October 14, 2013
Ecologist Search Committee
Department of Evolution and Ecology
College of Biological Sciences
University of California
Davis, CA 95616

Dear Jay Stachowicz, Sharon Strauss, and the Ecologist Search Committee,

I am delighted to be considered for the Assistant Professor in Evolution and Ecology at University of California, Davis. I am a plant ecologist interested in understanding the mechanisms driving population dynamics, community structure, and life history evolution. My professional goal is to join a department, such as the Department of Evolution and Ecology, where I can establish an active research program, excel at teaching, and involve students of all levels in research.

My research focuses on understanding plant responses to variable and changing environments, and identifying the traits driving those responses. Further, I seek to understand how variation in these traits affects population dynamics, community structure, and life history evolution. Therefore, my research lies at the interface of physiology, demography, ecology, and evolution. In order to integrate across these levels of organization, from physiological mechanism to broad scale pattern, I use empirical studies, including short-term experiments and longer-term field observations, as well as mathematical models. In my dissertation research with Dr. Anna Sala and Dr. Elizabeth Crone, I used a combination of physiological and demographic techniques to investigate the causes and consequences of dormancy in a native Montana wildflower. As a postdoctoral research associate with Drs. Larry Venable, Travis Huxman, and Amy Angert, I investigated how physiological traits interact with environmental variation to affect population and community dynamics of Sonoran Desert winter annual plants. Currently, I am working with the U.S. Geological Survey to synthesize long-term vegetation dynamics across southwestern deserts and identify the mechanisms driving those patterns. Further, my current research seeks to identify traits at the species, community, and ecosystem scales that predict vulnerability or resilience to environmental change. Together, my research uses an integrative and collaborative approach to address key questions in ecology and evolution as well as provide information to manage natural systems confronted with change.

As a scientist and an educator, I believe that interdisciplinary approaches promote comprehensive understanding, creativity, and innovation. Therefore, I appreciate the dedication to interdisciplinary research and education at the Department of Evolution and Ecology and look forward to the opportunity to contribute to that pursuit. In my research, I use tools from multiple fields to understand ecological processes. As a teacher, I integrate ideas and concepts across courses to promote a more comprehensive understanding of ecology. As a mentor, I advise students with diverse backgrounds and interests. I am prepared to teach courses covering topics in several fields of biology including introductory biology, general ecology, population biology, and physiological ecology. I am also interested in developing electives and seminars in life history theory, functional ecology, and global change biology.

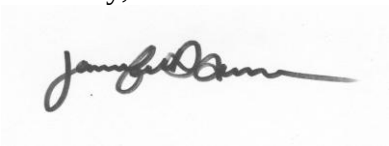
I am excited about the opportunity to collaborate with the faculty in the Department of Evolution and Ecology, as well as other departments across campus, including the Department of Plant Biology. Because my research seeks to integrate patterns across different levels of biological organization, I seek

to form collaborations with experts in other fields of ecology and evolution. The Department of Evolution and Ecology provides an ideal opportunity for these types of productive collaborations, due to existing strengths at multiple scales, from genes to ecosystems. In addition to collaborating with the faculty, I am also interested in participating in interdisciplinary collaboration with students in the Ecology, Population Biology, and Plant Biology Graduate Programs. Because supporting diversity in the sciences is important to me, I would seek opportunities to contribute to such efforts through teaching and mentoring as well as participation in campus groups including Women in Science and Engineering (WISE) and the Consortium for Women and Research (CWR). As assistant professor, I would be a dynamic, interactive addition to your department and I look forward to the opportunity to work with the faculty at University of California, Davis to achieve excellence in research, education, and outreach.

In closing, I believe that my combination of skills and interests makes me an excellent candidate for this position. As part of this application, I have included my curriculum vitae, statements of research and teaching, and recent publications. Dr. D. Larry Venable, Dr. Anna Sala, and Dr. Elizabeth Crone will provide letters of recommendation on my behalf. If you have any question or need additional materials, please do not hesitate to contact me. During the government shutdown, I can be contacted at jgremer@email.arizona.edu, and on my mobile phone at (805) 448-7264.

Thank you for your time and consideration. I look forward to hearing from you soon.

Sincerely,



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