

The Genetics of the Peoples of Africa and the Transatlantic African Diaspora

AN INTERNATIONAL CONFERENCE

Non-genetic factors impacting African and Diasporian genetics/genomics

Epigenetics and African diversity

Genetics, health disparities and disease

Biotechnology and African genomics

Ethics of genetic research in Africa and the Diaspora

Future research directions

MARCH 19-20, 2012

FRIDAY CENTER

100 Friday Center Drive

Campus Box 1020

UNIVERSITY OF

NORTH CAROLINA

Chapel Hill, NC 27599-1020

U.S.A.

There is always something new out of Africa.

*Pliny the Elder
Natural Historian,
Roman scholar, and
scientist
(23 AD - 79 AD)*

CONFERENCE REGISTRATION NOW OPEN

To receive pre-registration materials, send contact information to

africangenetics@unc.edu *or*

africangenetics@yahoo.com

Website registration available after Jan. 15, 2012

<http://africangenetics.web.unc.edu/>

HOSTED BY THE
UNIVERSITY OF
NORTH CAROLINA
AT CHAPEL HILL (USA)
AND THE CENTER FOR
RESEARCH ON
GENOMICS AND GLOBAL HEALTH
NATIONAL INSTITUTES OF
HEALTH (USA)

Registration Form

March 19-20, 2012

**The Genetics of the Peoples of Africa and the
Transatlantic African Diaspora
An International Conference
The Friday Center, University of North Carolina
at Chapel Hill
Chapel Hill, NC**

Program and lodging information: <http://africangenetics.web.unc.edu>

Full Name: _____
University/Organization: _____
Preferred Mailing Address: _____
City: _____ **State/Province:** _____ **Zip/Postal Code:** _____
Country: _____ **Telephone:** (_____) _____ **Fax:** (_____) _____
Email: _____

CONFERENCE FEES

1. **Registration Fees** (All fees listed in U.S. Funds.) Includes all presentations, meals, conference materials, and activities.

PLEASE CHECK APPROPRIATE REGISTRAION FEE:	POSTMARKED & PAID	
	BEFORE/ON FEBRUARY 15	AFTER FEBRUARY 15
Day 1 and Day 2	<input type="checkbox"/> \$150	<input type="checkbox"/> \$175
Day 1 Only	<input type="checkbox"/> \$80	<input type="checkbox"/> \$100
Day 2 Only	<input type="checkbox"/> \$80	<input type="checkbox"/> \$100

\$ _____

If you received a scholarship, do not pay registration fee; however please complete this registration form.

2. Please indicate your **Primary Research Interest** as it relates to the conference. (Lunchtime seating will be organized into special interest round tables)

Indicate below your preferred interest for discussion at lunch. Please number choices from 1 to 3 (1 being most preferable) for Day 1 and Day 2.

DAY 1

- Ethics of Genetic Research and Application
- Translating Genomic Science into Clinical Interventions
- Integrating Interdisciplinary Approaches in Genetic Interpretations
- New Tools in Genomic Technology
- Genetic Contributions to Health Disparities in African Descendants

DAY 2

- Ethics of Genetic Research and Application
- Translating Genomic Science into Clinical Interventions
- Integrating interdisciplinary Approaches in Genetic Interpretations
- New Tools in Genomic Technology
- Genetic Contributions to Health Disparities in African Descendants

Please list any ADA Special Needs: _____

Cancellations/Changes and Refunds: Fees for missed meals, late arrivals, and early departures will not be refunded. Fees will be refunded, less a \$20.00 processing fee, if cancellation or change resulting in a refund is received in writing no later than February 25, 2012. After that date, fees are non-refundable. All refunds will be processed after the conference. Substitutions are allowed at no charge.

PAYMENT METHOD Check or Money Order must be in U.S. funds payable to: **UNC-Chapel Hill (Department of Anthropology)**. There will be a \$25.00 fee charged on checks returned by the bank due to insufficient funds. Registration confirmation/receipt and further information will be mailed

Please check appropriate box: Check Money Order Made out to: **UNC-Chapel Hill (Department of Anthropology)**

Please send your check or money order to:

**Mr. Matt McAlister
301 Alumni Bldg.
CB#3115
University of North Carolina
Chapel Hill, NC 27599
USA**

PROGRAM PLENARY SESSIONS AND SPEAKERS

Day One: Monday, March 19, 2012

Opening Ceremony

Welcoming Address Chancellor Holden Thorp, University of North Carolina at Chapel Hill

Conference Introductions and Rationale Fatimah Jackson, University of North Carolina at Chapel Hill

PLENARY SESSION ONE

What is Known (and Unknown) of the Genetics of Africans

Sarah Tishkoff, University of Pennsylvania

African & non-African Genetic Lineages in the Transatlantic Diaspora

Rick Kittles, University of Illinois

African Genetic Signatures in Afro-Latino Groups

Carlos D. Bustamante, Stanford University

Reconstructing the Historic African Genetic Ancestries of Enslaved Communities in the Caribbean

Hannes Shroeder, Univ. of Copenhagen

Panel Discussion on the State of our Current Knowledge about African Genetic Ancestries

Moderator: Bereket Selassie, University of North Carolina

PLENARY SESSION TWO

Technological Innovations Impacting Genomic Science

George Church, Harvard & MIT

Using Technology to Identify the Relationships between Genotype and Phenotype

Deborah Nickerson, University of Washington

Applying the Latest Genetic Technology in Disease Diagnosis

John Carpten, TGen Research (Phoenix, AZ)

New Insights on Epigenetics/Epigenomics in Continental and Diasporic African Groups

Robert A. Waterland, Baylor College of Medicine

Panel Discussion on Genetic/Genomic Technology and Translation

Moderator: Joseph L. Graves, NCA&T and University of North Carolina at Greensboro

Beyond Eden: The Significance of Archaic Human Genetic Sequences in African Populations

Michael Hammer, University of Arizona

Day 2 – Tuesday, March 20, 2012

Welcoming and Summary of First Day Events

Fatimah Jackson, University of North Carolina at Chapel Hill

PLENARY SESSION THREE

Paleoanthropological Origins of Human Genetic Diversity: The Significance of humanity's African Roots

Chris Stringer, Natural History Museum, London

African Linguistic Variation of Relevance to Genetic Processes

Chris Ehret, University of California at Los Angeles

Biohistorical Influences on African Genetic Diversity

Shomarka Keita, Howard University.

African Geographical and Ecological Variation Impacting Genetics

Stephen Prince, University of Maryland

African Historical Demography and Population Dispersions of Importance to Genetics

Michael Gomez, New York University

Panel Discussion on Geographic, Ecologic, Demographic, & Historic Issues in Collecting and Interpreting African Genetic/Genomic Data

Moderator: Allison Brooks, George Washington University

PLENARY SESSION FOUR

The Role of Genetics/Genomics in the Diseases that Disproportionately Afflict Peoples of African Descent

Barry Freedman, Wake Forest University

Translating New Genetic & Genomic Knowledge about African Peoples into Practice

Georgia Dunston, Howard University

Ethical Challenges to Conducting Genetic and Genomic Studies among Peoples of African Descent

Charmaine Royal, Duke University

Panel Discussion on Translating Genetic Findings from the Lab to the Clinic and to the Public

Moderator: Norm Oliver, University of Virginia

PLENARY SESSION FIVE

Future Directions in Genetic/Genomic Research on Peoples of African Descent

Francis Collins, National Institutes of Health (*invited*)

Closing Remarks and Conference Summary

Charles Rotimi, National Institutes of Health

Conference Rationale:

The roles of genetic/genomic variations in health disparities among African descended peoples remain greatly understudied. This conference will provide a bridge of knowledge that will begin to fill the gaps in our current understanding of the magnitude of genetic diversity in Africa and the Americas, its origins, ecological context, geographical distributions, and biomedical significance. The conference will provide data on African genetic variants, the presence of African genetic retentions in the Americas, as well as evidence for new genetic configurations. Additionally, the conference will explore the more relevant non-genetic factors that have differentially influenced the 21st Century profiles of African genetic, genomic, and epigenomic variations and the impact of some of these factors on gene expression, disease susceptibilities, and health disparities.

The conference will introduce some of the newest technology available to understand human genetics and genomics and discuss the relevance of this technology to studies among continental Africans and African-descended groups of the Americas. The conference will begin to articulate a set of roadmaps for future studies among populations of recent African descent.

These kinds of data and opportunities for their discussion are expected to be profoundly important to both researchers in the field, particularly those working in the vast and understudied continent of Africa, and for the general biomedical community, particularly individuals working with African-descended individuals and groups in the Americas in clinical settings. For the former group of field researchers, the conference will contribute a more nuanced and enriched historical framework for interpreting African human genetic variation and its impact on disease patterns as well as more standardized, trans-disciplinary, and accurate terminologies for use in reporting this observed genetic and genomic diversity. For the general biomedical community, this conference will synthesize knowledge that is at the foundations of some of the most important health disparity issues facing African-descended peoples in the Americas.

Conference Aims:

- Integrate research among Africans and African-descended groups in the Americas from diverse perspectives;
- Discuss important genetic/genomic diversity in Africa and throughout the Americas;
- Consider genetic/genomic technology and translation of relevance to the detection of health disparities;
- Discuss the means for taking genetic insights to the public in health disparities research;
- Examine the ethical implications and future research directions for genetic/genomic/epigenetic studies among African-descended peoples.

Mission of the Conference:

The mission of this conference is to deliver advanced state-of-the-art scholarly information on the genetics and genomics of African peoples by nationally and internationally recognized and emerging authorities. The conference will solicit, provide a platform for, and disseminate knowledge of interdisciplinary research on the peoples of recent African descent throughout the transatlantic Diaspora and continental Africa through a consideration of the context of African genetic diversity, a discussion of recent advances in the basic sciences, and the translation and applications of these advances in a cross-section of disciplines. A special effort will be made to link African genetic and genomic diversity to contemporary health disparities in continental and diasporian groups.

Objectives and Goals:

The 2012 international conference on *The Genetics of the Peoples of Africa and the Transatlantic African Diaspora* will focus on the results of evidence-based genetic, genomic, and epigenetic research that can provide interdisciplinary approaches to an array of issues affecting peoples of African descent by:

- Providing an appropriate framework for understanding past and present African genetic diversity;
- Reporting on the latest innovative technologies for documenting the genetic history of continental and Diasporic African peoples;
- Encouraging interdisciplinary communication and collaboration on the translational applications of African genetics, genomics, and epigenomics; and
- Identifying future research needs in genetic and health disparity studies of African-descended peoples.

Expected Outcomes:

The program content and the conference format will stimulate new lines of interdisciplinary, integrative research.

Conference participants will be able to develop and nurture multi-level and interdisciplinary collaborations and personal and professional interactions.

Participants will gain a better understanding of many of NIH's scientific goals and how these interface with African genetic/genomic/epigenomic initiatives