

Curriculum Vitae
THEODORA PINOU
Western Connecticut State University
Department of Biological and Environmental Sciences
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PRINCIPAL AREAS OF INTEREST:

Ecology and Evolutionary Biology of Vertebrates; Science Education.

EDUCATION

Secondary Science Teacher Certification – 2004; Alternative Route to Certification, Connecticut Department of Higher Education.

Ph.D. in Biology - 1993; New York University, Department of Biology.

M. Phil. - 1991; New York University, Department of Biology.

M. S. in Biology - 1988; New York University, Department of Biology.

B. A. - 1986; New York University, Department of Biology.

Bronx High School of Science, Bronx, NY, 1978-1982.

PROFESSIONAL EXPERIENCE

Academic

-Associate Professor, Western Connecticut State University, Department of Biological and Environmental Sciences, 8/09 –present.

-Assistant Professor, Western Connecticut State University, Department of Biological and Environmental Sciences, 8/04 – 8/09.

-Curatorial Affiliate in Vertebrate Zoology, Yale University, Peabody Museum of Natural History, 12/04 – Present. (nominated and elected by museum curators).

-Connecticut Science Center Fellow, Connecticut Science Center, Hartford CT, 8/08 – Present.

Science Education

-Science Partner, Barnard Environmental Magnet School, New Haven, CT, 04/03- Present.

-Teacher Education and Mentoring Program (TEAM). Certified Mentor by the Connecticut Department of Education, June 2011.

-National Council for Accreditation of Teacher Education Programs (NCATE), National Science Teachers Association (NSTA) Reviewer for Science, Fall 2007 – Present.

-Beginning Educator Support Certified. Certified by the Connecticut Department of Education to mentor new science teachers. August, 2005.

-Cyber- Scientist Program Developer. A Professional Development Program for in-service and pre-service science teachers, 2003 - Present.

TEACHING EXPERIENCE

Western Connecticut State University

– Concepts of Biology lecture and lab (non-majors lab science course).

– Methods in Teaching Secondary Science Education.

– Vertebrate Zoology (lab course for majors)

– Herpetology (graduate course including lecture, lab, and associated field trips).

– Undergraduate Group Research Course.

GRADUATE STUDENTS

Western Connecticut State University

-Stacy Evans, Current (2013, MA), “A examination of the recolonization of sea turtle epibionts of turtles nesting consecutive years.”

-Molly O’Leary, Current (2012, MA), “A comparison of hard and soft edges and their impact on endangered species.”

-Christine Lener. Current, [2010, MA], “Sea Turtle Epibionts as an indicator of foraging grounds of the Loggerhead Sea Turtle (*Caretta caretta*) in Casey Key, Florida.”

-Diane Murphy, Current, [2010, MA], “Habitat utilization and seasonal movements of a small population of box turtles (*Terrapene c. carolina*) at the northeastern periphery of their range in Dutchess Co., NY.”

Yale University/ University of Crete

-Georgia Mantziou. 2006, Ph.D. “Phylogeography and population genetics of *Mauremys rivulata* (Chelonia: Geoemydidae).” Thesis committee member.

AWARDS AND EXTERNAL SUPPORT

Awards

-*Excellence in Teaching Award*, The National Society of Leadership and Success (WCSU chapter), 5/2014.

-*Norton Mezvinsky Trustees Research Awards (WCSU & System Level Award)*, 3/10

-*Ernest A. Lynton Award for the Scholarship of Engagement for Early Career Faculty*, New England Resource Center for Higher Education, Nomination, 4/09.

-*I4 Initiative*, Connecticut Science Center Fellow, 8/08

Research and Scholarship Support

Connecticut Department of Transportation (DOT)

- Edge effects of road development on the northern most range of the protected slimy salamander (*Plethodon glutinosus*). Pinou invited by Parsons Environmental Engineering Co. and The Connecticut Science Center to Co-PI, **Award - \$25,000.00** over 5 years. 1/2010 - 2015.

National Oceanic and Atmospheric Administration (NOAA)

- Student Opportunity for Learning Grant to establish a summer camp for middle school students in collaboration with Danbury Public Schools: #NA10NES4400005 Award Amount \$250.00. PI – Pinou, 5/09 – 3/13.

Connecticut State Department of Education, Bureau of Teaching and Learning

-**Mathematics and Science Partnership Grant (MSP)**, **Award - \$250,000** over 3 years. Pinou invited to Co-PI with Danbury Public Schools, 1/2010 – 2011.

Endowment for Applied Water Quality Research

-**Water Research Foundation**, **Award - \$45,557.00**. Improving the water quality in Lake Kenosia, CT. PI-Pinou, 1/2010 - 2011.

State of Connecticut, Department of Higher Education (DHE)

-**Teacher Partnership Quality Grant (TQP)**, **Award - \$125,000.00**. WestConn Institute for Science Teacher Research (WISTR). PI-Pinou, 4/06 – 6/07.

National Science Foundation (NSF)

-**NSF (Declined - \$576,669)**. A Community of Practice Approach for Environmental Stewardship. PI-Pinou, 6/10-6/13.

-**NSF (Declined - \$1,855,420.00)**. Collaborative Research in STEM Learning, among Education Connection, Candlewood Lake Authority, WestConn, and Connecticut Public School Districts – Project CLEAR. PI-Pinou, 2/09.

-**NSF (Declined - \$816,390.00)** – Invited, as a Co-PI, by Yale University, Department of Computer Science – Collaborative Research: Optical Methods for 3D Reconstruction of Animal Forms, 08/08.

Private and Corporate Sponsors

-**Center for Technological Literacy, Hofstra University, Award - \$5000.00.** Start-up funding to develop STEM Leadership in Public Schools. PI-Pinou, 3/09 – 7/09.

- **-Riverhead Foundation for Marine Research and Conservation, Award - \$15,000.00.** Project Migration ARGOS Satellite Transmission Time. PI- Pinou, 7/08 – 7/10.

-**Wooster School, Award - \$20,000.00.** Project Migration Satellite Transmitter Sponsorship. PI- Pinou, 7/08 -7/10.

-**Crane Co. Foundation, (\$10,360.00).** Project Migration Satellite Transmitter Sponsorship. PI- Pinou, 6/08 – 6/10.

INTERNAL FUNDING AND SUPPORT

Scholarship

WestConn Faculty Development Funds

-Total Award - \$2,700.00 over 3 years to improve instruction.

CSU/AAUP University Research Grants

- Total Award - \$27,000 over 6 years to study sea turtle behavior and their interspecies relationships.

ATTENDANCE AT INVITED WORKSHOPS

- US Department of Education MSP Regional Conference, February, 2010, San Diego, CA.

- NSF NOYCE Teacher Scholarship Program Proposal Writing Workshop, NSF, January 2009, Atlanta, Georgia.

- NSF MSTP STEM Symposium, Hofstra University, March 5-7, 2009, Singer Island, Florida.

- ATLAST Item Writing Workshop, Horizon Research, May 15-16, 2009, Chapel Hill, North Carolina.

INVITED SEMINARS

- Framingham State University, MA – *Uncovering Marine Biodiversity Through Sea Turtle Conservation*; February, 2012.

- Central Connecticut State University – *Sea Turtle Conservation and Marine Health*; December, 2008.

- University of Guadalajara (CUCBA) – *Sea Turtle Epibionts*; October, 2007.

- University of Puerto Rico at Mayaguez – *Using Technology to Understand Biodiversity*; March 2007.

- Western Connecticut State University, Sigma-XI Research Seminar – *Snake Evolution and Systematics*; March, 2006.

- Western Connecticut State University, Science at Night Lecture Series – *Conservation of Sea Turtles and the Organisms that Live on Them*; April, 2005.

- Yale – Peabody Museum of Natural History, O. C. Marsh Lecture Series – *Sea Turtle Conservation in Mexico*; March, 2005.

RESEARCH COLLABORATIONS

International

Wetlands Conservation and Island Biodiversity

- Petros Lymberakis, Ph. D., Natural History Museum of Crete-University of Crete, Greece add address. Topic: Island Biodiversity and Conservation.

Marine Conservation and Community Stewardship

- Ildefonso Enciso, Research Scientists in Marine Ecosystems, University of Guadalajara, CUCBA. Topic: Sea Turtle Conservation in eastern Pacific Ocean.

National

Best Practices in Teaching and Learning

-Stacy Alba Skar, Ph.D., Western Connecticut State University, World Language and Literature. Topic: Innovative teaching through experiential learning.

-Scott Graves, Ph.D., Southern Connecticut State University, Department of Environmental Science Education. Topic: Application of global positioning technology in the K-12 classroom.

-Marjorie Drucker, Barnard Environmental Magnet School, New Haven, CT. Topic: Best practices in elementary school science education.

Herpetology and Conservation

-Hank Gruner, Director, Connecticut Science Center, Hartford, CT. Topic: Public exhibition and herpetological conservation.

-Eric Lazo-Wasem, Yale University, Peabody Museum of Natural History, Division of Invertebrate Zoology. Topic: Systematics of sea turtle epibionts.

-Gisella Caccone, Ph.D., Yale University, Department of Ecology and Evolutionary Biology & Director of the YIBS Laboratory for Molecular Systematics and Conservation Genetics. Topic: Reptilian phylogenetics, molecular systematics, and conservation.

-Rob DiGiovanni, Director, Riverhead Foundation for Marine Preservation and Research, Riverhead, NY. Topic: Sea turtle migration.

Resource Management and Stewardship

-Larry Marsecano, Director, Candle Wood Lake Authority, Danbury, CT. Topic: Citizen science and stewardship of resources.

-Ed Faison, Ecologist, Highstead Arboretum, Redding, CT. Topic: A survey of amphibians and reptiles found in Highstead Arboretum.

PUBLICATIONS

(# Student Co-Authors, ## Teacher Co-Authors)

Submitted Journal Article

[#]Truong, T., Lavretsky, P., **Pinou, T.**, Bagley, D. *et al.* [2013]. DNA barcoding: A novel tool for investigating genetic structure in *Ozobranchius spp.* from Atlantic and Pacific Ocean sea turtles. Molecular Ecology Resources (MER-13-0332).

Published Journal Articles

Pinou, T., Lazo-Wasem, E., Dion, K. & Zardus, J. 2013. Six degrees of separation in barnacles? Assessing genetic variability in the sea-turtle epibiont *Stomatolepas elegans* (Costa) among turtles, beaches, and oceans. Journal of Natural History. 47(33-34): 2193-2212, DOI: 1080/00222933.2013.798701

Lazo-Wasem, E., **Pinou, T.**, Pena De Niz, A., [#]Feuerstein, A. (2011). Epibionts associated with nesting marine turtles *Lepidochelys olivacea* and *Chelonia mydas* in Jalisco, Mexico: A review and field guide. Bulletin of the Peabody Museum of Natural History 52(2): 221-240.

Pinou, T., ^{##}Drucker, M., & ^{##}Studley, E. (2010). An “HOLA” approach to learning science. In R. E. Yager (Ed.). Science for Resolving Issues/Problem. NSTA Press, Arlington, VA. Pp. 235 - 244.

Pinou, T., and [#]Pioli, J. (2010). Garter Snake hibernacula in Connecticut. Herpetological Review. 41(3): 372 - 373.

Pinou, T., Pena De Niz, A., [#]Pacete, K. J., Gall, L., and Lazo-Wasem, E. (2009). The moon's relationship to sea turtle nesting. Herpetological Review. 40(4): 409-410.

Pinou, T., ^{##}Flanigan, H., ^{##}Drucker, M. (2009). First-Grade Record Keepers. Science and Children. 46(5): 31 - 35.

[#]Lener, C. and **Pinou, T.** (2007). Learning with Loggerheads (*Caretta caretta*). Science and Children. 45(1): 24 - 28.

- Lazo-Wasem, E., **Pinou, T.**, Pena De Niz, A., #Salgado, M., #Schenker, E. (2007). New Records of the marine turtle epibiont *Balaenophilus umigamecolus* (Copepoda: Harpacticoida: Balaenophilidae): New host records and possible implications for marine turtle health. *Bulletin of the Peabody Museum of Natural History* 48(1): 153-157.
- #Mantziou, G., Antoniou, A., Poulakakis, N., Goulielmos, G., Tsigenopoulos, C.S., **Pinou, T.**, and M. Mylonas. (2005). Isolation and characterization of six microsatellite markers in the fresh water turtle *Mauremys rivulata* (Testudines: Geomydidae). *Molecular Ecology Notes*. 5(4): 727-729.
- Pinou, T.** and #E. Diamandi. (2004). An Introduction to the Flora and Fauna of Lake Orestias, Kastoria, Greece. Peabody Museum Publication: 31 pages in three languages.
- Pinou, T.**, S. Vicario, #M. Marscher, A. Caccone. (2004). Relict snakes of North America and their relationships to the Caenophidia using Bayesian methods on mitochondrial sequences. *Molecular Phylogenetics and Evolution*. 32: 563 - 574.
- Dowling, H. G. and **Pinou, T.** (2003). Xenodermatid Snakes in America. *Herpetological Review* 34(1): 20-23.
- Pinou, T.** and #A. J. R. Carter (2002). *Elaphe obsoleta* Behavior. *Herpetological Review* 33(4): 313-314.
- Pinou, T.** and Margaret A. Riley (2001). Nucleotide Polymorphism in Microcin V plasmids from Natural Isolates of *Escherichia coli*. *Plasmid* 46: 1-9.
- Margaret A. Riley, **T. Pinou**, John Wertz, Yin Tan, and Carla M. Valletta. (2001). Characterization of the Klebicin B Plasmid of *Klebsiella pneumoniae*. *Plasmid* 45: 209-221.
- Pinou, T.** and Herndon G. Dowling. (2000). Ptyas versus Coluber: A regrettable tangle of names. *Herpetological Review* 31(3): 136-138.
- Gordon, David M., Margaret A. Riley, and ***T. Pinou**. (1998). Diversity and frequency of colicins in *E. coli* from house mice. *Microbiology* 144: 2233-2240.
- Pinou, T.**, Tamar Schlick, Bin Li, and Herndon G. Dowling. (1996). Addition of Darwin's third dimension to phyletic trees. *Journal of Theoretical Biology* 182: 505-512.
- Pinou, T.**, Carla A. Hass, and Linda R. Maxson. (1995). Geographic variation of serum albumin in the monotypic snake genus *Diadophis* (Colubridae: Xenodontinae): Evidence for cryptic species. *J. Herpetol.* 29(1): 105-110.
- Pinou, T.**, and Herndon G. Dowling. (1994). The phylogenetic relationships of the Central American snake *Tretanhorinus*: Data from morphology and karyology. *Amphibia-Reptilia* 15(3): 297-305.
- Pinou, T.** (1993). Relict Caenophidian snakes of North America. Ph.D. Diss., New York University. 236pp.

Invited Papers & Publications

- Pinou, T.** (2009). Author Response. *Science and Children*. 46(8): 8.
- Pinou, T.** (2007). Teaching with the New York Times. The New York Times Knowledge Network. www.nytimes.com/college.

INVITED MEETING SYMPOSIA PARTICIPATION

- Pinou, T.** and Lazo-Wasem (2008). Epibionts from *Leidochelys olivacea*, in Jalisco, Mexico. The 28th Annual Symposium on Sea Turtle Biology and Conservation, Loreto, Baja California Sur, Mexico, 18-26 January.
- Pinou, T.** and Lazo-Wasem (2008). Marine Turtle Epibionts – Field Methods, Procedures, and Data Protocol. The 28th Annual Symposium on Sea Turtle Biology and Conservation, Loreto, Baja California Sur, Mexico, 18-26 January.
- Pinou, T.** and Lazo-Wasem (2008). Status of the barnacle *Stomatolepas* from Jalisco, Mexico.

The 28th Annual Symposium on Sea Turtle Biology and Conservation, Loreto, Baja California Sur, Mexico, 18-26 January.

ABSTRACTS OF PAPERS PRESENTED AT PROFESSIONAL MEETINGS.

- Pinou, T.**, DiGiovanni, R., Enciso-Padilla, I., Jacobo-Perez, F., Barrera, C., Trejo- Robles, A. (2013). Postnesting Behavior of *Lepidochelys olivacea* from Campamento La Gloria, Jalisco, Mexico. The 33rd Annual Symposium on Sea Turtle Biology and Conservation, Baltimore, MD, 4 - 10 February.
- Pinou, T.** and [#]Christine Lener. (2010). Sea Turtle Epibionts as Indicators of Migration Patterns. 2010 Joint Meeting of Ichthyologists and Herpetologists, Providence, RI, 7-12 July 2010. Pp. 41.
- Pinou, T.**, [#]Pioli, J., Lymberakis, P. (2009). Population structure of *Mauremys rivulata* in natural and artificial wetlands. 11th International Congress on the Zoogeography, Ecology, and Evolution of Eastern Mediterranean, Heraklion, Crete, Greece, 21-25 September 2009. Pp. 171
- Pinou, T.**, Pacete, K. J., Pena De Niz, A. Gall, L., Lazo-Waseum, E. (2007). Lunar Illumination and its impact on sea turtle nesting. The 27th Annual Symposium on Sea Turtle Biology and Conservation, Myrtle Beach, SC, USA, 22-28 February.
- Pinou, T.**, Georgia Mantziou, and Petros Lymberakis. (2005). Understanding the population structure of the turtle *Mauremys rivulata* (Testudines: Bataguridae) on the island of Crete. The Annual joint Meeting of the American Society of Ichthyologists and Herpetologists, The Herpetologist' League, and The Society for the Study of Amphibians and Reptiles, Tampa, Florida, USA, 4 - 11 July.
- Pinou, T.** and Herndon G. Dowling. (1999). Origins of the North American Snake Fauna. The Annual Joint Meeting of The American Society of Ichthyologists and Herpetologists, The Herpetologists' League, and The Society for the Study of Amphibians and Reptiles. Penn State University, State College Pennsylvania, USA, 24-30 June.
- Pinou, T.**, [#]Tanya Greenberg, and Sean Rice. (1999). An intraspecific investigation of the hemipenial characters in *Heterodon platyrhinos*. The Annual Joint Meeting of The American Society of Ichthyologists and Herpetologists, The Herpetologists' League, and The Society for the Study of Amphibians and Reptiles. Penn State University, State College Pennsylvania, USA, 24-30 June.
- Pinou, T.**, Ying Tan, and Margaret Riley. (1996). Diversifying selection as a recurring theme in bacteriocin evolution. The annual New England Molecular Evolution Meeting. University of New Hampshire, Durham, New Hampshire, October.
- Pinou, T.**, Tamar Schlick, Bin Li, and Herndon G. Dowling. (1994). The addition of Darwin's third Dimension. The annual New England Molecular Evolution Meeting. Harvard University, Cambridge, Massachusetts, December.
- Pinou, T.** (1992). Relationships of the "Relict" colubrid snakes of North America, using microcomplement fixation (MC'F). Second Annual Joint Meeting of the American Society of Ichthyologists and Herpetologists, and Herpetologists League. University of Illinois, Champaign-Urbana, June.
- Pinou, T.** (1991). Microdermatoglyphics versus biochemistry in *Opheodrys*. Annual meeting of the American Society of Ichthyologists and Herpetologists. American Museum of Natural History, New York, 15-20 June.
- Pinou, T.** (1990). "Relict" colubroid snakes of North America. Fourth International Congress of Systematic and Evolutionary Biology. University of Maryland, College Park, 1-7 July.

TECHNICAL REPORTS.

- Kozuchowski, J. and **Pinou, T.** (2011). A Baseline Study of Phosphorus and Nitrogen Loadings in Lake Kenosia; A Quality Assurance Project Plan (qAPP). Lake Kenosia Commission, Danbury, CT
- Cronkite, S., Gruner, H., #O’Leary, M., **Pinou, T.**, and Quinn, D. (2011). Five – Year Monitoring of Known Slimy Salamander (*Plethodon glutinosus*) Habitats. Project 18-113, U.S. Route 7 Bypass, Brookfield, Connecticut. Connecticut Department of Transportation (CT DOT).
- Pinou, T.** (2007, 2012). Specialized Professional Association (SPA) Accreditation Report for WCSU Secondary Science Education Biology Program. The National Council for Accreditation of Teacher Education (NCATE), National Science Teachers Association (NSTA – SPA) for Biological Sciences.