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Predoctoral Research Associate
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PhD Student
Department of Epidemiology
School of Public Health
University of Washington, Box 357236
Seattle, WA 98195

CURRICULUM VITAE

RESEARCH INTERESTS

My primary research interests include the epidemiology of vaccine preventable diseases, infectious disease transmission dynamics, methods for estimating vaccine efficacy, the indirect effects of vaccination, the design of community-based and household-based vaccine trials, and global health disparities.

EDUCATION

Graduate Student, PhD Epidemiology, University of Washington September 2007 – Present
Department of Epidemiology, School of Public Health, Seattle, WA
Relevant Coursework: Epidemiologic methods I and II; Applied biostatistics I and II; Analytic methods for infectious diseases; Logistics regression analysis; Survival analysis; Data analysis in SAS and STATA; Responsible conduct of international research; Design of clinical trials

MPhil Epidemiology, University of Cambridge November 2004
Gates Cambridge Trust Scholar
Department of Public Health and Primary Care, Cambridge, England
Relevant Coursework: Epidemiologic principles; Biostatistical analysis and data handling in STATA; Clinical trial design; Infectious disease epidemiology; Global burden of disease

AB Ecology and Evolutionary Biology, Princeton University June 2003
Magna Cum Laude
Department of Ecology and Evolutionary Biology, Princeton, NJ
Relevant Coursework: Ecology and epidemiology of parasitic diseases; Population ecology, evolution and genetics; Viruses; Human genetics, reproduction and public policy

SPECIALIZED COURSES

Erasmus University, Netherlands Institute for Health Sciences, Rotterdam, The Netherlands March 2004
Quantitative Models for the Evaluation of Tropical Disease Control

Smithsonian Tropical Research Institute, Panama City/Gamboia, Panama February – May 2002
Ecology and Evolutionary Biology Field Semester in the Tropics

PUBLICATIONS

Basta NE, Emmanuel S, Schulte J. Assessing Public Health Department Employees' Willingness to Report to Work during an Influenza Pandemic. *Journal of Public Health Management and Practice.* 2009; *In press*

Basta NE, Halloran ME, Matrajt L, Longini IM. Estimating Influenza Vaccine Efficacy From Challenge and Community-based Study Data. *American Journal of Epidemiology.* 2008;168(12):1343-52

Basta NE, Matthews F, Chatfield M, and Brayne C (MRC-CFAS). Community-level socio-economic status and cognitive and functional impairment in the older population. *Euro Journal of Public Health.* 2008; 18(1):48-54

PROFESSIONAL TRAINING

Predoctoral Research Associate Oct 2007 – Present
Vaccine and Infectious Disease Institute, Fred Hutchinson Cancer Research Center, Seattle, WA

Supervisors: Dr. Ira Longini and Dr. Betz Halloran

Research includes estimating vaccine efficacy for seasonal and pre-pandemic influenza vaccines, secondary analysis of vaccine trial data, assessing strategies for vaccinating children against influenza, and writing scientific manuscripts

Research Assistant/Intern Summer 2008

Meningitis Vaccine Project Field Trial, Shirdi Sai Baba Rural Hospital, Vadu, Pune, India

Supervisor: Dr. Siddhi Hirve

Drafted manuscript describing initial vaccine trial results and gained experience in field study operations including implementing protocols, patient recruitment, data collection, and follow-up

Florida Epidemic Intelligence Service Fellow June 2005 – May 2007

Florida Department of Health; Assigned to Collier and Hendry/Glades County Health Departments

Supervisors: Dr. Joann Schulte and Mark Crowley

Conducted communicable disease outbreak investigations, designed descriptive and analytical epidemiologic studies, and provided data analysis support to various divisions within the health department

RESEARCH EXPERIENCE

Pandemic Influenza Response: County Health Department Employees' Knowledge, Perceptions, and Concerns June 2006 – Dec 2008

Principal Investigator, Florida Department of Health

Co-Principal Investigators: Dr. Joann Schulte and Sharlene Edwards

Designed a study to determine how knowledgeable Florida County Health Department Employees are about their role in pandemic response, how willing they are to carry out this role, and their concerns about responding to a pandemic. Selected a stratified random cluster sample of 4,700 employees, created an online questionnaire, received IRB approval, and oversaw all aspects of study implementation.

Socioeconomic Status and Frailty in the Older Population: An Analysis of the Medical Research Council Cognitive Function and Ageing Study Masters Thesis May – August 2004

Medical Research Council Cognitive Function and Ageing Study, University of Cambridge

Supervisors: Dr. Carol Brayne and Dr. Brian Tom

Analyzed cross-sectional data from over 13,000 individuals to determine if there is an additional increased risk of cognitive and functional impairment for those living in areas of low socioeconomic status beyond the increased risk associated with low individual socioeconomic status.

The Seasonality of Hematozoa Infections in the Clay-Colored Robin (*Turdus grayi*): Is Testosterone Associated with Infection Status? – Senior Thesis June 2002 – May 2003

Smithsonian Tropical Research Institute, Panama City/Gamboia, Panama and Princeton University

Supervisors: Dr. Peter Grant and Dr. Andrea Gager

Conducted field and lab research to examine the seasonality and infection dynamics of avian blood parasites. Field experience includes mist netting tropical birds and extracting blood samples. Lab experience includes PCR to determine sex and infection status and radioimmunoassay.

Laboratory Research Assistant September 2000 – May 2003

Zakian Molecular Biology Laboratory, Princeton University

Supervisors: Dr. Virginia Zakian and Dr. Brian Lenzmeier

Assisted with research addressing the relationship between tri-nucleotide repeat sequence expansions and chromosome breakage in yeast. Laboratory skills include extraction and purification of DNA, gel electrophoresis, southern blot, PCR, and transformations into *E.coli*.

FELLOWSHIPS, AWARDS, AND RESEARCH GRANTS

Achievement Rewards for College Scientists Fellowship (ARCS) , University of Washington	2007 – 2010
▪ Merit-based funding for the University of Washington Epidemiology PhD program	
Graduate School Top Scholar Award , University of Washington	2007
▪ Funding for a research assistantship at the University of Washington	
Florida Epidemic Intelligence Service Fellowship , Florida Department of Health	2005 – 2007
▪ Two-year training fellowship in applied epidemiology and public health practice	
Davis Productivity Award , Florida Department of Health	2007
To the Hurricane Toolkit Development Team for increasing productivity and promoting innovation	
Best Florida Epidemic Intelligence Service Poster , Florida Department of Health	2006
▪ Outstanding poster presentation at the Florida statewide epidemiology seminar	
Gates Cambridge Trust Fellowship , The Bill and Melinda Gates Foundation	2003 – 2004
▪ Full funding for graduate study at the University of Cambridge	
Homerton College Travel Grant , University of Cambridge	2004
▪ Funding for study at Erasmus University, The Netherlands	
Gates Trust Travel Grant , The Bill and Melinda Gates Foundation	2004
▪ Funding for study at Erasmus University, The Netherlands	
Sigma Xi , Princeton University	2003
▪ Inducted to scientific honor society	
Leslie Kilham Johnson Award , Princeton University	2003
▪ Outstanding senior thesis in Ecology and Evolutionary Biology	
Latin American Studies Thesis Research Grant , Princeton University	2002 – 2003
▪ Financial support to conduct senior thesis field research in Panama	
Dean of the College Round Table Thesis Research Grant , Princeton University	2002 – 2003
▪ Financial support to conduct senior thesis field research in Panama	
Anthony B. Evnin '62 Thesis Research Grant , Princeton University	2002 – 2003
▪ Financial support to conduct senior thesis field research in Panama	

CONFERENCE PRESENTATIONS

*Indicates presenter

11th Statewide Epidemiology Seminar, Florida Dept of Health , Tampa, FL	October 2006
<i>Immokalee Syphilis Outbreak: Identification, Control, and Epidemiology</i>	
<i>Oral Presentation: *Basta NE and *Rosario N</i>	
Florida Public Health Association Annual Conference , Palm Beach Gardens, FL	August 2006
<i>Salmonellosis in Collier County, FL: An Analysis of Rates by Zip Code</i>	
<i>Poster Presentation: *Basta NE, Florida Epidemic Intelligence Service, Florida Department of Health</i>	
Northeastern Ecology and Evolution Conference , Rutgers University, NJ	April 2003
<i>Seasonal Correlates of Avian Hematozoa in the Neo-Tropical Clay-Colored Robin (<i>Turdus grayi</i>)</i>	
<i>Poster Presentation: *Basta NE, Gager A, Wikelski M, and Grant PR, Princeton University</i>	
<i>Oral Presentation: *Basta NE, Cannon Memorial Senior Symposium, Princeton University, May 2003</i>	

LEADERSHIP ACTIVITIES

▪ Student Representative, Department of Epidemiology Curriculum Committee University of Washington	2008 – Present
▪ Student Member, Epidemiology Seminar Committee University of Washington	2007 – Present
▪ Student Representative to the Faculty, MPhil Epidemiology Program University of Cambridge	2003 – 2004
▪ Senior Class and Junior Class Chair of the EEB Departmental Committee Princeton University	2001 – 2003