UC Davis Cardiovascular Symposium 2016

Systems Approach to Understanding Cardiac Excitation – Contraction Coupling & Arrhythmias

March 3 & 4

UC Davis Conference Center
550 Alumni Lane
UC Davis Campus

Organizing Committee
Donald Bers, Ye Chen-Izu, Nipavan Chiamvimonvat, Eleonora Grandi

Consultants: Jeanne Nerbonne, Michael Sanguinetti

K+ channels and regulation

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UC Davis Cardiovascular Symposium 2016

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Thursday, March 3

Coffee and light pastries served at 7:30 am

**Session I**  
K⁺ channel dysfunction and arrhythmia: from cell to whole heart

8:00 – 8:30  
K⁺ currents during the cardiac action potential – Ye Chen-Izu

8:30 – 9:00  
Cardiac K⁺ channelopathies and arrhythmia – Gideon Koren

9:00 – 9:45  
Panel discussion: Critical issues & Controversies – James Weiss  
David Paterson, David Christini, Dobromir Dobrev, Eleonora Grandi, Thomas O’Hara

9:45 – 10:00  
Break

**Session II**  
Voltage–gated K⁺ channels structure and function

10:00 – 10:30  
Experimental studies – Francisco Bezanilla

10:30 – 10:50  
Modeling studies – Vladimir Yarov-Yarovoy

10:50 – 11:00  
Modeling studies – Sergei Noskov

11:10 – 11:55  
Panel discussion: Critical issues & Controversies – Daniel Minor  
Peter Larsson, Jon Sack, Matthew Trudeau, Jamie Vandenbarg, Toby Allen

12:00 – 1:00  
Lunch on site for registered attendees

**Session III**  
K⁺ channel regulation I

1:00 – 1:30  
CaMKII regulation of K⁺ channels – Stefan Wagner

1:30 – 2:00  
Function studies – Jeanne Nerbonne

2:00 – 2:45  
Panel discussion: Critical issues & Controversies – Robert Kass  
Brian O’Rourke, Leighton Izu, Tamas Banyasz, James Trimmer

2:45 – 3:00  
Break

**Session IV**  
K⁺ channel regulation II

3:00 – 3:30  
Experimental studies – Jianmin Cui

3:30 – 4:00  
Modeling studies – Randall Rasmusson

4:00 – 4:45  
Panel discussion: Critical issues & Controversies – Gail Robertson  
Antonio Zaza, Isabelle Deschenes, Laszlo Csernoch, Jordi Heijman, Crystal Ripplinger

4:45 – 5:15  
Break

5:15 – 6:30  
Wine Reception – Conference Center Front Lobby

7:00 – 9:30  
Dinner for registered attendees

Friday, March 4

Coffee and light pastries served at 7:30 am

**Session V**  
K⁺ channels regulated by Ca²⁺

8:00 – 8:30  
Experimental studies – Nipavan Chiamvimonvat

8:30 – 9:00  
Modeling studies – Zhilin Qu

9:00 – 9:45  
Panel discussion: Critical issues & Controversies – Fernando Santana  
Manuel Navedo, Daisuke Sato, Eleonora Grandi, Heike Wulff

9:45 – 10:00  
Break

**Session VI**  
Ligand-gated K⁺ channels

10:00 – 10:30  
Experimental studies – Jonathan Makielski

10:30 – 11:00  
Modeling studies – Colin Nichols

11:00 – 11:45  
Panel Discussion: Critical issues & Controversies – Jonathan Lederer  
Dobromir Dobrev, Catherine Proenza, Yu-Fung Lin, Ursula Ravens

11:45 – 12:00  
Break

12:00 – 1:00  
Lunch on site for registered attendees

**Session VII**  
Trafficking and sequestration of K⁺ channels

1:00 – 1:30  
Structure studies – Henry Colecraft

1:30 – 2:00  
Function studies – Brian Delisle

2:00 – 2:45  
Panel Discussion: Critical issues & Controversies – Isabelle Deschenes  
Geoffrey Abbott, Aldrin Gomes, Fadi Akar, Nipavan Chiamvimonvat, Ravi Balijepalli

2:45 – 3:00  
Break

**Session VIII**  
Cardiac K⁺ channels as therapeutic targets

3:00 – 3:30  
Experimental Studies - Michael Sanguinetti

3:30 – 4:00  
Modeling Studies - Colleen Clancy

4:00 – 4:45  
Panel Discussion: Critical issues & Controversies – Donald Bers  
Eric Sobie, Andras Varro, Heike Wulff, Ariel Escobar

5:00  
Closing Remarks – Donald Bers