

Keolu Fox

National Institutes of Health
12 South Drive, Room 4044
Bethesda, MD 20892-563

foxko@mail.nih.gov

hm: 301.614.3264
wrk: 301.402.6560
cell: 301.346.13075

Education

2003–2008 B.A., Biological Anthropology, University of Maryland at College Park, College Park, MD (high honors)

Experience

Center for Research on Genomics and Global Health

National Institutes of Health, Bethesda, MD

August 2009-present Postbaccalaureate Intramural Research Training Award (IRTA) Program

- Assist in the development of genome wide association studies to study the genetic basis of type two diabetes in a broad range of populations including West Africans, African Americans, Central Chinese and Mexican Americans.
- Currently conducting an investigation of renal function among type two diabetic subjects and controls, enrolled from West Africa, the Washington DC area, and Sui Zho China.
- Assist in maintaining the CRGGH blog aimed at providing information to both the scientific and lay communities on how culture, lifestyle, and genomics are related to global health.

May-August 2009 Summer Internship Program

- Performed *in silico* translational research aimed at exploring the utilization pharmacogenomic data using asthma medication as an example.
- Assisted in IRB protocol amendment applications.

BioTraces, Inc, Herndon, VA

August 2008- January 2009 Research and Development team member

- Assisted in the analysis of signaling proteins and advancements in the understanding of biological pathways, disease mechanisms, and cell function.
- Generated ultra-sensitive immunoassays using protein specific immune system profiles.
- Programmed protocols for automated immune assay robots.
- Prepared blood samples through the separation of plasma from blood cells i.e., plasmapheresis.

University of Maryland Eastern Shore, Princess Anne, MD

August 2008- January 2009 Field Research Team Member

- Conducted field lab assembly, including plasmapheresis station and phlebotomist station.
- Conducted epidemiological community based education and research through the University of Maryland Eastern shores “Mini-Med School Program.”

University of Maryland College Park, College Park, MD

Spring 2007 Undergraduate Teaching Assistant, (Introduction to Biological Anthropology)

- Instructed a laboratory section for first year Biological Anthropology undergraduates.

- Prepared laboratory experiments (e.g., DNA extraction), lecture course material for lab and discussion, designed test/quiz questions, graded papers/exams/quiz/laboratory reports.

Archeological Field School, University of Maryland College Park, Eastern Shore, MD
Summer 2006 Field Research Archeologist

- Assisted in the excavation of Parole Annapolis (a civil war prison).
- Assisted in the excavation of Wye House Eastern Shore (a plantation where Fredrick Douglass was a slave).
- Excavation techniques include sifting debris, digging test pits, illustrating excavation maps, pick axes, trowels, identifying various types of porcelain, earthen ware, stone ware, running chemical/chronological tests on soil and various types of glass and keeping detailed books of daily excavations.

Genomic Models Research Group, College Park, MD

2005-prsnt Research team member

- Performed breast cancer and ancestry research using blood based proteomic analysis of cancer specific signaling proteins.
- Assisted in researching the high incidence of hypertension in African Americans by recreating the transatlantic slave trade in a mouse model (investigating the salt hypertension hypothesis).

Honors and Awards

- Postbaccalaureate Intramural Research Training Award (IRTA), The National Institutes of Health.
- Summer Internship Program, The National Institutes of Health.
- Departmental honors (a minimum GPA of 3.50 in your Major).
- High Honors, Honors thesis project (*The Interface of Anthropology and Proteomics*).
 - Awarded graduate course registration as an undergraduate (6 credits+ financial compensation).
- Nominated for the 2008 University of Maryland, College Park Undergraduate Researcher of the Year Award.
- Research and development internship at BioTraces Inc. (6 credits + financial compensation).
- National Science Foundation Scholarship for Minority Student Research.
 - \$500 undergraduate honors thesis research travel grant.

Memberships and Affiliations

- 2009-prsnt Member, Society for Advancement of Chicanos and Native Americans in Science (SACNAS).

Publications & Presentations

1. Ramos E, Fox K, Rotimi C. (2009) *Pharmacogenomics meets clinical practice: Is treatment in sync with theoretical modeling?* (Manuscript currently in development.)

2. **Fox K**, Zhou J, Ramos E, Adeyemo A, Rotimi C. (2009) *An investigation of renal function among type two diabetic subjects and controls, enrolled from West Africa, the Washington DC area, and Sui Zho China.* (Manuscript currently in development.)

3. *Pharmacogenomics meets clinical practice: Is treatment in sync with theoretical modeling?* **Fox K**, Ramos E, Adeyemo A, Shriner D, Tekola F, Rotimi C. NIH Research Festival. Bethesda, Maryland. August 2009.