

BIOGRAPHICAL SKETCH

Provide the following information for the key personnel and other significant contributors in the order listed on Form Page 2.
Follow this format for each person. **DO NOT EXCEED FOUR PAGES.**

NAME Omolo, Bernard Oguna	POSITION TITLE Associate Professor
eRA COMMONS USER NAME Bomolo00	

EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Egerton University, Njoro, Kenya	B.Sc.	1990	Mathematics
Egerton University, Njoro, Kenya	M.Sc.	1994	Statistics
Texas Tech University, Lubbock, Texas	Ph.D.	2004	Mathematical Statistics

A. Positions and Honors. List in chronological order previous positions, concluding with your present position. List any honors. Include present membership on any Federal Government public advisory committee.

Positions and Employment

- 1990-94 Teaching Assistant, Department of Mathematics, Egerton University
 1994-99 Assistant Lecturer, Department of Mathematics, Egerton University
 1999-04 Lecturer, Department of Mathematics, Egerton University
 1999-04 Graduate Part-time Instructor, Dept of Mathematics & Statistics, Texas Tech University
 2004-10 Assistant Professor, Division of Math & Computer Science, Univ. of South Carolina-Upstate
 2010- Associate Professor, Division of Math & Computer Science, Univ. of South Carolina-Upstate

Other Experience and Professional Memberships

- 2002- Member, International Biometric Society (ENAR)
 2002- Member, American Statistical Association (ASA)
 2003- Member, Institute of Mathematical Statistics (IMS)
 2004- Reviewer for The American Statistician (TAS)
 2006- Member, SC Biomedical Research Infrastructure Network (SCBRIN)
 2006- AP Statistics Reader

Awards

- 1993-94 German Academic Exchange (DAAD) Graduate Scholarship, Egerton University
 1999-00 Gordon Fuller Memorial Graduate Scholarship, Texas Tech University
 2003-04 Gordon Fuller Memorial Graduate Scholarship, Texas Tech University
 2003 NSF Travel Award, 7th Purdue International Symposium on Statistics, Purdue University
 2004 NIH/NCI Travel Award, Workshop for Junior Researchers in Biostatistics, Pittsburgh
 2008 Training Grant, South Carolina Department of Education
 2008 NSF Travel Award, NSF/ QEM CAREER Proposal Dev & Evaluation Workshop, Washington DC
 2008-09 NIH/NHLBI SIPID Mentee Award, Washington University – St. Louis
 2009-10 NIH/NCI Training Fellowship, Biostatistics for Genomics and Cancer, UNC-Chapel Hill

B. Selected peer-reviewed publications (in chronological order). Do not include publications submitted or in preparation.

- Einmahl J, Omolo B, Puri M, Ruymgaart F (2005). Aligned Rank Statistics for Repeated Measurement Models with Orthonormal Design employing a Chernoff-Savage approach. Journal of Statistical Planning and Inference, 130: 167-182.
- Hart J, Omolo B, Boone R (2007). Thermal Patterns and Health Perceptions. J Canadian Chirop Assoc, 51 (2): 106-111.
- Hart J, Omolo B, Boone R, Brown C, Ashton A (2007). Reliability of Three Methods of Computer-Aided Thermal Pattern Analysis. J Canadian Chirop Assoc, 51(3): 175-185.
- Lee S-H, Lee E, Omolo B (2008). Using Integrated Weighted Survival Difference for the Two Sample Censored data Problem. Computational Statistics & Data Analysis, 52: 4410-4416.
- Morgan D, Omolo, B. O. (2010). Challenges in Genomic Data Processing I – Multiple Small Files. SAS

Principal Investigator/Program Director (Last,First,Middle):

Global Forum 2010 Proceedings, Seattle, WA, Paper 062-2010.

6. Omolo B, Hongmei Z, Karmaus W. Cautions of using allele-based tests under heterosis (in progress).
7. A Bayesian hierarchical model for correlated microarray datasets (in progress)
8. A signature of effective p53-dependent G1 checkpoint function in melanoma cell-lines (in progress)
9. A signature of defective G2 checkpoint function in melanoma cell-lines (in progress)
10. Mechanisms of chromosomal instability in melanoma (in progress)

- C. Research Support.** List selected ongoing or completed (during the last three years) research projects (federal and non-federal support). Begin with the projects that are most relevant to the research proposed in this application. Briefly indicate the overall goals of the projects and your role (e.g. PI, Co-Investigator, Consultant) in the research project. Do not list award amounts or percent effort in projects.

Completed Projects

*Faculty Course Release Program
(USC Upstate)*

01/12/2009 – 05/15/2009

The major goal of this project is to assess the influence of heterosis on allele-based tests of genetic association. Power comparisons are made between the allele-based tests and genotype-based tests for various inheritance models (dominant, recessive and co-dominant) in the absence and presence of heterosis, via simulations. Role: Principal Investigator.

*Training Grant # 08IG308-02
(SC Department of Education)*

02/15/2008 – 06/02/2008

The main goal of this project was to help expand and deepen the AP Statistics teachers' factual and interpretive knowledge of statistics and apply the knowledge in designing AP curriculum and lesson plans that would provide high school students with a learning experience equivalent to that of an introductory statistics course at the college level. Role: Principal Investigator (Professor).

*Student Research Assistant Program
(USC Upstate)*

05/14/2008 – 08/15/2008

The main goal of this project was to provide summer mentorship and hands-on experience in statistical research to a student assistant in my lab. Role: Principal Investigator.