NANCY RUGGERI

Searle Center for Advancing Learning and Teaching Northwestern University Evanston, IL 60208

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EDUCATION

Ph.D. Curriculum & Instruction, 2011

University of Wisconsin-Madison

Dissertation: Scientific Uncertainty and its Relevance to Science Education

M.S. Biological Anthropology, 1995

University of Wisconsin-Madison

B.A. Biological Anthropology, 1988

University of Wisconsin-Madison

PROFESSIONAL EXPERIENCE

Associate Director, 2012-Present Searle Center for Advancing Learning and Teaching Northwestern University

- Direct Searle Graduate and Postdoctoral programs (Teaching Certificate Program, New TA Conference, Graduate Teaching Fellows, CIRTL at Northwestern), including strategic planning, program design, implementation, and evaluation
- Supervise program assistant, two graduate student assistants, approx. 35 graduate students, and affiliates of the Searle Center who contribute to the Center's programming
- Lead workshops on student learning, course design, creating inclusive learning environments, undergraduate STEM education, critical thinking, and graduate professional development
- Facilitate Searle Fellows project group of junior faculty to help develop projects in student learning
- Consult with individuals and academic units at Northwestern to improve student learning
- Liaise to Northwestern departments and schools to conduct needs assessment, coordinate efforts, and offer specialized sessions
- Develop research and evaluation projects on teaching and learning at Northwestern
- Co-facilitate international faculty development project in Palestine, West Bank.

Faculty Development Fellow, 2010-2012

Center for the Enhancement of Teaching and Learning Georgia Institute of Technology

- Co-facilitated faculty learning communities, Teaching Fellows and Teaching Scholars
- Led faculty development workshops on teaching and learning
- Facilitated faculty reading group to discuss relevant teaching and learning topics
- Taught graduate courses in pedagogy and course design
- Taught undergraduate course in science teaching methods
- Consulted with faculty and graduate students following their requests for teaching observations
- Organized campus-wide teaching events, *Celebrating Teaching Day* and the 4-day, *New Faculty Orientation* program
- Co-developed curricula on faculty mentoring to improve retention of women in STEM fields
- Collaborated with faculty and graduate students to improve student learning at Georgia Tech

Doctoral Student, 2005-2011

Department of Curriculum & Instruction University of Wisconsin-Madison

- University of wisconsin-wadison
- Co-developed *Ways of Knowing in the Sciences*, a UW-Madison undergraduate course for non-science majors
- Assessed student learning and co-taught *Ways of Knowing* from 2007-2009 to ~40 students each semester
- Developed curricula to highlight uncertainty in scientific data and models
- Used qualitative analysis of student writing about uncertainty to inform its use in curricula
- Dissertation research funded by the National Science Foundation (CCLI grant # 737352)

External Evaluator, 2008-2009

Center for Sustainability and the Global Environment University of Wisconsin-Madison

- Served as external evaluator for the NSF-funded Integrative Graduate Education and Research Traineeship (IGERT) program, Graduate Certificate on Humans and the Global Environment (CHANGE)
- Assisted in alignment of program objectives with evaluation needs

Associate Outreach Coordinator, 2005-2007

College of Engineering University of Wisconsin-Madison

- Coordinated K-12 outreach program for the College of Engineering
- Served as a central educational resource for K-12 teachers, engineering students and faculty
- Worked with engineering faculty to develop broader impact initiatives for NSF
- Supervised undergraduate students in developing and implementing engineering outreach curriculum
- Conceived and created the website for educational outreach for the College of Engineering

Student Services Coordinator, 2004-2005

Center for Biology Education, Institute for Cross-College Biology Education University of Wisconsin-Madison

- Coordinated Ways of Knowing Biology, a freshman seminar for biology majors
- Advised graduate students developing instructional materials for Ways of Knowing Biology
- Recruited faculty and graduate students for research explorations and graduate students for graduate shadowing experience in *Ways of Knowing Biology*
- Administered the application process for 300+ applicants to the Summer Research Opportunities Program
- Edited SRP-Bio Journal and managed distribution to students and faculty mentors
- Coordinated pre-college science programs (PEOPLE) and Summer Science Institute (SSI)

Associate Faculty Associate, 2003-2005 Assistant Faculty Associate, 1997-2003 Department of Zoology University of Wisconsin-Madison

• Coordinated two-semester introductory biology course for approx. 200 students majoring in the biological sciences

- Collaborated with faculty to develop curricula and assessments for: cellular and molecular biology, genetics, evolutionary biology, plant and animal physiology, and ecology
- Trained and supervised graduate students in established teaching methods for weekly laboratories and discussions
- Developed and implemented laboratories and discussion exercises emphasizing inquirybased learning techniques
- Mentored honors students on their written research projects working with the faculty mentors in the biological sciences
- Initiated a degree service learning option for all students who engage in community research in Dane County, WI

Advisor, 1998

Summer Orientation and Academic Registration (SOAR) Program University of Wisconsin-Madison

- Advised incoming freshmen on academic expectations and requirements for UW Madison's orientation program
- Assisted students in registering for their first semester of courses

Instructor and Foundation Director, 1997

Nature's Classroom, Spring Green, WI

- Developed and delivered courses for K-12 environmental education program
- Coordinated fund-raising activities to support the program's continuing development
- Wrote and implemented various grants and educational materials

Training and Education Coordinator and Ecological Monitoring Specialist, 1995-1996 Wildlife Conservation Society, Lao Program: Vientiane, Laos

- Developed curriculum and instructed the training program in wildlife conservation for the Lao forestry staff based in Vientaine, Laos
- Initiated monitoring program for the White-cheeked gibbon (*Nomascus leucogenys*) in a protected area in central Laos
- Collaborated with government officials to implement changing legislation

Instructor, 1995

Anthropology, Madison Area Technical College

• Developed and instructed a course in general anthropology to ~25 students.

Project Assistant, 1994-1995

Center for Biology Education, University of Wisconsin-Madison

- Developed ideas to promote understanding of concepts in the life sciences through the use of alternative teaching and learning methods
- Organized, developed the itinerary, and facilitated the annual meeting of the Coalition for Education in the Life Sciences

Teaching Assistant, 1993-1994

Department of Zoology, University of Wisconsin-Madison

• Instructed introductory biology labs and discussions.

Research Assistant (Rwanda, Africa), 1992 Department of Zoology, University of Wisconsin-Madison

• Assisted on a project to study the ecology and social behavior of two monkey species, *Cercopithecus l'hoesti* and *C. mitis* in the Nyungwe Forest, southeastern Rwanda

Project Assistant, 1991-1993

Aging and Physiological Psychology, Wisconsin Regional Primate Research Center

• Studied the effects of nutrition on ovarian cycles in captive *Macaca mulatta* under the direction of Joseph Kemnitz

Research Specialist, 1988-1991

Department of Pediatrics, University of Wisconsin-Madison

• Managed and organized medical laboratory research for Diane Nugent, MD, investigating the autoimmune disease idiopathic thrombocytopenic purpura (ITP) using immunoassay and tissue culture techniques

FELLOWSHIPS, AWARDS AND GRANTS

National Science Foundation, 2008-2010

Course, Curriculum, and Laboratory Instruction (CCLI) Phase I grant (Award #737352) "Teaching Nature of Science and Scientific Inquiry in the Context of Scientific Paradigms: Assessing Student Understanding" (\$140,662)

Teaching Academy Fellow, 2007 University of Wisconsin-Madison

Division of Information Technology Adaptation Award, 2005 Development of web-based instructional materials in conservation biology University of Wisconsin-Madison (\$700)

Zoological Society of Milwaukee County Conservation Award, 1995 "A survey of the white-cheeked gibbon in central Laos" (\$2000)

Primate Conservation, Inc. Conservation Award, 1995 "Field survey of *Hylobates concolor siki* in central Laos" (\$3300)

Foreign Language Area Studies Fellowship, 1995 Center for Southeast Asian Studies, University of Wisconsin-Madison

INVITED WORKSHOPS AND LECTURES

Ruggeri, N. "Engaging Your Audience with Active Learning Approaches." Educating Scientists in Research Ethics for the 21st Century: A Train-the-Trainers Conference. Annapolis, MD. June, 2014.

Ruggeri, N. "Using Scientific Uncertainty to Integrate the Nature of Science into Science Teaching." Edgewood College, Madison, WI. May, 2014.

Ruggeri, N. "Engaging Students to Think Critically." Faculty workshop, University of Iowa. October 2012.

Ruggeri, N. "Asking Questions, Getting Answers: Engaging STEM Students." Faculty workshop, University of Iowa. October 2012.

Ruggeri, N. "Scientific Uncertainty and Decision-Making." Workshop presented to International Affairs 8001, Science and Technology and International Affairs. Georgia Institute of Technology. February 2012.

Ruggeri, N. "Academically Adrift? Challenging Our Students to Think Critically." Workshop presented to Fellowships in Research and Science Teaching (FIRST) Program, Emory University. January 2012.

Ruggeri, N. "Academically Adrift? Challenging Our Students to Think Critically." Faculty workshop, Georgia Institute of Technology. October 2011.

Ruggeri, N. "How Learning Works." Faculty workshop, Georgia Institute of Technology. August 2011.

Ruggeri, N. "Developing your Teaching Philosophy and Portfolio." Workshop presented at the Graduate Career Symposium, Georgia Institute of Technology, March 2011.

Ruggeri, N and Gormally, C. "Making Student Learning Visible." Faculty workshop, Georgia Institute of Technology. February 2011.

Ruggeri, N. "Biology of Gender." Invited lecture presented in Counseling Psychology 115, Emphasis on Gender Awareness, University of Wisconsin-Madison. Fall 2004.

Ruggeri, N. "Conservation Biology." Invited lectures presented in Introductory Biology 152, University of Wisconsin-Madison, spring semesters 1997-2003.

Ruggeri, N. "Primate Conservation and Field Research." Invited lecture series presented in Introductory Biology 152, University of Wisconsin-Madison, Spring 1997-2003.

Ruggeri, N. "Primate Conservation Research." Invited lecture presented in Primate Behavioral Ecology, Anthropology Department, University of Wisconsin-Madison 2000.

PROFESSIONAL SERVICE

Reviewer, Professional and Organizational Development Network, 2007-2014

Reviewer, National Association for Research in Science Teaching, 2008-2012

Reviewer, American Educational Research Association, 2008-2009

Chair, Outreach Committee for the Evolution Initiative, 2008-2009, James F. Crow Institute for the Study of Evolution, University of Wisconsin-Madison

Committee Member, UW-Madison Reaccreditation Steering Committee, 2007-2008 University of Wisconsin-Madison (http://www.greatu.wisc.edu/)

Facilitator, Creating a Collaborative Learning Environment, 2004-2005

Delta/CIRTL Program, UW-Madison

Coordinator, Topics in Primate Conservation, Primate-Science listsery, 2000-2004 Wisconsin Regional Primate Research Center

Reviewer, Lincoln Park Zoo (awards for research in primate conservation), 2002-2004

PUBLICATIONS AND CONFERENCE PRESENTATIONS

Ruggeri, N., Baiduc, R., & Woods, L. (2016, November). *Analyzing teaching statements in the context of a graduate teaching development program.* Presented at the Professional & Organizational Development Network in Higher Education Conference, Louisville, KY.

Baiduc, R., Linsenmeier, R.A, & Ruggeri N. (2015). Mentored discussions of teaching: An introductory teaching development program for future STEM faculty. *Innovative Higher Education*, DOI: 10.1007/s107/s10755-015-9348-1.

Baiduc, R.R., & Ruggeri, N. (2015, November). *Disciplinary conceptions of teaching in a graduate teaching development program*. Professional & Organizational Development Network in Higher Education Conference, San Francisco, CA.

Rudolph, JL and N. Ruggeri. 2010. The NARST digital archives project: A repository and resource for the history of science education research. Presidential Invited Session at the *National Association of Research in Science Teaching* Conference; Philadelphia, PA.

Ruggeri, N. 2009. Uncertain about scientific uncertainty: Building critical reflection about scientific uncertainty in an undergraduate context. Professional and Organizational Development (POD) Network in Higher Education Conference; Houston, TX.

Kwako, J and N. Ruggeri. 2005. Engaging future faculty in the scholarship of teaching and learning: Two distinct approaches. Second Annual Conference of the International Society for the Scholarship of Teaching and Learning (ISSOTL); Vancouver, BC.

Ruggeri, N. and M. Etterson. 1998. First records of *Colugo cynocephalus* from the Lao PDR. *Mammalia* 62:450-451.

Ruggeri, N. and R.J. Timmins. 1995/1996. An initial summary of diurnal primate status in Laos. *Asian Primates* 5(3&4):1-3.

Timmins, R.J. and N. Ruggeri. 1996. Status of primates in Laos. Presentation at the International Primate Society/American Society of Primatologists (IPS/ASP) Conference, Madison, WI.

PROFESSIONAL AFFILIATIONS

American Educational Research Association National Association for Research in Science Teaching Professional and Organizational Development Network in Higher Education