



5<sup>th</sup> Annual Meeting  
African Society of Human Genetics

*in conjunction with*

First Annual Meeting, Division of Human Genetics and Genome  
Research, NRC and The National Society of Human Genetics

**GENOMICS RESEARCH IN AFRICA:**  
IMPLICATIONS FOR DISEASE DIAGNOSIS,  
TREATMENT AND DRUG DEVELOPMENT



November 3-5, 2007  
Cairo, Egypt

# Conference Program

## Day 0 (2<sup>nd</sup> November 2007)

1800-1900

### **REGISTRATION**

1900-2200

### **WELCOME RECEPTION and BUFFET DINNER**

**Teeba Ballroom**

**Semiramis Intercontinental Hotel**

## Day 1 (3<sup>rd</sup> November 2007)

### **Session 1**

0930 – 0935

0935 – 0940

0940 – 0950

0950 – 1000

1000 – 1100

### **Opening Remarks and Keynote lecture**

Opening remarks by Prof Amal Mahmoud, DHGGR Head

Opening remarks by Samia Temtamy, NSHG President

Opening remarks by Charles Rotimi, AfSHG President

Opening remarks by Professor Hany El-Nazer, NRC Director

**Keynote Speaker:** Africa and the Genomics Revolution - Francis Collins, Director, NHGRI/NIH, USA

**1100 – 1125**

**Break**

### **Session 2**

1125– 1145

1145 – 1205

1205 – 1225

1225 – 1245

1245 – 1300

### **Understanding Genetic Diseases in Africa: Implications for**

**Research and Public Health Strategies** (Chairs: Samia Temtamy and Charles Rotimi)

Infectious Diseases Genomics: The Malaria GEN Network – D. Kwiatkowski (UK)

Genetic Epidemiology of Diabetes in Africa - Charles Rotimi (USA)

Stratification of Cancers into Genetic Subtypes is an Aide to Clinical Management - Raj Ramesar (South Africa)

Genetics of Hypertension in Africa - Adebowale Adeyemo (USA)

International HapMap repositories – update and challenges - Duncan Ngare (Kenya) and Donald Coppock (USA)

**1300 – 1400**

**Lunch and poster viewing**

### **Session 3**

1400 – 1430

1430 – 1445

1445 – 1500

1500 – 1515

1515 - 1545

### **Understanding the Genetic Basis of Common Human Diseases**

(Chairs: Melanie Newport and Raj Ramesar)

**Keynote:** Genetics of Complex Diseases - Kari Stefansson (deCODE Genetics, Iceland)

Recent Studies in limb and skeletal malformations - Samia Temtamy (Egypt)

A novel approach for the study of the Genetics of Hypertension in Arabs. Heritability and linkage analysis results of “Oman Family Study” - Mohammed. Hassan (Oman)

Identification of loci for the obesity-diabetes phenotypes among Arabs of the “Oman Family Study” - Riad. Bayoumi (Oman)

Host genetics of HIV Infection - Drs Fellay and Shianna (USA)

- 1545 - 1555 High prevalence of the 516 G>T mutation in CYP2B6 and impact on the population pharmacogenetics of efavirinz in HIV/AIDS outpatients in Zimbabwe - Christopher Nyakutira (Zimbabwe)
- 1555 – 1605 CCR5 gene polymorphisms in two Berber communities and a cosmopolitan population from Tunisia - Asma Jilizi (Tunisia)

**1700 – 2100 Evening Social Event: Light and Sound Show at the Pyramids**

**Day 2 (November 4<sup>th</sup> 2007)**

- 0830 – 0930 **Early bird teaching session** – Workshop on gene expression data mining and analysis - Joseph Beyene (Canada)

**Session 4** **Human Genetic Variation and Disease** (Chairs: Giorgio Sirugo and Clement Adebamowo)

- 0930 – 1000 **Keynote:** Human polymorphisms and malaria selection - Lucio Luzzatto (Italy)
- 1000 – 1015 The genetic basis of human adaptation in Africa: implications for human evolution and human disease – Floyd Reed (USA)
- 1015 - 1025 \*Genetic diversity within Africa based on Autosomal haplotypes - Ken Kidd (USA)
- 1025 – 1040 Genomics of Arab populations - Ghazi Tadmouri (Dubai)

**1040 – 1110 Break**

**Session 5** **Understanding the Human Journey Within and Outside of Africa** (Chairs: David Bentley and Muntaser Ibrahim)

- 1110 – 1130 Understanding the Human Migration: Genographic Project - Himla Soodyall (S. Africa)
- 1130 – 1150 Regional populations and the increasingly flat world of genetics - Emily Niemitz (Nature Genetics, USA)

**Session 6** **Free papers** (Chairs: Eman Aboul-Ezz and Aggrey Ambali)

- 1150 – 1200 Different genetic patterns of Y chromosome and mitochondrial DNA variation, with implications to the peopling of Sudan - Hisham Hassan (Sudan)
- 1200 – 1210 A genome-wide gene expression signature of lifestyle in peripheral blood of Moroccan Amazigh - Y Idaghdour (USA)
- 1210 - 1220 Large scale screen of candidate genes in durable vaccine-induced immunity to HBV in The Gambia - Branwen Hennig (UK)
- 1220 - 1230 Evidence for a genetic contribution to rheumatic fever occurrence: a systematic review and meta-analysis of twin studies - Mark Engel (South Africa)
- 1230 - 1240 Role of interphase fluorescence in situ hybridization and M-FISH in multiple myeloma - Ashraf Ibrahim (Egypt)
- 1240 - 1250 Molecular diagnosis of hereditary neurological disease in Mali - KG Balk (Mali)
- 1250 - 1300 Molecular investigation and development of DNA-based tools for diagnosis of metabolic diseases in Tunisia - W Cherif (Tunisia)

**1300 – 1400 Lunch and poster viewing**

**Session 7** **Genetics and Genomics of Cancer** (Chairs: Riad Bayoumi and Muntaser Ibrahim)

- 1400 – 1430 **Keynote:** The role of genomics in understanding the basic molecular mechanisms of cancer - Sir Walter Bodmer (UK)
- 1430 – 1445 Epigenetic and chromosomal modification of colorectal cancer in African Americans - Hassan Ashktorab (USA)
- 1445 – 1500 Ethnicity and molecular fingerprints in sub-Saharan African breast cancer: studies in Central Sudan - Renato Mariani-Costantini (Italy)
- 1500 – 1515 Genomics of Cancer: Preventive and Predictive Medicine Implications - Lotfi Chouchane (Tunisia)
- 1515 – 1530 Functional Integrated 'Omics' in Cancer Wael El-Rifae (Egypt/USA)
- 1530 – 1545 Epidemiological and genetic characteristics of cancer in Nigeria – Clement Adebamowo (Nigeria)

**1545 – 1605 Break**

**Session 8**

- Free papers** (Chairs: Ekram Fateen and Himla Soodyall)
- 1605 – 1615 Molecular investigation of hereditary breast cancer in Tunisia - W Troudi (Tunisia/USA)
- 1615 – 1625 Cystic Fibrosis In Egypt - Common Mutations - E Abdel-Salam (Egypt)
- 1625 – 1635 Haplotypic classification of DEB in Tunisia: implication for prenatal diagnosis - H Ouragini (Tunisia)
- 1635 – 1645 Selection, validation and testing SNPs for human identification - Iliena Pietrangeli (Italy)
- 1645 – 1655 CoCoNUT: A software system for comparative genomics - Mohamed Abouelhoda (Germany)
- 1655 – 1705 Idiopathic premature ovarian failure in 47 young women: cytogenetic analysis and genetic counselling results - Nouha Bouayed Abdelmoula (Tunisia)
- 1705 – 1715 Prevalence rates of congenital anomalies in Giza, Egypt (2005-2007): establishment of population bases registry - Ghada Abdel-Salam (Egypt)
- 1715 – 1725 Acceptability of prenatal diagnosis of sickle disease by a sample of Cameroonian parents with an affected child - Ambroise Wonkam (Cameroon)
- 1725 – 1735 Informed consent process for community based genetic research in Southern Ethiopia - Fasil Tekola (Ethiopia)

**1745 - 1915 Society Annual General Meeting** (Chairs: Melanie Newport and Yehia Gad)

**2000 Gala Dinner – Nile Cruise** with announcement of the winner the AfSHG Prize for young investigators in the field of genetics in Africa (Branwen Hennig)

**Day 3 (5<sup>th</sup> November 2007)**

**Session 9**

**Genomic Technologies, Pharmacogenomics and Bioinformatics**

(Chair Joseph Beyene and Raj Ramesar)

- 0900 - 0930 **Keynote:** The global impact of pharmacogenomics on drug discovery and delivery: Understanding the implications for Africa - David Goldstein (USA)
- 0930 - 0945 Genomic sequence data mining: a way to identify disease causing genes - Farideh Chitsaz (USA)
- 0945 - 1000 Genomic Biomarkers in Pharmacogenetics and Pharmacogenomics - Giuseppe Novelli (Italy)
- 1000 - 1015 Bioinformatics networks in Africa - Daniel Jacobson (South Africa)
- 1015 - 1030 Bio-Repositories in Africa - Pasquale De Blasio (Italy)

<b>1030 - 1050</b>	<b>Break</b>
<b><u>Session 10</u></b>	<b><u>Tomorrow's Technology</u></b> (Chair: Adebowale Adeyemo)
1050 - 1120	<b>Keynote</b> New Sequencing Technology and Changing Horizons - David Bentley (Illumina Inc.)
1120 - 1250	Developing an African genomic project to ensure that "Tomorrow's medicine and technology will work for all humans". This is a major project to be spearheaded by the African Society of Human Genetics. (Open to all members of the AFSHG and invited guests).
<b>1300 - 1400</b>	<b>Lunch</b>
<b><u>Session 11</u></b>	<b><u>Tomorrow's Medicine</u></b> (Chair: Charles Rotimi)
1400 - 1430	<b>Keynote:</b> Stem cell therapy for sickle cell disease: transplantation and gene therapy - Griffin Rodgers (Director, NIDDK/NIH, USA)
1430 - 1445	Human Stem Cell: Technology, Science, and Society. Random differentiation of human embryonic stem cell derived neuroprogenitors into neuronal cells - Alice A. Aleem (Egypt)
1445 - 1500	Stem cells in dental practice - Tarek El-Badry (Egypt)
<b>1500 – 1515</b>	<b>Break</b>
<b><u>Session 12</u></b>	<b><u>Clinical integration of genomic research in Africa: where are we and where are we going?</u></b>
1515 – 1615	<b>Panel Members:</b> Clement Adebamowo (Nigeria, Chair), Melanie Newport (UK) Adebowale Adeyemo (USA); Griffin Rodgers (USA); Amal Mahmoud (Egypt)
<b><u>Session 13</u></b>	<b><u>Towards improved global health: ethical, legal, social, and policy implications of genomic medicine in developing countries</u></b>
1615 – 1715	<b>Panel Members:</b> Charmaine Royal (USA, Chair); Clement Adebamowo (Nigeria); Raj Ramesar (S. Africa); Patricia Marshall (USA); Sonia Abdelhak (Tunisia); Eman Aboul-Ezz (Egypt); Yehia Gad Felix Okojie (USA)
1715 – 1730	Concluding Remarks - Charles Rotimi and Samia Temtamy
<b>2000 – 2230</b>	<b>AfSHG Committees Business Dinner</b>