The Third UCLA Autonomic Nervous System Control of the Heart in Health and Disease Symposium: 2017

Friday, March 3rd and Saturday, March 4th, 2017
University of California, Los Angeles
Meyer & Renee Luskin Conference Center

This symposium is supported by the Leonetti/O’Connell Family Foundation
## Invited Faculty:

<table>
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<tr>
<th>Name</th>
<th>Title and Affiliation</th>
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<tr>
<td>Maurits Allessie, MD PhD</td>
<td>Emeritus Professor of Physiology, Maastricht University, The Netherlands</td>
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<tr>
<td>Michael C. Andresen PhD</td>
<td>Professor, Department of Physiology and Pharmacology, Oregon Health &amp; Science University, Portland, OR</td>
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<tr>
<td>Rishi Arora, MD</td>
<td>Associate Professor of Medicine, Northwestern University, Evanston, IL</td>
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<td>Peng-Sheng Chen, MD</td>
<td>Professor and Chief, Krannert Institute of Cardiology, Indiana University, Indianapolis, IN</td>
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<td>Kevin Donahue, MD</td>
<td>Professor of Medicine, University of Massachusetts Medical School, Worcester, MA</td>
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<tr>
<td>Charless Fowlkes, PhD</td>
<td>Associate Professor, Computer Science, University of California, Irvine, Irvine, CA</td>
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<td>Viviana Gradinaru, PhD</td>
<td>Assistant Professor of Biology and Biological Engineering, California Institute of Technology, Pasadena, CA</td>
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<td>Beth A. Habecker, PhD</td>
<td>Professor, Department of Physiology and Pharmacology, Oregon Health &amp; Sciences University, Portland, OR</td>
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<td>Guy Kember, PhD</td>
<td>Professor of Engineering Mathematics, Dalhousie University, Halifax, Nova Scotia</td>
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<td>Pier Lambiase, MD PhD</td>
<td>Professor of Cardiology, Institute of Cardiovascular Science, UCL, London, UK</td>
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<tr>
<td>David A. Lathrop, PhD</td>
<td>Chief, Heart Failure &amp; Arrhythmia Branch, Division of Cardiovascular Sciences, National Heart, Lung, and Blood Institute, New York, NY</td>
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<tr>
<td>Bruce B. Lerman, MD</td>
<td>H. Altschul Master Professor of Medicine, Weill-Cornell Medical Center, New York Presbyterian Hospital, New York, NY</td>
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<td>Stephen J. Lewis, PhD</td>
<td>Professor, Department of Pharmacology, Case Western Reserve University, Cleveland, OH</td>
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<td>Robert Lux, PhD</td>
<td>Professor Emeritus, The University of Utah, Salt Lake City, UT</td>
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<td>David Paterson, DPhil, DSc</td>
<td>Professor of Cardiovascular Physiology, Associate Head of Medical Sciences, University of Oxford, Oxford, UK</td>
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David Geffen School of Medicine Faculty:

Kelsey Martin, MD PhD
Professor of Biological Chemistry,
Psychiatry and Biobehavioral sciences
Dean, School of Medicine

John Andrew Armour, MD PhD
Professor of Medicine

Marmar Vaseghi, MD PhD
Assistant Professor, Medicine

Olujimi A. Ajijola , MD PhD
Assistant Professor, Medicine

John D. Tompkins, PhD
Assistant Professor of Medicine

Alan Fogelman, MD
Castera Professor
Executive Chair, Medicine

Jack Feldman, PhD
Distinguished Professor, Neurobiology

James N. Weiss, MD
Kawata Chair
Distinguished Professor, Medicine
Chief, Division of Cardiology

Cover Image Legend:
Confocal image of neural innervation of the mouse heart, 2016. Image generated by UCLA (Shivkumar Lab) and Caltech (Gradinaru Lab).

Page 5 Image Legend:
The heart with its nerves from: De Humani Corporis Fabrica, 1543, Andreas Vesalius.
Friday, March 3rd, 2017

07:30 am - 08:00 am  On-site Registration and Continental Breakfast
Luskin Conference Center, Laureate Room

08:00 am - 08:05 am  Jeffrey L. Ardell, PhD and Kalyanam Shivkumar, MD, PhD
Welcome

08:05 am - 08:15 am  Kelsey Martin MD, PhD, Dean, David Geffen School of Medicine

08:20 am - 08:30 am  Introductory remarks- Alan M. Fogelman MD, Castera Professor & Executive Chair, Department of Medicine

**Theme: Techniques/Technology: Cardiac Electrophysiology**

08:30 am - 08:50 am  Crystal Ripplinger: Optical Mapping

08:50 am - 09:10 am  Robert Lux: Electrical Cardiac Mapping

09:10 am - 09:30 am  Olujimi Ajijola: Neural Control of Propagation

09:30 am - 09:50 am  Guy Salama: Future of cardiac mapping

09:50 am - 10:30 am  Discussion leaders: Donahue & Shivkumar

10:30 am - 11:00 am  Break - Coffee and refreshments

**Theme: Techniques/Technology: Neuronal Studies**

11:00 am - 11:20 am  Beth Habecker: Molecular approaches to define neurons

11:20 am - 11:40 am  Corey Smith: Voltammetry for direct neurotransmitter measurements

11:40 am - 12:00 pm  Steve Lewis: New neural interfaces

12:00 pm - 12:30 pm  Discussion leaders: Paterson & Ardell

12:30 pm - 02:00 pm  Lunch – Plateia Restaurant at the Luskin Conference Center

**Theme: Structure/Function (From Data to Circuits): Analytics to Interpret Neural Circuits**

02:00 pm - 02:20 pm  Viviana Gradinaru: Clarity and viral tracing

02:00 pm - 02:40 pm  Charless Fowlkes: Bioinformatics for mapping (imaging)

02:40 pm - 03:00 pm  Guy Kember: Modeling & interpreting neuronal signals

03:00 pm - 04:00 pm  Discussion leaders: Zucker & Andresen

04:00 pm - 04:30 pm  Break - Coffee and refreshments

**Theme: NIH program update & Keynote Address**

04:30 pm - 05:00 pm  Felicia Qashu -NIH SPARC Emerging Opportunities 2017

05:00 pm – 06:00 pm  Keynote Lecture: ‘Understanding neural circuits: taking a few breaths may help’  Jack Feldman, PhD, Distinguished Professor UCLA
Saturday, March 4th, 2017

**Theme: Cardiac Pathophysiology**

07:45 am - 08:15 am  On-site Registration and Continental Breakfast  
                     Luskin Conference Center

08:15 am – 08:45 am  Maurits Allessie: Atrial Fibrillation-Mapping insights

08:45 am - 09:00 am  David Paterson: Molecular neuronal targets for CV disease

09:00 am - 09:15 am  Rishi Arora: Pathophysiology of arrhythmias and neural control

09:15 am - 09:30 am  Kevin Donahue: Gene therapy approaches to autonomic targets

09:30 am - 09:45 am  Pier Lambiase: Neuromodulatory therapeutic targets in ion channel disorders

09:45 am - 10:00 am  Bruce Lerman: Ventricular arrhythmias

10:00 am - 10:30 am  Discussion leaders: Shivkumar & Weiss

10:30 am - 11:00 am  Break - Coffee and refreshments

**Theme: Neuromodulation Targets in Autonomic Nervous System for Cardiac Pathology**

11:00 am - 11:15 am  Marmar Vaseghi: Vagal Nerve Stimulation

11:15 am - 11:30 am  Hari Tandri: Sympathectomy

11:30 am - 11:45 am  Peng-Sheng Chen: Atrial Fibrillation

11:45 am - 12:15 pm  Discussion leader: Lerman & Lathrop

12:15 pm – 1:30 pm  Lunch at Plateia Restaurant & Closing remarks
# Conference Details

**Registration:**
Please fax, scan, or email the completed registration form to Julie Ramirez at (310) 825-2092 or jrramirez@mednet.ucla.edu. You can also register online using the link below:

[https://thethirduclaautonomicsymposium.eventbrite.com](https://thethirduclaautonomicsymposium.eventbrite.com)

The registration is complimentary for faculty and students. Please note that no CME credit will be given for the symposium.

For Further information, please call Julie Ramirez at (310)206-6433.

**Location:**
The UCLA Meyer & Renee Luskin Conference Center- Laureate Room  
425 Westwood Blvd.  
Los Angeles, CA 90024  
310-794-3563

**Parking:**
Please park in structure 8. You can report to the parking kiosk on Westwood Plaza to pay for a parking permit ($12).

### Registration

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