Scientific Organizers:
Fusun Kilic, University of Arkansas Medical School, USA
Michael D. Gershon, Columbia University, USA
Luc Maroteaux, UMR-S 839 INSERM / UPMC, France

Serotonin is a multi-functional signaling molecule that plays extra-cerebral roles, not only in adult life, but in development as well. Although research concerning extra-cerebral serotonin is growing rapidly and interest in the subject is great, the physiological control and underlying molecular processes, as well as the involvement of peripheral serotonin in disease, have not been definitively established. Furthermore, the role of serotonin in peripheral tissues has been neglected and under-represented at current meetings, which have focused on the 3-5% of the body’s serotonin that is present in the central nervous system. Therefore, this Keystone Symposia conference aims to reveal insights into the role of serotonin in peripheral tissues, specifically in the diagnosis, prevention and treatment of many diseases, which is long overdue.

Session Topics:
• Serotonin, a Major Peripheral Neurohormone
• Serotonin in a Drug Target
• Serotonin in the Circulatory System
• Serotonin Receptors in Cardiovascular and Pulmonary Functions
• Peripheral Serotonin in Relation to Brain Function and Development
• Serotonin in Diseases

Abstracts can still be submitted for short talk consideration through September 11, 2017 and for poster presentation through October 1, 2017
Discounted Registration Deadline: September 12, 2017

Note: Scholarships are available for graduate students and postdoctoral fellows and are awarded based on the abstract submitted. Submitting an abstract is an excellent opportunity to gain exposure for your work. Abstracts submitted by the abstract deadline will also be considered for short talks on the program.

Meeting Hashtag: #KSserotonin
www.keystonesymposia.org/17T5
Sunday, November 12
Arrival and Registration

Monday, November 13
Welcome and Keynote Address
Michael D. Gershon, Columbia University, USA
Serotonergic Regulation of Enteric Neurogenesis

Serotonin, a Major Peripheral Neurohormone
Elaine Y. Hsiao, University of California Los Angeles, USA
Indigenous bacteria from the gut microbiota regulate host serotonin biosynthesis
Gary M. Mawe, University of Vermont, USA
Mucosal Serotonin Signaling in the Gut: Changes in Disease and Therapeutic Targets
Nick J. Spencer, Flinders University, Australia
Is There a Role for Mucosal Serotonin in the Generation of Neurogenic Motor Patterns in the Gut Wall?
Short Talk(s) Chosen from Abstracts

Serotonin in a New Drug Target
Gerard Karsenty, Columbia University Medical Center, USA
Serotonin in a New Drug Target
Pablo Lapuerta, Lexicon Pharmaceuticals, Inc., USA
Tryptophan Hydroxylase Inhibitors for Carcinoid Syndrome
Michael Bader, Max-Delbrück-Center for Molecular Medicine, Germany
Peripheral Serotonin, a New Drug Target
Short Talk(s) Chosen from Abstracts

Poster Session 1

Tuesday, November 14
Keynote Address
Stephanie Wengert Watts, Michigan State University, USA
5-HT and Blood Pressure: Knowing and Learning

Serotonin in the Circulatory System
Francine Côté, Institut Imagine INSERM U1163, France
Bone Marrow Derived Serotonin Regulates Expansion of Red Blood Cells Progenitors
Harvey J. Kliman, Yale University, USA
The Serotonin Highway in the Human Placenta: Serotonin Transport from Mother to Fetus
Fusun Kilic, University of Arkansas Medical School, USA
Cigarette Smoking-Associated alterations in Serotonin/Adrenalin Signaling Pathways of Platelets
Short Talk(s) Chosen from Abstracts

Serotonin Receptors in Cardiovascular and Pulmonary Functions
Laurent Monassier, Université de Strasbourg, France
Heart Disease and Valvulopathy

Wednesday, November 15
Peripheral Serotonin in Relation to Brain Function and Development
Kara Gross Margolis, New York-Presbyterian Morgan Stanley Children's Hospital, USA
The Involvement of Peripheral Serotonin in Autism
Randi Blakely, Florida Atlantic University, USA
Keeping the Periphery in Mind: Peripheral Inflammatory Modulation of Behavior Mediated by CNS Serotonin
Alexandre Bonnin, University of Southern California, USA
Prenatal Exposures and Placental Serotonin: a Pathway for the Fetal Programming of Mental Disorders
Hail Kim, KAIST, South Korea
Regulation of Systemic Energy Homeostasis by Peripheral Serotonin
Short Talk(s) Chosen from Abstracts

Serotonin in Diseases
Joanne Wang, University of Washington, USA
Serotonin Transporter Deficiency Drives Estrogen-Dependent Obesity and Glucose Intolerance
Robin L. Haynes, Children's Hospital Boston, USA
High Levels of Serum Serotonin in Sudden Infant Death Syndrome
Terence Keith Smith, University of Nevada School of Medicine, USA
Does Neuronal Serotonin Have a Role in Colonic Motor Patterns?

Meeting Wrap-Up: Outcomes and Future Directions (Organizers)

Thursday, November 16
Departure

* Session Chair † Invited but not yet accepted Program current as of September 15, 2017. Program subject to change. Meal formats are based on meeting venue. For the most up-to-date details, visit www.keystonesymposia.org/18T5.