

**AGENDA**  
**ORD/NHLBI Workshop on Recognition and Treatment of**  
**Rare Inherited Arrhythmias**  
**September 14/15, 2006, Bethesda, MD**

**Thursday September 14, 2006 – Natcher Conference Center - Balcony B**

7:30 AM Registration

**8:00 – 8:15 AM Welcome – Opening Remarks**

Alice M. Mascette, M.D.  
Chief, Heart Failure & Arrhythmias Branch  
National Heart, Lung, and Blood Institute, NIH

Stephen C. Groft, Ph.D.  
Director, Office of Rare Disease  
National Institutes of Health

Andrew R. Marks, M.D. (Chair)  
Columbia University College of Physicians & Surgeons

Jonathan C. Makielski M.D. (Co-Chair)  
University of Wisconsin

**8:15 – 11:00 AM Session I: Rare Inherited Sodium Channelopathies**

8:15 AM Introduction to Session I  
"Cardiac Sodium Channel Disorders"  
Alfred L. George Jr., M.D. Vanderbilt University

8:20 AM "Biophysical Properties of the Cardiac Sodium Channel and the  
Defects that Result in LQT3"  
Augustus O. Grant, M.D., Ph.D., Duke University

8:40 AM "Mixed Arrhythmia Phenotypes Associated With Single SCN5A  
Mutations"  
Alfred L. George Jr., M.D., Vanderbilt University

9:10 AM "Mechanisms of Arrhythmia Caused by Sodium Channel  
Mutations: Insights From Theoretical Models"  
Colleen E. Clancy, Ph.D., Cornell University

9:30 AM Discussion

9:40 AM Break

10:00 AM "Sodium Channel Mutations and Conduction System Disorders"  
Woodrow Benson, Jr., M.D., Children's Hospital Cincinnati

10:20 AM "Susceptibility to Dilated Cardiomyopathy and Atrial Fibrillation in  
Sodium Channel Mutation-Carriers"  
Timothy M. Olson, M.D., Mayo Clinic Rochester

10:40 AM Discussion Session I

**11:00 AM – 12:00 PM Session II. Other Rare Inherited Arrhythmias**  
**Part A: Potassium Channel Mutations**

11:00 AM Introduction to Session II – Part A: Potassium Channel Mutations  
W. Jonathan Lederer, M.D., Ph.D., University of Maryland

11:05 AM	“Loss of Function Potassium Channel Mutations in Inherited Long QT Syndromes” Jeanne Nerbonne, Ph.D., Washington University
11:25 AM	“Gain of Function Mutations in Potassium Channels Causing Short QT Syndrome” Ramon Brugada-Terradellas, M.D., Montreal Heart Institute
11:45 AM	Discussion
<b>12:00 PM – 1:00 PM</b>	<b>Lunch on your own, Natcher Cafeteria</b>
<b>1:00 PM – 2:45 PM</b>	<b>Session II. Other Rare Inherited Arrhythmias Part B: Other Arrhythmogenic Mechanism</b>
1:00 PM	Introduction to Part B: Other Arrhythmogenic Mechanisms Peter J. Mohler, Ph.D., Vanderbilt University
1:05 PM	“Dysfunction in Ankyrin-Based Cellular Pathways in Human Arrhythmia” Peter J. Mohler, Ph.D.
1:25 PM	“CPVT and Mechanisms of Ryanodine Receptor Calcium Leak” Stephan Lehnart, M.D., Ph.D., Columbia University
1:45 PM	“Local and Global Ca <sup>2+</sup> Signaling Changes Link Rare to Common Arrhythmias” W. Jonathan Lederer, M.D., Ph.D. University of Maryland
2:05 PM	“Mechanisms of Cardiac Arrhythmias in Cardiomyopathies” Jeffrey A. Towbin, M.D., Baylor University
2:25 PM	Discussion Session II
2:45 PM	Break
<b>3:00 PM – 5:30 PM</b>	<b>Session III. Implications for the Future Diagnosis and Management of Rare Inherited Arrhythmias</b>
3:00 PM	Introduction to Session III: “Therapy Based on Biophysical Dysfunction of The Disease-causing Mutation” Arthur Moss, M.D., University of Rochester
3:05 PM	“State of Genetic Testing for Cardiac Channelopathies” Michael J. Ackerman, M.D., Ph.D., Mayo Clinic
3:25 PM	“Making the Link between Genotype and Clinical Phenotype” Jonathan C. Makielski M.D., University of Wisconsin
3:45 PM	Discussion
4:00 PM	Break
4:15 PM	“Gene/Cell Transfer for Treatment of Rare Inherited Arrhythmias” Kevin Donahue, M.D., MetroHealth, Cleveland
4:35 PM	“Clinical Implications of Trafficking Defects” Craig T. January, M.D., Ph.D., University of Wisconsin
4:55 PM	Discussion Session III
5:15 PM	Break
<b>5:30 PM – 6:00 PM</b>	<b>Closing Remarks Drs. Marks and Makielski</b>