS B 3:45pm Departs Harborside Hotel to Bar Harbor Grand Hotel to Cromwell Harbor Motel Drops off at The Jackson Laboratory Main Entrance BUS A 4:00pm Departs Harborside Hotel to Bar Harbor Grand Hotel to Cromwell Harbor Motel Drops off at The Jackson Laboratory Main Entrance BUS B 4:15pm Departs Harborside Hotel to Bar Harbor Grand Hotel to Cromwell Harbor Motel Drops off at The Jackson Laboratory Main Entrance	
4:00pm – 4:30pm	R Registration	Lobby (TJL, 600 Main St, Bar Harbor, ME 04609)
5:00pm – 7:00pm	C Opening Reception Bring your party hat	Roscoes (TJL, 600 Main St, Bar Harbor, ME 04609)
6:15pm – 7:15pm	S Shuttle Service to Hotels Shuttle Service to Hotels - depart JAX every 15 minutes	TBA
	BUS A 6:15pm Departs The Jackson Laboratory Main Entrance	

Drops off at Cromwell Harbor Motel, Bar Harbor Grand Hotel, and Harborside
BUS B
6:30pm
Departs The Jackson Laboratory Main Entrance
Drops off at Cromwell Harbor Motel, Bar Harbor Grand Hotel, and Harborside
BUS A
6:45pm
Departs The Jackson Laboratory Main Entrance
Drops off at Cromwell Harbor Motel, Bar Harbor Grand Hotel, and Harborside
BUS B
7:00pm
Departs The Jackson Laboratory Main Entrance
Drops off at Cromwell Harbor Motel, Bar Harbor Grand Hotel, and Harborside

IBANGS 2016

A Announcements **F** Free Time **P** Poster **D** Product Demo **R** Registration **S** Shuttle **C** Special Event **L** Special Lecture **Y** Symposium

MAY 13 • FRIDAY

7:00am – 8:00am	S Shuttle Service to JAX	TBA
	Shuttles depart Hotels every 15 minutes BUS A 7:00am Departs Harborside Hotel to Bar Harbor Grand Hotel to Cromwell Harbor Motel Drops off at The Jackson Laboratory Main Entrance BUS B 7:15am Departs Harborside Hotel to Bar Harbor Grand Hotel to Cromwell Harbor Motel Drops off at The Jackson Laboratory Main Entrance BUS A 7:30am Departs Harborside Hotel to Bar Harbor Grand Hotel to Cromwell Harbor Motel Drops off at The Jackson Laboratory Main Entrance BUS B 7:45am Departs Harborside Hotel to Bar Harbor Grand Hotel to Cromwell Harbor Motel Drops off at The Jackson Laboratory Main Entrance	
8:00am – 8:15am	R Registration	Lobby (TJL, 600 Main St, Bar Harbor, ME 04609)
	Speakers can upload their talks at this time.	
8:15am – 8:25am	A Welcome: Dr. Edison Liu, President and CEO of The Jackson Laboratory	LCC Auditorium (TJL, 600 Main St, Bar Harbor, ME 04609)
	<i>Speakers: Ed Liu</i>	
8:25am – 8:30am	A Welcome: Leo Schalkwyk, President IBANGS	LCC Auditorium (TJL, 600 Main St, Bar Harbor, ME 04609)
	<i>Speakers: Leonard Schalkwyk</i>	
8:30am – 9:30am	L Keynote Lecture: David Goldman	LCC Auditorium (TJL, 600 Main St, Bar Harbor, ME 04609)
	<i>Moderators: Elissa Chesler</i>	
9:30am – 10:00am	F Coffee Break	Lobby (TJL, 600 Main St, Bar Harbor, ME 04609)
10:00am – 10:30am	Y Selected Talks 1: To drink or Not(ch) to drink: conserved neuro-molecular mechanisms underlying alcohol cravings	LCC Auditorium (TJL, 600 Main St, Bar Harbor, ME 04609)
	<i>Moderators: Stephen Boehm</i> <i>Speakers: Karla Kaun</i>	
	To drink or Not(ch) to drink: conserved neuro-molecular mechanisms underlying alcohol cravings Michael Feyder, Emily Petruccelli, Rachel Muster, Nicolas Ledru, Kristin Scaplen, Karla R. Kaun	
10:30am – 10:50am	Y Selected Talks 1: Machine learning to identify highly heritable components of substance use disorders	LCC Auditorium (TJL, 600 Main St, Bar Harbor, ME 04609)
	<i>Moderators: Stephen Boehm</i> <i>Speakers: Jinbo Bi</i> Machine learning to identify highly heritable components of substance use disorders Jinbo Bi ¹ , Jiangwen Sun ¹ , Henry R Kranzler ² ¹ Department of Computer Science and Engineering, University of Connecticut ² Center for Studies of Addiction, University of Pennsylvania Perelman School of Medicine	
10:50am – 11:10am	Y Selected Talks 1: Genomic responses in mouse models greatly mimic human inflammatory / psychiatric diseases.	LCC Auditorium (TJL, 600 Main St, Bar Harbor, ME 04609)
	<i>Moderators: Stephen Boehm</i> <i>Speakers: Tsuyoshi Miyakawa</i> Genomic responses in mouse models greatly mimic human inflammatory / psychiatric diseases. Tsuyoshi Miyakawa ¹ , Keizo Takao ² , Hideo Hagihara ¹ ¹ Division of Systems Medical Science, Institute for Comprehensive Medical Science, Fujita Health University ² Section of Behavior Patterns, Center for Genetic Analysis of Behavior, National Institute for Physiological Sciences	
11:10am – 11:30am	Y Selected Talks 1: EEG source imaging indices of cognitive control show association with dopamine system genes	LCC Auditorium (TJL, 600 Main St, Bar Harbor, ME 04609)
	<i>Moderators: Stephen Boehm</i> <i>Speakers: Grainne McLoughlin</i> EEG source imaging indices of cognitive control show association with dopamine system genes G McLoughlin ¹ , J Palmer ² , S Makeig ² , N Bigdely-Shamlo ² , T Banaschewski ³ , M Laucht ³ , 4 & D Brandeis ^{3,5,6,7} ¹ Social, Genetic and Developmental Psychiatry Centre, Institute of Psychiatry, Psychology and Neuroscience, King's College London, London, UK ² Swartz Center for Computational Neuroscience, Institute for Neural Computation, University of California San Diego, La Jolla, California, USA ³ Department of Psychology, University of Potsdam, Potsdam, Germany ⁴ Department of Child and Adolescent Psychiatry and Psychotherapy, Central Institute of Mental Health, Mannheim, Medical Faculty Mannheim / Heidelberg University, Mannheim, Germany ⁵ Department of Psychology, University of Potsdam, Potsdam, Germany ⁶ Department of Child and Adolescent Psychiatry, University of Zürich, Zürich, Switzerland	

	6 Zurich Center for Integrative Human Physiology, University of Zürich, Zürich, Switzerland 7 Neuroscience Center Zurich, University and ETH Zürich, Switzerland	
11:30am – 11:50am	<p>Y Selected Talks 1: COMT Allelic Variation and Sleep Organization in Human Neonatal Opioid Withdrawal</p> <p><i>Moderators: Stephen Boehm</i> <i>Speakers: Katrina Daigle</i></p> <p>COMT Allelic Variation and Sleep Organization in Human Neonatal Opioid Withdrawal <u>K.M. Daigle</u>², M.J. Hayes¹, 2, H. Shrestha³, B.A. Logan⁴, N.A. Heller⁵, M.S. Brown⁶, D.A. Nielsen⁷, & E.M. Wachman³</p> <p>1Graduate School of Biomedical Sciences, University of Maine 2Psychology, University of Maine 3Pediatrics, Boston Medical Center 4Children's Hospital of Pittsburg of UPMC 5Department of Psychology, Colby-Sawyer College 6Pediatrics, Eastern Maine Medical Center 7Baylor College of Medicine</p>	LCC Auditorium (TJL, 600 Main St, Bar Harbor, ME 04609)
11:50am – 12:10pm	<p>Y Selected Talks 1: Amygdala-cortical interaction reveals underlying connectivity mechanisms in 5-HTTLPR genetic polymorphism variation</p> <p><i>Moderators: Stephen Boehm</i> <i>Speakers: Qian Luo</i></p> <p>Amygdala-cortical interaction reveals underlying connectivity mechanisms in 5-HTTLPR genetic polymorphism variation <u>Qian Luo</u>^{1,2}, Tom Holroyd³, Derek Mitchell⁴, Henry Yu², Xi Cheng⁵, Colin Hodgkinson⁶, Daniel McCaffrey², David Goldman⁶, R. James Blair²</p> <p>1 Current affiliation: Behavioral Biology Branch, Walter Reed Army Research Institute 2 Work done at: Unit on Affective Cognitive Neuroscience, NIMH/NIMH 3MEG Core Facility, NIMH/NIH 4Departments of Psychiatry and Anatomy & Cell Biology, Brain and Mind Institute, University of Western Ontario 5National Institute of Allergy and Infectious Diseases, NIH 6Laboratory of Neurogenetics, NIAAA/NIH</p>	LCC Auditorium (TJL, 600 Main St, Bar Harbor, ME 04609)
12:00pm – 1:00pm	<p>Mentoring Workshop – Neurobehavioral Genetics Networking for Students and Post-Docs</p> <p><i>Panelists: Laura Anderson, Elissa Chesler, James Clark, John Crabbe, Josh Dubnau, Lina Emilsson, David Goldman, Clarissa Parker, Joyce Peterson, Vivek Philip, Stacey Rizzo, Alan Rosenwasser, Mark Rutledge-Gorman, Leonard Schalkwyk</i></p> <p>Training in Behavioral and Neurogenetics is providing you with an array of skills that positions you to succeed at many post-PhD careers. You all hope fervently that these careers involve an actual, paid job! And you all know that making effective use of a network of mentors greatly expands your fortunes in deciding upon a particular career path and connecting with one of those jobs. We'd like to offer you an opportunity to meet future mentors and explore different ideas about your future career.</p> <p>This working lunch offers an opportunity to meet and talk with a number of scientists at this meeting. We've collected an array of folks who occupy a variety of niches in the scientific enterprise who are willing to talk with you about their careers, and how these careers work.</p>	TBA
12:15pm – 1:30pm	F Lunch	Roscoes (TJL, 600 Main St, Bar Harbor, ME 04609)
1:30pm – 3:00pm	<p>Y Outstanding Travel Award Talks</p> <p><i>Moderators: Mark Rutledge-Gorman</i> <i>Speakers: Kayla Gjelsvik, Randall Krug, Ryan Logan, Laverne Melón</i></p> <p>The Bone Morphogenetic Protein (BMP) Signaling Pathway is Required for Allodynia in <i>Drosophila melanogaster</i> <u>K Gjelsvik</u>¹, M Galko², G Ganter¹</p> <p>1University of New England, Biddeford ME, 2UT Southwestern MD Anderson, Houston TX</p> <p>Endocannabinoid Signaling as a Modifier of Zebrafish Stress Responses <u>Randall G. Krug</u>^{1,2}, Morgan O. Petersen³, and Karl J. Clark, Ph.D. ^{1,2,3}</p> <p>1Mayo Graduate School Neurobiology of Disease track 2Mayo Clinic Addiction Research Center 3Mayo Clinic Department of Biochemistry and Molecular Biology, Mayo Clinic, Rochester, MN, USA.</p> <p>Identifying novel therapeutic epigenetic targets for the treatment of bipolar disorder <u>RW Logan</u>¹, AR Ozburn^{2,3}, X Zhu¹, E Fitzgerald¹, RN Arey⁴, MB Jarpe⁵, C Wang⁶, and CA McClung¹</p> <p>1Translational Neuroscience Program, Department of Psychiatry, School of Medicine, University of Pittsburgh, Pittsburgh, PA 15219 2Department of Behavioral Neuroscience, Oregon Health and Science University, Portland, OR 97239 3Research and Development Service, Portland Veterans Affairs Medical Center, Portland, OR 97239 4Department of Molecular Biology, Princeton University, Princeton, NJ 08544 5Acetylon Pharmaceuticals, Inc., Boston, MA 02210 6Department of Radiology, Massachusetts General Hospital, Harvard Medical School, Charlestown, MA 02129</p> <p>KCC2 and Peripartum stress hyporeactivity: Implications for Vulnerability to Postpartum Depression <u>LC Melón</u>¹, JL Maguire¹</p> <p>1Department of Neuroscience, Tufts University School of Medicine, Boston, MA, USA Funding: NINDS-R01NS073574 (JLM) and NIGMS-K12GM074869 (LCM)</p>	LCC Auditorium (TJL, 600 Main St, Bar Harbor, ME 04609)
3:00pm – 3:30pm	F Coffee Break	Lobby (TJL, 600 Main St, Bar Harbor, ME 04609)
3:30pm – 5:30pm	<p>Y Symposium 1: The evolving role of corticotropin releasing factor (CRF) system in physiology and behavior</p> <p><i>Moderators: Su Guo.</i> <i>Speakers: Su Guo (speaker), Phillip W. Gold, Matthew Hill, Greg S. B. Suh</i></p> <p>A search lasting nearly three decades has led to the discovery of corticotropin releasing factor (CRF), a 41 amino acid peptide by Vale and colleagues in 1981. Since then, a large body of work suggests that CRF mediates not only the endocrine but also the autonomic and behavioral responses to stress. Furthermore, there is evidence pointing to abnormal function of CRF in depression. In this symposium, we will discuss the role of CRF in</p>	LCC Auditorium (TJL, 600 Main St, Bar Harbor, ME 04609)

physiological and behavioral regulation from fruit flies to humans. The perspective gained from an evolutionary view of the CRF system may potentially shed important light on its development and function, and how its malfunction may contribute to disease states including anxiety, depression, and addiction.

1. Interoceptive Nutrient Sensing by the Brain

[Greg S. B. Suh](#)

Skirball Institute, Department of Cell Biology, NYU School of Medicine

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2. The Role of CRH in the Human Stress Response and in Melancholic and Atypical Depression

[Philip W. Gold](#)

Intramural Research Program, NIH/NIMH

http://data.memberclicks.com/receiptattach/ibangs/10610603/7276174/IBANGS_Gold_Abstract.docx

3. Unraveling the connectivity- function relationship of corticotropin releasing factor (CRF) neurons employing zebrafish

Mahendra Wagle and [Su Guo](#)

Department of Bioengineering and Therapeutic Sciences, Programs in Biological Sciences and Human Genetics, UCSF, 1550 4th Street, San Francisco, CA 94143-2811

<http://data.memberclicks.com/receiptattach/ibangs/10628026/7276174>

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4. Functional interplay between CRHR1 and endocannabinoid signaling in the regulation of stress and anxiety

[Matthew N. Hill](#)¹, [J. Megan Gray](#)¹, [Maria Morena](#)¹, [Haley Vecchiarelli](#)¹, [Jan Deussing](#)² and [Sachin Patel](#)³.

¹Hotchkiss Brain Institute, University of Calgary, Calgary, AB CANADA; ²Department of Stress Neurobiology and

Neurogenetics, Max Planck Institute of Psychiatry, Munich GERMANY; ³Department of Psychiatry, Vanderbilt

University, Nashville TN USA

http://data.memberclicks.com/receiptattach/ibangs/10511828/7276174/HILL_-_IBANGS_abstract.docx

5:45pm – 7:30pm

P Poster Session 1 (ODD NUMBERS PRESENT)

Roscoes (TJL, 600 Main St, Bar Harbor, ME 04609)

1. Sex differences in the behaviour of the 3xTg-AD mouse model of Alzheimer's Disease [Richard E. Brown](#)
3. Profiling differential expression of miRNA in the prefrontal cortex of tobacco smokers vs. non-smokers. [MS Powers](#)
5. How universal is the 'Epigenetic Clock'? [Louis Y. El Khoury](#)
7. Exploring Intersections in Mental Health and Addiction: A Screen for Psychiatric Drug Efficacy in Nicotine Cessation [J Yang](#)
9. Involvement of long-term and transgenerational hippocampal Akt-mTOR signaling impairment in behavioral deficiency in the F1 and F2 generations of postpartum depression-like mice [Chen G](#)
11. A comparative phenotypic analysis of nicotine effects and dependence in C57BL/6J and C57BL/6N mouse strains [M. Imad Damaj](#)
13. Resources for translational behavioral, neurological and addiction research at the Rat Genome Database [Jennifer R. Smith](#)
15. The genetics of phenotypic tradeoffs between stress-resistance and cognition [Y Ben-Shahar](#)
17. Identifying genes associated with conditioned fear in the Diversity Outbred mouse population using a forward genetic, genome-wide approach [Andrew Kreuzman](#)
19. An e-internship program in Neuroscience for K12 students [A. Delprato](#)
21. Integrating convergent evidence across species to identify conserved genes underlying behavior. [JA Bublier](#)
23. Targeting Neuroimmune Pathways Reduces Alcohol Withdrawal Symptoms [Susan E. Bergeson](#).
25. The International Mouse Phenotyping Consortium – a comprehensive functional catalogue of a mammalian genome catalogue [ME Stewart](#)
27. Combined consumption of alcohol and a high-fat diet: effects on behavior and health [RR Gelineau](#)
29. Assessing motivational drive to attain alcohol in *Drosophila melanogaster* [Mei N](#)
31. Genome-wide mapping of ethanol sensitivity in the Diversity Outbred mouse population [Steven Kasparek](#)¹
33. Functional *in vitro* studies within CHRNA5-CHRNA3-CHRNA4 gene cluster on Chr15q24-25.1 locus [Belimezova S](#)
35. Use of the Visual Cliff apparatus for high-throughput quantification of impulsivity [Price E. Dickson](#)
37. Sex differences in cognitive and behavioural tasks in the 5xFAD mouse model of Alzheimer's Disease [F Kose](#)
39. Removal of a high-fat diet produces improvements anxiety-like behavior and health [I De Pina Monteiro](#)
41. Genetic Mapping in Diversity Outbred mice identifies a novel *Trpa1* functional variant affecting inflammatory pain sensitivity [JM Recla](#)
43. Neurobiological mechanisms of hRNP H1 in methamphetamine addictive behaviors [Neema Yazdani](#)
45. Predictive identification of addiction related genes using rapid behavioral screening of drug-naïve knock-out mice [T. D. WILCOX](#)
47. Quaking -Moving from human to fish to understand the connection between glia cells, myelination, synaptogenesis and higher brain function [Lina Emilsson](#)
49. Sensitivity of a novel paradigm for detecting episodic-like memory impairments in 5XFAD and aged mice. [SJ Sukoff Rizzo](#)
51. The JAX repository of mouse models for neurobehavioral genetics [M Sasner](#)
53. Central amygdala nociceptin neurons inhibit high fat food consumption [JA Hardaway](#)
55. Genetic Influences on Resting EEG Alpha Power in an American Indian Tribe [M-A Enoch](#)
57. Identifying novel behavioural mouse models from the International Mouse Phenotyping Consortium Resource. [MM Simon](#)
59. Substrain differences in ethanol preference and running wheel activity in C57BL/6J and C57BL/6N mice. [WD McCulley III](#)
61. Illustrating psychiatric disease classification and overlap through GeneWeaver geneset associations [Timothy Reynolds](#)
63. EAAT2 Regulation as a Mechanism for NRG3-Mediated Nicotine Withdrawal Phenotypes [Adewale](#)

[Adeluyi](#)

65. The role of JmJc demethylases in alcohol-related behaviors [Jorge H. Pinzón C](#)

6:15pm – 7:15pm

S Shuttle Service to Hotels

TBA

Shuttle Service to Hotels - depart JAX every 15 minutes

BUS A

6:15pm

Departs The Jackson Laboratory Main Entrance

Drops off at Cromwell Harbor Motel, Bar Harbor Grand Hotel, and Harborside

BUS B

6:30pm

Departs The Jackson Laboratory Main Entrance

Drops off at Cromwell Harbor Motel, Bar Harbor Grand Hotel, and Harborside

BUS A

6:45pm

Departs The Jackson Laboratory Main Entrance

Drops off at Cromwell Harbor Motel, Bar Harbor Grand Hotel, and Harborside

BUS B

7:00pm

Departs The Jackson Laboratory Main Entrance

Drops off at Cromwell Harbor Motel, Bar Harbor Grand Hotel, and Harborside

7:30pm – 9:00pm

F Dinner - on your own

See List of Restaurants (Bar Harbor)

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A Announcements **F** Free Time **P** Poster **D** Product Demo **R** Registration **S** Shuttle **C** Special Event **L** Special Lecture **Y** Symposium

MAY 14 • SATURDAY

7:30am – 8:15am	S Shuttle Service to JAX Shuttles depart Hotels every 15 minutes BUS A 7:30am Departs Harborside Hotel to Bar Harbor Grand Hotel to Cromwell Harbor Motel Drops off at The Jackson Laboratory Main Entrance BUS B 7:45am Departs Harborside Hotel to Bar Harbor Grand Hotel to Cromwell Harbor Motel Drops off at The Jackson Laboratory Main Entrance BUS A 8:00am Departs Harborside Hotel to Bar Harbor Grand Hotel to Cromwell Harbor Motel Drops off at The Jackson Laboratory Main Entrance BUS B 8:15am Departs Harborside Hotel to Bar Harbor Grand Hotel to Cromwell Harbor Motel Drops off at The Jackson Laboratory Main Entrance	TBA
8:00am – 8:30am	R Registration Speakers can upload their talks at this time.	Lobby (TJL, 600 Main St, Bar Harbor, ME 04609)
8:15am – 8:25am	A Announcements	LCC Auditorium (TJL, 600 Main St, Bar Harbor, ME 04609)
8:30am – 9:30am	L Young Scientist: Alex Keene (Genetic and evolutionary dissection of the sleep-feeding conflict) <i>Moderators: Yehuda Ben-Shahar</i> <i>Speakers: Alex Keene</i> Genetic and evolutionary dissection of the sleep-feeding conflict. <u>Keene, Alex C.</u> Florida Atlantic University, Biological Sciences, Boca Raton, FL	LCC Auditorium (TJL, 600 Main St, Bar Harbor, ME 04609)
9:30am – 10:00am	F Coffee Break	Lobby (TJL, 600 Main St, Bar Harbor, ME 04609)
10:00am – 12:00pm	Y Symposium 2: Analysis of 3D genomes and chromatin <i>Moderators: Jonathan Pollock</i> <i>Speakers: Schahram Akbarian, Olivia Corradin, Yijun Ruan, Hyejung Won</i> Most genetic analysis is conceptualized in two dimensional space along a six foot string of DNA. However, the genome is highly compacted in the cell nucleus forming three dimensional structures. These three dimensional structures enable interactions among distal elements on the same chromosomes as well as different chromosomes. The 3D chromatin structure may help to explain more of the inherited disease risk and the functions that many of the discovered GWAS SNPs play in non-coding regions. 1. Annotation of non-coding regulatory elements via 3D chromosome conformation in human brain development <u>Hyejung Won</u> ¹ , Luis de la Torre-Ubieta ¹ , Jason L. Stein ¹ , Neelroop N. Parikhshak ¹ , Farhad Hormozdiari ³ , Changhoon Lee ¹ , Eleazar Eskin ^{3,4} , Jason Ernst ^{2,3} , Daniel H. Geschwind ^{1,4} 1 Neurogenetics Program, Department of Neurology, David Geffen School of Medicine, University of California Los Angeles 2 Department of Biological Chemistry, David Geffen School of Medicine, University of California Los Angeles 3 Department of Computer Science, University of California Los Angeles 4 Department of Human Genetics, David Geffen School of Medicine, University of California Los Angeles 5 Department of Molecular, Cell and Developmental Biology, University of California Los Angeles, Los Angeles http://data.memberclicks.com/receiptattach/ibangs/10151642/7276174/IBANGS_abstract.docx 2. Genome in 3D: Exploring Spatial Genome Architectures and Function in Mouse and Human Brain Amanda Mitchell and <u>Schahram Akbarian</u> Friedman Brain Institute, and Department of Psychiatry, Icahn School of Medicine at Mount Sinai, New York 10029 http://data.memberclicks.com/receiptattach/ibangs/10161014/7276174/Akbarian_Mitchell_IBANGS_2016_.docx 3. 3D chromatin architecture defines inherited disease risk <u>Olivia Corradin</u> ¹ , Andrea J. Cohen ¹ , Jennifer M. Lupinno ¹ , Ian M. Bayles ¹ , Peter C. Scacheri ^{1,2} 1Department of Genetics and Genome Sciences and 2Case Comprehensive Cancer Center, Case Western Reserve University School of Medicine, Cleveland, OH 44106 http://data.memberclicks.com/receiptattach/ibangs/10195995/7276174/CorradinO_3Dgenome_symposium_abstract.docx 4. 3D genome architecture and topological framework of transcription regulation <u>Yijun Ruan</u> The Jackson Laboratory for Genomic Medicine 10 Discovery Drive, Farmington, Connecticut 06032 https://data.memberclicks.com/receiptattach/ibangs/10793132/7276174/IBANGS_May_2016.docx	LCC Auditorium (TJL, 600 Main St, Bar Harbor, ME 04609)
12:00pm – 1:30pm	F Lunch	Roscoes (TJL, 600 Main St, Bar Harbor, ME 04609)

1:30pm – 3:30pm	<p>Y Symposium 3: Neurogenetics of Circadian Behavior, Sleep and Metabolism</p> <p><i>Moderators: Lora Heisler</i></p> <p><i>Speakers: Lora Heisler (Speaker), Annika Barber, Jonathan Cedernaes, Pablo B. Martinez de Morentin</i></p> <p>The field of molecular clocks has been central to advances in neuroscience and physiology—and a movement has begun to develop similar mechanistic insight into sleep. Clocks are anticipatory biologic oscillators that coordinate internal rhythmic processes at the level of brain and the whole organism. But we still do not know how clocks program behavioral centers and coordinate these with energy transfer from organic matter to ATP, and how they give rise to coherent physiologic cellular outputs. Central questions that will be addressed in this symposium include: How do clocks control gene transcription and posttranscriptional pathways to program appetitive and bioenergetic homeostasis at the level of the brain? How do regulatory networks emergent in neural pacemaker cells of the hypothalamus communicate with extra-pacemaker energy-sensing neurons and how does intra-circuit communication influence temporal and metabolic dynamics at the level of the whole organism? Increasing evidence indicates that clocks are crucial for health, and our proposed symposium will highlight frontiers in neurogenetics and implications of these discoveries for clinical therapeutics in obesity and diabetes.</p> <p>1. Genetic Dissection of Neurons Coordinating Sleep-Wake Behavior and Metabolism <i>Annika Barber</i>^{1,2}, Dan Cavanaugh³, Amita Sehgal^{1,2} ¹Howard Hughes Medical Institute; ²University of Pennsylvania; ³Loyola University Department of Biology, Chicago</p> <p>2. Mis-timed Feeding Causes Dysregulated Metabolism in Hypothalamic Circadian Mutant Mice <i>J.Cedernaes</i>^{1*}, W Huang^{1*}, KM Ramsey¹, L Cheng², B Marche¹, C Omura¹, Y Kobayashi¹, R Dhir³, R Awatramani⁴, CA Bradfield⁵, XA Wang⁶, JS Takahashi⁷, RS Ahima³, J Bass^{1,§} ¹Feinberg School of Medicine, Northwestern.; ²Weinberg College of Arts and Sciences, Northwestern.; ³School of Medicine, UPenn; ⁴Department of Neurology and Center for Genetic Medicine, Northwestern.; ⁵McArdle Laboratory for Cancer Research, University of Wisconsin Medical School; ⁶Department of Molecular Sciences, Northwestern; ⁷Department of Neuroscience and Howard Hughes Medical Institute, UT Southwestern Medical Center</p> <p>3. Functional elucidation of neural circuits interconnecting metabolic and circadian processes <i>Lora Heisler</i>¹ ¹Rowett Institute of Nutrition and Health, University of Aberdeen, Aberdeen, UK.</p> <p>4. Chemogenetic analysis of circuits involved in energy usage with implications for obesity treatment <i>PB Martinez de Morentin</i> Rowett Institute of Nutrition and Health, Aberdeen, UK</p>	LCC Auditorium (TJL, 600 Main St, Bar Harbor, ME 04609)
3:30pm – 4:00pm	F Coffee Break	Lobby (TJL, 600 Main St, Bar Harbor, ME 04609)
4:00pm – 4:20pm	<p>Y Selected Talks 2: X-linked histone demethylase Kdm6a regulates cerebellar development and motor coordination</p> <p><i>Moderators: Emily Petrucci</i></p> <p><i>Speakers: Jun Xu</i></p> <p>X-linked histone demethylase Kdm6a regulates cerebellar development and motor coordination <i>Jun Xu</i>¹, Halle Weimar¹, Terri Driessen¹, and Ge Kai² ¹Department of Integrative Physiology and Neuroscience, Washington State University, Pullman, WA 99164, USA; ²National Institute of Diabetes and Digestive and Kidney Diseases, Bethesda, MD 20814, USA</p>	LCC Auditorium (TJL, 600 Main St, Bar Harbor, ME 04609)
4:20pm – 4:40pm	<p>Y Selected Talks 2: Genomic and brain transcriptomic variation of mouse microRNAs</p> <p><i>Moderators: Emily Petrucci</i></p> <p><i>Speakers: Iiris Hovatta</i></p> <p>Genomic and brain transcriptomic variation of mouse microRNAs <i>Kalevi Trontti</i>¹, Juho Väänänen¹, Katherine Ica², Tessa Sipilä², Dario Greco³, <i>Iiris Hovatta</i>^{1,2,4} ¹Department of Biosciences, University of Helsinki, Finland, ²Research Programs Unit, Molecular Neurology, Biomedicum-Helsinki, University of Helsinki, Finland, ³Unit of Systems Toxicology, Institute for Occupational Health, Helsinki, Finland, ⁴Department of Health, National Institute for Health and Welfare, Helsinki, Finland Funding Support: Academy of Finland, Helsinki Biomedical Graduate School, University of Helsinki (Finland)</p>	LCC Auditorium (TJL, 600 Main St, Bar Harbor, ME 04609)
4:40pm – 5:00pm	<p>Y Selected Talks 2: An epigenetic link of acute inebriation to presynaptic changes and the development of alcohol tolerance, preference, and reward</p> <p><i>Moderators: Emily Petrucci</i></p> <p><i>Speakers: Fred Wolf</i></p> <p>An epigenetic link of acute inebriation to presynaptic changes and the development of alcohol tolerance, preference, and reward <i>Gregory L. Enge</i>¹, <i>Sunanda Marella</i>², <i>Karla R. Kaun</i>³, <i>Julia Wu</i>², <i>Pratik Adhikari</i>¹, <i>Eric C. Kong</i>², <i>Fred W. Wolf</i>^{1,2*} ¹University of California, Merced, School of Natural Sciences, Merced, CA 95343 ²Ernest Gallo Clinic and Research Center, University of California San Francisco, Emeryville, CA 94608 ³Brown University, Department of Neuroscience, Providence, RI 02912</p>	LCC Auditorium (TJL, 600 Main St, Bar Harbor, ME 04609)
5:00pm – 5:20pm	<p>Y Selected Talks 2: Genetic divergence in the engram for chronic alcohol exposure</p> <p><i>Moderators: Emily Petrucci</i></p> <p><i>Speakers: Megan Mulligan</i></p> <p>Genetic divergence in the engram for chronic alcohol exposure <i>M.K. Mulligan</i>¹, K. Mozhui¹, A.K. Pandey¹, L. Lu¹, R.W. Williams¹ ¹The University of Tennessee Health Science Center, Memphis TN, USA This work was funded in part by INIA grant U01AA13499.</p>	LCC Auditorium (TJL, 600 Main St, Bar Harbor, ME 04609)
5:20pm – 5:40pm	<p>Y Selected Talks 2: Pyruvate carboxylase functions in astrocytes to regulate habituation learning.</p> <p><i>Moderators: Emily Petrucci</i></p>	LCC Auditorium (TJL, 600 Main St, Bar Harbor, ME 04609)

Speakers: *Marc Wolman*

Pyruvate carboxylase functions in astrocytes to regulate habituation learning.

Jennings, C., Johnson, L., and [Wolman MA](#).

Department of Zoology, University of Wisconsin, Madison.

5:45pm – 7:30pm

P Poster Session 2 (EVEN NUMBERS PRESENT)

Roscoes (TJL, 600 Main St, Bar Harbor, ME 04609)

- 2. Early behavioral markers of schizophrenia in DISC1 (Disrupted-in-Schizophrenia-1) knockout rats [MJ Glenn](#)
- 4. Congenital Muscular Dystrophy with Megaconial Myopathy (MDCMC): When big isn't better. [Saved AA](#)
- 6. Long-term consequences of chronic-intermittent ethanol vapor exposure on affective behavior in selectively-bred Withdrawal Seizure Prone and Withdrawal Seizure Resistant mice [AM Rosenwasser](#)
- 8. Altered Energy Balance in Ethanol-Treated Animals [M. Blaszkiewicz1, M. Hartmann](#)
- 10. Dopamine signaling in health and disease, pathways and related networks at RGD's Pathway Portal [V Petri](#)
- 12. Examination of cerebellar development across time in C57BL/6J, DBA/2J and BXD mice [KM Hamre](#)
- 14. NICOTINIC ACETYLCHOLINE RECEPTORS INFLUENCE ETHANOL BEHAVIORS IN AN AGE SPECIFIC MANNER [H.M. Kamens](#)
- 16. The genetic architecture of open-field behavior in mice [Wim E. Crusio](#)
- 18. Detecting interactions between *Gtf2i* and *Gtf2ird1* in mouse behavior and oxytocin regulation [Nathan D. Kopp](#)
- 20. Modeling increased autism risk following maternal SSRI use. [SE Maloney](#)
- 22. Region-Specific Aβ1-42 and TXNIP expression in the aging hippocampus of 3x-TgAD and control (non-Tg) mice [Wheeler, Ryan V](#)
- 24. A Novel Gene for Amyotrophic Lateral Sclerosis Identified [Martin, PB](#)
- 26. Mouse Phenome Database: Enhancing experimental protocols to address research reproducibility and replicability [MA Bogue](#)
- 28. The effect of nicotine exposure on ethanol consumption and gene expression: a WGCNA analysis [Silva, C.P.](#)
- 30. Voluntary wheel-running affects anxiety behavior and physiology in mice fed a high fat diet [NL Arruda](#)
- 32. Severity of Demyelinating and Axonal Neuropathies Are Modified by Genetic Mutations Affecting Sodium Channels at Nodes of Ranvier [KH Morelli](#)
- 34. Short-term selective breeding for adolescent sensitivity to tetrahydrocannabinol- (THC-) induced locomotor sedation in mice. [SL Boehm II](#)
- 36. Computer Vision Based Analysis of Complex Mouse Behavior [Brian Geuther](#)
- 38. Are male mice better test subjects for behavioral phenotyping? [Fritz AK](#)
- 40. ApoE Isoform- and Sex-dependent Effects of Methamphetamine Exposure in Chronic Variable Stressed Mice [Eileen Ruth S Torres](#)
- 42. Metabolic effects of menthol on WFS1-deficient mice [S Köks1](#)
- 44. Test for allelic interaction of a QTL influencing methamphetamine sensitivity using a 112 kb congenic line crossed to gene-edited knockout lines for *Hnrnp1* and *Rufy1* [R. Keith Babbs](#)
- 46. Pharmacological dissection of hyperactivity and related behaviors in a subset of KOMP lines. [S. P. DEATS](#)
- 48. An Emerging Role for Developmental Regulator Tcf7l2 in Social Learning and Behavior [Christopher Seward](#)
- 50. Developing Rapid Functional Validation of Clinically-Relevant Variants of Unknown Significance [Karl J. Clark](#)
- 52. Development of a Mouse Model of Hyper Caloric Diet and Ethanol intake to Study Addiction Overlapping [Carvalho, LM](#)
- 54. Examining 25 classic schizophrenia candidate genes in the context of GWAS data – evidence for relevance? [Marissa Ehringer](#)
- 56. Identifying mouse models for neurodevelopmental defects in attention deficit-hyperactive disorder [Meiyee Law](#)
- 58. Piezo system identifies genes influencing sleep from KOMP2 pipeline with a high hit rate [Shreyas S. Joshi](#)
- 60. Brain-specific Allelic Imbalance of *Trappc9* Influences Metabolism and Behavior [Liang ZS](#)
- 62. The role of JmJc demethylases in alcohol-related behaviors [Jorge H. Pinzón C](#)
- 64. Methodological research : development of primers specific to X & Y gametolog genes in the context of psychiatric disorders sexual dimorphism [Pascalina Suciú](#)

6:30pm – 7:30pm

S Shuttle Service to Hotels

TBA

Shuttle Service to Hotels - depart JAX every 15 minutes

BUS A

6:30pm

Departs The Jackson Laboratory Main Entrance

Drops off at Cromwell Harbor Motel, Bar Harbor Grand Hotel, and Harborside

BUS B

6:45pm

Departs The Jackson Laboratory Main Entrance

Drops off at Cromwell Harbor Motel, Bar Harbor Grand Hotel, and Harborside

BUS A

7:00pm

Departs The Jackson Laboratory Main Entrance

Drops off at Cromwell Harbor Motel, Bar Harbor Grand Hotel, and Harborside

BUS B

7:15pm

Departs The Jackson Laboratory Main Entrance

Drops off at Cromwell Harbor Motel, Bar Harbor Grand Hotel, and Harborside

7:30pm – 10:30pm

F Dinner - on your own

See List of Restaurants (Bar Harbor)

IBANGS 2016

A Announcements **F** Free Time **P** Poster **D** Product Demo **R** Registration **S** Shuttle **C** Special Event **L** Special Lecture **Y** Symposium

MAY 15 • SUNDAY

7:30am – 8:15am	S Shuttle Service to JAX	TBA
Shuttles depart Hotels every 15 minutes		
BUS A		
7:30am		
Departs Harborside Hotel to Bar Harbor Grand Hotel to Cromwell Harbor Motel		
Drops off at The Jackson Laboratory Main Entrance		
BUS B		
7:45am		
Departs Harborside Hotel to Bar Harbor Grand Hotel to Cromwell Harbor Motel		
Drops off at The Jackson Laboratory Main Entrance		
BUS A		
8:00am		
Departs Harborside Hotel to Bar Harbor Grand Hotel to Cromwell Harbor Motel		
Drops off at The Jackson Laboratory Main Entrance		
BUS B		
8:15am		
Departs Harborside Hotel to Bar Harbor Grand Hotel to Cromwell Harbor Motel		
Drops off at The Jackson Laboratory Main Entrance		
8:00am – 8:30am	R Registration	Lobby (TJL, 600 Main St, Bar Harbor, ME 04609)
Speakers can upload their talks at this time.		
8:15am – 8:25am	A Announcements	LCC Auditorium (TJL, 600 Main St, Bar Harbor, ME 04609)
8:30am – 9:30am	L Presidential Lecture: Tim Tully	LCC Auditorium (TJL, 600 Main St, Bar Harbor, ME 04609)
<i>Moderators: Leonard Schalkwyk</i>		
9:30am – 10:00am	F Coffee Break	Lobby (TJL, 600 Main St, Bar Harbor, ME 04609)
10:00am – 12:00pm	Y Symposium 4: RNA binding proteins in neural development, plasticity and psychiatric disorders	LCC Auditorium (TJL, 600 Main St, Bar Harbor, ME 04609)
<i>Moderators: Camron Bryant</i>		
<i>Speakers: Camron Bryant (Speaker), Josh Dubnau, Bryen Jordan, Laura Smith</i>		
Post-transcriptional regulation of gene expression functionally bridges genetic variation with brain disorders and drastically increases the functional diversity of gene regulation. RNA binding proteins (RBPs) are key regulators of RNA metabolism, including splicing, transport, stability, localization, and translation. Accumulating studies demonstrate important roles for RNA binding proteins in gene regulation underlying psychiatric traits and disorders.		
1. Sam68 in neuronal function and brain disorders		
Matthew E. Klein ¹ , Thomas J. Younts ¹ , Guoan Zhang ² , Thomas A. Neubert ² , Pablo E. Castillo ¹ , Bryen A. Jordan¹		
¹ Dominick P. Purpura Department of Neuroscience, Albert Einstein College of Medicine, New York, USA.		
² Department of Pharmacology and Skirball Institute of Biomolecular Medicine, New York University School of Medicine, New York, USA.		
http://data.memberclicks.com/receiptattach/ibangs/10397512/7276174/IBANGS_abstract-Jordan2016.docx		
2. The retrotransposon storm: Retrotransposon activation causes neurodegeneration in a <i>Drosophila</i> TDP-43 model of amyotrophic lateral sclerosis.		
Krug, L.1,2, Chatterjee, N.1, Borges-Monroy, R.1,3, Hearn, S.1, Theodorou, D.1,4, Dubnau, J.1,2		
¹ Cold Spring Harbor Laboratory, Cold Spring Harbor, NY 11724, USA.		
² Watson School of Biological Sciences, Cold Spring Harbor Laboratory		
³ The Undergraduate Program on Genomic Sciences of the National Autonomous University of Mexico		
⁴ Magistère de Génétique Graduate Program at Université Paris Diderot, Sorbonne Paris Cité		
http://data.memberclicks.com/receiptattach/ibangs/10338362/7276174/IBANGS2016_Dubnau.docx		
3. Transcriptional and splicing networks associated with methamphetamine behavioral and neuroanatomical dysfunction in <i>Hnrnp1</i> (heterogeneous nuclear ribonucleoprotein H1) knockouts		
Camron D. Bryant		
Director, Laboratory of Addiction Genetics, Department of Pharmacology and Experimental Therapeutics and Psychiatry, Boston University School of Medicine		
http://data.memberclicks.com/receiptattach/ibangs/10411005/7276174/2016_IBANGS_Abstract_CDB_2_15_16.docx		
4. Control of drug-related plasticity by the fragile X mental retardation and activity-regulated cytoskeleton-associated proteins		
LN Smith ¹ , JP Jedynak ¹ , RD Penrod ¹ , J Kumar ^{1,4} , MM Thomsen ¹ , MR Fontenot ⁴ , CF Hale ³ , KC Dietz ² , FS Thomas ² , M Taniguchi ¹ , BC Zirlin ¹ , KM Huber ³ , SG Birnbaum ² , MJ Thomas ⁵ , CW Cowan ¹		
¹ Dept. of Psychiatry, Harvard Medical School, McLean Hospital, Belmont, Massachusetts, USA, ² Dept of Psychiatry, ³ Dept of Neuroscience		
⁴ Medical Scientist Training Program, UT Southwestern Medical Center, Dallas, Texas, USA		
⁵ Depts of Neuroscience & Psychology, U of Minnesota, Minneapolis, Minnesota, USA;		
Support: NIDA T32 DA007290, F32 DA027265, DA008277, DA027664, DA030590, DA019666, R21 DA033457, and K02 DA035459, NINDS NS062158, FRAXA Research Foundation, and Simons Foundation Autism Research		
http://data.memberclicks.com/receiptattach/ibangs/10414049/7276174/Smith_et_al_IBANGs_abstract.docx		

12:00pm – 1:30pm	F Lunch	Roscoes (TJL, 600 Main St, Bar Harbor, ME 04609)
1:30pm – 2:00pm	<p>Y Selected Talks 3: Commonalities across diverse species reveals deeply conserved mechanisms underlying social response</p> <p><i>Moderators: Iiris Hovatta</i></p> <p><i>Speakers: Lisa Stubbs</i></p> <p>Commonalities across diverse species reveals deeply conserved mechanisms underlying social response</p> <p><u>Lisa Stubbs</u>^{1,2}, Michael Saul¹, Christopher Seward^{1,2}, Hagai Shpigler^{1,3}, Abbas Bukhari^{1,4}, Laura Sloofman^{1,5}, Joseph Troy^{1,6}, Huimin Zhang^{1,2}, Amy Cash Ahmed^{1,3}, Xiaochen Lu^{1,2}, Jian Ma^{1,7}, Sihai Dave Zhao^{1,8}, Alison Bell^{1,4}, Saurabh Sinha^{1,5}, Gene Robinson^{1,3}, ¹Carl R. Woese Institute for Genomic Biology, and Departments of ²Cell and Developmental Biology, ³Entomology, ⁴Animal Biology, ⁵Computer Science, ⁶Illinois Informatics Institute, ⁷Bioengineering, and ⁸Statistics, University of Illinois, Urbana, IL 61801</p>	LCC Auditorium (TJL, 600 Main St, Bar Harbor, ME 04609)
2:00pm – 2:20pm	<p>Y Selected Talks 3: Transcriptional regulatory dynamics underlay metabolic and neural responses to a social threat in mice</p> <p><i>Moderators: Iiris Hovatta</i></p> <p><i>Speakers: Michael Saul</i></p> <p>Transcriptional regulatory dynamics underlay metabolic and neural responses to a social threat in mice</p> <p>*<u>Michael Saul</u>¹, *Christopher Seward^{1,2}, Joseph Troy³, Laura Sloofman⁴, Patricia A. Weisner⁵, Derek Caetano-Anolles², Huimin Zhang¹, Hao Sun¹, Yang Zhang⁶, Dave Zhao^{1,7}, Jian Ma⁶, Sriram Chandrasekaran⁸, Saurabh Sinha^{1,4,9,10}, Lisa Stubbs^{1,2,5} ¹Carl R. Woese Institute for Genomic Biology; ²School of Cell and Molecular Biology; ³Illinois Informatics Institute; ⁴Center for Biophysics and Quantitative Biology; ⁵Neuroscience Training Program, UIUC, Urbana, IL, USA; ⁷School of Computer Science, Carnegie-Mellon University, Pittsburgh, PA, USA; ⁸Harvard Society of Fellows, Harvard University, Cambridge, MA, USA; ⁹Department of Computer Science; ¹⁰Department of Entomology, UIUC, Urbana, IL, USA. Funding Support: Simons Foundation #SFLife 291812, New York, NY, USA.</p>	LCC Auditorium (TJL, 600 Main St, Bar Harbor, ME 04609)
2:20pm – 2:40pm	<p>Y Selected Talks 3: High Heritability of Social Visual Engagement in an Epidemiologic Twin Sample: Implications for Autism and Typical Development</p> <p><i>Moderators: Iiris Hovatta</i></p> <p><i>Speakers: Claire Weichselbaum</i></p> <p>High Heritability of Social Visual Engagement in an Epidemiologic Twin Sample: Implications for Autism and Typical Development</p> <p>John N. Constantino¹, Stefanie Kennon-McGill¹, <u>Claire Weichselbaum</u>^{1,2}, Natasha Marrus¹, Alyzeh Haider¹, Anne L. Glowinski¹, Ami Klin^{3,4,5}, Warren Jones^{3,4,5} ¹Department of Psychiatry, Washington University, St. Louis, MO; ²Department of Genetics, Washington University, St. Louis, MO; ³Marcus Autism Center, Children's Healthcare of Atlanta, Atlanta, GA; ⁴Division of Autism & Related Disabilities, Department of Pediatrics, Emory University School of Medicine, Atlanta, GA; ⁵Center for Translational Social Neuroscience, Emory University, Atlanta, GA</p>	LCC Auditorium (TJL, 600 Main St, Bar Harbor, ME 04609)
2:40pm – 3:00pm	<p>Y Selected Talks 3: Characterizing glucocorticoid receptor signaling with mutant zebrafish strains in the HPA axis</p> <p><i>Moderators: Iiris Hovatta</i></p> <p><i>Speakers: Han Lee</i></p> <p>Characterizing glucocorticoid receptor signaling with mutant zebrafish strains in the HPA axis</p> <p><u>Han B. Lee</u>¹, Tanya L. Poshusta², <u>Bethany C. Berry</u>², Randall G. Krug II¹, Makayla R. Berg², Ashley N. Sigafos², Brynn N. Sundberg², Cassandra E. Bullard², and Karl J. Clark, Ph.D.^{1,2} ¹Neurobiology of Disease program, Mayo Graduate School, ²Department of Biochemistry and Molecular Biology, Mayo Clinic, Rochester, MN USA</p>	LCC Auditorium (TJL, 600 Main St, Bar Harbor, ME 04609)
3:00pm – 3:20pm	<p>Y Selected Talks 3: A spontaneous mutation of Neurexin3 in the 129S1/SvImJ strain of mice enhances empathic fear behavior.</p> <p><i>Moderators: Iiris Hovatta</i></p> <p><i>Speakers: Hee-Sup Shin</i></p> <p>A spontaneous mutation of Neurexin3 in the 129S1/SvImJ strain of mice enhances empathic fear behavior.</p> <p>Sehoon Keum, Arie Kim, and <u>Hee-Sup Shin</u> Center for Cognition and Sociality, Institute for Basic Science (IBS), Daejeon, Republic of Korea</p>	LCC Auditorium (TJL, 600 Main St, Bar Harbor, ME 04609)
3:30pm – 4:00pm	<p>S Shuttle Service to Hotels</p> <p>Shuttle Service to Hotels - 2 Busses</p> <p>3:30pm</p> <p>Departs The Jackson Laboratory Main Entrance</p> <p>Drops off at Cromwell Harbor Motel, Bar Harbor Grand Hotel, and Harborside</p>	TBA
3:30pm – 4:30pm	<p>D Signal Solutions Demo Piezo Sleep System (SESSION 1)</p> <p>Please wear long pants and closed toe shoes.</p>	Training Lab (GRB) (Jackson Laboratory)
4:30pm – 5:00pm	<p>S Shuttle Service to Hotels</p> <p>Shuttle Service to Hotels - 1 Bus</p> <p>4:30pm</p> <p>Departs The Jackson Laboratory Main Entrance</p> <p>Drops off at Cromwell Harbor Motel, Bar Harbor Grand Hotel, and Harborside</p>	TBA
4:30pm – 5:30pm	<p>D Signal Solutions Demo Piezo Sleep System (SESSION 2)</p> <p>Please wear long pants and closed toe shoes.</p>	Training Lab (GRB) (Jackson Laboratory)

5:30pm – 6:00pm	S Shuttle Service to Hotels Shuttle Service to Hotels - 1 Bus 5:30pm Departs The Jackson Laboratory Main Entrance Drops off at Cromwell Harbor Motel, Bar Harbor Grand Hotel, and Harborside	TBA
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7:00pm – 10:00pm	F Dinner - on your own	See List of Restaurants (Bar Harbor)
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IBANGS 2016

A Announcements **F** Free Time **P** Poster **D** Product Demo **R** Registration **S** Shuttle **C** Special Event **L** Special Lecture **Y** Symposium

MAY 16 • MONDAY

7:30am – 8:15am	S Shuttle Service to JAX Shuttles depart Hotels every 15 minutes BUS A 7:30am Departs Harborside Hotel to Bar Harbor Grand Hotel to Cromwell Harbor Motel Drops off at The Jackson Laboratory Main Entrance BUS B 7:45am Departs Harborside Hotel to Bar Harbor Grand Hotel to Cromwell Harbor Motel Drops off at The Jackson Laboratory Main Entrance BUS A 8:00am Departs Harborside Hotel to Bar Harbor Grand Hotel to Cromwell Harbor Motel Drops off at The Jackson Laboratory Main Entrance BUS B 8:15am Departs Harborside Hotel to Bar Harbor Grand Hotel to Cromwell Harbor Motel Drops off at The Jackson Laboratory Main Entrance	TBA
8:00am – 8:30am	R Registration Speakers can upload their talks at this time.	Lobby (TJL, 600 Main St, Bar Harbor, ME 04609)
8:15am – 8:25am	A Announcements	LCC Auditorium (TJL, 600 Main St, Bar Harbor, ME 04609)
8:30am – 9:30am	L Distinguished Scientist <i>Moderators: Stacey Rizzo</i> <i>Speakers: Guoping Feng</i> Dissecting Synaptic and Circuitry Mechanisms of Autism Guoping Feng, PhD McGovern Institute for Brain Research, Department of Brain and Cognitive Sciences Massachusetts Institute of Technology, Cambridge, MA, USA Stanley Center for Psychiatric Research, Broad Institute of MIT and Harvard, Cambridge, MA, USA	LCC Auditorium (TJL, 600 Main St, Bar Harbor, ME 04609)
9:30am – 10:30am	C General Business Meeting	TBA
10:30am – 11:00am	Y Featured Speaker: Shared genetics of obsessive compulsive disorder in dogs and humans <i>Moderators: Sulev Koks</i> <i>Speakers: Elinor Karlsson</i> Shared genetics of obsessive compulsive disorder in dogs and humans EK Karlsson ^{1,2} , HJ Noh ² , J McClure ^{1,2} , D Genereux ^{1,2} , G Feng ^{2,3} , K Lindblad-Toh ^{2,4} 1Bioinformatics & Integrative Biology and Program in Molecular Medicine, UMass Medical School, Worcester, MA, USA, 2Broad Institute of MIT and Harvard, Cambridge, MA, USA, 3McGovern Institute for Brain Research at MIT, Cambridge, MA, USA, 4Science for Life Laboratory, IMBIM, Uppsala Univ., Uppsala, Sweden	LCC Auditorium (TJL, 600 Main St, Bar Harbor, ME 04609)
11:00am – 11:30am	Y Featured Speaker: Gene-social context-environment interaction critical for response inhibition <i>Moderators: Sulev Koks</i> <i>Speakers: Kyung-An Han</i> Gene-social context-environment interaction critical for response inhibition Paul Sabandal, Erick Saldes, Youngcho Kim, John M. Sabandal, and <u>Kyung-An Han</u> Department of Biological Sciences, Border Biomedical Research Center Neuromodulation Disorders Cluster, University of Texas at El Paso, El Paso, TX USA	TBA
11:30am – 1:00pm	F Lunch	Roscoes (TJL, 600 Main St, Bar Harbor, ME 04609)
1:00pm – 1:20pm	Y Selected Talks 4: Quantitative Trait Locus Mapping of Oxycodone Reward and Naloxone Aversion in C57BL/6 Substrains <i>Moderators: John Crabbe</i> <i>Speakers: Lisa Goldberg</i> Quantitative Trait Locus Mapping of Oxycodone Reward and Naloxone Aversion in C57BL/6 Substrains Lisa R. Goldberg ¹ , Stacey L. Kirkpatrick ¹ , Neema Yazdani ¹ , Megan K. Mulligan ² , and Camron D. Bryant ¹ 1Laboratory of Addiction Genetics, Department of Pharmacology and Experimental Therapeutics and Psychiatry, Boston University School of Medicine 2Department of Anatomy and Neurobiology, University of Tennessee Health Science Center, FUNDING: R00DA029635 (NIDA; C.D.B.), R03DA03828702 (NIDA; C.D.B), Transformative Training Program in Addiction Science (Burroughs Wellcome 9550300872)	LCC Auditorium (TJL, 600 Main St, Bar Harbor, ME 04609)
1:20pm – 1:40pm	Y Selected Talks 4: Genome-wide mapping in the Diversity Outbred Population <i>Moderators: John Crabbe</i> <i>Speakers: Clarissa Parker</i> Genome-wide mapping in the Diversity Outbred Population Kayvon Sharif ¹ , Troy Wilcox ² , Dan Gatti ² , Eric Busch ³ , Emily Funsten ¹ , Steven Kasperek ¹ , Drew Kreuzman ¹ , Benjamin Mansky ¹ , Sophie Masneuf ³ , Erica Sagalyn ³ , Dominik Tattera ¹ , Walter Taylor ¹ , Mary Thomas ¹ , Andrew Holmes ³ , Elissa J. Chesler ² , <u>Clarissa C. Parker</u> ¹	LCC Auditorium (TJL, 600 Main St, Bar Harbor, ME 04609)

	<p>1Department of Psychology & Program in Neuroscience, Middlebury College, VT 05753 2Center for Genome Dynamics, The Jackson Laboratory, 600 Main Street, Bar Harbor, ME 04609 3Laboratory of Behavioral and Genomic Neuroscience, NIAAA, NIH, Rockville MD 20852</p>	
1:40pm – 2:00pm	<p>Y Selected Talks 4: Novel animal models of initial cocaine sensitivity using Collaborative Cross mice <i>Moderators: John Crabbe</i> <i>Speakers: Sarah Schoenrock</i> Novel animal models of initial cocaine sensitivity using Collaborative Cross mice <u>S Adams Schoenrock</u>^{1,2}, J Farrington¹, FP Manuel de Villena^{3,4,5}, W Valdar^{3,5}, LM Tarantino^{1,6} 1Department of Psychiatry, 2Neurobiology Curriculum, 3Department of Genetics, 4Carolina Center for Genome Sciences, 5Lineberger Comprehensive Cancer Center, 6Division of Pharmacotherapy and Experimental Therapeutics, Eshelman School of Pharmacy, University of North Carolina, Chapel Hill, NC, USA Research funding provided by grant R01MH100241 from the National Institute of Mental Health, National Institutes of Health</p>	LCC Auditorium (TJL, 600 Main St, Bar Harbor, ME 04609)
2:00pm – 2:20pm	<p>Y Selected Talks 4: Neural Dynamics of the Decision to Drink in Alcohol Preferring 'P' and Wistar Rats <i>Moderators: John Crabbe</i> <i>Speakers: David Linsenhardt</i> Neural Dynamics of the Decision to Drink in Alcohol Preferring 'P' and Wistar Rats <u>David N. Linsenhardt</u>, & Christopher C. Lapish Indiana Alcohol Research Center and Department of Addiction Neuroscience - Psychology, Indiana University – Purdue University Indianapolis, Indianapolis, IN 46202. Acknowledgments: This work was supported in part by grant #: AA022268 (DNL), AA022821 (CCL), AA023786 (CCL), the ABMRf (CCL), and the Indiana Alcohol Research Center P60-AA007611 (D. Crabb).</p>	LCC Auditorium (TJL, 600 Main St, Bar Harbor, ME 04609)
2:30pm – 3:00pm	F Coffee Break	Lobby (TJL, 600 Main St, Bar Harbor, ME 04609)
3:00pm – 5:00pm	<p>Y Symposium 5: From Mouse Phenotype to Human Disease: integration and interpretation of behavior assays for disease relevancy. <i>Moderators: Vivek Kumar</i> <i>Speakers: Vivek Kumar (Speaker), Terrence Meehan, Patrick Martin Nolan</i> 1. Integrated analysis of KOMP2 behavioral data <u>Vivek Kumar</u>, Donghyung Lee, Vivek Phillip, James Clark, Karen Svenson, Bob Braun, Stacey Rizzo, Elissa J. Chesler The Jackson Laboratory, Bar Harbor, ME 04609 http://data.memberclicks.com/receiptattach/ibangs/10449783/7276174/NKabstract.docx 2. Continuous recording of home-cage behaviours in group-housed mice; evaluation in selected strains and mutants <u>PM Nolan</u>. MRC Harwell, Mammalian Genetics Unit, Harwell Campus, Oxfordshire, OX11 0RD, UK. http://data.memberclicks.com/receiptattach/ibangs/10410104/7276174/IBANGS_2016_Nolan.docx 3. Informing Neurobehavioral Genetics: The International Mouse Phenotyping Consortium <u>Terrence Meehan</u>¹ on behalf of the Mouse Phenotyping Informatics Infrastructure (MPI-2) 1European Molecular Biology Laboratory- European Bioinformatics Institute, Cambridge, UK Support: NIH Common Fund U54 HG006370 http://data.memberclicks.com/receiptattach/ibangs/10564267/7276174/Informing_Neurobehavioural_Genetics_IMPC.docx</p>	LCC Auditorium (TJL, 600 Main St, Bar Harbor, ME 04609)
5:00pm – 5:30pm	<p>S Shuttle Service to Banquet Shuttle Service to Bar Harbor Lobster Bakes (2 Shuttles)</p> <p>5:00pm Departs The Jackson Laboratory Main Entrance Drops off at Bar Harbor Lobster Bakes</p>	TBA
5:00pm – 9:30pm	<p>C Banquet 5:00-6:00pm Arrival 6:00-7:00pm Social Hour 7:00pm Dinner Starts</p> <p>Entertainment provided by "Banned from Eden" https://bannedfromeden.com/</p>	Bar Harbor Lobster Bakes (10 - ME 3, Hulls Cove, ME 04644)
8:30pm – 9:30pm	<p>S Shuttle Service to Hotels</p> <p>Shuttles Depart Bar harbor Lobster Bakes every 15 minutes BUS A 8:30pm Departs The Bar Harbor Lobster Bakes Drops off at Harborside Hotel, Bar Harbor Grand Hotel and Cromwell Harbor BUS B 8:45pm Departs The Bar Harbor Lobster Bakes Drops off at Harborside Hotel, Bar Harbor Grand Hotel and Cromwell Harbor BUS A 9:00pm Departs The Bar Harbor Lobster Bakes Drops off at Harborside Hotel, Bar Harbor Grand Hotel and Cromwell Harbor BUS B</p>	TBA

9:15pm
Departs The Bar Harbor Lobster Bakes
Drops off at Harborside Hotel, Bar Harbor Grand Hotel and Cromwell Harbor

MAY 17 • TUESDAY

8:00am – 12:00pm **F Depart**

From Hotel (Bar Harbor)
