

# Nicholas Deason

Postbac Researcher at NIH

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## Education

2015 University of Notre Dame – BS in Biological Sciences

## Research Experience

2015- NIH Post-baccalaureate Fellow – Fairhurst Lab, Laboratory of Malaria and Vector Research, National Institute of Allergy and Infectious Disease (Rockville, MD)

2013-2015 Undergraduate Researcher – Collins Lab, Eck Institute for Global Health, University of Notre Dame (Notre Dame, IN)

2013 Hank Family Research Fellow – University of Notre Dame Environmental Research Center (Land O' Lakes, WI)

2013 Undergraduate Researcher – O'Tousa Lab, Department of Biology, University of Notre Dame (Notre Dame, IN)

2010-2011 Research Intern – Environmental Management and Byproduct Utilization Laboratory, United States Department of Agriculture (Beltsville, MD)

## Publications

2016 Echeverry DF, **Deason NA**, Davidson J, Makuru V, Xiao H, Niedbalski J, Kern M, Russell TL, Burkot TR, Collins FH, Lobo NF. Human malaria diagnosis using a single-step direct-PCR based on the Plasmodium cytochrome oxidase III gene. Malaria journal. 2016 Feb 29;15(1):1.

2015 Lobo NF, St. Laurent B, Sikaala CH, Hamainza B, Chanda J, Chinula D, Krishnankutty SM, Mueller JD, **Deason NA**, Hoang QT, Boldt HL, Thummloup J, Stevenson J, Seyoum A, Collins FH. Unexpected diversity of Anopheles species in Eastern Zambia: implications for evaluating vector behavior and interventions using molecular tools. Scientific reports. 2015;5.

Submitted Echeverry DF, **Deason NA**, Makuru V, Davidson J, Xiao H, Niedbalski J, Yu X, Stevenson J, Bugoro H, Apairamo A, Reuben H, Cooper R, Burkot TR, Russell TL, Collins FH, Lobo NF. Fast and robust single and pooled PCR for Plasmodium sporozoite detection in mosquitoes using the cytochrome oxidase I gene. Malaria journal. Submitted 2016 Jan 26.

In Prep St. Laurent B, **Deason NA**, Oy K, Sovannaroeth S, Anderson JM, Fairhurst RM. Clinically informed mosquito sampling in Cambodia – a year-long survey of diverse and abundant malaria vectors in three provinces.

- In Prep St. Laurent B, Miller B, Gasteiger E, Lee E, **Deason NA**, Sovannaroeth S, Gwadz RW, Anderson JM, Fairhurst RM. Diverse sympatric malaria vectors in Thmar Da, Pursat Province, Western Cambodia.
- In Prep St. Laurent B, **Deason NA**, Oy K, Sovannaroeth S, Fairhurst RM. Cow-baited tents as a control tool for outdoor biting malaria vectors in Cambodia.
- In Prep Echeverry DF, **Deason NA**, Xiao H, Davidson J, Makuru V, Collins FH, Burkot TR, Russell TL, Cooper B, Bugoro H, Rueben H, Bobogare A, Lobo NF. Limitations for malaria eradication in the Solomon Islands: asymptomatic malaria and G6PD deficiency.

## **Awards**

- 2017 FAES Graduate School Scholarship, Human Neuroscience, Foundation for Advanced Education in the Sciences (Bethesda, MD), \$180
- 2015 William J. Lechel, II Memorial Scholarship, Student Presentation Competition, Michigan Mosquito Control Association, \$1000
- 2014 Honorable Mention Poster Award, Notre Dame Biology Summer Research Symposium
- 2013 Accepted to the Honors Program in Biological Sciences, University of Notre Dame
- 2011 Accepted to the Glynn Family Honors Program for students in the Colleges of Science and Arts & Letters, University of Notre Dame
- 2011 Named National Merit Scholar, National Merit Scholarship Corporation

## **Grants Received**

- 2014 Global Health Travel Grant – “Evaluation of the outdoor use of insecticide-impregnated barriers (IIB) as a malaria control intervention in the Solomon Islands,” Eck Institute for Global Health, \$5,440
- 2014 Glynn Family Honors Program Undergraduate Research Grant – “Prevalence of asymptomatic malaria and Glucose 6 Phosphate Dehydrogenase (G6PD) deficiency in Western Province, Solomon Islands,” Glynn Family Honors Program, University of Notre Dame, \$700
- 2014 Undergraduate Research Travel Grant – College of Science, University of Notre Dame, \$500

## **Teaching Experience**

- 2015-2016 Private Tutor – ACT, SAT, AP Biology, IB Biology, and Pre-Calculus, Alpha Educators, LLC (Beltsville, MD)
- 2015 Teaching Assistant – Biostatistics, University of Notre Dame (Notre Dame, IN)
- 2014-2015 Program Leader, Team Mentor – Uplift Mentoring Program, Department of Biological Sciences, University of Notre Dame (Notre Dame, IN)
- 2013-2014 STEM Ambassador and Tutor – Colleges of Science and Engineering, University of Notre Dame (Notre Dame, IN)

2013-2014 Teaching Assistant – Organic Chemistry Laboratory, University of Notre Dame (Notre Dame, IN)

### Oral Presentations

- 2016 **Deason NA.** "A longitudinal survey of diverse anopheline mosquitoes in Cambodia," Malaria and Vector Biology Interest Group Seminar, National Institute of Allergy and Infectious Diseases (Rockville, MD)
- 2015 **Deason NA.** "Insecticide-impregnated barriers: a new intervention for malaria control in the Solomon Islands," Annual Conference of the Michigan Mosquito Control Association (Bellaire, MI)
- 2014 **Deason NA.** "Evaluation of *Acilius* larvae (Coleoptera: Dytiscidae) for biocontrol of mosquito larvae," Annual Conference of the Michigan Mosquito Control Association (Lansing, MI)

### Poster Presentations

- 2016 **Deason NA,** St. Laurent B, Kolthida O, Sovannaroeth S, Anderson JM, Fairhurst RM, "A longitudinal survey of diverse anopheline mosquitoes in Cambodia," 65<sup>th</sup> Annual Meeting of the American Society of Tropical Medicine and Hygiene (Atlanta, GA)
- 2015 **Deason NA.** "Bionomics of the malaria vector *Anopheles farauti* in Jack Harbour, Solomon Islands," College of Science Joint Annual Meeting, University of Notre Dame (Notre Dame, IN)
- 2014 Echeverri-Garcia DF, **Deason NA,** Russell TL, Burkot TR, Collins FH, Cooper RD, Bugoro H, Reuben H, Bobogare A, Beebe NW, and Lobo NF. "Prevalence of asymptomatic malaria and glucose 6 phosphate dehydrogenase (G6PD) deficiency in Western Province, Solomon Islands," 63<sup>rd</sup> Annual Meeting of the American Society of Tropical Medicine and Hygiene (New Orleans, LA)
- 2014 **Deason NA.** "A new intervention for malaria control in the Solomon Islands: insecticide-impregnated barriers," Regional Summer Undergraduate Research Symposium, University of Notre Dame (Notre Dame, IN)
- 2014 **Deason NA.** "Malaria Prevalence and Epidemiological Characteristics of Western Province, Solomon Islands," College of Science Joint Annual Meeting, University of Notre Dame (Notre Dame, IN)
- 2014 Echeverri-Garcia DF and **Deason NA.** "Prevalence of malaria and Glucose 6 Phosphate Dehydrogenase deficiency in the Western Province of Solomon Islands," 6<sup>th</sup> Annual Graduate Student Union and Office for Postdoctoral Scholars Research Symposium, University of Notre Dame (Notre Dame, IN)
- 2013 **Deason NA.** "Predaceous diving beetle larvae as a biocontrol for mosquito larvae," Fall Undergraduate Research Fair, University of Notre Dame (Notre Dame, IN)

- 2013 **Deason NA**, Brindley EC, Hayman KE, Hoang QT, and Yu J. "Effects of rhodopsin impairment on bloodfeeding in *Aedes aegypti*," College of Science Joint Annual Meeting, University of Notre Dame (Notre Dame, IN)
- 2011 **Deason NA**, Kanyuck K, Stone GN, and Dao TH. "Evaluation of x-ray fluorescence spectrometry as a phosphorus-sensing technology on corn," Annual USDA Poster Day, United States Department of Agriculture (Beltsville, MD)

### **Conferences Attended**

- 2016 65<sup>th</sup> Annual Meeting of the American Society of Tropical Medicine and Hygiene (Atlanta, GA)
- 2015 Annual Conference of the Michigan Mosquito Control Association (Bellaire, MI)
- 2014 63<sup>rd</sup> Annual Meeting of the American Society of Tropical Medicine and Hygiene (New Orleans, LA)
- 2014 Annual Conference of the Michigan Mosquito Control Association (Lansing, MI)

### **Science Writing**

- 2016 **Deason NA**. "How to prevent a million infectious diseases deaths per year with human genome editing," Infective Perspective, <http://www.infectiveperspective.com/blog/how-to-prevent-a-million-infectious-diseases-deaths-per-year-with-human-genome-editing>
- 2016 **Deason NA**. "Infective Infographic: Deadliest Plagues in History," Infective Perspective, <http://www.infectiveperspective.com/blog/infective-infographic-deadliest-plagues-in-history>
- 2016 **Deason NA**. "Free Resource: *Parasitic Diseases, 6th Edition*," Infective Perspective, <http://www.infectiveperspective.com>
- 2016 **Deason NA**. "The State of the Union in Infectious Diseases," Infective Perspective, <http://www.infectiveperspective.com/blog/the-state-of-the-union-in-infectious-diseases>
- 2016 **Deason NA**. "Infectious Diseases in America Before European Contact," Infective Perspective, <http://www.infectiveperspective.com/blog/-infectious-diseases-in-america-before-european-contact>

### **Science Outreach**

- 2014 Designed and led hands-on genetics themed activities at Indianapolis Children's Museum for "A Moment of Science" event co-hosted by Notre Dame Football and the College of Science
- 2014 Helped design and lead REU Biology Outreach Day for children from the Robinson Community Learning Center at Notre Dame

### **Additional Science Training**

- 2017 Class: "Human Neuroscience," Foundation for Advanced Education in the Sciences (Bethesda, MD)
- 2015 Class: "Fundamentals for Precision Medicine: Medical Population Genetics and Genomics," Foundation for Advanced Education in the Sciences (Bethesda, MD)
- 2014 Summer Program: National Science Foundation Research Experience for Undergraduates, Biology, University of Notre Dame (Notre Dame, IN)
- 2014 Spring Break Program: "Science Policy Ethics: Guiding Science through the Regulation of Research and Funding," College of Science and the Center for Social Concerns, University of Notre Dame (Washington, D.C. and Notre Dame, IN)
- 2013 Summer Program: "Practicum in Environmental Field Biology", University of Notre Dame Environmental Research Center (Land O' Lakes, WI)
- 2013 Research Class: "Special Studies in Cell and Molecular Biology", University of Notre Dame (Notre Dame, IN)
- 2011 Spring Break Program: "Brown Environmental Leadership Laboratory", Brown University (Hawai'i Volcanoes National Park and Kawaihae, HI)

### **Professional Memberships**

2014-2016 Michigan Mosquito Control Association