

The National Institutes of Health and The Johns Hopkins University School of Medicine present

## Workshop on Vasculopathy in Sickle Cell Disease

**August 27-28, 2008**

Natcher Conference Center, NIH  
Bethesda, Maryland

### WORKSHOP ORGANIZER

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### CALL FOR ABSTRACTS

Closes July 25, 2008

### MORE INFORMATION:

[www.sicklelecellmeeting.net](http://www.sicklelecellmeeting.net)

### SCIENTIFIC PRESENTATIONS

#### DISRUPTED NITRIC OXIDE METABOLISM AND OXIDATIVE STRESS

#### VASCULAR DYSFUNCTION AND CELL ADHESION

#### HEMOSTATIC ACTIVATION AND GENOMICS OF VASCULOPATHY

#### TRANSLATIONAL THERAPEUTICS

#### ATHEROSCLEROSIS: PARALLELS WITH SICKLE VASCULOPATHY?

### FEATURED SPEAKERS AND SESSION CHAIRS

Kenneth I. Ataga, MD  
University of North Carolina at  
Chapel Hill

Francoise Bernaudin, MD  
Centre Hospitalier, Créteil, France

Hunter C. Champion, MD, PhD  
Johns Hopkins University

Mary E. Fabry, MD  
Bronx Comprehensive Sickle Cell  
Center

Bruce Freeman, PhD  
University of Pittsburgh School of  
Medicine

Paul S. Frenette, MD  
Mount Sinai School of Medicine,  
New York

Mark T. Gladwin, MD  
National Heart, Lung, and Blood  
Institute, NIH, DHHS

Robert P. Hebbel, MD  
University of Minnesota

Cheryl A. Hillery, MD  
Medical College of Wisconsin

Lewis L. Hsu, MD, PhD  
St. Christopher's Hospital for Children,  
Philadelphia

Henrietta D. Hyatt-Knorr, MA  
Office of the Director, NIH, DHHS

Gregory J. Kato, MD  
National Heart, Lung, and Blood  
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Dhananjay K. Kaul, PhD  
Albert Einstein College of Medicine,  
Bronx, New York

Anh Le, PhD  
Emory University, Atlanta, Georgia

Daniel Levy, MD  
Boston University School of Medicine

Claudia R. Morris, MD  
Children's Hospital Oakland Research  
Institute, California

Kirkwood A. Pritchard, Jr., PhD  
Children's Research Institute,  
Milwaukee, Wisconsin

Alan N. Schechter, MD  
National Institute of Diabetes and  
Digestive and Kidney Diseases,  
NIH, DHHS

Martin H. Steinberg, MD  
Boston University School of Medicine

Marie J. Stuart, MD  
Thomas Jefferson University,  
Philadelphia, Pennsylvania

James G. Taylor VI, MD  
National Heart, Lung and Blood  
Institute, NIH, DHHS

Marilyn J. Telen, MD  
Duke University, Durham,  
North Carolina

John Fitzgerald Tisdale, MD  
National Institute of Diabetes and  
Digestive and Kidney Diseases,  
NIH, DHHS

Tim M. Townes, PhD  
University of Alabama at Birmingham

Gregory M. Vercellotti, MD  
University of Minnesota Medical  
School



## DESCRIPTION

As supportive medical care has improved over the last 45 years for patients with sickle cell disease in the United States, their average lifespan has changed from 10 years to nearly 50 years. With this changing epidemiology, new patterns of chronic disease are becoming more evident, and pulmonary hypertension has emerged as a very significant predictor of early mortality for adults with sickle cell disease. Pulmonary hypertension in these patients has been reported by several groups to be associated with markers of accelerated intravascular hemolysis. Hemoglobin and arginase released from red cells impair nitric oxide bioavailability and promote oxidative stress and hemostatic activation. This leads to a clinical constellation of pulmonary hypertension, priapism, leg ulceration and possibly stroke. Increasing evidence suggest that this mechanistic model also applies to other disorders of intravascular hemolysis, such as other hemoglobinopathies, paroxysmal nocturnal hemoglobinuria and autoimmune hemolytic anemia.

This workshop will bring together leading thinkers in the field of sickle cell, and unify the field for scientific consensus on currently available data and directions for new research.

## WHO SHOULD ATTEND

This 2-day workshop is intended for hematologists, pulmonologists, cardiologists, and basic scientists interested in sickle cell vascular pathophysiology and translational research.

## OBJECTIVES

Participants will be able to discuss and explain advances in vasculopathy biology and its role in the sickle cell physiological processes. They will also be able to state the epidemiologic linkage to pulmonary hypertension, priapism, and leg ulceration.

Additionally, researchers will be able to propose collaborative relationships with other health professionals who share an interest in pursuing the novel similarities and differences of sickle cell vasculopathy compared to atherosclerosis.

## ACCREDITATION STATEMENT

This activity has been planned and implemented in accordance with the Essential Areas and policies of the Accreditation Council for Continuing Medical Education through the joint sponsorship of The Johns Hopkins University School of Medicine and The National Institutes of Health. The Johns Hopkins University School of Medicine is accredited by the ACCME to provide continuing medical education for physicians.

## CREDIT DESIGNATION STATEMENT

The Johns Hopkins University School of Medicine designates this educational activity for a maximum of *9.25 AMA PRA Category 1 Credit(s)*<sup>™</sup>. Physicians should only claim credit commensurate with the extent of their participation in the activity.

## POLICY ON SPEAKER AND PROVIDER DISCLOSURE

It is the policy of The Johns Hopkins University School of Medicine that the speaker and provider disclose real or apparent conflicts of interest relating to the topics of this educational activity, and also disclose discussions of unlabeled/unapproved uses of drugs or devices during their presentation(s). The Johns Hopkins University School of Medicine OCME has established policies in place that will identify and resolve all conflicts of interest prior to this educational activity. Detailed disclosure will be made in the activity handout materials.

*The Johns Hopkins University School of Medicine takes responsibility for the content, quality and scientific integrity of this CME activity.*