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The International Imaging Genetics Conferences focus on the advancement of the field of Imaging Genetics, and the transdisciplinary fusion that is its foundation. Combining these disciplines has clear advantages given that the genetic background is clearly related to mental illness as well as clinical efficacy and development of side-effects. The Conferences are 2 day meetings which bring together national and international experts in neuroimaging, genetics, data-mining, visualization and statistics, to present their research and findings as they relate to the field of Imaging Genetics. Panel sessions are held on both days of the conference to allow for in-depth discussion of the day's talks between the audience and the speakers. Posters of research from attendees working in the field are presented on the first day of the conference. This is a unique conference addressing the role of genes on brain function in neuropsychiatric illness, and patient response to treatment.

The objective of the International Imaging Genetics Conference is to review the latest progress in understanding brain function by taking an evolutionary and developmental perspective, and novel methods of integrating genomic and imaging data. In support of this objective, the conference provides a unique opportunity for interaction among experts and students in the wide-ranging fields of neuroimaging, genetics, statistical analysis, and clinical studies. These interactions, based on the scientific presentations at the conference, provide the necessary substrate for the novel methods and findings needed by the field to apply to improve clinical diagnosis and treatment.



Steven G. Potkin, MD



Daniel R. Weinberger, MD

Co-Chairs

International Imaging Genetics Conference

Speakers and talks:

Carrie Bearden, UCLA: "22q11.2 Gene Dosage effects on Brain development"

Jennifer Erwin, Gage Lab, Salk Institute: "The Changing Neural Genome: Studies on LINE1-Associated Somatic Mosaicism in the Brain"

Daniel Felsky, Harvard: "Combining multi-omics and imaging approaches to deconstruct neurodegenerative disease risk and resilience in aging"

David Glahn, Yale University: "Searching for Genes Influencing Successful Brain Aging"

Casey Greene, UPenn: "Genetic Association Guided Analysis of Gene Networks."

Ahmad Hariri, Duke University: "Neural Signatures of Genome-Wide Risk for Mental Illness"

Andrew Jaffe, Lieber Institute and Johns Hopkins: "Functional genomics in schizophrenia - from genes to voxels"

Fabio Macciardi, UCI and Guia Guffanti, Harvard: "Non-reference polymorphic L1 insertions in schizophrenia influence neurodevelopmental genes"

Steven Potkin, UC Irvine: "Down Syndrome with and without cognitive decline."

Esther Walton, Bristol University: "Gene - Environment interaction: methodological approaches to imaging (epi-) genetics in psychiatry"

Daniel Weinberger, Lieber Institute: "Developmental and molecular dissection of significant psychiatric loci"

Objectives for the 13th IIGC:

- Describe the consequence of transposon insertion on gene function related to schizophrenia.
- To better evaluate the diverse genome-wide findings influencing the risk for mental illness.
- Identify evidence for both specific and general risk factors as reflected by genetic variation in increasing the risk for developing cognitive and neuronal dysfunction in Down syndrome and 22q11 Deletion Syndrome.
- Describe how genetic variation can affect brain imaging and proteomics and metabolomics.
- To appreciate the genetic variability between neurons and their effects on brain function.

Poster Presentations at the 13th IIGC:

Abstracts from conference participants with research related to the field of Imaging Genetics will be selected by the Scientific Advisory Committee for presentation during the Conference. Poster presentations are held at the close of the first day during an evening reception, allowing attendees to view and discuss current work in Imaging Genetics with fellow researchers. The posters are displayed throughout the two day meeting and abstracts are posted online in the archives on the conference website. The highest rated posters will be granted travel awards for the authors to attend future meetings.



Continuing Medical Education

CME Accreditation

The University of California, Irvine School of Medicine is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

CME Designation

The University of California, Irvine School of Medicine designates this live activity for a maximum of 14 *AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Americans with Disabilities: The International Imaging Genetics Conference at the University of California, Irvine College of Medicine complies with the Americans with Disabilities Act. Please contact Liv McMillan at iigc-info@uci.edu with any questions or requests. Every reasonable effort will be made to accommodate your needs.

California Assembly Bill 1195: This activity is in compliance with [California Assembly Bill 1195](#) which requires continuing medical education activities with patient care components to include curriculum in the subjects of cultural and linguistic competency.

Disclosure Policy: It is the policy of the University of California, Irvine School of Medicine and the University of California CME Consortium to ensure balance, independence, objectivity and scientific rigor in all CME activities. Full disclosure of conflicts and conflict resolutions will be made prior to the activity in writing via handout materials, insert, or syllabus.

Commercial Support for the Imaging Genetics Conference

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For additional information, please contact: Liv McMillan, University of California, Irvine, iigc-info@uci.edu.

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