# Jessica Dawn Pratt

# EDUCATION

Ph.D. 2013. Ecology & Evolutionary Biology, University of California, Irvine. Advisor: Kailen A. Mooney

M.S. 2005. Zoology, North Carolina State University. Advisor: Jaime A. Collazo

**B.S**. 2003. Biology, *Magna cum laude*, Honors College, Grand Valley State University.

## PROFESSIONAL APPOINTMENTS

2014-	Assistant Teaching Professor, Ecology and Evolutionary Biology, University of California, Irvine
2013- 2014	Education & Outreach Coordinator, Center for Environmental Biology, University of California, Irvine
2012	Research Coordinator, Environment Institute, University of California, Irvine
2008- 2011	Teaching Assistant, University of California, Irvine, Department of Ecology and Evolutionary Biology
2009-2010	Research Assistant, Campbell Lab, Rocky Mountain Biological Lab, Gothic, CO
2009-2010	NSF GK-12 Teaching Fellow, School of Biological Sciences, University of California, Irvine
2008	Lab Manager, Mooney Lab, University of California, Irvine
2007	Administrative Specialist, HHMI at UCI Teacher Development Program, School of Biological Sciences, University of California, Irvine
2007	Adjunct Professor, Department of Biology, Orange Coast College, Costa Mesa, CA Courses taught include: Genetics (BIO 283) & Intro Biology Lab (BIO 100L)
2006- 2007	Lecturer, School of Biological Sciences, University of California, Irvine. Departments: Ecology and Evolutionary Biology, Cell and Developmental Biology
	Courses taught include: Genetics (BIO 97); Biological Conservation in Modern Society (BIO E190); Experimental Biology Laboratory (BIO 100LW); Organisms to Ecosystems (BIO 94).
2006-2007	HHMI Teaching Fellow, University of California, Irvine, School of Biological Sciences

#### SELECTED ACADEMIC HONORS

2017 2014 2014	Nominee, UC-Irvine Community Engaged Teaching Award UC-Irvine Living Our Values Award UCI 50 <sup>th</sup> Anniversary Commencement Speaker, with President Obama
2013	UC-Irvine Chancellor's Club Distinguished Fellowship
2010-2013	Environmental Protection Agency – STAR Graduate Fellowship UC-Irvine Graduate Division, Public Impact Fellowship
2011	UC-Irvine Graduate Division, Most Promising Future Faculty Award
2011	Union of Concerned Scientists & Ecological Society of America, Ecoservice Award

**PUBLICATIONS** (previously published under Gleffe; \*indicates undergraduate student coauthor)

- 9. Nelson, AS, RT Pratt, **JD Pratt**, RA Smith, CT Symanski, C. Prenot, KA Mooney. *In revision*. Progressive sensitivity of trophic levels to warming underlies an elevational gradient in ant-aphid mutualism strength. Oikos.
- Meza-Lopez M, KA Mooney, AL Thompson\*, NK Ho\*, JD Pratt. 2018. A test for clinal variation in Artemisia californica and associated arthropod responses to nitrogen addition. PLOS ONE13(2): e0191997.
- Nell, CS, MM Meza-Lopez, JR Croy, AS Nelson, X Moreira, JD Pratt, KA Mooney. 2018. Relative effects of genetic variation sensu lato and sexual dimorphism on plant traits and associated arthropod communities. Oecologia. doi.org/10.1007/s00442-018-4065-y

- 6. Abdala-Roberts L, RT Pratt, **JD Pratt**, KA Mooney. 2017. Traits underlying community consequences of plant intra-specific diversity. PLoS ONE 12(9): e0183493.
- 5. **Pratt JD**, A Datu\*, T Tran\*, D Sheng, KA Mooney. 2017. Genetically-based latitudinal clines in Artemisia californica drive parallel clines in arthropod communities. Ecology 98(1): 79-91
- 4. Abdala-Roberts L, **JD Pratt**, RT Pratt, TK Schreck, V Hanna\*, KA Mooney. 2016. Multi-trophic consequences of plant genetic variation in sex and growth. Ecology 97(3): 743-753.
- 3. **Pratt JD**, K Keefover-Ring, L Liu\*, KA Mooney. 2014. Genetically-based latitudinal variation in Artemisia californica secondary chemistry. Oikos 123(8): 953-963.
- Pratt JD, KA Mooney. 2013. Clinal adaptation and adaptive plasticity in Artemisia californica: Implications for the response of a foundation species to predicted climate change. Global Change Biology 19: 2454-2466.
- 1. **Gleffe JD**, JA Collazo, MJ Groom, L Miranda. 2006. Avian reproduction and the conservation value of shaded coffee plantations. Ornitologia Neotropical 17: 271-282.

## **PRESENTATIONS, SYMPOSIA, & WORKSHOPS**

- **Pratt JD**. 2018. Teaching beyond your discipline: Improving interdisciplinary conservation education and sharing best practices through faculty learning communities. Interactive symposium session. North American Congress for Conservation Biology, Toronto, Ontario, CAN.
- **Pratt JD**. 2018. Incorporating intraspecific variation in plant trait and arthropod community responses to environmental change into restoration planning. Invited presentation. California Native Plant Society Conservation Conference, Los Angeles, CA.
- Pratt JD. 2017. Teaching professional and leadership skills, sustainability awareness, and self-efficacy through collaborations between university and high school classes. Invited presentation. UC-CSU Nearly Carbon Neutral Conference. The UC-CSU Knowledge Action Network for Transformative Climate and Sustainability Education and Action.
- **Pratt JD**. 2017. Community-engaged scholarship teaches essential skills for environmental careers and conservation action. Invited presentation. International Headwaters to Oceans Conference.
- Pratt JD. 2016. Infusing principles of sustainability and climate neutrality into existing curriculum to enhance conservation education for all students. Half-day Teaching Workshop. North American Congress for Conservation Biology, Madison, WI.
- Pratt JD. 2016. Get out of the classroom! Integrating student-public interactions into conservation courses. Invited Talk, Symposium: Improving Conservation Education In and Out of the Classroom. North American Congress for Conservation Biology, Madison, WI.
- **Pratt JD**. 2015. Causes and community-level consequences of clinal adaptation in a foundational plant species. Invited Seminar Talk. Loma Linda University.
- **Pratt JD**, C Nell. 2015. Teaching Ecological & Evolutionary Perspectives on a tri-trophic system. Workshop. Association for Biology Laboratory Education Regional Meeting, Irvine, CA.
- **Pratt JD**, P Kadandale\*. 2015. Assessing Student Learning. Invited workshop. UCI School of Biological Sciences Faculty Retreat. \*co-organizers
- Pratt JD, S Kimball, TE Huxman. 2014. Linking conservation practitioners and university scholarship to K-12 and public audiences through a conservation research and outreach training program for undergraduates. Oral presentation. North American Congress for Conservation Biology, Missoula, MT.
- Pratt JD, N Ho, KA Mooney. 2014. Variation in the response of Artemisia californica populations to nitrogen addition and impacts on associated arthropods. Oral presentation. Ecological Society of America Annual Meeting, Sacramento, CA.
- **Pratt JD**. 2014. Environmental issues in Southern California. Invited seminar. The Wellington Community, Laguna Hills, CA.
- **Pratt JD**. 2013. Variation in the response of California sagebrush (*Artemisia californica*) and its arthropod community to environmental change. Invited seminar. Irvine Ranch Conservancy, Irvine, CA.
- Pratt JD, KA Mooney. 2013. Clinal adaptation and adaptive plasticity in Artemisia californica: Implications for the response of a foundation species and its arthropod community to predicted climate change. Oral presentation. Ecological Society of America Annual Meeting, Minneapolis, MN.

- Pratt JD, KA Mooney. 2013. Clinal adaptation and adaptive plasticity in Artemisia californica: Implications for the response of a foundation species and its arthropod community to predicted climate change. Poster presentation. Gordon Research Conference on Plant-Herbivore Interactions, Ventura, CA.
- Pratt JD, DR Campbell. 2013. Local adaptation and phenotypic plasticity in *Ipomopsis aggregata* across an elevational gradient. Oral presentation. Rocky Mountain Biological Lab Seminar Series, Gothic, CO.
- **Pratt JD**, KA Mooney. 2011. Conservation implications of variation in *Artemisia californica* traits along an environmental gradient. Oral presentation. Medecos Conference, Los Angeles, CA.
- **Pratt JD**, KA Mooney, DR Campbell. 2011. Assessing clinal variation and elevational range limits in *Ipomopsis* aggregata. Oral Presentation. Ecological Society of America Annual Meeting, Austin, TX.
- **Pratt JD**, KA Mooney. 2010. Plant adaptation to a resource cline has consequence for plant-insect interactions. Oral Presentation. Ecological Society of America Annual Meeting, Pittsburgh, PA.
- Pratt JD, KA Mooney. 2010. Assessing the need for assisted migration of Artemisia californica in coastal sage scrub habitat. Poster Presentation. Society for Conservation Biology Annual Meeting, Edmonton, Canada.
- **Pratt JD**, KA Mooney. 2010. The other assisted migration: moving genotypes within a species range. Invited Talk. Janet Meakin Poor Research Symposium, Chicago Botanic Garden, Glencoe, IL.
- Blackwell L, M Burke, J Eme, **JD Pratt**, K Shah. 2010. Integrating research into K-12 classrooms: from molecules to ecosystems. Group Oral Presentation. NSF GK-12 Special Focus Meeting, American Association for the Advancement of Science Annual Meeting, San Diego, CA.
- **Pratt JD**, KA Mooney. 2010. Clinal variation in *Artemisia californica* growth rate: implications for herbivore communities and restoration in a changing climate. Poster Presentation. American Association for the Advancement of Science Annual Meeting, San Diego, CA.
- Main M, **JD Pratt**. 2009. Conservation science through SCB chapters. Contributed Workshop. 10<sup>th</sup> Biennial Conference for Research on the Colorado Plateau, Society for Conservation Biology, Flagstaff, AZ.
- **Pratt JD**. 2008. Coastal sage scrub and grassland restoration at Upper Newport Bay Ecological Reserve. Oral Presentation. Society for Conservation Biology Annual Meeting, Chattanooga, TN.
- **Gleffe JD**, JA Collazo, MJ Groom, L Miranda. 2005. Breeding productivity in shaded coffee plantations: could plantations have served as refugia in Puerto Rico? Oral Presentation. Association for Tropical Biology and Conservation Annual Meeting, Uberlandia, Brazil.
- **Gleffe JD**. 2003. Social behavior of captive chimpanzees (*Pan troglodytes*): dominance and mediation. Oral presentation. Student Scholarship Day, Grand Valley State University, Allendale, MI.
- Hunt J, **JD Gleffe**, N Cadena. 2003. Behavior of captive chimpanzees (*Pan troglodytes*) at John Ball Zoo, Grand Rapids, MI. Oral Presentation. Michigan Academy of Sciences Annual Meeting, Holland, MI.

#### **GRANTS & AWARDS**

- 2018 "Using the SWIM (<u>Science Writing Integrated Mentoring</u>) Program to increase effectiveness of a course-based undergraduate research experience". Course-based Undergraduate Research Experiences Network (CUREnet). C. Sorte (Lead PI), N. Aguilar-Roca (Co-PI), and J. Pratt (Co-PI). \$1000.
- 2018 UC-Irvine School of Biological Sciences Research and Travel Award to attend and present an interactive workshop session at the North America Congress for Conservation Biology. \$1300
- 2016 UC Carbon Neutrality Initiative. Sustainability Curriculum Workshops, Faculty Leadership Training Award. \$1000
- 2016 Society for Conservation Biology. \$400 to improve and continue "Conservation Café and Service Series" community education and outreach project
- 2016 Conference Travel Award for Chapter Members, Society for Conservation Biology (\$300)
- 2015 Society for Conservation Biology. \$300 for "Conservation Café" community education project
- 2015 UC-Irvine Green Initiative Fund \$600 awarded for Global Sustainability student poster session
- 2014 Conference Travel Award for Chapter Members, Society for Conservation Biology (\$300)
- 2014 UC-Irvine Living Our Values Award (\$1,000)
- 2013 UC-Irvine Chancellor's Club Distinguished Fellowship (\$10,000)
- 2012 UC-Irvine School of Biological Sciences Distinguished Graduate Student Fellowship (\$1,000)

2012	Sigma Xi Scientific Research Society, Grants-in-Aid of Research (\$400)
2011	UC-Irvine Graduate Division, Public Impact Fellowship (\$10,000)
2011	UC-Irvine Graduate Division. Most Promising Future Faculty Award (\$10,000)
2011	Union of Concerned Scientists & Ecological Society of America, Ecoservice Award (\$500)
2011	Rocky Mountain Biological Laboratory Graduate Student Fellowship (\$500)
2011	Lake Forest Garden Club Graduate Student Scholarship (\$1000)
2010-2013	Environmental Protection Agency – STAR Graduate Fellowship (\$111,000 total over 3 years)
2010	Orange County Assoc. of Environmental Professionals, Graduate Research Scholarship (\$2,500)
2010	Graduate Assistantship in Areas of National Need (GAANN) Fellowship (\$30,000), declined
2010	Target Field Trip Grant to bring 50 7th Grade Life Science students to the Back Bay Science
	Center (\$500)
2010	Department of Defense, SERDP Travel Grant for Society for Conservation Biology conference
	(\$700)
2009	Department of Defense, SERDP Travel Grant for Society for Conservation Biology conference
	(\$500)
2009	Newport Bay Naturalists and Friends, Small Research Grant (\$1,000)
2009	UC-Irvine, School of Biological Sciences, Most Promising First-Year Graduate Student Award
2008	Sonoran Joint Venture Foundation, Conservation Grant in collaboration with OC Society for
	Conservation Biology (\$9,974)
2008	Newkirk Center for Science and Society, Research Fellowship (\$6,000)
2008	HHMI at UCI Teaching Materials Grant (\$350)
2007	HHMI at UCI Teaching Fellowship Award (\$1,500 for pedagogical training)

## **TEACHING** at the University of California, Irvine

#### Course Name - description Quarter and Year, (Enrollment, %); notes

- Uni Stu 3 Freshman Seminar; restricted enrollment, variable topics courses open to all majors Winter 2015, "Invasive Species", (14, 100%) Spring 2017, "Sustainable Living", (15, 100%)
- Bio 6 Tropical Biology; lower division general education science course Winter 2017 (60, 100%); designed course from scratch, had not been taught in 10 years Spring 2018 (56, 100%)
- Bio 94 Organisms to Ecosystems (discussion sections only); core course for Bio Sci majors Winter 2006, 7 course sections, (average: 30, 100%)

Bio 97 – Genetics (discussion sections only); core course for Bio Sci majors
Fall 2006, 15 course sections, (average: 20, 100%); also served as course coordinator for two sections of Bio 97 lecture
Fall 2007, 29 course sections, 6 taught independently, 9 with TA, 14 with lecturer (average: 21, 100%); also served as course coordinator for two sections of Bio 97 lecture

- Bio 100LW Experimental Biology Laboratory; core lab and writing course for Bio Sci majors Spring 2007, 3 course sections, (average: 24, 100%)
- Bio 108 Research Methods; core lab course for CalTeach students (future teachers) Summer 2017 (15, 100%)
- Bio 166L Field Biology; upper division lab required for Ecology and Evolution majors Fall 2016 (20, 50%) Fall 2017 (24, 50%)

Bio E190 – Conservation in Modern Society; newly developed upper division elective Summer 2007 (30, 100%); new course offering

Bio 191A – Global Sustainability A; 1<sup>st</sup> course in 3-course capstone sequence required for Global Sustainability Minors, cross-listed as Social Ecology 186A and Earth System Science 190A

Fall 2014 (23, 100%) Fall 2015 (40, 100%) Fall 2016 (34, 100%) Fall 2017 (29, 100%)

Bio 191B – Global Sustainability B; 2<sup>nd</sup> course in 3-course capstone sequence required for Global Sustainability Minors, cross-listed as Social Ecology 186B and Earth System Science 190B

Winter 2015 (28, 100%) Winter 2016 (39, 100%) Winter 2017 (33, 100%) Winter 2018 (25, 100%)

Bio 191CW – Global Sustainability CW; 3<sup>rd</sup> course in 3-course capstone sequence required for Global Sustainability Minors, cross-listed as Social Ecology 186CW and Earth System Science 190CW, fulfills upperdivision writing requirement

Spring 2015 (30, 100%) Spring 2016, two sections (average: 22, 100%) Spring 2017, two sections (average: 16, 100%) Spring 2018 (26, 100%)

Eco Evo 203B – Conservation and Restoration Science Tutorial; required tutorial/field experiences course in the Masters in Conservation and Restoration Science program Fall 2017 (3, 50%)

Winter 2018 (3, 50%)

Eco Evo 246 – Seminar in Ecology and Evolution Education; graduate seminar/discussion group Winter 2015, "Writing Teaching and Diversity Statements" (13, 100%) Spring 2015, "Designing K-12 and/or Public Outreach Projects" (11, 100%) Spring 2016, "Practices to Support Diversity in STEM" (15, 50%) Fall 2016, "Course Design" (15, 50%) Spring 2017, "Mentoring" (17, 50%) Spring 2018, "Teaching the Whole Student" Reading Group (8, 50%)

Eco Evo 264 – Conservation Biology; required graduate course in the new (2017) Masters in Conservation and Restoration Science program

Winter 2018 (4, 100%); new course offering

#### SERVICE at the University of California, Irvine

- 2018 Hiring Committee Chair, UCI CalTeach Director Search
- 2017- Core Faculty, Water UCI Center, School of Social Ecology
- 2017- Faculty Mentor, UCI First Generation Initiative
- 2017- Faculty Advisor, OC Association of Environmental Professionals, UCI Chapter
- 2017- Steering Committee Member, Masters in Conservation and Restoration Science Program, Department of Ecology and Evolutionary Biology at UCI
- 2017- Admissions Committee Member, Masters in Conservation and Restoration Science Program, Department of Ecology and Evolutionary Biology at UCI
- 2017- Development Committee, Department of Ecology and Evolutionary Biology at UCI

- 2017- UC-Irvine Representative, UC-CSU Knowledge Action Network for Transformative Climate and Sustainability Education and Action, a newly formed statewide network; selected from among a UC systemwide applicant pool
- 2016- Faculty Advisor, OC Chapter of the Society for Conservation Biology at UCI
- 2015-2017 Faculty Leader for Sustainability Curriculum Workshops, UC Global Climate Leadership Council's Faculty Engagement and Education Task Force; selected from among a campuswide applicant pool
- 2014- Faculty Co-Director, UC-Irvine CalTeach Program
- 2014- Faculty Director, Biology Education Major, School of Biological Sciences
- 2014- UC-Irvine Delegate to the Organization for Tropical Studies
- 2014-2017 Faculty Co-Lead (with T. Huxman), Development of new self-supporting degree program in the School of Biological Sciences- Masters in Conservation and Restoration Science
- 2014-2017 UC-Irvine Faculty Task Force on Sustainability Education
- 2009-2017 Ad Hoc Reviewer. Journals: Oikos (2), Conservation Biology (1), Functional Ecology (2), PLOS ONE (2); Funding Agencies: Israeli Science Foundation (1); University of Washington, Environmental Stewardship and Sustainability Green Seed Fund Grants (1); Other: Ecological Society of America Service Awards (1)
- 2014-2015 Faculty Coordinator, Spring Break in the Desert Service-Learning Program
- 2013-2014 Committee Member, UC-Irvine Cal Teach Program Task Force
- 2008-2014 Mentor to 17 undergraduate students for >550 total hours of supervised research (BIO 199)
- 2010- 2011 Graduate Student Representative, Dept. Ecology & Evolutionary Biology, UC-Irvine
- 2010-2011 Americorps Students In Service Volunteer (300 Hours of Service Completed)
- 2007- 2008 Co-Chair, Focus The Nation at UCI Conference Steering Committee

## **SERVICE** to the discipline / Societies

- 2018- Conference Committee, North America Section of the Society for Conservation Biology
- 2016-2017 Invited Contributor, Next Generation Careers Innovation in Environmental Biology Education, a nascent National network collaborative sponsored by the Society for Conservation Biology and the Ecological Society of America
- 2014-2016 President, Orange County Chapter, Society for Conservation Biology
- 2015- Education Committee, North America Section of the Society for Conservation Biology
- 2010- 2013 Conference Coordinator, Chapters Advisory Committee, Society for Conservation Biology
- 2008-2010 Presenter and Content Developer, Teaching Conservation Science through SCB Chapters
- 2006-2012 Orange County Chapter, Society for Conservation Biology. Founding Member (2006) Chapter Vice President (2006-2010), Special Events Coordinator (2010-2012)

#### SERVICE to the community

- 2017- Curriculum Consultant, STEM Teacher Professional Development, Tustin High School (with Hosun Kang, UCI School of Education)
- 2014-2016 Education Committee, Back Bay Science Center
- 2013-2014 Program Coordination Committee Member, Back Bay Science Center
- 2007- 2012 Science Fair Judge, Irvine Unified School District
- 2007 Newport Bay Naturalists and Friends Volunteer Training Program

#### MENTORING

Graduate Student Committees:

Daniel Sheng, K. Mooney Lab (2013-2015); Hong Chen, BSEMD Program (2014-2016); Benjamin Schlau, T. Huxman Lab (2014-); Connor Herron, R. Matthews Lab (2016-); Nora Davis, D. Stokols Lab (2015-2016)

High School Student Researchers:

Ryan Shean, Sage Hill School (2015-2016); Stephanie Cho, Sage Hill School (2014-2015)

Undergraduate Researchers:

(17 students for ~5500 total hours; Independent research project; Awarded funding)

Michelle Rastegar (2009-2010), Amanda Thompson<sup>1</sup> (2009-2010), Laura Ashmore (2009-2010), Deborah Tsai (2010-2011), Dung Tran (2010-2011), Natalie Chau (2010-2011), Nicole Ho<sup>1</sup> (2010-2011), Rose Chang (2010-2011), Thi Tran (2010-2011), Valerie Chavez (2010-2011), Heros Amerkhanian<sup>1</sup> (2010-2012), Lawrence Liu<sup>1</sup> (2010-2012), Hong Chen (2010-2012), Lauren Simpson (2011), Andrew Datu (2011-2012), Stephanie Liu (2011-2012), Chelsea Hertler (2011-2013)

# ADDITIONAL TRAINING AND PROFESSIONAL ACTIVITY

2017	Research Methods for future STEM Teachers. Instructor Training, UTeach Program, University of Texas, Austin.
2016	AB 540 and Undocumented Student Ally Training. UCI Dreamers Resource Center.
2015	disAbility Ally Training. UCI Disability Services
2014	Improving Conservation Science Curriculum. Workshop Attendee. Society for Conservation Biology.
2012	ArcGIS for Ecologists. Workshop. UC-Irvine Department of Ecology & Evolutionary Biology
2012	Web-based Database and Decision-Making Tools for Orange County Restoration Planning. Workshop. OC Invasive Plant Management, Nature Reserve of Orange County, Dept. of Fish and Game
2012	Ecological Restoration Research in Orange County, CA. Workshop. UC-Irvine Center for Environmental Biology
2011	Conservation Genetics. Organization for Tropical Studies, Las Cruces, Costa Rica
2009	Digging In, Community-Based Habitat Restoration. Workshop. California Coastal Commission
2005	Marine Conservation Biology. Short Course. Society for Conservation Biology, Brasilia, Brazil
2004	Tropical Biology Field Course. Organization for Tropical Studies, Costa Rica

## PROFESSIONAL MEMBERSHIPS AND CERTIFICATIONS

Society for Conservation Biology Ecological Society of America Society for Ecological Restoration Sigma Xi, The Scientific Research Society Phi Kappa Phi, Academic Honors Society Beta Beta Beta, National Honors Society for the Biological Sciences IDEA Open Water Scuba Dive Certification Adult and Child CPR and Wilderness First Aid Certification