Kerry M. Kriger, Ph.D.

Email: kerry@kerrykriger.com

CURRENT POSITION

SAVE THE FROGS! March 2008-present

Founder, Executive Director & Ecologist: Founded and leads a worldwide movement dedicated to protecting amphibians from extinction. Coordinated over 2,000 educational events in 59 countries. Supervises staff, presides over the Board of Directors, and determines future directions of the organization. Manages legal and financial affairs, graphic design, public relations, volunteer coordination, educational programs, political campaigns, social media, marketing and fundraising. Conceived and coordinates Save The Frogs Day, the world's largest day of amphibian education and conservation action. Has given over 450 public presentations on amphibian conservation in 20+ countries. Raised nearly two million dollars for amphibian conservation efforts. Created the www.savethefrogs.com website, which has educated over three million visitors.

Zero2Webmaster LLC March 2020-present

Founder, President & Webmaster: Provides consulting services to nonprofits and small businesses, primarily focused around website technology, marketing strategy, fundraising, volunteer management, program development, process documentation and automation.

Bansuri Bliss LLC October 2017-present

Founder, President & Musician: Records, performs, composes and teaches classical music of northern India on bansuri (bamboo flute) and tabla (hand drums). Created Bansuri Bliss Academy, the most thorough collection of bansuri learning materials in existence. Composed and published hundreds of pages of sheet music and hundreds of video tutorials. Taught over 1,000 hours of private and group lessons to hundreds of students from beginner through advanced levels.

EDUCATION

Griffith University -- School of Environmental and Applied Sciences Queensland, Australia
Ph.D., May 2007
Thesis: The Ecology of Chytridiomycosis in Eastern Australia

University of Virginia -- School of Engineering and Applied Science Charlottesville, VA
Bachelor of Science degree in Mechanical Engineering, May 1996
Thesis: An Analysis of the Molecular Vibrations of Ethylguanidinium Halides

Phillips Academy -- Class of 1992 Andover, MA

AWARDS & RECOGNITION

Chief of Environment and Development in Yawkrom, Western Region, Ghana **2016**
Inducted as chief of development and given the title Nana Kojo Agyeman Bosompem Nkosuohene I.

Patagonia Environmental Grant **2014**
Awarded $2,000 to construct wetlands at Clifford Elementary School in Redwood City, CA.

Disney Worldwide Conservation Fund **2014**
Awarded $20,000 to restore habitat for Ghana's critically endangered Giant Squeaker Frog.

LUSH Fresh Handmade Cosmetics **2014**
Awarded $23,910 to build 11 wetlands in northern California.

Norcross Wildlife Foundation, Inc. **2014**
Awarded $1,000 to conduct a Wetlands Construction Workshop and build wetlands for wildlife.

Nature's Path Envirokidz Award **2014**
Awarded $10,000 to coordinate Save The Frogs Day and design wetlands.

Nature's Path Envirokidz Award **2013**
Awarded $10,000 to promote, coordinate and grow Save The Frogs Day.

Distinguished Citizen of Berriozábal, Chiapas, Mexico **2012**
Awarded by the town's Mayor in recognition of my amphibian conservation work.

Froglife's Newt Year Honours **2012**

Winner of the UK charity's 2012 "High Profile Person Representing Amphibians and Reptiles Award"

Innogive Scholarship **2012**
Awarded scholarship to attend the annual Innogive Technology Conference, funded by PayPal.

Chase Community Giving Grant **2011**
Spearheaded a 20th place finish in which thousands of charities nationwide compete in Chase Bank's annual competition, yielding a $25,000 award for SAVE THE FROGS!.

Patagonia Environmental Grant **2010**
Awarded $5,000 for SAVE THE FROGS! project entitled "Restoring Habitat for Endangered California Red-Legged Frogs in Santa Cruz County".

Democracy In Action Green Grant Award **2009**
Awarded for past successes with SAVE THE FROGS! and for potential to create significant environmental progress.

Scott Piper Best Student Publication Award **2007**
Awarded for my article "Latitudinal variation in the prevalence and intensity of chytrid (*Batrachochytrium dendrobatidis*) infection in eastern Australia", which appeared in *Conservation Biology* 21(5):1280-1290.

Centre for Innovative Conservation Strategies Conference Travel Grant **2007**
Awarded AU$800 to present research results at the Joint Meeting of Ichthyologists and Herpetologists in St. Louis.

Queensland 'Growing the Smart State PhD Funding Program' Grant **2006**
Awarded AU$5,000 to fund research project entitled "The Latitudinal Distribution of Chytridiomycosis in Frogs of Eastern Australia".

Best Oral Presentation on an Ecological Management and Restoration Topic **2006**
Awarded at the Joint Conference of the New Zealand Ecological Society and the Ecological Society of Australia

Herpetologists' League Robert G. Jaeger Award for Graduate Research – Finalist **2006**
Received US$200 for presenting research results at the Joint Meeting of Ichthyologists and Herpetologists in New Orleans.

Australian Society of Herpetologists Conference Travel Grant **2006**
Awarded AU$175 to present research results at the Society's annual meeting in Healesville, Victoria.

Peter Rankin Trust Fund for Herpetology Research Grant **2005**
Awarded AU$875 to fund research project entitled "Effects of Breeding Habitat on the Prevalence and Severity of Chytridiomycosis in Frogs of Southeast Queensland".

Gold Coast Association of Postgraduates Conference Travel Grant **2005**
Received AU$800 to present research results at the Joint Meeting of Ichthyologists and Herpetologists in Tampa, FL.

Ecological Society of Australia Student Research Grant **2005**
Awarded AU$500 to fund research project entitled "The Latitudinal Distribution of Chytridiomycosis in Frogs of Eastern Australia".

Gold Coast Association of Postgraduates Conference Travel Grant **2005**
Received AU$400 to present research results at the Ecological Society of Australia conference in Brisbane.

Eppley Foundation for Research Fellowship **2004**
Awarded US$18,530 to fund research project entitled "The Altitudinal Distribution of Chytridiomycosis in Eastern Australia".

National Geographic Society -- Committee for Research and Exploration Grant **2004**
Received US$10,000 to support research project entitled "Ecology of Chytridiomycosis in Mid-Eastern Australia".

Gold Coast Association of Postgraduates Scholarship **2004**
Awarded AU$1000 in recognition of service to the University and local community.

Gold Coast Association of Postgraduates Conference Travel Grant **2004**
Received AU$790 to present a 50-minute lecture at the University of Virginia's Mountain Lake Biological Station.

Australian Society of Herpetologists Student Research Grant **2004**
Awarded AU$750 to fund research project entitled "Effects of Breeding Habitat on the Prevalence and Severity of Chytridiomycosis in Frogs of Southeast Queensland".

Northern Virginia Community College Presidential Scholar Award **2001**
Awarded title of Presidential Scholar for outstanding academic achievement.

PUBLICATIONS

Davidson, C., Williamson, C.E., Vincent, K., Simonich, S.M., Yip, K.S., Hero, J.-M., and Kriger, K.M. (2013) Anuran population declines occur on an elevational gradient in the western hemisphere. *Herpetological Conservation and Biology* 8(3):503-518

Islam, M.N., Shaikat, A.H., Khan, S.A., Hassan, M.M., Kriger, K.M. (2012) Concern over destroying frog habitat on the occasion of Save The Frogs Day in Bangladesh. *FrogLog* 20(3):28

Kriger, K.M. (2010) Why we must save the frogs. In Triscott, N. & Pope, M. (eds.) Brandon Ballengée: Malamp, The Occurrence of Deformities in Amphibians, Arts Catalyst, London and Yorkshire Sculpture Park, Wakefield, England, pp. 28-31

Murray, K., Retallick, R., McDonald, K., Mendez, D., Aplin, K., Kirkpatrick, P., Berger, L., Hunter, D., Hines, H., Campbell, C., Pauza, M., Driessen, M., Speare, R., Richards, S., Mahony, M., Freeman, A., Phillott, A., Hero, J.-M., Kriger, K., Driscoll, D., Felton, A., Puschendorf, R., Skerratt, L. (2010) The distribution and host range of the pandemic disease chytridiomycosis in Australia, spanning surveys from 1956–2007. *Ecology* 91(5):1557-1558

Kriger, K.M. (2009) Lack of evidence for the drought-linked chytridiomycosis hypothesis. *Journal of Wildlife Diseases* 45(2):537-541

Kriger, K.M. and Hero, J.-M. (2009) Chytridiomycosis, amphibian extinctions, and lessons for the prevention of future panzootics. *EcoHealth* 6(1):148-151

Kriger, K.M. and Hero, J.-M. (2009) After the horse has bolted: a reply to Garner et al. (2009). *EcoHealth* 6(1):152

Kriger, K.M. (2008) SAVE THE FROGS! nonprofit organization: the future of amphibian conservation. *Phyllomedusa* 7(2):151

Kriger, K.M. and Hero, J.-M. (2008) Altitudinal distribution of chytrid (*Batrachochytrium dendrobatidis*) infection in subtropical Australian frogs. *Austral Ecology* 33(8):1022-1032

Hero, J.-M. and Kriger, K.M. (2008) Threats to amphibians in tropical regions. *Tropical Biology and Natural Resources*, *Encyclopedia of Life Support Services (EOLSS)*. Developed under the auspices of the UNESCO, EOLSS Publishers, Oxford, UK

Van Sluys, M., Kriger, K.M., Phillott, A.D., Campbell, R., Skerratt, L.F. and Hero, J.-M. (2008) Storage of samples at high temperatures reduces the amount of amphibian chytrid fungus (*Batrachochytrium dendrobatidis*) DNA detectable by PCR assay. *Diseases of Aquatic Organisms* 81:93-97

Kriger, K.M., Pereoglou, F. and Hero, J.-M. (2007) Latitudinal variation in the prevalence and intensity of chytrid (*Batrachochytrium dendrobatidis*) infection in Eastern Australia. *Conservation Biology* 21(5):1280-1290 Winner: 'Scott Piper Best Student Publication of 2007 Award'

Kriger, K.M. and Hero, J.-M. (2007) Large-scale seasonal variation in the prevalence and severity of chytridiomycosis. *Journal of Zoology* 271:352-359 (Journal of Zoology's most cited paper in 2007/2008)

Kriger, K.M. and Hero, J.-M. (2007) The chytrid fungus *Batrachochytrium dendrobatidis* is non-randomly distributed across amphibian breeding habitats. *Diversity and Distributions* 13:781-788

Kriger, K.M., Ashton, K.J., Hines, H.B. and Hero, J.-M. (2007) On the biological relevance of a single *Batrachochytrium dendrobatidis* zoospore: a reply to Smith (2007). *Diseases of Aquatic Organisms* 73:257-260

Hyatt, A.D., Boyle, D.G., Olsen, V., Boyle, D.B., Berger, L., Obendorf, D., Dalton, A., Campbell, R., Kriger, K.M, Hero, J.-M., Hines, H., Phillott, R., Campbell, R., Gleason, F., Colling, A. (2007) Diagnostic assays and sampling protocols for the detection of *Batrachochytrium dendrobatidis. Diseases of Aquatic Organisms* 73:175-192 'Feature Article'

Kriger, K.M., Hines, H.B., Hyatt, A.D., Boyle, D.G. and Hero, J.-M. (2006) Techniques for detecting chytridiomycosis in wild frogs: comparing histology with real-time Taqman PCR. *Diseases of Aquatic Organisms* 71:141-148

Kriger, K.M., Hero, J.-M. and Ashton, K.J. (2006) Cost efficiency in the detection of chytridiomycosis using PCR assay. *Diseases of Aquatic Organisms* 71:149-154

Kriger, K.M. and Hero, J.-M. (2006) Survivorship in wild frogs infected with chytridiomycosis. *EcoHealth* 3:171-177

Kriger, K.M. and Hero, J.-M. (2006) *Cophixalus ornatus* (Ornate Nursery Frog). Chytridiomycosis. *Herpetological Review* 37(4):443

Prager, A.B., Trindle, C., Kriger K.M. and Braiman M.S. (1998) Modeling of arginine-halide interactions in chloride transport proteins: Effects of different anion environments on alkylguanidino vibrational frequencies. Biophysical Journal 74(2):A294

Braiman, M.S., Briercheck, D.M. and Kriger, K.M. (1999) Modeling vibrational spectra of amino acid side chains in proteins: effects of protonation state, counterion, and solvent on Arginine C-N stretch frequencies. *Journal of Physical Chemistry B*. 103(22):4744-4750

Invited Reviewer

- Reviewed manuscripts for the following journals: *Conservation Biology*, *Proceedings of the Royal Society B*, *Diversity and Distributions, Diseases of Aquatic Organisms*, *Herpetological Review, Veterinary Microbiology*, *EcoHealth, Wildlife Research, BMC Ecology* and *Caribbean Journal of Science*.
- Reviewed research funding applications for the National Geographic Society and the US Army Corps of Engineers.
- Edited a volume of encyclopedias entitled Children's Cyclopedia (published by Macaw Books).

GOVERNMENT EXPERIENCE

California Department of Fish & Wildlife's Invasive Frog and Turtle Stakeholder Group 2018-2023
Member: Advised government officials on legal, scientific, and educational methods for reducing the number of invasive amphibian and reptile species entering California.

Local, State & Federal Campaigns 2010-2021
Organizer & Speaker: Led and participated in numerous campaigns at various levels of government. Activities included speaking at public hearings, leading petition drives, organizing rallies, authoring letters to government officials, and creating press releases, webpages and social media posts to raise awareness of various issues. Successes include:

- The United States Fish & Wildlife Service prohibiting the importation & interstate transportation of 201 salamander species to prevent influx of amphibian diseases.
- California State Parks abandoning plans to create an off-highway vehicle park on critical amphibian habitat in Tesla Park.
- The City of San Francisco abandoning plans to construct a fish weir on top of critical amphibian habitat in Little Yosemite Creek.
- The City and County of Santa Cruz banning the importation and sale of American Bullfrogs.

RESEARCH EXPERIENCE

Griffith University, Centre for Innovative Conservation Strategies May 2007-December 2007

Adjunct researcher: Expanded upon my Ph.D. research, writing articles on the causes of amphibian population declines and methods of conserving existing amphibian populations.

Griffith University, School of Environmental and Applied Sciences September 2003-May 2007
Ph.D. research: The ecology of chytridiomycosis in eastern Australia: determining the extent to which the prevalence and intensity of chytrid infections vary with altitude, latitude, breeding habitat, and season. Supervisors: Dr. Jean-Marc Hero and Dr. Kevin Ashton

- Conducted extensive sampling of native Australian amphibians for presence of fungal pathogen *Batrachochytrium dendrobatidis,* causative agent of the potentially lethal disease chytridiomycosis. Analyzed all samples using quantitative (real-time) PCR (qPCR).
- Performed experimental evaluation of two techniques (qPCR and histopathology) used to detect chytridiomycosis in wild frogs.
- Performed theoretical evaluations of three PCR techniques (singlicate qPCR, triplicate qPCR and conventional PCR) in order to compare their sensitivities and costs. Described a technique by which the cost of chytrid diagnostic tests could be significantly reduced with negligible decrease in accuracy.
- Trained in the detection of *Batrachochytrium dendrobatidis* using qPCR techniques. Course by Dr. Alex Hyatt laboratory at the CSIRO Australian Animal Health Laboratories in Geelong, Victoria.
- Set up qPCR chytrid diagnostic laboratory at Griffith University, and trained two scientists to perform qPCR techniques.
- Trained in the detection of *Batrachochytrium dendrobatidis* by histopathology. Course by Diana Mendez at James Cook University School of Public Health and Tropical Medicine in Townsville, Queensland.

University of California, Santa Cruz, Predatory Bird Research Group August 1998, June 1999
Wildlife Biologist: Monitored the release of captive-bred peregrine falcons into the wild.

- Recorded the birds' foraging and flying habits, and activities of potential predators.
- 7 days per week.

University of Hawaii, Hakalau National Forest Wildlife Refuge June-September 1997
Wildlife Researcher: Investigated the ecology of endangered Hawaiian birds in a high altitude rainforest.

- Recorded and analyzed foraging habits of mixed-species flocks and their behavior in relation to predators.
- Installed mist nets, and assisted in banding birds for tracking purposes.
- Collected insects from tree canopy in order to determine food availability.
- Identified potential nest trees, and used findings to predict maximum number of birds the forest could support.

Corrpro Companies, Inc., Trans-Alaska Pipeline System May-August 1996
Corrosion Engineer: Evaluated the effectiveness of the cathodic protection along buried sections of the Trans-Alaska Pipeline.

- Recommended preventive measures for potentially corrosive sections, which were then treated by a separate team.
- 70 hours per week, regardless of weather conditions.

University of Virginia, Biophysics Laboratory June 1994-May 1996
Undergraduate Researcher: Investigated molecular vibrations of ethylguanidinium chloride, a side-chain of an amino acid thought to be linked to cystic fibrosis.

- Used a Fourier Transform Infrared Spectrometer to collect empirical data on vibrational frequencies of specific atoms within the molecule.
- Utilized molecular modeling software to generate a predictive model of the molecule's vibrational frequencies and made comparisons to empirical data to judge the program's accuracy and future worth.
- Synthesized all necessary samples.

University of Virginia, Cell Biology Laboratory May-August 1993
Laboratory Specialist: Used a microscopic camera to photograph the cardiovascular systems of embryonic chickens and computer imaging software to analyze the photographs.

- Managed the laboratory's network of computers and installed computer and photography hardware and software.

TEACHING EXPERIENCE

SAVE THE FROGS! Academy February 2013 - Present

- Lecturer: Create and teach online courses covering a wide variety of topics related to amphibian conservation, volunteering, fundraising and nonprofit management.

Bansuri Bliss Academy February 2013 - Present

- Music Teacher: Create and teach online courses covering a wide variety of topics related to bansuri (bamboo flute), tabla (hand drums) and the classical music of northern India. Taught over 1,000 hours of private and group lessons to hundreds of students from beginner through advanced levels.

Smithsonian Tropical Research Institute, Panama City, Panama October 2009

- Lecturer: Created and taught a 5-day course entitled "Instruction and application of quantitative PCR molecular techniques for the study of amphibian epidemics". The course was taught in Spanish, and was attended by 25 scientists from Panama, Costa Rica and Colombia.

Griffith University, School of Environmental and Applied Sciences, Queensland, Australia

- Lecturer: Vertebrate Biology (2007). Presented two hours of lectures per week, supervised laboratory sessions, led discussion groups, and graded students' assignments. Course material was focused on the biology and biogeography of amphibians, reptiles, birds and mammals, and field sampling techniques for each of those groups.
- Lecturer: Ecology (2007). Presented nine lectures. Topics covered included mark-recapture, life-tables, population dynamics, harvesting and conservation biology. Assisted on field trips.
- Guest Lecturer: Zoology and Conservation Biology (2006). Topics covered included amphibian and mammal biology, biogeography, and amphibian declines.
- Tutor: General Chemistry (2006) and Applied Mathematics (2005-2007). Introduced classes of 15 students to upcoming course material, and provided assistance with exam preparation.

Gold Coast Tutoring, Queensland, Australia October 2003-May 2007

Private Tutor: Tutor Griffith University students at the one-on-one level.

- Subjects taught include Chemistry, Biology, Physics, and Calculus.
- Assisted students with exam preparation, laboratory write-ups, and topics not yet covered in class.
- GUMURRI Centre: Taught indigenous Australian university students.

Northern Virginia Tutoring July 2001-September 2003

Private Tutor, Founder: Tutored 5th through 12th grade math and science at the one-on-one level.

- Subjects included Algebra, Trigonometry, Calculus, Biology and Chemistry, and SAT Preparation.
- Managed all aspects of this private business, including marketing and finances.

Search & Rescue, Andover, MA September-November 1991

- Taught a group of six Phillips Academy students the fundamentals of rock climbing, mountain safety, orienteering, and canoeing.

PRESENTATIONS

Amphibian Conservation in the 21st Century 2009-Present

- Given 450+ in-person SAVE THE FROGS! presentations, to universities, schools, government agencies, nonprofits and community groups in 20+ countries.

Strategies for Biodiversity & Amphibian Conservation Symposium Seoul, Korea; November 2010

- "SAVE THE FROGS! – Translating Science Into Action"

Joint Meeting of Ichthyologists and Herpetologists Portland, Oregon; July 2009

- "Save The Frogs Day – April 30th, 2010"

6th World Congress of Herpetologists Manaus, Brazil; August 2008
- "SAVE THE FROGS! Nonprofit Organization: The Future of Amphibian Conservation"

Joint Meeting of Ichthyologists and Herpetologists St. Louis, Missouri; July 2007
- "Breeding Habitat, Altitude, and Chytridiomycosis"

Centre for Innovative Conservation Strategies Seminar Series, Invited Speaker
- 50-minute lecture: "The Ecology of Chytridiomycosis in Eastern Australia" Australia; May 2007

Joint Meeting of the New Zealand Ecological Society and Ecological Society of Australia
- "Climate, Morphology, and Chytridiomycosis" Wellington, New Zealand; August 2006

Joint Meeting of Ichthyologists and Herpetologists New Orleans, Louisiana; July 2006
- "Seasonal and Latitudinal Variation in the Prevalence of Chytridiomycosis in *Litoria lesueuri*"

Australian Society of Herpetologists Conference
- "Latitudinal and Temporal Variation in the Prevalence and Severity of Chytridiomycosis in Stoney Creek Treefrogs (*Litoria lesueuri* complex)" Healesville, Victoria; April 2006

Ecological Society of Australia Conference
- "Temporal, Spatial and Inter-Specific Variability in Levels of Chytridiomycosis in Frogs of Southeast Queensland" Brisbane, Queensland; November 2005

Joint Meeting of Ichthyologists and Herpetologists Tampa, Florida; July 2005
- "Chytridiomycosis in Frogs of Southeast Queensland"

Australian Society of Herpetologists Conference
- "Techniques for Detecting Chytridiomycosis in Wild Frogs: Comparing Histological with Real-Time Taqman PCR" Springbrook, Queensland; February 2005

Captivity, Reintroduction and Disease Control Technologies for Amphibians Conference
- "Techniques for Detecting Chytridiomycosis in Wild Frogs: Comparing Histological with Real-Time Taqman PCR." Werribee, Victoria; December 2004

Mountain Lake Biological Station Seminar Series, Invited Speaker Mountain Lake, Virginia; July 2004
- Presented a 50-minute lecture entitled "Chytridiomycosis and Global Amphibian Declines".

CERTIFICATIONS:

Certified Automation Service Provider March 2022
- Certified by Automation Bridge for displaying a strong understanding of implementing marketing systems for automated business growth.

SOFTWARE:

Wordpress, Airtable, ActiveCampaign, Adobe (Photoshop, Illustrator, Premiere, Audition, Firefly), Notion, Google Workspace, Microsoft Office, Zoom, Screenflow, Zapier, Make, Loom, Midjourney, Discord, Open AI and numerous other tools used by nonprofits, small business, creatives and digital marketing specialists.

ACTIVITIES

Photography:

- Photographed frogs for large educational posters that have been placed in Chicago O'Hare, Denver, Baltimore-Washington, Atlanta, Detroit, Orlando, St. Louis, Orange County and Dulles international airports.

Travel:
- Visited nearly 70 countries, both for work and personal enjoyment.

Language
- Have given university presentations in English, Spanish and Portuguese.

Musician & Multi-Instrumentalist: August 1996 - present
- Creator of www.bansuribliss.com, a website dedicated to providing music education.
- Studied bamboo flute with India's renowned flute master, Pandit Vijay Raghav Rao.
- Recorded and performed in the USA, Australia, Argentina, Chile, and Mexico.
- Proficient on bamboo flute, piano, guitar, ukulele, jaw harp and a variety of drums.

National Outdoor Leadership School (NOLS):
- Completed certification in Wilderness First Aid.
- Lived on glaciers in the Alaska Range for one month while practicing ice climbing, rock climbing, crevasse rescue and mountain safety skills.

References Available Upon Request