Issue 5

Autumn 2019

# **IBANGS News**

The International Behavioural and Neural Genetics Society

# Acknowledgement to IBANGS Members

We would like to take this opportunity to say THANK YOU to all IBANGS members for your support of the society and contributions to the field. A very special thank you to the society's early members and those of you that have served on the committees. You have helped make the society the success that it is today. You're the best!

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# **Upcoming Events**

# Professional Development Workshop, Society for Neuroscience 2019

Bringing Genetic Diversity to Neuroscientific Research Organizer: Elissa J. Chesler Panelists: Yehuda Ben-Shahar, Tamara J. Phillips, Abraham A. Palmer, Catherine C. Kaczorowski, Robert Williams Date & Time: Sunday, October 20, 2019 9am - 11am Location: Room N228 More information about this SFN workshop and others <u>here</u>

# Annual Meeting: Genes Brain and Behavior, May12-17, 2020



Planning of the 2020 Genes, Brain and Behavior meeting is well underway thanks to the efforts of this year's local organizing committee: Camron Bryant, Boston University, Karla Kaun, Brown University, Clarissa Parker, Middlebury College and Alberto Cruz-Martin, Boston University.

This year's meeting will take place at the Marine Biological Laboratory (MBL) in Woods Hole, MA US. The MBL is a world renowned research and teaching institute. The nearby cities of Boston MA, Providence RI, New Haven CT, and the surrounding New England towns have a large concentration of research and educational institutions. In addition to the rich scientific environment, there is a wealth of touristic and recreational activities such as beaches, coastal hikes, biking, salty restaurants and pubs, and the point of departure for the ferry to Martha's Vineyard and Nantucket Islands.

The meeting page will be updated with the latest information.

# IBANGS-FENS Satellite meeting, July 11, 2020, Glasgow, UK



IBANGS has been invited by FENS to organize a satellite meeting in collaboration with three other behavioral neuroscience societies: European Behavioural Pharmacology Society (EBPS), European Brain and Behaviour Society (EBBS) and the European

Molecular and Cellular Cognition Society (EMCCS).

The overarching theme of the meeting is *Behavioural neuroscience for the next decade: Why behaviour matters to brain science*. This is a one day meeting and will include plenary lectures, short talks and panel discussions. Lunch will also be provided. Please check the <u>meeting page</u> for updates and registration information.

#### **Committee opportunities**

There are opportunities available to participate on IBANGS committees. Taking an active role in our society will help you to build professional relationships with other scientists in your field that have a lot of expertise to share and the society will in turn benefit from your input and enthusiasm. Please contact the IBANGS secretary, liris Hovatta [iiris.hovatta@helsinki.fi] for more information on how you can get involved.

#### Other ways to be involved

Help is also needed for various aspects of the annual meetings, social media strategy, and newsletter content. Contact the IBANGS admin, Anna Delprato [administrator@ibangs.org] for more information.

# **Open Calls**

### **Call for Symposium Proposals**



The call for symposium proposals for the Genes, Brain and Behavior 2020 annual meeting is open and the **deadline for submissions** is **October 7, 2019**.

For more information please refer to the <u>Symposium</u> <u>Proposal Guidelines</u> or contact Program Committee Chairs, Camron Bryant [camron@bu.edu] and Karl Clark [Clark.Karl@mayo.edu].

## **Call for Investigator Award Nominations**

The call for award nominations will be open on October 1<sup>st</sup>, 2019 for the IBANGS Young Investigator and Distinguished Investigator Awards. Criteria and submission guidelines will be emailed to members in the upcoming days. This year's Awards Committee consists of Richard A. Radcliffe (Chair), Leo Schalkwyk, Catherine Kaczorowski, Zoe Donaldson and Gang Chen.

# **Student Funding Opportunity**

NIH Blueprint Diversity Specialized Predoctoral to Postdoctoral Advancement in Neuroscience (D-SPAN) Award. Application deadline December 13, 2019. More information <u>here</u>.

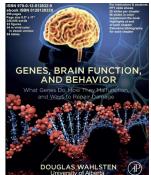
# Classifieds

**Newsletter item**: We're adding an issue! The IBANGS newsletter will now be circulated to members three times annually: Autumn, Winter and Spring. As a **reminder**, members have the option to advertise or share unlimited items of all sorts (protocols, code, databases, publications, open/seeking positions, workshops etc) in the society newsletter. Please send your announcements to Anna Delprato, [administrator@ibangs.org] at any time. The next issue of the newsletter is scheduled for release on or around December 22<sup>nd</sup>.

**Journal item**: On behalf of G2B editor, Andrew Holmes, "Watch for the upcoming special Reviews issue on Sex Differences that will be published in January, 2020."

**Teaching and reference resource for Behavior Genetics**: Society member, Doug Wahlsten has published a book entitled : <u>"Genes, Brain Function, and Behavior: What Genes Do, How They Malfunction, and Ways to Repair Damage"</u>. The book comes complete with a comprehensive set of beautifully illustrated PowerPoint slides for lectures. You may browse and purchase the book on <u>Amazon</u>. The book may also be purchased directly from the publisher, <u>Elsevier</u>. More details of the book are provided below. Please feel free to contact Doug Wahlsten [wahlsten2@gmail.com] with questions and/or to provide feedback.

# **Outline of Chapter Topics**



Section A Fundamentals - Essential Background Knowledge: 1 Levels & Explanations 2 Genes 3 Gene Expression 4 Nervous System 5 Brain Development 6 Behavior

Section B Single Gene and Chromosome Disorders: 7 Single Genes 8 Phenylketonuria 9 Huntington Disease 10 Androgen Insensitivity 11 Leber's Optic Neuritis 12 Down Syndrome 13 XYY Male

Section C Complex Traits Applications & Ethics: 14 Complex Traits 15 Intelligence 16 Autism 17 Schizophrenia 18 Sexuality & Gender 19 Race 20 The Future

Special features of the book: Outline of Chapter Topics 1. Whereas traditional behavior genetics texts typically provide a cursory overview of a wide range of traits, this book examines several specific behavioral disorders in considerable depth. The disorders are chosen because they are relatively well understood, and they include examples of recessive, dominant, X-linked and mitochondrial genetic transmission. This focus makes it possible to perceive just what it is that genes do, their roles at the cellular level and in the nervous system, and diverse ways that genetic mutations can influence behavior. 2. The structures of genes are illustrated clearly with diagrams and examples of how a mutation can change the structure of a protein and thereby influence behavior. Recent discoveries about epigenetic regulation of gene expression and transmission of the microbiome across generations challenge the conventional dichotomy of genetic and environmental effects. Their implications for a modern understanding of differences between individuals are discussed. 3. An extensive introduction to nervous system structure and function is an integral part of the book, not just a dangling appendix. The roles of dozens of genes in nervous system function and development are illustrated with detailed diagrams and tables. 4. A separate chapter describes how behavior is measured or rated and how behavioral tests are constructed and standardized. Close

attention is paid to diagnosis of psychiatric disorders and the ways criteria have changed over the years in different countries. Definition and diagnosis have important implications for the quest to identify genes relevant to behavioral disorders. 5. Events leading to discovery and understanding of several specific disorders are traced, and the histories of conflicting views are explored. Claims about precision, individualized medicine are subjected to a critical evaluation. 6. Statistical methods used to estimate the strength of genetic influences on behavior are described briefly, including the heritability coefficient, and doubts about the validity of the techniques are reviewed. 7. Continuing controversies about genetic influences on mental disorders, homosexuality and racial variations are documented and evaluated. Ethical issues arising in the applications of genetic technologies are also considered. 8. The book is primarily about human behavior and mental disorders in relation to genetics and environment, but research done with lab animals (mice, flies, nematode worms) is relied upon to provide insights into things that cannot be readily studied and manipulated in humans.

"Somewhere, something incredible is waiting to be known."

— Carl Sagan