resume\_105@gmail.com  
(157) 430 7871  
Steven Brady  
Postdoctoral Fellow - VT Cooperative Fish & Wildlife Research Unit  
- Email me on Indeed: indeed.com/r/Steven-Brady/6796871a632d8bbc  
WORK EXPERIENCE  
Postdoctoral Fellow  
VT Cooperative Fish & Wildlife Research Unit - Burlington VT - 2014 to Present  
 Leading 25 international professionals in working group to explore novel trends in applied evolution and tackle challenging theoretical problems in the study of contemporary evolution  
 Developing open source (R framework) software for harvest data analysis and adaptive management  
 Editor of special issue on 'Evolutionary Toxicology' in Evolutionary Applications a top biology journal  
 Reviewed/edited book ('R for Fledglings') on open source data analysis  
 Authored scientific paper describing 'pitfalls' in the field of landscape genetics  
 Authoring scientific paper highlighting critical overlooked issues in typical harvest analyses  
 Singlehandedly instructing two undergrad./graduate courses (Animal Behavior; Ecology); responsibilities include student coaching lecture development. Received very positive feedback on teaching style and accessibility. Routine use of wit keeps students alert/entertained (occasional chuckles can be heard in class)  
Founding team member in startup  
VT Cooperative Fish & Wildlife Research Unit - 2015 to 2015  
 Conceived and worked up concept  
 Collaborated with three MBA students to develop business plan (semifinalist in MIT 100k competition) Composed and analyzed preliminary market surveys  
Visiting Scholar  
Dartmouth College - Hanover NH - 2014 to 2014  
 Led team of 5 professionals and students to design execute and analyze large-scale field/lab experiments Developed and modeled novel evolutionary biology theory showing that adaptation to environmental change can cause the unexpected outcome of local extinction  
 Conducted physiological and acoustic assays of amphibians  
 Mentored students in optimization of data collection processing and interpretation  
Postdoctoral Researcher  
Northeast Fisheries Science Center - Woods Hole MA - 2013 to 2014  
 Analyzed big data (millions of acoustic data points) to infer patterns in an endangered species  
 Team leader in visual whale survey at sea (two week cruise: Great South Channel / Georges Bank)  
 Lead author on manuscript reporting first use of density estimation from acoustic data in the Right Whale. Discovered acoustic surveys can be effective complement to visual surveys for detection of whales.  
Hixon Fellow / Mianus Fellow  
Yale University - New Haven CT - 2007 to 2013  
 Published first evidence of a vertebrate adapting to roads (featured in international media outlets)  
 Independently executed aquatic toxicological assays (e.g. LC50) across multiple species and life stages Analyzed genetic ecological and toxicological data with frequentist and Bayesian methods in R / Matlab - Conducted phylogenetic analyses to examine effect of species relationship on toxicity tolerance  
- Composed de novo phylogenetic trees using multiple mitochondrial genes sequences from GenBank  
   
- Compiled database of toxicity values to assess tolerance across taxa  
- Implemented mixed (i.e. fixed and random effects) generalized models with both univariate and multivariate data; used dimension reduction techniques (e.g. PCA RDA NMDS) to analyze high  
dimension data; honed Matlab particle detection algorithms to analyze moving objects  
 Extracted amplified and sequenced animal DNA/RNA in numerous experimental contexts  
 Developed and managed animal care/use protocols and standard operating procedures for amphibians  
 Developed knowledge of GLP compliance ICH guidance and various lab safety trainings/protocols  
 Developed novel technique for sperm and egg extraction in amphibians  
 Conducted full-sib / half-sib breeding design to infer patterns of genetic inheritance in an amphibian  
 Managed and motivated teams of researchers in lab and field (through adverse weather and terrain)  
 Designed and constructed novel infrastructure for aquatic animal husbandry and toxicological assays  
 Monitored water quality at 100s of sites for abiotic parameters and biotic indicators (e.g. EPT Index)  
 Analyzed water samples in lab to measure nutrient composition and heavy metal contaminants  
 Screened amphibians for disease using microscopic dissection  
 Delivered dozens of research presentations at international regional and local scientific conferences  
 Organized 3-day international conservation science conference (American Museum of Natural History)  
- Solely responsible for coordinating 60 preeminent scientists to serve as student mentors  
 Participated in 3-day EPA workshop on advancing understanding of chloride toxicity  
MacClean Fellow / Carpenter Fellow  
Yale University - New Haven CT - 2005 to 2007  
 Used Matlab to model trait responses to dynamic selection regimes with quantitative genetics approach Used ERDAS Imagine remote sensing software to analyze high resolution remotely sensed IKONOS imagery (1 m panchromatic and 4 m multi-spectral) and digital elevation models to estimate winter ice cover on vernal pools as a predictor of marbled salamander occupancy  
 Surveyed wetland bird communities in response to land use; found unexpectedly high biodiversity in highly developed landscapes including suburban/urban developments and trailer park communities  
 Delineated 100s of wetlands and surveyed for biodiversity amphibian performance zoonotic disease and water quality. Used GIS to estimate composition of land use/land cover in buffers surrounding wetlands  
Web Developer  
Outdoor Gear Exchange - Burlington VT - 2004 to 2005  
 Overhauled and managed back end and front end of commercial website (gearx.com)  
 Following launch of improved website increased monthly online sales from $1000 to $20000  
EDUCATION  
Ph.D. in Ecology and Evolutionary Biology  
Yale University School of Forestry & Environmental Studies 2013  
Ecology  
Yale University School of Forestry & Environmental Studies 2007  
- New Haven CT  
- New Haven CT  
certification in Wilderness Emergency Medical Technician  
Acadia Mountain Guides Climbing School 2001 to 2003  
B.A. in Fine Arts  
Saint Michael's College - Colchester VT 2001  
LINKS http://stevenpbrady.weebly.com  
ADDITIONAL INFORMATION  
Core Competencies  
 Toxicology/ecotoxicology Data synthesis & meta-analysis Publishing scientific literature  
 Experimental design & inference High dimensional data analysis Translating science to application Field & bench science Computer coding (esp. in R) Presentations/public speaking