

## Curriculum Vitae

# BRIANNA (BRIE) K. DAY

## EDUCATION

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- **Ph.D. student, Washington State University** *Vancouver, WA* (2007-2009)  
(3 years completed – A.B.D.):
  - Environmental & Natural Resource Sciences: Molecular Evolutionary Genetics of Salmonids
- **Ph.D. student, Capella University** *online* (2005-2006)  
(1 year completed):
  - Education: Instructional Design for Online Learning
- **M.S., Illinois State University** *Normal, IL* (1998-2000)  
(conferred December, 2000):
  - Biological Sciences: Ecology/Conservation biology
- **B.S., University of Maryland** *College Park, MD* (1995-1998)  
(conferred May, 1998):
  - Biological Sciences: Ecology, Evolutionary Biology, and Behavior

## FULL-TIME TEACHING POSITIONS HELD

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- **Eastfield College** *Mesquite, TX* (Fall 2015-present)
  - Professor (Full-Time), Biology
  - Learning Communities “Faculty Scholar”
- **Hawaii Community College- West Hawaii Campus** *Kealahou, HI* (Fall 2013-Summer 2015)
  - Instructor (tenure-track), Biology
  - West Hawaii Science Program Coordinator/Lead Science Faculty
  - Supervisor to West Hawaii Lab Coordinator
  - Coordinator, Hawaii Community College Marine Options Program (MOP)
  - Principle Investigator (PI), West Hawaii Campus Science Lab
- **College of the Redwoods (CR)- Del Norte Campus** *Crescent City, CA* (Fall 2010-Summer 2013)
  - Assistant Professor (tenure-track), Biology/Life Sciences
- **Mt. Hood Community College (MHCC)** *Gresham, OR* (Fall 2007-Fall 2009)
  - Assistant Professor (tenure-track), Biology/Natural Resources
  - Program Coordinator/Director (interim), Natural Resources Technology program (2008-2009)

- **Mt. San Jacinto Community College (MSJC)** *Menifee, CA* *(Fall 2002-Fall 2006)*  
Assistant Professor (**tenure-track**), Biology and Environmental Science
  - Recommended for tenure *(Fall 2006)*
  - **Chair, Science Department** *(July 2005-June 2006)*
  - Program Author/Director, Environmental Studies A.S. Transfer Degree Program *(2003-2006)*
  - Project Director & author, USDA Hispanic-Serving Institutions Education Grant (\$233,000)  
“Ensuring Success of Underrepresented Students in Environmental Science through Projectbased Experiential Learning” *(Fall, 2006)*

## PART-TIME TEACHING POSITIONS HELD

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- **California State University, Los Angeles** *Los Angeles, CA* *(Summer 2009)*  
Lecturer, Biology (Biometrics; General Genetics)
- **Washington State University, Vancouver** *Vancouver, WA* *(Fall 2006-Summer 2007)*  
Instructor in Biology and Academic Science Coordinator (total 83% of full-time)
- **Mt. San Antonio College,** *Walnut, CA* *(Spring 2003)*  
Adjunct Professor, Biology
- **Riverside Community College,** *Moreno Valley/Norco, CA* *(2001-2003)*  
Adjunct Professor, Biology
- **University of California, Riverside,** *Riverside, CA* *(2001-2003)*  
Lecturer, Biology
- **Illinois State University,** *Normal, IL* *(1998-2000)*  
Graduate Lab Instructor/TA, Biology and Evolutionary Ecology

## COLLEGE COURSES TAUGHT

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### Eastfield College *(Professor - Full Time)*

- BIOL 1406: Biology for Science Majors I (lecture + lab; *face-to-face and hybrid online formats*)
- BIOL 1407: Biology for Science Majors I (lecture + lab; *face-to-face and hybrid online formats*)
- BIOL 1408: Biology for Non-Science Majors I (lecture + lab *face-to-face and FULLY online formats*)
- BIOL 1409: Biology for Non-Science Majors II (lecture + lab; *face-to-face, hybrid, and FULLY online formats*)
- BIOL 2406: Environmental Biology (lecture + lab *face-to-face*)
- BIOL 1408/ARTS 1301: “**Art of Life**” **team-taught Learning Community** (*“flipped” lecture + lab hybrid online format*)

### Hawaii Community College *(Instructor – tenure track)*

- General Biology (non-majors, lecture + lab, *face-to-face and fully online*)
- Human Anatomy & Physiology I (lecture – *face-to-face and fully online* + lab)
- Human Anatomy & Physiology II (lecture + lab)

- Introduction to Environmental Science (lecture + lab)
- Marine Science Career Explorations Summer Camp (field-based)

**College of the Redwoods** (*Assistant Professor – tenure track*)

- General Biology (lecture + lab)
- Microbiology (lecture + lab)
- Human Anatomy (lecture + lab)
- Human Physiology (lecture + lab)
- Human Biology (lecture + lab)
- Marine Biology (lecture + lab)
- Introduction to Environmental Science (lecture + lab)
- Environmental Ethics (lecture)

**California State University, Los Angeles** (*Lecturer*)

- General Genetics (lecture + lab)
- Biometrics (lecture + lab)

**Mt. Hood Community College** (*Instructor – tenure track*)

- Natural Resources Ecology (lecture + lab)
- Principles of Biology III (majors, lecture + lab)
- General Biology I (non-majors, lecture + lab, *hybrid and fully online*)
- General Biology II (non-majors, lecture + lab, *hybrid and fully online*)
- General Biology III (non-majors, lecture + lab, *hybrid and fully online*)
- Introduction to Natural Resources (lecture)
- Forest Measurements I (lecture + lab)
- Forest Insects and Diseases (lecture + lab)
- Career Development in Natural Resources (lecture)
- Natural Resources Fundamentals (for students from Central and South America – (lecture)
- Field Projects/Co-op in Natural Resources/Special Projects in Natural Resources (lecture)

**Washington State University, Vancouver** (*Instructor*)

- General Biology (non-majors, lecture + lab)

**Mt. San Jacinto Community College** (*Assistant Professor – recommended for tenure*)

- Ecology (lecture + lab)
- Introduction to Evolution (*team-taught with an anthropologist*) - (lecture)
- Animal Behavior (lecture + lab)
- Topics in Biology (*face-to-face and fully-online*)- (lecture + lab)
- Introduction to Environmental Science (*face-to-face and fully-online*) - (lecture)
- Introduction to Environmental Science Laboratory

- Humans and Scientific Inquiry (lecture)

**Mt. San Antonio Community College** (*Adjunct Professor*)

- Human Physiology (lab)

**Riverside Community College** (*Adjunct Professor*)

- Ecology (lecture + lab)
- Principles of the Life Sciences (lecture)
- Human Reproduction (lecture)
- Introduction to Health Science (lecture)

**University of California, Riverside** (*Lecturer*)

- Parasitology (lab)
- Functional Comparative Anatomy of the Vertebrates I (lab)
- Functional Comparative Anatomy of the Vertebrates II (lab)

**Illinois State University** (*Teaching Assistant*)

- Evolutionary Ecology (lab)
- Concepts of Biology (lab)

## CURRICULA DESIGN

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**Eastfield College**

**Co-Author:**

- “Art of Life” team-taught “flipped” hybrid Learning Community (BIOL 1408 + ARTS 1301)

**Hawaii Community College**

**Author:**

- Proposed Marine Science A.A. Transfer Degree
- Proposed Marine Science Tract of A.S. in Natural Science degree
- Proposed 6-credit, 12-credit, and 15-credit stackable certificates in Marine Science
- Fully online version of BIOL 101: General Biology
- Fully online version of BIOL 101L: General Biology Lab
- BIOL 101: General Biology (*major revision and GE Designation*)
- BIOL 101L: General Biology Lab (*major revision and GE Designation*)
- GG 101: Introduction to Geology (*major revision and GE Designation*)
- GG 101L: Introduction to Geology Lab (*major revision and GE Designation*)
- OCN 201L: Science of the Sea Lab (Introduction to Oceanography Lab)
- Fully online version of BIOL 141: Human Anatomy & Physiology I

## **College of the Redwoods**

### **Author:**

- Fully online version of BIOL 1: General Biology
- BIOL 10: Introduction to Ecology
- BIOL 28: Introduction to Biostatistics
- BIOL 27: Biology of Marine Mammals (*revision*)

### **Co-Author:**

- BIO 8: Human Biology (*major revision*)
- BIO 2: Microbiology (*revision*)
- BIO 7: Human Physiology (*revision*)
- BIO 6: Human Anatomy (*revision*)
- BIO 1: General Biology (*revision*)
- ENVSC 10: Introduction to Environmental Science (*major revision*)

## **Mt. Hood Community College**

**Author:** Watersheds A.S. Transfer Degree Program (presented to college president)

## **Mt. San Jacinto Community College**

**Author:** Environmental Studies A.S. Transfer Degree Program

- *Approved by state Chancellor's Office December, 2005  
(articulated to programs at UCR & UCSB)*
- BIOL 117: Conservation Biology
- BIOL 148: Field Studies in the Tropical Ecology of Costa Rica ▪ BIOL 201: Biostatistics
- Created *fully-online* version of ENVS 101: Introduction to Environmental Science

### **Co-Author:**

- BIOL 135: Introduction to Evolution (regular and Honors versions)
- BIOL 143: Animal Behavior

### **Reviewer/Editor:**

- BIOL 144: Plant Biology
- BIOL 141: Wetlands Ecology
- ENVS 110: Environmental Analysis and Design
- BIOL 142: World of Insects
- ENVS 130: Natural Resource Management
- BIOL 146: Biodiversity
- ENVS 190: Watershed Resources Management
- ES 101: Topics in Earth Science (*major revision*)
- BIOL 130: Marine Biology (*major revision*)

## PROFESSIONAL DEVELOPMENT: MEMBERSHIPS, ACTIVITIES, & SHARED GOVERNANCE

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### Eastfield College

- Faculty Coordinator, EFC Center for Excellence in Teaching and Learning (*Fall 2018-present*)
- Organizer/Facilitator, District-wide Faculty Samuell Farm Proposal Exploration Retreat (*Fall 2018*)
- Organizer/Facilitator, Eastfield College Samuell Farm Proposal Task Force (*Summer 2018*)
- Eastfield Rep., District-wide Academic Freedom and Instructional Goals Committee (*Fall 2017-present*)
- Member, EFC Pre-Med Guided Pathways Task Force (*Spring 2018*)
- Co-Author, Samuell Farm Outdoor Teaching, Research, and Environmental Education Initiative Proposal (*Summer 2017*)
- Member, Global Conference Team between Eastfield College and UDLA (Chile) (*Fall 2017-Spring 2018*)
- Certificate of Completion: Learning Communities Faculty Scholars course, Kennesaw State University (*Summer 2017*)
- Co-Chair, STEM Week (*Fall 2015-Spring 2017*)
- Member, District-wide Environmental Science Curriculum Committee (*Spring 2017-present*)
- Member, Eastfield College Sustainability Committee (*Spring 2016-present*)
- Presenter, Eastfield College Environmental Biology, Earth Day Dallas (*Spring 2016*)
- Participant, Visions of Excellence (VOE) New Faculty Orientation 2-Day Conference (*Summer 2015*)

### Hawaii Community College

- Chair, West Hawaii Lab Coordinator Hiring Committee (*Spring 2015*)
- Hawaii Community College Representative, UH System Biosafety Committee (*Spring 2015*)
- Hawaii Community College Representative, UH System Animal Welfare Committee (*Spring 2015*)
- Member, STEM Committee (*Fall 2014-Spring 2015*)
- Chair, Marine Science Advisory Board (*Fall 2014-Spring 2015*)
- Chair, Sub-Committee for drafting Distance Education Mastering Plan (*Fall 2014-Spring 2015*)
- Initiator/Co-Coordinator, All-College Institutional Learning Outcomes Assessment Summit (*Aug. 2014*)
- Treasurer, WHEA Charter School Governing Board (*Summer 2014-Summer 2015*)
- Principle Investigator (PI), West Hawaii Science Lab (*Fall 2013-Summer 2015*)
- Coordinator/Lead Science Faculty, West Hawaii Science Program (*Fall 2013-Summer 2015*)
- Supervisor to West Hawaii lab coordinator (*Fall 2013-Spring 2015*)
- Member/West Hawaii Representative, Assessment Committee (*Fall 2013-Spring 2015*)
- Member, Distance Education Committee (*Fall 2013-Spring 2015*)
- Member, Faculty Senate (*Fall 2013-Summer 2015*)
- Member, West Hawaii Nursing Advisory Committee (*Spring 2013-Spring 2015*)
- Volunteer Science Advisor, KCCEF Board of Directors (*Fall 2013-Present*)
- Member/Math & Natural Science Representative, A.A. Liberal Arts Task Force (*Spring 2014*)
- Member, Marine Science/Ocean Recreation Industry Group (*Fall 2013-Spring 2014*)
- Member, West Hawaii Campus Lab Coordinator Hiring Committee (*Fall 2013-Spring 2014*)
- Member, Technology Advisory Committee (*Fall 2013-Spring 2014*)
- Coordinator, West Hawaii *E Imi Pono* Assessment Summit (*September 2013*)

## **College of the Redwoods**

- Senator – Del Norte Representative, Academic Senate (*Fall 2012-Summer 2013*)
- Member, CA State Academic Senate (*Fall 2012-Summer 2013*)
- Member, Program Review Committee (*Fall 2012-Summer 2013*)
- Assessment Liason, CR-Del Norte (*Spring 2012*)
- Member, Distance Education Advisory Committee (*Fall 2010- Summer 2013*)
- Member, C-ID Discipline Input Group (DIG, Biology) (*Fall 2010- Summer 2013*)
- Faculty Advisor, CR-Del Norte EcoClub/Natural Resources Club (*Fall 2010- Summer 2013*)
- Faculty Co-Chair, Instructional Support Specialist III – Biology Hiring Committee (*Fall 2012*)
- Supervisor, Rural Human Services Tsunami Relief Crew Invasive Exotic Plant Removal (*Fall 2011*)
- Member, Instructional Council (*Fall 2010-Spring 2011*)
- Member, CR-Del Norte Education Master Plan Committee (*Spring 2010*)

## **Mt. Hood Community College**

- Co-chair, Watersheds Program Advisory Board (*Fall 2008-Spring 2009*)
- Member, Natural Resources Advisory Board (*Fall 2007- Spring 2009*)
- Member, Sustainability Educational Assessment Committee (*Spring 2008- Spring 2009*)
- Member, Biology Educational Assessment Committee (*Spring 2008- Spring 2009*)
- Member, Natural Resources Technology Educational Assessment Committee (*Spring 2008-Spring 2009*)
- Member, “Green Team” (*Fall 2008- Spring 2009*)
- NRT Liason, high school recruitment initiative (*Winter 2009- Spring 2009*)
- NRT Advisor, CASS/IALS international students (*Fall 2007- Spring 2009*)
- Faculty Advisor, Natural Resources Club (*Fall 2008- Spring 2009*)
- Treasurer, Faculty Association (*Spring 2008-Spring 2009*)
- Member, Faculty Senate (*Fall 2008- Spring 2009*)
- Member, Faculty Association Bargaining Support Team (*Fall 2008- Spring 2009*)
- Member/Co-coordinator, “Bel Registered” Campaign (*Fall 2008- Spring 2009*)
- Participant, Strategic Planning, Ed. Assessment, & Shared Governance discussions (*Fall 2007- Spring 2009*)
- Member, Budget MOU Task Force (*Winter 2009- Spring 2009*)
- Member, Distance Learning MOU Task Force (*Winter 2009- Spring 2009*)
- Member, Part-Time Faculty Task Force (*Winter 2009- Spring 2009*)
- Member, Teaching and Learning Center (*Fall 2007- Spring 2009*)

## **Washington State University, Vancouver**

- Faculty Co-Advisor, Cougs for the Cure Club (*Fall 2006-May 2007*)
- Co-author, Teaching and Learning Grant Proposal (\$15,000)for Science Programs (*Fall 2006*)
- Member, Academic Coordinators Committee (*Fall 2006-May 2007*)
- Member, Sustainability Council (*Fall 2006-May 2007*)

## **Mt. San Jacinto College**

- Faculty Advisor, EcoClub (*Fall 2006*) Project Director, USDA Hispanic-Serving Institutions Education Grant (\$235,000)for Environmental Studies program (*Fall 2006*)



- Member, Natural Science Tutor V Hiring Committee (*Fall 2006*)
- Chair, Science Department – Mt. San Jacinto College, Menifee Campus (*Summer 2005-Summer 2006*)
- Co-editor, Mt. San Jacinto College Accreditation Self-Study Report (*Summer 2005*)
- Director, Environmental Studies Program (*2003-December 2006*)
- Chair, Environmental Studies Advisory Board (*2003-December 2006*)
- Member, Earth Science Instructor hiring committee (*Spring 2006*)
- Co-editor/Co-writer, Mt. San Jacinto College Honors Enrichment Program Accreditation Self-Study, UCLA Transfer Alliance Program (*Fall 2005*)
- Member, Dean of Academic Success and Technology hiring committee (*Fall 2005*)
- Member, Student Learning Outcomes Committee (*Fall 2005-December 2006*)
- Member, Educational Technology Committee (ETC) (*2003-December 2006*)
- Member, Honor's Enrichment Program Advisory Committee (*2005-December 2006*)
- Member, American Association for the Advancement of Science-Pacific Division (*2005-2006*)
- Member, Career Education Programs Advisory Board (*2003-2006*)
- Member, GIS Advisory Board (*2003-December 2006*)
- Member, American Sign Language Instructor Hiring Committee (*Spring 2005*)
- Member, Master Plan Goal #21 (Interdisciplinary Programs) Committee (*2004*)
- Co-chair, Faculty Resource Specialist Hiring Committee (*2004*)
- Member, Faculty Evaluations for Online Instructors Committee (*2004*)
- Member, FLEX (Faculty Development) Committee (*2003-2004*)
- Member, Water Technologies Advisory Board (*2003-2004*)
- Member, Master Plan Committee:Transfer/Basic Skills/General Education (*2004*)
- Member, Biology/Environmental Science TA II Hiring Committee (*Fall 2004*)

### **Illinois State University**

- Member, Sigma Xi Biological Fraternity (*2000-2001*)
- Member, Entomological Society of America (*2000-2001*)
- Vice-President, Phi Sigma Biological Honor Society, Beta Lambda Chapter (*1999-2001*)
- Graduate Student Body Representative, Phi Sigma-Biological Sciences Research Symposium Steering Committee (*1999-2000*)

## **PRESENTATIONS, AWARDS, AND CONFERENCES**

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- Attendee, National Council for Science and the Environment CCASE Summer Meeting, Dallas Texas (*Summer 2018*)
- Presenter, “Art of Life” Learning Community, Eastfield College (*Spring 2017, August 2017*)
- Presenter, “Assessment Made Easy”, Eastfield College (*Fall 2016*)
- Presenter, “Marine Science at Hawaii CC”, Community Enterprises Townhall (*Summer 2014*)
- Presenter, “Marine Science at Hawaii Community College”, Rotary Club of Kona (*Summer 2014*)
- Presenter, “Marine Science at Hawaii Community College – West Hawaii”, Marine Science Advisory Board meeting at DolpinQuest (*September 2014*)
- Guest DJ, “Programs at Hawaii CC West Hawaii”, LAVA 105.3 radio station (*Spring 2014, Fall 2014*)



- Keynote Speaker, West Hawaii Phi Theta Kappa Induction Ceremony (*Spring 2014*)
- Presenter, “Marine Science at Hawaii CC”, Math & Natural Science Dept. (*September 2014*)
- Presenter, “Fully Online Science Labs”, Math & Natural Science Dept. (*April 2014*)
- Participant, HSI Summit, Oahu, HI (*March, 2014*)
- Participant, Hawaii Sustainability Summit, Oahu, HI (*March, 2014*)
- Presenter, “Teaching science in an online environment...even the labs?!” , CR-Del Norte Faculty Brownbag Series (*Spring 2013*)
- Participant, “Round table discussion: Course-Level Assessment and Student Development Outcomes”, CR-Eureka, CA (*January 2013*)
- Participant, “Program Assessment Dialogue and Reporting”, CR-Eureka, CA (*January 2013*)
- Guest Presenter, “Study Skills for the Life and Health Sciences”, CR-Del Norte First-year Experience class, Crescent City, CA (*November 2012*)
- Participant, “Annual Planning workshop”, SLO/PLO mapping, and Departmental Assessment workshops, CR-Eureka, CA (*August 2012*)
- Participant, “Student-Learning Outcomes/Program Learning Outcomes Mapping workshop”, CREureka, CA (*August 2012*)
- Participant, “ Departmental Assessment workshop”, CR-Eureka, CA (*August 2012*)
- Presenter, “Integrated Course Outlines, Authentic Assessment, and the Uber-Rubric”, CR Assessment Summit, CR-Eureka, CA (*May 2012*)
- Participant, “Biology-Nursing Collaboration Retreat”, CR-Eureka, CA (*April 2012*)
- Presenter, “I’m Going to College!” CR-Del Norte workshop for 4<sup>th</sup> graders (*May 2011*)
- Participant, “Interest-Based Problem-Solving training” workshop, CR-Eureka, CA (*Spring 2011*)
- Presenter, “Trio Faculty Mentoring Workshop”, CR-Del Norte (*December 2010*)
- Participant, “Statewide Course Identification Numbering System Discipline Input Group Meeting” conference, Orange, CA (*October 2010*)
- Presenter, CR-Del Norte “Teaching and Learning Thursdays: Educational Technologies” (*September 2010*)
- Presenter, “Celebrating Darwin’s 200<sup>th</sup> Birthday” MHCC faculty forum (*March 2009*)
- Presenter, “Herstory: Women Take the Lead in the Environment” forum, MHCC (*February 2009*)
- Participant, “8<sup>th</sup> International Conference on the Biology of Fish”, Portland, OR (*July-August 2008*)
- Participant, “Coastwide Salmonid Genetics Meeting”, Washington Department of Fish and Wildlife, Olympia, WA (*June 2008*)
- Participant, “Evolutionary Changes and Salmon Symposium: Consequences of Anthropogenic Changes for the Long-term Viability of Pacific Salmon and Steelhead”, NOAA Fisheries Northwest Fisheries Science Center, held at the Museum of Science and Industry, Seattle, WA (*December 2006*)
- Presenter, “Ensuring Success of Underrepresented Students in Environmental Science through Project-based Experiential Learning”, USDA CSREES New Project Directors Orientation, USDA CSREES and NSF, Washington, D.C. (*September, 2006*)
- Co-Presenter, “Health Professions Information Session”, Washington State University, Vancouver (*Fall 2006*)
- Certified, Online Teachers Training, Washington Online (WAOL) (*Summer, 2006*)
- Participant, “Santa Barbara Summit on Environmental Studies”, hosted by University of California, Santa Barbara (*February 2006*)
- Presenter, “Online Learning in the Sciences”, @MSJC Faculty Technology Training Academy IX

(August 2005)

Participant, American Association of for the Advancement of Science–Pacific Division (AAASPD) 86<sup>th</sup> Annual Meeting, Southern Oregon University, Ashland, Oregon (June 2005)

- Presenter, “Writing Student Learning Outcomes into Curricula”, FLEX workshop, MSJC (April 2005)
- Participant, "Workshop on Embedding Assessment of Student Learning Outcomes in Regularly Scheduled Assignments", San Bernardino Community College, San Bernardino, CA (February 2005)
- Presenter, FLEX workshop on adding multimedia components to PowerPoint lectures, MSJC (January 2005)
- Presenter, FLEX workshop for standardizing Environmental Science education at Mt. San Jacinto College (January 2005)
- Presenter, poster presentation on Environmental Studies program, counselor’s breakfast, MSJC (December, 2004)
- Recipient, “Went the Distance” - Greatest Achievement Award, Online Course Design”, @ MSJC” Faculty Technology Training Academy VI, MSJC (January 2003)
- Recipient, “President’s Prize” for best student research poster (Medical Entomology), Annual Meeting of the Entomological Association of America Montréal, Canada (December 2000)
- Recipient, 1<sup>st</sup> place, best oral research presentation by a graduate student, Phi Sigma-Biological Science Research Symposium Illinois State University (March 2000)
- Recipient, Mockford Fellowship (\$1000) for best graduate student research proposal, Illinois State University (February 2000)
- Recipient, Wiegel Grant (\$500) for graduate research proposal, Illinois State University (May 1999)

## RESEARCH PUBLICATION

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Aliabadi [former last name], B.W. and S.A. Juliano (2002). Escape from gregarine parasites affects the competitive interactions of an invasive mosquito. *Biological Invasions*, 4:283-297.

## RESEARCH EXPERIENCE

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### Washington State University, Vancouver (Fall 2007-2009)

- **Ph.D. student**, Environmental and Natural Resource Sciences - Molecular Evolutionary Genetics of Salmon and Trout (Research Advisor: Ruth Phillips)

#### Projects:

- Evolution of the sex-determining gene in Rainbow Trout;
- Evolution of genes for heat shock proteins in Pacific salmon (implications for adaptation to global warming)

#### Coursework:

- Molecular Ecology, Cell Biology, Molecular Evolution and Phylogenetics, Independent Study in Molecular Genetics, Graduate Skills Seminar, Human Genetics (audit)

### Illinois State University (1998-2000)

- *M.S. Thesis Research*: “Escape from Gregarine Parasites Affects the Competitive Interactions of an Invasive Mosquito” My thesis involved lab and field studies that addressed how interspecific larval competition

between the exotic, invasive Asian tiger mosquito, *Aedes albopictus*, and the native tree-hole mosquito, *Onchotatus triseriatus*, changes when *A. albopictus* escapes its natural gut parasite as it invades new locations in the United States. Study published in *Biological Invasions* (see citation above under “Research Publication”). (Research Advisor: Dr. Steven Juliano))

- **Research Supervisor:** “Optimal parasite oocyst doses for observing fitness effects in the Asian Tiger Mosquito, *Aedes albopictus*”  
I served as research project manager and advisor on a study conducted by an undergraduate on optimal parasite oocyst doses for observing fitness effects in the Asian Tiger Mosquito, *Aedes albopictus*. That undergraduate student gave an oral presentation of this study to a Phi Sigma research symposium, and won the prize for best oral presentation by an undergraduate.
- **Research Assistant:** “Effects of temperature, flooding, and nutrients on tree-hole invertebrate communities”  
I worked as a research assistant for my advisor, Dr. Steven Juliano, performing fieldwork, labwork, and statistical data analysis for various long-term mosquito ecology studies, including investigations of tree-hole invertebrate community and population dynamics.
- **Research Assistant:** “Influence of shading on the growth and leaf photosynthesis of the invasive non-indigenous plant garlic mustard [*Alliaria petiolata* (M.Bieb) Cavara and Grande] grown under simulated late-winter to mid-spring conditions”.
- **Research Assistant:** “Defensive secretions in dung Beetles”  
I aided in experimental design, fieldwork, and statistical data analysis for a project conducted in Arizona and Illinois on the defensive behaviors and secretions of dung beetles (*Canton* spp).
- **Field Research Assistant:** “Egg-laying behaviors of lubber grasshoppers (*Taeniopoda equis*) in Southeastern Arizona”
- **Field Research Assistant:** Collection of tree frogs for population study in Central Illinois.
- **Field Research Assistant** – Prevalence of La Crosse encephalitis in mosquitoes and mammals in Peoria, IL.  
I assisted in mammal trapping and adult- and larval mosquito collection in this study conducted by University of Illinois, Urbana-Champaign and the Peoria Health Department.
- **Research Assistant:** “Chemical sequestration in the harlequin bug (*Murgantia histrionica*)”  
I assisted in experimental design, field- and labwork, statistical data analysis, and technical writing/editing on a study of harlequin bug (*Murgantia histrionica*) chemical sequestration. I am acknowledged in two publications from this study.
- **“Deer Checker”:** Illinois Department of Natural Resources annual deer population study I analyzed hunted deer carcasses (including teeth analysis) to determine deer age and other demographics for population monitoring.

### **University of Maryland (1995-1998)**

- **Undergraduate Researcher:** “Territorial boundaries resulting from aggressive encounters between family groups in Golden lion tamarins (*Leontopithecus rosalia*).”

- *Undergraduate Researcher:* “Courtship behaviors in male Satin bower birds (*Ptilonorhynchus violaceus*).” I worked under Dr. Gerald Borgia, author of the “Good Genes Model”

### **National Zoological Park, Smithsonian Institution, Washington D.C. (1994-1995)**

- *Research Intern:* “The use of a computer-based interactive educational program in the National Zoo’s Small Mammal House.”

## **COMPUTER SKILLS**

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Online teaching, MS Office suite (all versions – Word, Excel, PowerPoint), Sokai, Blackboard, WebCT, ePortfolio, Photoshop, ArcView GIS, GPS, SAS, Minitab, Adobe Illustrator, Wix, Dreamweaver, FrontPage, podcasting, DARS, Screencast-O-Matic, Tegrity, Impatica OnCue, Camtasia, MEGA (Molecular Evolutionary Genetics Analysis), Mr. Bayes, Phylogeny, Oligo, NCBI BLAST

## **GRANT-WRITING EXPERIENCE AND DONATION GATHERING**

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Eastfield College Supplemental Budget Request (*awarded, ~\$18,000* worth of biotechnology equipment); USDA HSI Grant (*awarded, \$233,000*); Hokulia Foundation West Hawaii Marine Science UH Foundation Endowed Scholarship Donation (*awarded, \$50,000*); West Hawaii Science Lab Equipment UH Foundation Donation (*awarded, \$1,000*); Mockford Fellowship (*awarded, \$1,000*); Wiegel Grant (*awarded, \$500*)

## **BIOTECHNICAL SKILLS**

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Bioinformatics, PCR and primer design, gel electrophoresis (regular horizontal and FLASH gels, PAGE protein electrophoresis), DNA extraction, spectrophotometer, DNA sequencing/SNP analysis