

SINLAN POO, PH.D

DEPARTMENT OF BIOLOGICAL SCIENCES, NATIONAL UNIVERSITY OF SINGAPORE

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EDUCATION

Ph.D.: 2010-2014, Department of Biological Sciences, National University of Singapore

B.A.: 2003-2007, Boston University, Major: Biology, Specialization in Ecology and Conservation Biology
Summa cum laude with Distinction (GPA 3.91)

PUBLICATION

1. **Poo, S.** (In prep). Flood-induced hatching, chronological changes in escape response in a treefrog.
2. **Poo, S.** (In prep). Male call during amplexus in a Southeast Asian treefrog, *Chiromantis hansenae* (Amphibia: Rhacophoridae).
3. **Poo, S.** (In prep). First report of *Xenochrophis piscator* (Reptilia: Natriciidae) predation of gelatinous frog eggs.
4. **Poo, S.**, Evans, T.A., Tan, M.K., & Bickford, D.P. (submitted). Dynamic switching in predator attack and maternal defense of egg prey.
5. Karraker, N., Fischer, S., Aowphol, A., Sheridan, J., & **Poo, S.** (submitted). Signals of forest loss and degradation in the demography of Asian amphibians.
6. **Poo, S.** & Bickford, D.P. (2014). Hatching plasticity in a Southeast Asian Treefrog. *Behavioral Ecology and Sociobiology*. doi: 10.1007/s00265-014-1781-0. Media: | Springer Select | Science Daily | Nature World News | Science World Report | PhysOrg | Design & Trend |
7. **Poo, S.** & Bickford, D.P. (2013). The adaptive significance of egg attendance in a Southeast Asian treefrog. *Ethology*, 119(8), 671-679. Media: | **Natural History (cover story)** | Science Daily | Nature World News | Science Newsline | Asian Scientist | Science Codex | PhysOrg | Red Orbit | NUS News | NUS Knowledge Enterprise |
8. Bickford, D., **Poo, S.**, & Posa, M. R. C. (2012). Southeast Asian biodiversity crisis. In D. Gower, K. Johnson, J. Richardson, B. Rosen, L. Rüber & S. Williams (Eds.), *Biotic evolution and environmental change in Southeast Asia*. Cambridge, U.K.: Cambridge University Press.
9. Caldwell-Harris, C. L., Tong, J., Lung, W., & **Poo, S.** (2011). Physiological reactivity to emotional phrases in Mandarin—English bilinguals. *International Journal of Bilingualism*, 15(3), 329-352.

PRESENTATION

1. **Poo, S.** (2014). Dynamic switching in attack and defense behaviors between a predator and maternal guardians of its prey. Ecological Society of America Annual Conference, Sacramento, CA.
2. **Poo, S.** (2014). The adaptive significance of egg attendance in a Southeast Asian treefrog. International Society for Behavioral Ecology Annual Conference, New York, NY.
3. **Poo, S.** (2014). The adaptive significance of egg attendance in a Southeast Asian treefrog. Society for Conservation Biology Asia Conference, Malacca, Malaysia.
4. **Poo, S.** (2013). Parental care of a Southeast Asian treefrog, *Chiromantis hansenae*. Biological Sciences Graduate Congress, Bangkok, Thailand. **Best Oral Presentation 2nd place.**
5. **Poo, S.** (2011). Evolutionary Ecology and Conservation: comparative, reproductive, and applied biodiversity research. National University of Singapore Department of Biological Science Research Lab Talks, Singapore.
6. **Poo, S.** (2010). Parental Care in a Southeast Asian Amphibian. Association for Tropical Biology and Conservation Annual Meeting, Bali, Indonesia.

7. **Poo, S.** (2007). An analysis of embryonic development across the premature hatching period in leaf-breeding treefrogs, genera *Agalychnis* and *Pachymedusa*. Biology Work for Distinction Symposium, Boston University, Boston, MA.
8. Harris, C.L., Lung, W., Mehta, N., **Poo, S.**, Robles, C., and Swaminathan, N. (2005). When does a First Language Feel More Emotional to Bilingual Speakers? Eastern Psychological Studies Association Annual Meeting, Boston, MA.

RESEARCH EXPERIENCE

Graduate Research	<i>1/2010-Present</i>
National University of Singapore, Department of Biological Sciences Evolutionary Ecology and Conservation Lab, Dr. David Bickford Conducted research on reproductive and behavioral ecology of Southeast Asian amphibians. Investigated the biotic and abiotic factors influencing parental care, anti-predator behavior, environmentally-cued hatching, and phenotypic plasticity.	THAILAND SINGAPORE
Field Biologist	<i>2/2008-5/2009</i>
Santa Ana Watershed Association, Riverside Biological Monitoring Program Conducted day and night surveys for threatened or endangered species, including rare plants, invertebrates, amphibians, reptiles, small mammals, and carnivores. Designed surveys, analyzed data, and wrote reports on status of targeted species.	Riverside, CA USA
Fish and Wildlife Scientific Aide	<i>9/2007-2/2008</i>
California Department of Fish and Game, Multiple Species Habitat Conservation Plan Monitored species using visual encounter surveys, herp arrays (funnel and fence traps), coverboards, aquatic traps, track stations, and camera traps. In addition, surveyed for endangered fairyshrimp in vernal pools.	Riverside, CA USA
Independent Work for Distinction (Honor's thesis)	<i>9/2006-5/2007</i>
Boston University Biology Department, Embryo Behavior Lab, Prof. Karen Warkentin Compared embryonic development within the premature hatching period across six species of tropical treefrogs in the genus <i>Agalychnis</i> and <i>Pachymedusa</i> using microscope dissections.	Boston, MA USA
National Science Foundation, Research Experience for Undergraduates (NSF-REU)	<i>6/2006-8/2006</i>
Smithsonian Tropical Research Institute Boston University Biology Department, Embryo Behavior Lab, Prof. Karen Warkentin Assisted in study of role of vibrational cues in the premature hatching of the Red-eyed Treefrog by conducting playbacks both in the field and in laboratory settings.	PANAMA
Tropical Ecology Program	<i>1/2006-5/2006</i>
Boston University International Programs Universidad San Francisco de Quito, Ecuador Designed and conducted small research projects in tropical mountain, rainforest, and coastal ecosystems. Projects included studies on herpetofauna, bats, lemon-ant trees, brittlestars, medicinal plants, ghost crabs, and marine invertebrates living in tidal pools.	ECUADOR
Undergraduate Research Assistant (volunteer)	<i>7/2005-12/2005</i>
Boston University Biology Department, Terrestrial Biogeochemistry Lab, Prof. Arian Finzi Assisted with processing plant and soil samples from Free Air Carbon Dioxide Experiment and study on plant uptake of soil organic matter and amino acid in temperate forests.	Boston, MA USA
Undergraduate Research Assistant (volunteer)	<i>3/2005-12/2005</i>
Boston University Biology Department, Embryo Behavior Lab, Prof. Karen Warkentin Assisted with research on embryonic development and premature hatching due to pathogens in amphibians and conducted locomotor performance experiments with tadpoles and juvenile frogs.	Boston, MA USA
Research Internship	<i>7/2004-8/2004</i>
Institute of Zoology, Academia Sinica, Marine Virology Lab, Prof. Ya-Li Hsu Assisted with maintaining cell cultures for research on viroproteins from viruses that influence the local fish and shrimp populations in Taiwan.	TAIWAN

Research Assistant; Experimenter (volunteer)	<i>9/2003-6/2004</i>
Boston University Psychology Department, Psycholinguistics Lab, Prof. Catherine Harris	Boston, MA
Conducted experiments and assisted with research in Mandarin Bilingual Research Project.	USA
Examined the emotional experience of first and second languages in bilingual speakers.	

GRANTS, SCHOLARSHIPS, AND AWARDS

Travel Award	<i>2014</i>
National University of Singapore, Department of Biological Sciences	
Singapore International Graduate Award (SINGA)	<i>2010-2014</i>
National University of Singapore	
Funded Research Opportunities Grant	<i>2007</i>
Boston University Undergraduate Research Opportunities Program	
National Science Foundation, Research Experience for Undergraduates (NSF-REU)	<i>2006</i>
Boston University Biology Department	
Smithsonian Tropical Research Institute, Panama	
Ester Chandler Scholarship	<i>2004-2007</i>
Boston University College of Arts and Sciences	

HONORS

Senior Book Award in Biology	<i>2007</i>
Boston University, Biology Department	
Phi Beta Kappa Member, December Initiate	<i>2006</i>
Boston University, Epsilon of Massachusetts	
National Society of Collegiate Scholars Member	<i>2004-2007</i>
Boston University branch	
Dean's list (every semester)	<i>2003-2007</i>
Boston University College of Arts and Sciences	

OTHER WORK EXPERIENCE

Guest Speaker	<i>6/2011-Present</i>
Sakaerat Environmental Research Station	THAILAND
Gave talks periodically on ecological research and experimental design to secondary and university students.	
Teaching Assistant	<i>1/2010-Present</i>
National University of Singapore	SINGAPORE
Taught undergraduates courses in introductory Biology, Ecology, and Biodiversity.	
Certified Tutor	<i>1/2005-12/2005</i>
Boston University Educational Resource Center,	Boston, MA
College Reading and Learning Association	USA
Taught undergraduates courses in introductory Biology, Ecology, Calculus, Statistics, General Psychology, and Personality Psychology.	
Undergraduate Teaching Assistant	<i>1/2005- 5/2005</i>
Boston University Biology Department	Boston, MA
Taught and assisted in Introductory Biology laboratory courses.	USA

PROFESSIONAL AFFILIATIONS

Member: Animal Behavior Society (since 2011), Ecological Society of America (since 2011), The Herpetologists' League (since 2011), Society for the Study of Amphibians and Reptiles (since 2011), Society for Conservation Biology (since 2014), International Society for Behavioral Ecology (since 2014).

LICENSE AND CERTIFICATIONS

Fairy shrimp identification license Fish and Wildlife Service	3/2008
CPR and AED performer American Safety & Health Institute	2/2008
Wilderness First Aid Foster Calm, Nevada City, CA	2/2008

COMPUTER SKILLS

English and Chinese input
R programming, ArcGIS & QGIS mapping, Topo! and GPS operation
Adobe Illustrator, Photoshop, ImageJ
Microsoft Word, Excel, Powerpoint, and Access

LANGUAGES

Native: English & Chinese
Basic: Spanish

PROFESSIONAL REFERENCES

Prof. David Bickford

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(Ph.D advisor)
National University of Singapore
Department of Biological Sciences
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Prof. Theodore Evans

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Prof. Peter Narins,

Distinguished Professor
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