

CURRICULUM VITA

WILLIAM M. SHIELDS

Age: 63 Born: 23 November 1947

Current Address: SUNY CESF, 1 Forestry Drive, Syracuse, NY 13210

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Dated: January 21, 2011

DEGREES

A. B., In Biology, Livingston College, Rutgers University, New Brunswick, New Jersey, with Distinction, May 1974

M. S., In Zoology, Ohio State University, Columbus, Ohio, June 1976

Ph. D., In Zoology, Ohio State University, Columbus, Ohio, June 1979, Dissertation: *Philopatry, Inbreeding, and the Adaptive Advantages of Sex.*

PROFESSIONAL EXPERIENCE

Teaching Associate, Ohio State University In: General Biology, General Zoology, Ethology, Animal Behavior, Ornithology, and Evolution (1974-1979)

Instructor, Wilmington College, Wilmington, Ohio

Topics in Biology (Nonmajors, 1976)

Vertebrate Biology (1976)

Laboratory in Vertebrate Anatomy (1976)

Lecturer, Ohio State University, Lima, Ohio

General Biology (Majors: lecture and lab, 1978)

General Biology (Non-majors: lecture, 1978)

Professor (1988-); Assistant (1979-84); Associate (1984-88),

State University of New York, Syracuse, New York

Animal Behavior (Enrollment: 100+, 1979-)

Evolutionary and Systematic Biology (1985 & 1987)

Topics in Evolution and Behavior (Grad Seminar, 1979- some years)

Conservation Biology & Genetics (Grad Seminar- 1980- some years)

Field Studies in Australia (1999-2009 some years)

Readings in Conservation Biology (2001- some years)

Freshman and Sophomore Honors Seminars (2008-)

Director, Cranberry Lake Biological Station, (1987-1995)

Associate Director (1980-1987).

Teaching: Field Ornithology (1979-94), Behavioral Ecology (1979-94, 2005-), In some years. Field Studies in the Adirondacks (1989-94), Functional Ecology (1996).

Distinguished Scholar-In-Residence (1986-87), Northern Arizona Univ. and Museum of Northern Arizona, Flagstaff, Arizona.

Scholar-In-Residence (1996-97), Univ. of Virginia School of Law, Charlottesville, VA.

HONORS AND FELLOWSHIPS

New York State Regents Scholarship (1965)
Marcia Brady Tucker Award (American Ornithologists Union, 1974)
Mary Osburn Fellow (Ohio State University, 1977)
Sigma Xi (elected 1979), Syracuse Chap. Secretary. 1998, Vice President, 1999, President, 2000
American Ornithologists Union, Elected: Member (1983) & Elected Fellow (1991),
Colorado Plateau Distinguished Scholar-in-Residence (1986-87)
Distinguished Teacher Award, Undergraduate Student Association,
SUNY College of Environmental Science & Forestry, 1990-1991
American Men & Women of Science (1995-)
Who's Who in American Teachers (2004-).
Executive Chair of College Faculty, SUNY CESF, (2006- 2008)
Who's Who in America (2010-).

PROFESSIONAL AFFILIATIONS

American Ornithologists Union
Animal Behavior Society
Ecological Society of America
Society for Conservation Biology
Society for the Study of Evolution

PUBLICATIONS

BOOKS

1. Shields, W. M. 1982. *Philopatry, Inbreeding, and the Evolution of Sex*. State University of New York Press, Albany, New York, 245 pp.
2. Yoshimura, J., N. Nakagiri and W.M. Shields, Eds., 2002. Proceedings of Two Symposia on Ecology and Evolution in VIII INTECOL, Seoul, Korea, 2002. Sangaku Publisher, Inc, Shiga, Japan, 107pp.

PAPERS (* indicates refereed book chapter or journal article)

1. Shields, W. M. and T. C. Grubb, Jr. 1974. Winter bird densities on north and south slopes. *Wilson Bull.* 86:125-130.*
2. Shields, W. M., T. C. Grubb, Jr. and A. Telis. 1974. The use of native plants by monk parakeets in New Jersey. *Wilson Bull.* 86:172-173.*
3. Shields, W. M. 1977. The effect of time of day on avian census results. *Auk* 94:380-383.*
4. Shields, W. M. 1977. The social significance of winter plumage variability: a comment. *Evolution* 31:905-907.*

5. Grubb, T.C., Jr. and W. M. Shields. 1977. Bald eagle interferes with an active osprey nest. *Auk* 94:140.*
6. Shields, W. M. 1979. Avian census techniques: an analytical review. In, *The role of insectivorous birds in forest ecosystems*. (J.G. Dickson, R.N. Conner, R.R. Fleet, J.A. Jackson, J.C. Kroll, eds.) Academic Press, New York, pp 23-51.
7. Shields, W. M. and K. L. Bildstein. 1979. Birds versus bats: behavioral interactions at a localized food source. *Ecology* 60:468:474.*
9. Shields, W. M. 1980. Ground squirrel alarm calls: nepotism or parental care? *American Naturalist* 116:599-603.*
10. Shields, W. M. 1982. Inbreeding and the paradox of sex: a resolution? *Evolutionary Theory* 5:245-279.*
11. Shields, W. M., L. M. Shields, R. Thornhill and N. W. Thornhill. 1982. What causes rape? A dissenting view. *Science* 82 (Dec.):16.
12. Hecklau, J. D., W. F. Porter and W. M. Shields. 1982. Feasibility of transplanting Wild Turkeys into areas of restricted cover and high human density. *Trans. N. E. Fish & Wildl. Conf.* 39:96-104.
13. Shields, W. M. 1983. Genetic considerations in the management of the wolf and other large vertebrates: an alternative view. In, *Wolves in Canada and Alaska: their status, biology, and management*. (L. N. Carbyn, ed.), Canadian Wildl. Serv. Series 45:90-92.*
14. Shields, W. M. 1983. Optimal inbreeding and the evolution of philopatry. In, *The Ecology of Animal Movement*. (I.R. Swingland and P.J. Greenwood, eds.), Oxford Clarendon Press, Oxford, pp. 132-159.
15. Shields, W. M. and L. M. Shields. 1983. Forcible rape: an evolutionary perspective. *Ethology and Sociobiology* 4:115-136.*
16. Shields, W. M. 1984. Barn swallow mobbing: self defence, collateral kin defence, group defence, or parental care? *Animal Behaviour* 32:132-148.*
17. Shields, W. M. 1984. Factors affecting site tenacity in Adirondack Barn Swallows. (*Hirundo rustica*). *Auk* 101:780-89.*
18. Shields, W. M. 1985. Avian song dialects: genetic adaptation and deceptive mimicry? *Behavioral and Brain Science* 8:114-115.*
19. Crook, J. R. and W. M. Shields. 1985. Sexually selected infanticide by male barn swallows. *Animal Behaviour* 33:754-761.*

20. Leck, C. F. and W. M. Shields. 1985. Pelagics off New Jersey. Records of New Jersey birds. XI(1):2-4.*
21. Templeton, A.R., H. Hemmer, G. Mace, U.S. Seal, W.M. Shields, and D.S. Woodruff. 1986. Local adaptation, coadaptation, and population boundaries. Zoo Biol. 5:115-125.*
22. Shields, W. M. 1986. Uncertain paternity, matrilineality, and cross-cousin marriage: hidden connections? Behavioral and Brain Science 8:678-79. *
23. Crook, J. R. and W. M. Shields. 1987. Non-parent nest attendance in the barn swallow: helping or harassment? Animal Behaviour 35:991-1002.*
24. Shields, W. M. and J. R. Crook. 1987. Barn swallow coloniality: a net cost for group living in the Adirondacks? Ecology 68:1373-1386.*
25. Shields, W. M. 1987. Dispersal and mating systems: investigating their causal connections. In, *Mammalian Dispersal Patterns: The Effects of Social Structure on Population Genetics*. (B.D. Chepko-Sade and Z. T. Halpin, eds.), Univ. of Chicago Press, Chicago, Ill., pp 3-24.*
26. Chepko-Sade, B. D. and W. M. Shields, with J. Berger, Z. T. Halpin, W. T. Jones, L. D. Mech, M. E. Nelson, L. L. Rogers, A. Rood, and A. Smith. 1987. The effects of dispersal and social structure on effective population size. In, *Mammalian Dispersal Patterns: The Effects of Social Structure on Population Genetics*.(B.D. Chepko-Sade and Z.T. Halpin, eds.), Univ. of Chicago Press, Chicago, Ill., pp 287-321.*
27. Yoshimura, J. and W. M. Shields. 1987. Probabilistic optimization of phenotype distributions: a general solution for the effects of uncertainty on natural selection? Evolutionary Ecology 1:125-138.*
28. Shields, W. M. 1988. Sex and adaptation. In, *The Evolution of Sex: An Examination of Current Ideas*. (R. E. Michod, and B. R. Levin, eds.), Sinauer Associates, Sunderland, Mass., p 253-269.
29. Shields, W. M., A. R. Templeton, and S. K. Davis. 1988. Genetic assessment of the current captive breeding program for the Mexican wolf (*Canis lupus baileyi*). Tech. Report, New Mexico Dept. of Game and Fish, Santa Fe, New Mexico.
30. Shields, W.M., J.R. Crook, M.L. Hebblethwaite, and S.S. Wiles-Ehmann. 1988. Ideal free coloniality in the swallows. In, *Ecology of Social Behavior*, C. N. Slobodchikoff, ed., Academic Press, NY, pp 189-228.
31. Slobodchikoff, C. N. and W. M. Shields. 1988. Ecological tradeoffs and social behavior. In, *Ecology of Social Behavior*, C. N. Slobodchikoff, ed., Academic Press, NY, pp 3-10.

32. Hebblethwaite, M. L. and W. M. Shields. 1990. Social influences on Barn Swallow foraging in the Adirondacks: A test of competing hypotheses. *Animal Behaviour*, 39:97-104.*
33. Shields, W. M. 1990. Information centers and coloniality in Cliff Swallows: Statistical design and analysis - a comment. *Ecology*, 71:401-405.*
34. Howard, D.J. and W.M. Shields. 1990. Patterns of genetic variation within and among species of *Chauliognathus* (Coleoptera: Cantharidae). *Ann. Entol. So. Am.*, 83:326-334.*
35. Yoshimura, J. and W. M. Shields. 1991. Components of uncertainty in clutch-size optimization. *Bulletin Mathematical Biology*, 54:445-464.*
36. Shields, W. M. 1992. Problems & Solutions Associated with Matching and Generating Inclusion Probabilities. pp 1-50, In, Proc. from the Third International Symposium on Human Identification 1992, Promega, Scottsdale, AZ.
37. Shields, W. M. 1993. The natural and unnatural history of inbreeding and outbreeding. pp 143-169, In, *The Natural History of Inbreeding and Outbreeding: theoretical and empirical perspectives on population structure*. (N. W. Thornhill, ed.), University of Chicago Press.*
38. Yoshimura, J. and W. M. Shields. 1995. Probabilistic optimization of body size: a discrepancy between genetic and phenotypic optima. *Evolution*, 49:375-378.*
39. Kawai, T., H. Amagai, W.M. Shields, and J. Yoshimura. 2002. Modeling the evolutionary process of hill-topping behavior in insects. In. *Proceedings of Two Symposia on Ecology and Evolution in VIII INTECOL*, Seoul, Korea, 2002. Yoshimura, J., N. Nakagiri and W.M. Shields, Eds., Sangaku Publisher, Inc, Shiga, Japan, 107pp.*
40. Caister, L.E., W.M. Shields, and A. Gosser. 2003. Female tannin avoidance: A possible explanation for habitat and dietary segregation of giraffes (*Giraffa camelopardis peralta*) in Niger. *African Journal of Ecology*. 41:201-210*
41. D. E. Krane, T. E. Doom, L. Mueller, M.L. Raymer, W.M. Shields, and W.C. Thompson. 2005. Commentary on: Budowle B, Shea B, Niezgodna S, Chakraborty R. CODIS STR loci data from 41 sample populations. *J Forensic Sci*. 2001; 46:453-489. *J. Forensic Science*. 49:111-112.
42. Krane, D. E., D. Balding, V. Bahn, B. Barlow, H. Cash, B. L. DesPortes, P. D'Eustachio, K. Devlin, T. E. Doom, I. Dror, S. Ford, C. Funk, J. Gilder, G. Hampikian, K. Inman, A. Jamieson, P. E. Kent, R. Koppl, I. Kornfield, S. Krimsky, J. Mnookin, L. Mueller, E. Murphy, D. R. Paoletti, D. A. Petrov, M. Raymer, D. M. Risinger, A. Roth, N. Rudin, W. Shields, J. A. Siegel, M. Slatkin, Y. S. Song, T. Speed, C. Spiegelman, P. Sullivan, A. R. Swinton, T. Tarpey, W. C. Thompson,

E. Ungvarsky, S. Zabell. 2009. Time for DNA Disclosure. Letter to the Editor. Science. 326:1631-1632.

43. Gilder, J. R., K. Inman, W. Shields, and D. E. Krane, 2010. Magnitude dependant variation in peak height balance at heterozygous STR loci. Intl. Journal Legal Medicine. 125:87-94.

RESEARCH GRANTS & CONTRACTS

Intraspecific vocal differentiation in anuran amphibians. State University of New York, University Awards Committee. \$3,468, 3/1/80 to 3/31/82.

Social behavior in the Barn Swallow. NSF \$46,536, 4/1/84 to 4/1/87.

Genetic assessment of the captive breeding plan and the breeding population of the Mexican Wolf (*Canis lupus baileyi*) recovery program. New Mexico Dept. of Game and Fish, \$4850, 4/1/85 to 6/1/87.

Conservation biology and genetics of Adirondack Wildlife. Adirondack Wildlife Program, State of New York, \$120,000, 4/1/85 to 4/1/90.

Conservation biology and genetics of Adirondack Wildlife. Adirondack Wildlife Program, State of New York, \$ 80,000, 4/1/90 to 4/1/95.

The natural history of inbreeding and outbreeding. Funding for Animal Behavior Society Symposium. N. W. Thornhill, CO-PI, NSF, \$10,000. June 89-90.

Conservation of the Flamingo and associated wetlands in Yucatan, Mexico, Co-PI Guy Baldassarre, U.S. Fish & Wildlife Service, \$160,000, 5/1/93 to 8/31/96.

The ecology of introgressive hybridization between sympatric Mallards and Black Ducks in the Adirondack Forest of New York: Evidence from DNA Typing. Co-PI, G. Baldassarre. MacIntyre-Stennis Grant (USDA). \$60,500, 4/1/92 - 9/30/96.

The effects of forest composition and habitat disturbance on the ranging patterns and social organization of *Varecia variegata variegata*. Co-PI, R. Chambers. Primate Conservation, Inc. \$2000 5/15/94-6/30/94.

Contract consultant on population genetic issues in creating forensic databases for PCR loci. Monroe County Crime Lab, Rochester, NY. (March,1994).

Habitat Use and Mortality in Sitka Black-tailed Deer on Managed Landscapes in Southeast Alaska, Co-PI, M. D. Kirchhoff, Alaska Fish & Game, \$200,000, 7/1/96-7/31/2001.

Human disturbance and tiger conservation in the Western Ghats, India, Save the Tiger Fund, U. S. Fish & Wildlife Foundation, Ayesha Prasad, CO-PI, \$20,000, February 2006-February 2007.

NYS Biodiversity Research Institute, Assessment of mercury accumulation in two forest-dwelling songbirds, \$26,093 with and to support Jason Townsend, Ph. D. student, May 31 2007-August, 31, 2008.

SELECTED INVITED LECTURES

Invited Participant: NATO Advanced Studies Workshop on Evolutionarily Stable Strategies, and the evolution of sex and sex ratios. Queens Univ., Kingston, Ontario, June, 1982.

Invited workshop participant: Population genetics and the Siberian Tiger propagation plan. Brookfield Zoo, Chicago, IL, May, 1984.

Invited panel member: on "Coadapted gene complexes and outbreeding depression", at Symposium on: Genetics of Captive Population Mgmt., National Zoo's Research Center, Front Royal, VA, Aug. 1984.

Dispersal and mating systems: their joint effect on mammalian evolution. At symposium on: "Patterns of dispersal among mammals and their effects on the genetic structure of populations." Jointly sponsored by Animal Behavior Society and the American Society of Zoologists, Denver, Dec. 1984.

Evolutionary versus cognitive explanations of crime and punishment: a false dichotomy? at Symposium on: The new evolutionary biology and its implications for philosophy and psychology. At: International Meeting of the Society for Philosophy and Psychology, Toronto, Canada, May 1985.

Sex, species, stasis, and change: beneath neodarwinism. Keynote Address: Southeastern Ecological Genetics Meeting, Belle Baruch Marine Station, South Carolina, August 1985.

Inbreeding and the evolution of sex: paradox lost? Ecology Lecture Series. University of California at Davis, Jan. 1986.

Barn swallow ecology and social behavior. Ornithology Lecture Series at Cornell Laboratory of Ornithology, Ithaca, New York. March, 1986.

The influence of tradition and housing costs on nesting ecology and sociality in the swallow family (Aves; Hirundinidae) At: Symposium on Ecology of Social Behavior, Northern Arizona Univ., Flagstaff, June 1986.

Forcible rape: current perspectives and criticisms of evolutionary analyses. NY Academy of Science Conference on: Human Sexual Aggression. New York, NY, January 1987.

Inbreeding: What it is and what to do about it!, At Symposium on: The genetics of small populations, at, American Association of Zoological Parks and Aquaria (AAZPA), NE Meeting, Syracuse, New York, March 1987.

Sexual Selection and Speciation in the Soldier Beetles. Colorado Plateau Lecture, Museum of Northern Arizona, Flagstaff, AZ, April 1987.

Forcible Rape: Comments and criticisms of an evolutionary perspective. Inaugural Keynote Lecture, Univ. Honors Program, Ohio State University, Lima, Ohio. Nov. 1987.

Genetics and Vertebrate Behavioral Ecology, Keynote Address: At Plenary Session on Genetics and Ecology: Is the integration working? Ontario Ethologists and Ecologists Society meeting, Queens College, Kingston, Ontario, April 1989.

Mating System and Sexual Selection in the Barn Swallow. Laboratory of Ornithology, Cornell Univ., Ithaca, NY, November 1990.

Problems with the FBI's methods of DNA typing. Invited presentation at Criminal Law Society Symposium on Forensic Applications of DNA typing. Syracuse University Law School, November 1990.

Invited Panelist, New York State Regents Biology Syllabus Review Workshop and Planning Committee, Sponsored by NY State Education Department and Cornell University, at Wells College, Aurora, NY, August 1991.

Invited Keynote Lecturer, Annual College Colloquium (1991-1992 topic: Human Violence). On the biological bases of human aggression. Siena College, Albany, NY November 1991.

Invited Workshop Leader: Workshop on Forensic Uses of DNA Typing, New Hampshire Public Defenders Office, February 1992.

Invited Symposium Participant, Lecture: "On the problems and solutions associated with matching and generating inclusion probabilities in forensic DNA typing., At, Promega's Third Intl. Symposium on Human Identification, Scottsdale, AZ, April 1992.

Invited Participant: Debate on genetic issues associated with forensic DNA typing. Carleton University and Univ. of Ottawa Law School, Ottawa, April 1992.

Invited Panelist, Forensic DNA typing: a discussion of its use and abuse, At, California Association of Criminalist's Meeting, Bass Lake, CA, May, 1992.

Invited Workshop Co-Leader (with B. Scheck): DNA: A survival primer. Sponsored by the Maryland Criminal Defense Attorneys' Conference. Hagerstown, MD, Oct. 1992.

Invited Workshop Leader: On Forensic DNA typing. Sponsored by Tompkins County Criminal Justice Association, Ithaca, NY, April, 1993.

Invited Participant, NSF Funded Panel to Review the research program at Hawk Mountain Sanctuary, Hawk Mountain, PA, August, 1994.

Invited Roundtable Participant. On the evolution of coloniality. International Ornithological Congress, Vienna, Austria, August, 1994.

Invited Lecturer, Scientific Evidence and the Law. Franklin Pierce Law School, Concord, NH, November, 1995.

Invited Workshop Participant, Parana-Paraguay Hidrovia Conference, Harvard University, Cambridge, Ma, April, 1996.

Inaugural Public Lecture, The animal within: an evolutionary perspective on human behavior, National Animal Behavior Society Meeting, Flagstaff, AZ, August, 1996.

Workshop Participant: AALS Workshop on evidence: new perspectives on evidence. Washington DC, October, 1996.

Guest Professor: Advanced Evidence Seminar: Sections on scientific evidence in criminal and toxic tort proceedings. University of Virginia Law School, Spring, 1997.

Guest Lecturer: Criminology Seminar, University of Virginia Law School. Feb., 1997.

Instructor, Continuing Legal Education Workshop on DNA typing in 1997. Sponsored by Science In The Courts, Inc., Classes in: Richmond, Tyson's Corner, Roanoke, and Norfolk, VA, May, 1997

Invited Speaker, Forensic DNA analysis and the Simpson Matter. Sigma Xi, the Scientific Research Society, SUNY Oswego Chapter, November, 1997

Invited Speaker, on "The validation of novel DNA typing techniques for forensic use. American Association for the Advancement of Science (AAAS) meeting. February, 1998, Philadelphia, PA.

Invited Banquet Speaker, on "The Validation of Forensic DNA Typing Techniques: Promise and Peril, at Sigma Xi, the Scientific Research Society, Syracuse Chapter Annual Meeting and Banquet, April, 1998.

Invited Speaker, "Mitochondrial DNA and the Identification of Remains", at National Alliance of Families of POW's and MIA's, Washington DC, June, 1998.

Faculty Member at Michigan Summer Institute SEEKS Program at Adrian College. June 1998 & June 1999.

Faculty Member: Workshop on DNA Evidence: New Hampshire Public Defenders, Manchester, New Hampshire, 1999

Invited Workshop Leader on: "Mitochondrial DNA Typing" at Science in the Courtroom for the 21st Century II. Illinois Appellate Defender and Cook County Public Defender, Chicago, IL, May 2000.

Invited Faculty at CLE Course: "How to Win with DNA" sponsored by Los Angeles Public Defender, June 2000.

Invited Speaker, on Forensic DNA Typing at the Deborah Creek Criminal Practice Institute, Washington D.C., November 2000.

Invited Faculty on DNA in the Courts, Criminal Defense Updates, NYS Defender's Association, Rochester, November 2000.

Invited Faculty on DNA in the Courts, Criminal Defense Updates, NYS Defender's Association, Syracuse, December 2000.

Invited Faculty on: Validation of Forensic STR and mtDNA methods, at Science in the Courtroom for the 21st Century III, Cook County Public Defender and Illinois Appellate Defender, Chicago, IL, May, 2001.

Keynote Banquet Speaker: What Forensic DNA Testing Has Taught Us About the Criminal Justice System, Sigma Xi, Syracuse Chapter Annual Meeting, April, 2002.

Invited Faculty on: Mitochondrial DNA statistical methods & STR Complex mixture interpretation, at Science in the Courtroom for the 21st Century III, Cook County Public Defender and Illinois Appellate Defender, Chicago, IL, May, 2002.

Invited Speaker: Forensic DNA Analyses: Statistical Issues. Florida Capital Defenders Association, Tampa, February, 2003.

Invited Faculty on: Forensic Mitochondrial DNA at Science in the Courtroom for the 21st Century III, Cook County Public Defender and Illinois Appellate Defender, Chicago, IL, May, 2003.

Invited Faculty at Symposium on: The statistics of DNA profiling. Wright State University, Dayton, OH, August, 2003.

Invited Faculty on: "Validation Studies and Litigation" at Science in the Courtroom for the 21st Century III, Cook County Public Defender and Illinois Appellate Defender, Chicago, IL, May, 2004.

Invited Faculty on: "The Science of DNA: Introduction to Genetics, at New York State Judicial Institute Summer Seminars, Buffalo, June, 2004, Syracuse, Albany, and White Plains, NY, July 2004.

Invited Faculty at Symposium on: The validation of forensic DNA profiling techniques. Wright State University, Dayton, OH, August, 2004.

Co-organizer & Lecturer on Cold hit statistics: at, Experts forum on Forensic DNA Analysis. University of Dayton Law School, Dayton, OH, August, 2005.

Invited lecturer on The forensic use of Mitochondrial DNA, at, Defending Illinois Death Penalty Cases in 2005, ILCLE, Springfield, IL, October 2005.

Co-organizer & Lecturer on Mitochondrial statistics & Peak Height Ratios: at, Experts forum on Forensic DNA Analysis. Wright State University, Dayton, OH, August, 2006.

Invited Faculty at a Continuing Legal Education Meeting at Monroe County Public Defenders at RIT, November, 2008

Invited Faculty: Project Advance for Secondary Science Teachers: Course on Forensic Science. Syracuse University, Lectures on: 1. Forensic Science and the Law, and 2. Forensic DNA Technology. Syracuse, NY, July 2003-2010.

Invited Participant: Workshop on the use of forensic databases in population biology. Las Vegas, NV, October 2009.

SELECTED DEPARTMENTAL SEMINARS:

Depts. of Anthropology and Biology, Harvard, Jan, 1979
Dept. of Zoology, Rutgers Univ., New Brunswick, NJ, Oct, 1979
Dept. of Biology, Princeton Univ., Princeton, NJ, Oct, 1979
Dept. of Zoology, Colorado State, Ft. Collins, CO, March, 1980
Dept. of Zoology, Univ. of Florida, Gainesville, FL, April, 1980
Dept. of Biology, Queens Univ., Kingston, Ontario, February, 1981
Dept. of Zoology, Western Ontario Univ., London, Ont., April, 1981
Dept. of Neurobiology and Behavior, Cornell, Ithaca, Oct, 1981
Dept. of Zoology, Univ. of Cal. Davis, Davis, CA, May, 1982
Dept. of Biology, Univ. of Cal. Santa Barbara, CA, May, 1982
Dept. of Natural Resources, Cornell, Ithaca, NY, Sept., 1982
Dept. of Animal Science, Cornell, Ithaca, NY, Feb., 1983
Dept. of Biol., Univ. of New Mexico, Albuquerque, NM, March, 1983
Dept. of Biology, Univ. of Colorado, Denver, CO, March, 1983
Dept. of Zoology, Colorado State, Ft. Collins, CO, March, 1983
Dept. of Biology, Fordham Univ., Bronx, NY, April, 1983
Dept. of Biology, Princeton Univ., Princeton, NJ, Nov., 1983
Dept. of Biology, Queens Univ., Kingston, Ontario, Nov, 1983
Rockefeller University, Millbrook, NY, March 1984
Ecology Program, Rutgers Univ., New Brunswick, NJ, Nov., 1984
Depts. of Biol. & Psych., Bowling Green Univ., OH, March, 1985
Savannah River Ecology Laboratory, Aiken, SC, August 1985
Dept. of Biol., Northern Arizona Univ., Flagstaff, AZ, Sept. 1986
Museum of Northern AZ., Board Meeting, Phoenix, AZ, Jan., 1987
Dept. of Ecology and Evolution, Univ. of Arizona, Tucson, AZ, Jan. 1987
Dept. of Zoology, Arizona State Univ., Tempe, AZ, Feb., 1987
Dept. of Zoology, Univ. of New Mexico, Albuquerque, NM, Feb., 1987

Depts. of Gen. and Zool., Univ. of Hawaii, Honolulu, March, 1987
Dept. of Biology, New Mexico State Univ., Las Cruces, Dec. 1987
Dept. of Biology, Penn State Univ., State College, PA, April, 1988
Dept. of Biology, SUNY Albany, Albany, NY, September, 1988
Dept. of Anthropology, Harvard, Cambridge, MA, October, 1988
Ecology and Systematics, Cornell University, Ithaca, NY, Nov., 1988
Dept. of Biology, SUNY Binghamton, Binghamton, NY, November, 1989
Dept. of Biology, Queens College, Kingston, Ontario, May 1990
Dept. of Zoology, Colorado State Univ., Ft. Collins, CO, October 1990
Dept. of Biology, Sweet Briar College, Sweet Briar, VA, March, 1995
Dept. of Biology, SUNY Binghamton, Binghamton, NY, October, 1995
Dept. of Biology, University of Richmond, Richmond, VA, November, 1996
Dept. of Biology, Adrian College, Adrian, MI, April, 1998.
Dept. of Ecology & Systematics, Cornell University, December, 2001
Dept. of Biology, Syracuse University, February, 2002
Dept. Environmental Studies, Cazenovia College, May 2004
Dept. of Ecology, Evol., and Con. Biology, University of Nevada, Reno, October 2006.

SELECTED PROFESSIONAL ACTIVITIES

Associate Editor, Wilson Bulletin, (1984-1987).
Associate Editor, American Midland Naturalist (1984-1989).
Associate, Behavioral and Brain Sciences (1984-2000).
Member, Syracuse University Honors Council (1986-1999).
Member, SUNY ESF Honors Council (2008-).
Leader, Ecology Concentration, (1990-1992).
Leader, Conservation Biology Concentration, (1998- 2003).
President, Syracuse Chapter of Sigma Xi, the Scientific Research Society, 2000-2001.
Executive Chair, College Faculty, (2006-2008).

Manuscript and Grant Reviewer (for about previous 10 years):

Auk, American Naturalist, Animal Behavior, Behavioral Ecology, Biological Conservation, Biological J. Linnaean Society, Ecological Modeling, Naturwissenschaften, Wilson Bulletin, National Association of Criminal Defense Attorneys, National Geographic Society, National Science Foundation, and United States Department of Justice.

Co organizer (with N. W. Thornhill) of symposium on "The natural history of inbreeding and outbreeding: theoretical and empirical perspectives on population structure. At, Animal Behavior Society Meetings, Northern Kentucky University, June, 1989.

Board of Directors (1996-) and Treasurer (1996-2001), Melinda Gray Ardia Environmental Education Foundation, P.O. Box 621, Skaneateles, New York 13152.

Special Mentor: For multiple scholars in the U.S.D.A. Under Represented Scholars Program (UMEB) at SUNY CESF (2000-) and the McNair Scholars Program at Syracuse University (2002-).

Consulting

Consultant and/or Expert Witness in Population Genetics, Molecular Genetics and/or Statistics concerning forensic DNA typing for the defense, the state, courts and NGO's.

Selected Cases: (Syracuse(15 Cases), Albany(12), Wampsville(3), Essex Co(2), Manhattan(8), Queens(5), Brooklyn(2), Nassau, Suffolk(3), Westchester(4), Buffalo(12), Ithaca, Fulton, Auburn(2), Lockport(2), Oswego(2), Rochester(12), Middletown, Endicott City, Schoharie, Plattsburgh, Binghamton(2), Orange County, Utica (2), Cortland, Wayne County, and Monticello(2), NY; Burlington(4), St. Albans(2), Bennington, North Hero, and Brattleboro, VT; Exeter, Manchester(4), and Concord(6), NH; Providence, RI, Seattle(4), WA; Grand Rapids(3), Detroit, and Pontiac, MI; Fredricton, New Brunswick; Pittsburgh, Allentown, Uniontown, Scranton(2) and Philadelphia(5) PA; Ottawa, Ont; Vancouver, BC(2), Toronto, Ont.(9), Halifax, NS, Yellowknife, NWT, Chicago(12), Rockford(2), Bellville, Wheaton, and Dupage Co., IL, Portland, ME, Portland, OR; Leavenworth, KS, Tucson and Phoenix(3), AZ, Albuquerque(3), NM, Daytona Beach(3), Melbourne, Clearwater, Rockledge, W. Palm Beach(3), Ft. Lauderdale (9), Miami(5), Orlando(3), Sarasota(2), Naples, Tampa(6), Pasco County, and Jacksonville(2), FL, St. Louis(5), MO, Asheville, Roanoke Rapids, and Raleigh, NC, Sheridan and Cheyenne, WY, Brewton and Birmingham, AL, Nashville(5) and Chattanooga(4), TN, Amarillo, Hempstead, Houston(2), Beaumont, Waco, and Port Arthur(2), TX, Lexington(2), La Grange, and Marion, KY, Charleston(2), SC, New Orleans(5), Baton Rouge(2), and Lake Charles, LA, Anadarko, Tulsa(2), and Oklahoma City, OK, Missoula(2) Bozeman, and Billings, MT, Cape Cod, Chatham(2), Dedham(2), Springfield(5), Pittsfield(3), Worcester(5), and Boston(20), MA, Bergen County (3), Hackensack(3), Camden, New Brunswick(5), Trenton(2), Toms River, Newark(6), Freehold, Essex(6), and Belvidere(2), NJ, Iowa City, IA, Cincinnati(2), Columbus, Cleveland, Woodsfield, Toledo(3), and Sandusky, OH, Stillwater(2), Minneapolis(15), Duluth, and Otswana(2), MN, Baltimore(7), Annapolis, Snow Hill, and Ellicott City, MD, Wilmington, DE(2), Bismark and Grand Forks(4), ND, New London, New Haven(5), Waterford, and Hartford(2), CT, Indianapolis, IN, Anchorage(3), Ketchikan, Juneau, and Fairbanks(2), AK, Denver, CO(4), Los Angeles(15), Orange Co(5) CA, San Francisco(8), Sacramento(4), San Diego(2), Modesto, Contra Costa(3), Fairfield, Madera, Siskiyou, San Luis Obispo, and Marin Co.(2), CA, Washington, DC(5), Norfolk(3), Williamsburg, Hampton, Newport News, Richmond(5), Virginia Beach(5), Fairfax, Buena Vista, and Arlington(2), VA, Agana, Guam(2); Melbourne, Australia, Edinburgh, Scotland, Buenos Aries, Argentina, St. Kitts and Nevis, and the U.S. Virgin Islands. The Russian Expert Commission Abroad and Russian Orthodox Church on the Identification of the Romanovs, and the Alliance of Families of MIA's and POW's on multiple cases.