

EDUCATION

University at Buffalo Ph.D Candidate, Biostatistics	Aug 2012 – May 2017 (anticipated) GPA 3.9/4.0
University of the South Post-baccalaureate student, Mathematics	Aug 2010 – May 2012 GPA 4.0/4.0
University of California, Berkeley Ph.D Candidate, Psychology	Aug 2009 – Mar 2010 GPA 4.0/4.0
Indiana University, Bloomington Bachelor of Science in Music and an Outside Field Graduated with High Distinction Major: Piano Performance Outside Field: Psychology, with Departmental Honors	Aug 2003 – Aug 2007 GPA 3.9/4.0

EXPERIENCE

University at Buffalo, Dept of Biostatistics, Buffalo, NY <i>Research Assistant</i> Principal Investigator: Dr. Marianthi Markatou	June 2013 – Present
<ul style="list-style-type: none">• Worked with collaborators at University at Buffalo and IBM Watson Labs to develop algorithms for clustering mixed continuous and categorical data subject to measurement error• Coded, implemented, and analyzed various Monte Carlo simulation studies on clusters of 4–200 cores, using MPI for parallelization	
University at Buffalo, Dept of Biostatistics, Buffalo, NY <i>Teaching Assistant</i>	Fall 2012, Spring 2013
<ul style="list-style-type: none">• TA for graduate and undergraduate statistics courses• Led weekly recitation sections, held weekly office hours, graded homework, assisted in grading exams• Received excellent student evaluations: 94% agreement with the statement “Presents material well,” 80% respondents categorizing overall teaching effectiveness as “One of the best” or “Above Average”, and comments such as “One of the best TAs I have had so far.”	
University at Buffalo, Dept of Biostatistics, Buffalo, NY Population Health Observatory <i>Research Assistant</i> Principal Investigator: Dr. Randolph Carter	Summers 2010, 2011, 2012
<ul style="list-style-type: none">• Implemented a Monte Carlo simulation in R evaluating published methods of calculating the lifetime risk at birth of Krabbe disease (published 2013)• Assisted in the writing of grant proposals to the NIDDK and HRSA, as well as an ARRA grant proposal.	
New York University, Dept of Applied Psychology, New York, NY Principal Investigator: Dr. Arnold Grossman <i>Data Analyst (part-time)</i>	Mar 2011 – June 2012
<ul style="list-style-type: none">• Analyzed associations between domestic abuse, neglect and other variables in elderly LGBT adults, as well as associations between homelessness and traumatic life events in LGBT youth• Co-author on a paper investigating the relationship between pubertal timing and sexual identity development (published 2014)	

University of California, Dept of Psychology, Berkeley, CA
Affective Cognitive Neuroscience Lab
Principal Investigator: Dr. Sonia Bishop
Graduate Student Researcher

Aug 2009 – Apr 2010

- Assisted in the design and analysis of a functional MRI study investigating neural processing of ambiguous and pure emotions
- Assisted in the writing of an NIMH BRAINS research grant concerning anxiety reduction biofeedback training using real-time fMRI

Yale University School of Medicine, New Haven, CT
Children's Hospital of Philadelphia, Philadelphia, PA
Developmental Neuroimaging Lab
Principal Investigator: Dr. Robert Schultz
Research Assistant (full time)

Oct 2007 – Jun 2009

- Assisted in the design and analysis of fMRI studies of visual perception and social cognition

Indiana University, Dept of Psychological & Brain Sciences, Bloomington, IN
Cognition & Action Neuroimaging Lab
Principal Investigator: Dr. Karin James
Undergraduate Research Assistant

Sep 2005 – Aug 2007

- Designed, analyzed, and published results of an fMRI experiment investigating the neural correlates of auditory perception of tone combinations; analysis conducted using BrainVoyager QX (published 2007)

PUBLICATIONS

AH Grossman, **AH Foss**, and AR D'Augelli (2014). "Puberty: Maturation, Timing and Adjustment, and Sexual Identity Developmental Milestones among Lesbian, Gay, and Bisexual Youth". In: *Journal of LGBT Youth* 11, pp. 107–124

AH Foss, PK Duffner, and RL Carter (2013). "Lifetime Risk Estimators in Epidemiological Studies of Krabbe Disease: Review and Monte Carlo Comparison". In: *Rare Diseases* 1.2, e25212

AL Barczykowski, **AH Foss**, PK Duffner, L Yan, and RL Carter (2012). "Death Rates in the U.S. due to Krabbe Disease and Related Leukodystrophy and Lysosomal Storage Diseases". In: *American Journal of Medical Genetics Part A* 158A, pp. 2835–2842

AH Foss, EL Altschuler, and KH James (2007). "Neural Correlates of Pythagorean Ratio Rules". In: *Neuroreport* 18, pp. 1521–1525

INVITED TALKS

AH Foss, A Heching, B Ray, and M Markatou (2014). "Clustering Mixed Data Subject to Measurement Error". In: *International Society for Business and Industrial Statistics*, ASA Section on Statistical Learning and Data Mining. Durham, NC, USA

POSTERS

AH Foss, P Duffner, and R Carter (2013). "Lifetime Risk Estimators in Epidemiological Studies of Krabbe Disease: Review and Monte Carlo Comparison". In: *Joint Statistical Meetings*. Montreal, Canada

A Nuñez-Elizalde, **AH Foss**, G Aguirre, and SJ Bishop (2010). "Does he look scared to you? Effects of trait anxiety upon neural dissimilarity measures for ambiguous and pure emotional expressions". In: Vision Sciences Society. Naples, FL, USA

JK Herrington, DW Grupe, ET Hunyadi, CS Shin, **AH Foss**, JM Taylor, and RT Schultz (2010). "Fusiform gyrus and face processing: Intrasubject stability, hemispheric asymmetry, and effective connectivity". In: International Meeting for Autism Research. Philadelphia, PA, USA

AH Foss and KH James (2006). "Music and language processing: Investigating the neural correlates of expertise". In: Human Brain Mapping. Chicago, IL, USA

ACADEMIC HONORS

- Two Honorable Mentions, NSF GRF Program Spring 2012 and 2013
- Perry Poster Award, University at Buffalo (\$100) April 19, 2013
- Presidential Fellowship, University at Buffalo (\$23,000) Fall 2012
- Diebold Fellowship, UC Berkeley Psychology Dept (\$14,600) Fall 2009
- Excellence in Research Award, IU Psychology Dept April 19, 2007
- Honors Thesis Award, IU Honors College Spring 2007
- Capstone Grant, Howard Hughes Medical Institute (\$4,250) Spring 2006
- Metz Scholarship, IU Honors College (\$56,000) Fall 2003
- Merit scholarship, IU School of Music (\$40,000) Fall 2003

COMPUTER SKILLS

Languages: R, Bash, C, Java, Mathematica, MATLAB, Processing, Python, Visual Basic, HTML, CSS

Software: SPSS, SAS, pdfTEX, Sweave, VIM, OpenOffice/LibreOffice, MS Office Suite

Operating Systems: Windows (98/XP/Vista/7/8), Macintosh (OS9, OSX), Linux (Red Hat, Ubuntu, CentOS)

SELECTED COURSEWORK

University of Indiana, Bloomington: University at Buffalo, Master's Level: Regression Analysis, Categorical Data Analysis, Multivariate Data Analysis, Statistics for Bioinformatics, Statistical Comparisons and Associations

University at Buffalo, PhD Level: Topics in Advanced Modeling, Advanced Categorical Data Analysis, Advanced Survival Analysis, Theory of Linear Models, Limit Theory, Theory of Statistical Inference

University of the South: Probability and Statistics I/II, Multidimensional Calculus, Linear Algebra, Discrete Mathematical Structures, Genomics, Numerical Analysis

OTHER PROFICIENCIES

- Fluent in Spanish
- Classically-trained pianist, freelance organist

GRE SCORES

General GRE scores: 790 Quantitative, 730 Verbal, 5.5 Analytical Writing

Psychology Subject GRE score: 830

SERVICE

University at Buffalo School of Public Health and Health Professions (SPHHP), Academic Affairs Committee

Committee Member

Sep 2014 – Present

- Worked with the Senior Associate Dean for Academic and Student Affairs to establish standards for undergraduate, graduate, and post graduate study in the SPHHP
- Issues addressed included the establishment of new programs, new course proposals, academic policies and procedures, admissions, and clinical education policies

New York State Center of Excellence in Bioinformatics and Life Sciences

Volunteer Speaker

July 24, 2012

- Gave a presentation on face recognition, brain imaging, and autism to a group of exchange students

The Franklin Institute Museum of Science, Philadelphia, PA

Volunteer

Nov 2007 – Oct 2008

- Conducted science demonstrations including paper-making, the “brain bar” neuroscience exhibit, and the Baldwin 60,000 steam engine simulation
- Interacted individually with children ages 4–16 and their parents

Wonderlab Museum of Science, Bloomington, IN

Volunteer

May 2006 – Jul 2007

- Conducted “science-on-the-spot” demonstrations
- Interacted individually with children ages 4–12 and their parents

International Service Learning, Kansas City, MO/San Jose, Costa Rica

Volunteer

Mar 10 – 18, 2007

- Helped set up clinics in Costa Rica in the towns of Tibás and Puntarenas
- Conducted community triage, took patient histories, gave eye examinations, and prescribed reading glasses