

Curriculum vitae

Dana Maria Krempels

Mailing address:

University of Miami Biology Department, P.O. Box 249118, Coral Gables, FL 33124
Phone: (305) 284-3977 FAX: (305) 284-3039

Home address:

6960 SW 60th Terrace Miami, FL 33143 (305) 666-3812

Personal data:

Citizenship: United States

Education

Doctor of Philosophy in Biology, December 1989

University of Miami, Coral Gables, FL.

Dissertation: "Visible" light and near infrared reflectance of amphibians and reptiles and the visual system of avian predators (Accipitridae: *Buteo* spp.)

Chairperson: Dr. Jay M. Savage

Bachelor of Science in Biological Science June 1980

University of Southern California, Los Angeles, CA.

areas of study: invertebrate zoology; biosystematics; herpetology; ecology

Bachelor of Arts in English June 1980

University of Southern California, Los Angeles, CA.

areas of study: creative writing; film history and production

Teaching and Professional Experience - University of Miami

Lecturer, Department of Biology

(June 1990 to present)

Courses: Introductory Biology (BIL 101)

Elementary Ecology (BIL 103)

Genetics and Society (BIL 104)

Elementary Botany (BIL 105)

Elementary Zoology (BIL 106)

Honors Seminar in Biology (BIL 113/114)

Evolution of Biodiversity (BIL 160)

Genetics (BIL 250)

Honors Seminar in Genetics (BIL 253)

Biology and Gender, an Evolutionary Perspective (BIL 375)

Director of Undergraduate Studies, Department of Biology

(June 1995 to present)

- Duties:
- 1) Advise undergraduate biology majors
 - 2) Evaluate transfer credits for new undergraduate transfer students
 - 3) Serve on College of Arts & Sciences Curriculum Committee
 - 4) Head Biology Department Curriculum Committee
 - 5) Devise potential improvements in biology majors' undergraduate experience at the University of Miami
 - 6) Schedule biology courses for each semester

Laboratory Coordinator, Department of Biology

(June 1987 to present)

- Duties:
- 1) Design and update laboratory experiments and exercises in first year biology for science majors
 - 2) Write and revise lab manuals (two)
 - 3) Train and supervise graduate teaching assistants
 - 4) Train and supervise workstudy laboratory assistants
 - 5) Academic advising of students
 - 6) Update and supervise and maintenance of living and preserved botanical and zoological teaching collections.
 - 7) Administrate all laboratory-related purchasing, loans, etc.
 - 8) Design and implement new laboratory teaching aids and materials

Ecology Instructor, Coordinator, HHMI Research in Ecology Program

(June-August, 1998-present)

This community outreach program is offered by the University of Miami Biology Department and the Howard Hughes Medical Institute every summer. Middle school students and science teachers from Miami-Dade County participate in a six-week research-intensive program in which small student/teacher teams design and execute an original research project, and present it in a symposium at the end of the program. For more information, see www.bio.miami.edu/ecosummer

Coordinator/Ecology Instructor, NSF Young Scholars Program

(June / August, 1997)

Duties: Instruct students selected from Dade Count public schools in ecological principles; lead student research projects and field trips; oversee and guide graduate and undergraduate assistants helping with the course; schedule guest lecturers for the program.

Organize and oversee return trips by YSP students to university ecology labs, in which they participate with college students in research projects.

Laboratory Instructor

(January 1983 - 1990)

Courses: Introductory Biology (BIL 111, BIL 112, for biology majors)
Developmental Biology (for biology majors)

Committees and Service – University of Miami

College of Arts and Sciences Curriculum Committee

Representative for Department of Biology

Honors Thesis Committee (College of Arts and Sciences)

Review and judge theses submitted by graduating seniors applying for cum laude.

Curriculum Committee (Department of Biology)

Chair of Biology Curriculum Committee.

John C. Gifford Arboretum Committee (Department of Biology)

Web design and graphics.

Community Outreach – University of Miami

Judge for Florida-Georgia Louis Stokes Alliance for Minority Participation in Science, Technology, Engineering & Mathematics (FGLSAMP) Poster Symposium – 2004

Judge, Miami-Dade Science, Engineering, Communication, Mathematics Enhancement (SECME) Science Fair (2004)

Judge, Miami-Dade County Science Fair (2003)

Guest Speaker, South Miami Elementary School (2001 – present) – interactive talks and lectures to third-grade students on exotic plant invasions in southern Florida.

Ecology Instructor, Coordinator, HHMI Research in Ecology Program (1998 – present)

Coordinator/Ecology Instructor, NSF Young Scholars Program (1997)

Teaching and Professional Experience – Other Institutions

Dade County Public School System

Instructor for Inservice Institute (July-August 1993)

Duties: Design and instruct an Ecology course for Dade County public school teachers wishing to receive science accreditation. The course combined lecture and field work and emphasized both a scientific approach to the study of ecosystems and humanistic approach to solving environmental problems.

University of Southern California

Laboratory Instructor (January - June 1982)

Courses: Ecology and Evolution
Introductory Biology

Assistant Curator of Crustacea (June 1980 - June 1981)

Curator: Richard C. Brusca, PhD

Duties: maintenance of USC crustacean collections;
identification and cataloging of specimens.

Other Employment

Scientific Illustrator (1980 to present)

Illustrations and/or photography included in the following publications.

Gaspar, Max R. 1981. *Peripheral Vascular Surgery*. W.B. Saunders & Co.: N.Y.

Savage, Jay M. and Jaime Villa R. 1986. *The Herpetofauna of Costa Rica*.

Contributions to Herpetology, Number 3.

(Also in a number of publications in various scientific journals.)

Field biologist (March 1981)

Employer: Enviresearch - Canoga Park, CA

Duties: Perform field surveys of flora and herpetofauna at a San Gabriel Mountains locality; file environmental impact report.

Field biologist (January - October 1981)

Employer: Los Angeles County Museum of Natural History

Duties: Perform field surveys and calculate population densities of herpetofauna at Ballona Wetlands, CA.

Publications

- Krempels, Dana M. 2003. *Life, the Universe and Evolution: Laboratory Exercises in Evolutionary Biology*. (Laboratory manual for BIL 161) Hunhare Press: Miami
- Krempels, Dana M. 2001. *Go Figure: Critical Thinking and Experimental Design in the Biology Laboratory*. (Laboratory manual for BIL 151) Hunhare Press: Miami
- Krempels, Dana M, Mary Cotter and Gil Stanzione. 2000. *Ileus in Domestic Rabbits*. Exotic DVM, Volume 2(4), pp. 19 – 21.
- Krempels, Dana M. 2000. *Tiptoe through the Taxa: Laboratory Exercises in Evolution*. (Laboratory Manual for BIL 161) Benjamin Cummings Publishing Company: San Francisco
- Krempels, Dana M. and Charles H. Mallery. 1995. *Laboratory Exercises in General Biology, 4th Ed.* Burgess Publishing Company: Edina
- Krempels, Dana M. 1995. *Tiptoe through the Taxa: A Laboratory Guide to the Five Kingdoms*. (negotiating for press rights)
- Krempels, Dana M. 1989. "Visible light" and near infrared reflectance of amphibians and reptiles and the visual system of avian predators (Accipitridae: *Buteo* spp.). Doctoral dissertation. University of Miami, Coral Gables, FL 33124.
- Donnelly, Maureen A., Craig Guyer, Dana M. Krempels and H. Elizabeth Braker. 1987. The tadpole of *Agalychnis calcarifer* (Anura: Hylidae). *Copeia* 1987(1): 247-250.
- Hayes, Marc P. and Dana M. Krempels. 1986. Vocal sac variation among frogs of the genus *Rana* from Western North America. *Copeia* 1986(4): 927-936.
- Hayes, Marc P. and Dana M. Krempels. 1985. *Centrolenella vireovittata*: a new locality record in Costa Rica. *Herpetological Review* 16(1): 31.

Professional Presentations

- Krempels, Dana M. 1988. Near infrared reflectance of amphibians and reptiles and the visual system of an avian predator (Accipitridae: *Buteo*). Oral presentation given at the 1988 meetings of the American Society of Ichthyologists and Herpetologists (ASIH).
- Krempels, Dana M. and Duco I. Hamasaki. 1987. Spectral sensitivity of hawks. Poster presentation at the 1987 meetings of the Association for Research in Vision and Ophthalmology (ARVO).
- Krempels, Dana M., Duco I. Hamasaki and E. J. Rockwood. 1986. Effect of light and neurotransmitter antagonists on the release of dopamine from the pigeon's retina. Poster presentation at the 1986 ARVO meetings.
- Krempels, Dana M. 1983. Near infrared reflectance by coral snakes: aposematic coloration? Poster presentation at the 1983 meetings of American Society of Ichthyologists
- Krempels, Dana M. 1983. Infrared reflectance in leaf litter amphibians and reptiles. Oral presentation at the 1983 ASIH meetings.

Grants and Fellowships

Women in Eye Research Grant, April 1987

Awarded travel funds to attend the 1987 meetings of ARVO.

Robert E. Maytag Fellowship, November 1981 - June 1984

Graduate Research fellowship awarded through the University of Miami

Sigma Xi Grant-in-Aid-of Research, January 1983

\$300 award to fund research on infrared reflectance of Costa Rican herpetofauna.

Organization for Tropical Studies Course Fellowship, June 1981

Awarded full tuition and travel funds by the University of Southern California for the #81-3 summer field ecology course.

Jessie Noyes Foundation Grant, December 1981

\$1200 award to fund research on infrared reflectance of Costa Rican herpetofauna

Awards

Outstanding Biology Educator of the Year - May 1996

Voted by graduating senior Biology majors, University of Miami

Who's Who Among Students in American Universities and Colleges - June 1989

Voted for inclusion by the University of Miami Biology Faculty

Outstanding Graduate Student Award - May 1986

Awarded by University of Miami College of Arts and Sciences

Teaching Assistant of the Year Award - June 1981

Awarded by the University of Southern California Biology Department.

Professional Societies

Sigma Xi, The Scientific Research Society of North America

1982 - present

American Society for the Study of Ichthyology and Herpetology

1983 - 1990

Organization for Tropical Studies

1981 - present

Addendum - Miscellaneous Information

Membership in Conservation Organizations

The Nature Conservancy
World Wildlife Fund
Tropical Audubon Society
Florida Wildlife Federation
Siskiyou Regional Education Project

Personal Interests

Wildlife photography. My work has been published in several books, magazines, brochures, posters and on a Costa Rican postage stamp.

Student/faculty relations. Served as a non-resident associate faculty master at Eaton Residential College, University of Miami since 1990. This program fosters personal interaction between students and faculty, and invites faculty to sponsor outings and social interactions with students.

Community Service. Served as president of a 783-member condominium association in 1992-93, overseeing the hurricane reconstruction of the community and dealing with the many legal and insurance issues involved therewith. Served as Landscape Director for the community of 96 acres, incorporating environmentally friendly and native plantings and initiating recycling programs. Served as editor and layout designer of community newsletter for three years; included environmental and wildlife education articles in every issue.

Music. Semi-professional singer/guitarist; perform traditional British Isles and Canadian folk music. Served on the Board of Directors of the Folk Club of South Florida from 1983 through 1988.

Athletics. Ran five marathons from 1986 through 1990, and still running.

Graphic design. Designed numerous brochures, newsletters, display advertisements, etc. for many different organizations.

Undergraduate awards and activities

Dean's List: 1975, 1977, 1978, 1979, 1980

Student Senate Outstanding Service Award: 1979

Director of the USC Coffeehouse from 1977 through 1980