



Sickle Cell in Focus

2-3 June 2016

Natcher Conference Centre, National Institutes of Health, Washington DC

DAY ONE: THURSDAY 2nd JUNE 2016

8:00am Registration

9:00am Welcome and Introduction
Gary Gibbons
Director, National Heart, Lung and Blood Institute, USA

SESSION ONE - SICKLE CELL DISEASE: A GLOBAL HEALTH ISSUE

Chair: Kwaku Ohene-Frempong

9:05am United States of America
Kathy Hassell
Colorado Sickle Cell Treatment and Research Center, University of Colorado, USA

9:20am Europe
Beatrice Gulbis
Department of Clinical Chemistry and Molecular genetic - Hôpital Erasme - U.L.B ,
Belgium

9:35am Africa
Dapa A. Diallo
Department of Hematology, Faculty of Medicine & Dentistry University of Bamako, Mali

Chair: Norma Lerner

09:50am The Caribbean
Jennifer Knight
Sickle Cell Unit, Tropical Medicine Research Unit, University Hospital of the West Indies,
Jamaica

10:05am Brazil
Anna Barbara Proietti (Hematology Center in Belo Horizonte)
Hemominas Foundation, Belo Horizonte, Brazil

10:20am India
Roshan B. Colah
National Institute of Immunohaematology, Mumbai, India

10.35am **BREAK**

SESSION TWO - SICKLE CELL DISEASE AND MALARIA – MORE THAN JUST A BALANCING ACT?

Chair: Bill Eaton

- 11:05am Protective role of HbS and other red blood cell defects on malaria
Tom Williams
Department of Medicine at Imperial College London, UK / KEMRI-Wellcome Trust Collaborative Programme, Kilifi, Kenya
- 11:35am The impact of iron availability on malaria and sickle cell disease severity
Hans Ackerman
National Heart, Lung and Blood Institute / National Institutes of Health, USA
- 12:05pm A microfluidic platform to assess malaria and sickle stickiness
Subra Suresh
Carnegie Mellon University, Pittsburgh, USA

12:35pm LUNCH

SESSION THREE – VASCULAR INJURY AND INFLAMMATION IN SICKLE CELL DISEASE

Chair: Alan Schechter

- 1:35pm Inflammasomes in health and disease
Fayyaz Sutterwala
University of Iowa, USA
- 2:05pm TLRs, inflammation and sickle cell disease - the innate connection
John Belcher
Division of Hematology, Oncology and Transplantation, University of Minnesota, USA
- 2.35pm Drivers of inflammation in sickle cell disease- Role of neutrophils
Dachuan Zhang
Albert Einstein College of Medicine, New York, USA

3:05pm BREAK

SESSION FOUR - UPDATES

Chair: TBC

- 3:30pm Newborn screening and point-of-care testing in developing countries
Carolyn Hoppe
Children's Hospital & Research Center, Oakland, USA
- 3:55pm Clinical trials
Deepa Manwani
The Children's Hospital at Montefiore, New York

4:20pm Bone marrow transplant
John Horan
Children's Healthcare of Atlanta, USA

4:45pm SHORT BREAK

SESSION FIVE - DEBATE: HSCT IS RECOMMENDED FOR SECONDARY PREVENTION OF CEREBROVASCULAR INFARCTS IN SCD?

Chair: Oswaldo Castro

5:00pm Pro: Michael DeBaun
Vanderbilt University School of Medicine, USA

5:20pm Con: Elliott Vichinsky
Children's Hospital & Research Center, Oakland, USA

5:40pm Debate

6:00pm DAY ONE CLOSE



Sickle Cell in Focus

2-3 June 2016

Natcher Conference Centre, National Institutes of Health, Washington DC

DAY TWO: FRIDAY 3rd JUNE 2016

8:00am Registration

9:00am Welcome and Introduction
Francis Collins
Director, National Institutes of Health, USA

SESSION ONE - GENETICS AND GENOMICS: PRIME TIME IN HEMOGLOBIN DISORDERS?

Chair: David Bodine

9:05am Genetics and genomics in clinical studies –potentials and pitfalls
Steve Chanock
National Cancer Institute, Division of Cancer Epidemiology & Genetics, NIH, USA

9:35am Impact of genetics and genomics in SCD (GWAs to date, genetic Modifiers to
Swee Lay Thein
National Heart, Lung and Blood Institute / National Institutes of Health, USA

10:05am Gene therapy
John Tisdale
National Heart, Lung and Blood Institute / National Institutes of Health, USA

10:35am BREAK

Chair: Courtney Fitzhugh

11:00am Application of genome editing in Hemoglobin disorders
Dan Bauer
Children's Hospital Boston, USA

11:30pm Environmental determinants of disease severity
David Rees
King's College Hospital NHS Foundation Trust / King's College London, UK

12:00pm SHORT BREAK

SESSION TWO - UPDATES ON MANAGEMENT (PART ONE)

Chair: Samir Ballas

- 12:15pm Management of pain and opioid use in patients with sickle cell disease
Patrick Carroll
Johns Hopkins University School of Medicine, Baltimore, USA
- 12:40pm Inflammation and pain in sickle cell disease
Deepika Darbari
Children's National Medical Center, Washington DC, USA
- 1:05 pm Causes, complications and management of hypoxia in sickle cell disease
Roberto Machado
University of Illinois College of Medicine at Chicago, USA

1:30pm LUNCH

SESSION THREE – UPDATES ON MANAGEMENT (PART TWO)

Chair Paul Swerdlow

- 2:30pm Expanding use of hydroxyurea in sickle cell disease
Jane Hankins
St Jude Children's Research Hospital, Memphis, USA
- 2:55pm Blood transfusion, alloimmunization, and role of genotyping for variant antigens
Stella Chou
The Children's Hospital of Philadelphia, USA
- 3:20pm Coagulation activation in sickle cell disease
Kenneth Ataga
University of Pittsburgh / Johns Hopkins University School of Medicine / University of North Carolina, USA

3:55pm BREAK

SESSION FOUR - DEBATE: HIGH MORTALITY IN YOUNG ADULTS IS DUE TO BREAKDOWN IN TRANSITION TO ADULT CARE?

Chair: Kathy Hassell

- 4:25pm Yes: Mariane de Montalembert
Necker-Enfants Malades Hospital, Paris France
- 4:45pm No: Sophie Lanzkron
Johns Hopkins University School of Medicine, Baltimore, USA
- 5:05pm Debate
- 5:30pm CLOSE OF CONFERENCE**