

# CURRICULUM VITAE

## CHRISTINE A. BOZARTH, PhD

Northern Virginia Community College – Alexandria Campus  
Mathematics, Science, Technology, and Business Division  
Room AA 0352, 5000 Dawes Ave.  
Alexandria, VA 22311  
Cbozarth@nvcc.edu

### EDUCATION

**Ph.D. Environmental Science and Public Policy**, George Mason University (2003-2010)

Advisors: **Larry Rockwood** - Professor, Environmental Science & Policy, George Mason University

**Jesus E. Maldonado** - Center for Conservation and Evolutionary Genetics, Smithsonian Conservation Biology Institute; Adjunct Faculty, Environmental Science & Policy, George Mason University

**B.A. Zoology**, Connecticut College (1997-2001)

### TEACHING EXPERIENCE

**Full-Time Faculty**, Northern Virginia Community College (fall 2011 to present)

Teaching lecture and laboratory for *Environmental Science I* and *II* (undergraduate)

Wrote all lectures and labs for these courses

Incorporated field trips in to these courses

Uses civic engagement, active learning, and technology in these courses

Taught lecture and laboratory for *General Biology II* (undergraduate)

Taught lecture and laboratory for *Human Anatomy and Physiology II* (undergraduate)

**Adjunct Faculty**, George Mason University (fall 2010 to summer 2011, and May 2012)

Developed and taught course on *Non-Invasive Genetic Techniques* (graduate/professional)

Taught *Animal Biology Honors* (undergraduate)

Taught *Fundamentals of Ecology* (graduate)

Interacted with students using *Blackboard* web-based learning system

**Instructor and Course Developer**, George Mason University (summer 2008)

Created an upper level undergraduate course on *Conservation Genetics*

Designed all lectures, homework assignments, and exams for all courses

Selected current literature and lead discussion groups

Interacted with students using *Blackboard* web-based learning system

### PROFESSIONAL EXPERIENCE

**Environmental Science Discipline Group Chair**, Northern Virginia Community College (2018-present)

Chairs bi-monthly meetings of College environmental science faculty

Creates course pathways for environmental science majors

Represents discipline on College steering committee

**Lab Manager**, Center for Conservation and Evolutionary Genetics, Smithsonian Institution (2007-2008)

Monitored lab funding from various grants and endowments

Purchased lab supplies

Supervised daily lab activity

**Graduate Student Fellow**, Center for Conservation and Evolutionary Genetics, Smithsonian Institution (2006-2010)

Performed molecular analyses on canid scat for dissertation research project

Wrote dissertation research chapters

Participated in the outreach activities of the lab

### OUTREACH EXPERIENCE

**Student Club Advisor**, Northern Virginia Community College (fall 2012 to present)

Organized conference attendance and field trips for students

Volunteered for stream cleanups and campus garden construction

Made a short movie on recycling and presented it at Convocation

**Organizer and Presenter**, Northern Virginia Community College (fall 2012 to present)

Featured on With Good Reason national radio program

Advised and acted in Film Collaborative International film on climate change

Organized Earth Week events

**Guest Lecturer**, Northern Virginia Community College (2018)

Lectured on wildlife conservation to Community College Initiative international students

**Guest Lecturer**, Georgetown University, George Mason University (fall 2007 & 2008, spring & fall 2010)

Lectured on non-invasive molecular methods to 4 different courses

**Outreach Materials Development**, National Zoological Park, Smithsonian Institution (2001 & 2008)

Designed and fabricated a DNA game for the outreach activities of the genetics lab

Prepared a fox pelt and skull for outreach activities of the genetics lab

Designed and fabricated various displays for the Amazonia Science Gallery

Created a PowerPoint slide show for display at the Amazonia Science Gallery

**Public Outreach**, National Zoological Park and Conservation Research Center, Smithsonian Institution (2001-2008)

Participated in outreach to inform the public about the zoo's research programs

Taught hands-on games to instruct the public about genetics research at the zoo

### GRANTS & AWARDS

**NVCC Educational Foundation Grant** – funding for training a student on DNA lab techniques to contribute to a research project on snake fungal disease

2018      \$3200

**NOVA Student Organization Advisor of the Year** – student-nominated award for leadership of the Green Club.

2018

**NVCC Alumni Foundation Teacher of the Year** – student-nominated award for teaching and leadership excellence

2016

**NVCC Educational Foundation Grant** – funding for training a student on DNA lab techniques to contribute to a research project on amphibian disease

2015      \$2400

**NOVA Faculty Rewards and Recognition** – award at the campus and college level for scholarly and creative engagement

2015      \$3000

**Smart and Sustainable Campuses** – funding for attendance at the Smart and Sustainable Campuses conference

2012      \$400

**Marine Corps Base Quantico** – funding for dissertation research on molecular ecology of local canids

2008-2010      \$83,000

**Friends of the National Zoo** – travel award to the American Society of Mammalogists (ASM) meetings

2006 & 2007      \$250

**Graduate Student Travel Fund, George Mason University** – to present at ASM meetings

2006      \$275

### MANUSCRIPTS IN PUBLICATION

**Bozarth, C.A.**, B. Gardner, L.R. Rockwood, and J.E. Maldonado. 2015. Using Fecal DNA and Spatial Capture-Recapture to Characterize a Recent Coyote Colonization. *Northeastern Naturalist* 21(1): 144-162.

**Bozarth, C.A.**, S.L. Lance, J.L. Glenn, and J.E. Maldonado. 2011. Phylogeography of the Gray Fox (*Urocyon cinereoargenteus*) in the Eastern United States Reveals a Signature of Recent Expansion into New England. *Journal of Mammalogy* 92(2): 283-294.

**Bozarth, C.A.**, F. Hailer, L.R. Rockwood, C.W. Edwards, and J.E. Maldonado. 2011. Coyote Colonization of Northern Virginia and Admixture with Great Lakes Wolves. *Journal of Mammalogy* 92(5): 1070-1080.

**Bozarth, C.A.**, Y.R. Alva-Campbell, K. Ralls, T.R. Henry, D.A. Smith, M.F. Westphal, and J.E. Maldonado. 2010. An Efficient Noninvasive Method for Discriminating Among Faeces of Sympatric North American Canids. *Conservation Genetics Resources* 2(1): 173-175.

Tupper, T., L. Fuchs, C. O'Connor-Love, R. Aguilar, **C. Bozarth**, and D. Fernandez. Fall 2017. Detection of the Pathogenic Fungus, *Batrachochytrium dendrobatidis*, in Anurans of Huntley Meadows Park, Fairfax County, Virginia. *Catesbeiana* 37(2): 109-120.

Tupper T.A., **C.A. Bozarth**, K. Jones, and R. Cook. 2014. Detection of *Batrachochytrium dendrobatidis* in the eastern spadefoot toad (*Scaphiopus h. hollbrookii*) at Cape Cod National Seashore, USA. *Herpetological Review* 45:445-447

Tupper, T.A., T. Galitzin, **C.A. Bozarth**, and D.M. Lawlor. 2012. Patterns of frog and toad vocalization in Fairfax County, Virginia. *Banisteria* 39: 34-46.

González-Porter, G.P., O.F. Villela, F. Hailer, **C.A. Bozarth**, and J.E. Maldonado. 2010. Characterization of Eight Polymorphic Loci for the Critically Endangered Central American River Turtle, *Dermatemys mawii*. *Molecular Ecology Resources* 10(6): 1098-1105.

## **REVIEWED MANUSCRIPTS AND MATERIALS FOR JOURNALS AND TEXTBOOKS**

Axios Review	Journal of Mammalogy	PLoS ONE
Cengage	McGraw-Hill	Wiley
Conservation Genetics Resources	Northeastern Naturalist	
FlatWorld	Pearson	

## **PROFESSIONAL SOCIETY MEMBERSHIPS**

Science Education for New Civic Engagements and Responsibilities (2017-present)  
Virginia Natural History Society (2014-present)  
National Association of Biology Teachers (2009-present)  
National Science Teachers Association (2009-present)  
American Society of Mammalogists (2006 – 2016)

## **PRESENTATIONS AT SCIENTIFIC MEETINGS**

Detection of *Batrachochytrium dendrobatidis* in the Eastern Spadefoot, *Scaphiopus holbrookii*. Virginia Community College System Science Peer Group. Oral Presentation October 18, 2014. Richmond, Virginia.  
Mid-Atlantic Melting Pot: Non-Invasive Molecular Detection of Coyote Origins in Northern Virginia. American Society of Mammalogists Meeting. Oral Presentation June 14, 2010. University of Wyoming, Laramie, Wyoming.  
Use of Non-Invasive Sampling to Study Relative Patterns of Distribution and Abundance of Canids at Marine Corps Base Quantico, Virginia. American Society of Mammalogists Meeting. Poster Presentation June 18, 2006, University of Massachusetts, Amherst, Massachusetts.  
Phylogeography and Demographic History of Gray Foxes (*Urocyon cinereoargenteus*) From Eastern North America. American Society of Mammalogists Meeting. Poster Presentation June 18, 2006, University of Massachusetts, Amherst, Massachusetts.

## **PROFESSIONAL SKILLS**

**Educational applications**, Blackboard, REVEL, Learning Catalytics, Google Drive, iMovie, HHMI Interactive Labs

**Field work**, including amphibian and reptile surveys, transect delineation, and scat collection

**Laboratory work**, including DNA extraction, PCR, microsatellite analysis, and sequencing of tissue, scat, hair, and swab samples from mammals and amphibians

## **REFERENCES**

### **Dr. Maggie Emblom-Callahan**

Associate Dean of Science  
Northern Virginia Community College  
5000 Dawes Avenue, Alexandria, VA 22311-5907  
phone: 703-845-6517; email: memblomcallahan@nvcc.edu

### **Dr. Jesus Maldonado**

Research Geneticist  
Center for Conservation Genomics  
Smithsonian Conservation Biology Institute, National Zoological Park  
PO Box 37012 MRC 5503, Washington, DC 20013-7012  
phone: 202-633-4198; email: maldonadoj@si.edu

### **Dr. Larry Rockwood**

Chair, Department of Biology  
Professor of Biology and Environmental Science and Policy  
Department of Biology  
George Mason University  
4400 University Drive, Fairfax, VA 22030-4444  
phone: 703-993-1031; email: lrockwoo@gmu.edu