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Department of Oceanography  
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## EDUCATION

Ph.D.	Biomolecular Science and Engineering, University of California, Santa Barbara	2014
M.S.	Biology	Arizona State University, Tempe 2005
B.A.	Environmental Science/Biology	University of California, Berkeley 1997

## PROFESSIONAL APPOINTMENTS

Assistant Researcher, University of Hawai'i, Dept. of Oceanography	July 2015-
NSF Graduate Research Fellow	2009-2014
Graduate Student Instructor and Researcher, U.C. Santa Barbara	2007-2011
Graduate Student Instructor and Researcher, Arizona State University	2002-2005
Staff Research Associate, Children's Hospital Oakland Research Institute	2000-2002
Research Assistant, University of California Berkeley, Entomology	1997-2000

## RESEARCH SUPPORT AND FELLOWSHIPS

Potential effects of symbiotic microbes on nesting and foraging by Hawaiian yellow-faced bees ( <i>Hylaeus</i> ). US Fish and Wildlife and Hawaii Department of Land and Natural Resources.	2019-2020
NSF IOS Collaborative Research: <i>Linking Causes of Variation in the Amphibian Skin Microbiome with Consequences for Disease Risk</i>	2015-2019
NSF Doctoral Dissertation Improvement Grant	2012-2013
Susan and Bruce Worster Graduate Research Award, with Leah Foltz	2012
NSF Graduate Research Fellowship	2009-2014
Susan and Bruce Worster Graduate Research Award, with Cord Dorcey	2010
ASU Biology Graduate Student Research Grant	2003
ASU Urban Ecology IGERT research and travel grant	2003
U.C. Berkeley Alumni Association Undergraduate Scholarship	1994-1997

**PUBLICATIONS IN PEER-REVIEWED JOURNALS**

- Jani, A.J. (2019). Amphibian microbiome linked to climate. *Nature Ecology & Evolution* 3, 332. (invited)
- Jani, A. J., and Briggs, C. J. (2018). Host and Aquatic Environment Shape the Amphibian Skin Microbiome but Effects on Downstream Resistance to the Pathogen *Batrachochytrium dendrobatidis* Are Variable. *Frontiers in Microbiology* 9. doi:10.3389/fmicb.2018.00487.
- Hynson, N. A., Frank, K. L., Alegado, R. A., Amend, A. S., Arif, M., Bennett, G. M., et al. (2018). Synergy among Microbiota and Their Hosts: Leveraging the Hawaiian Archipelago and Local Collaborative Networks To Address Pressing Questions in Microbiome Research. *mSystems* 3, e00159-17. doi:10.1128/mSystems.00159-17.
- Jani, A.J., R.A. Knapp, and C. J. Briggs. 2017. Epidemic and endemic pathogen dynamics correspond to distinct host population microbiomes at a landscape scale. *Proceedings of the Royal Society B*. 284: 20170944.
- Jani, A.J. and C.J. Briggs. 2014. The pathogen *Batrachochytrium dendrobatidis* disturbs the frog skin microbiome during a natural epidemic and experimental infection. *Proceedings of the National Academy of Sciences of the United States of America*. 111: E5049-E5058.
- Jani, A.J. and P.A. Cotter. 2010. Type VI Secretion: Not Just for Pathogenesis Anymore. *Cell Host and Microbe* 8(S1): 2-6.
- Jani, A.J., S.H. Faeth, and D. Gardner. 2010. Asexual endophytes and associated alkaloids alter arthropod community structure and increase herbivore abundances on a native grass. *Ecology Letters* 13:106-117.
- Mack, S. J., Sanchez-Mazas, A., Single, R. M., Meyer, D., Hill, J., Dron, H. A., Jani, A. J., Thomson, G., Erlich, H.A. (2007). Population samples and genotyping technology. *Tissue Antigens* 69, 188–191. doi:10.1111/j.1399-0039.2006.00768.x.
- Faeth, S. H., D. R. Gardner, C. J. Hayes, A. Jani, S. K. Wittlinger, and T. A. Jones. 2006. Temporal and spatial variation in alkaloid levels in *Achnatherum robustum*, a native grass infected with the endophyte *Neotyphodium*. *Journal of Chemical Ecology* 32:307-324.
- McCallum, H., L. Gerber, and A. Jani. 2005. Does infectious disease influence the efficacy of marine protected areas? A theoretical framework. *Journal of Applied Ecology* 42:688-698.
- Sabo, J.L., R. Sponseller, M. Dixon, K. Gade, T. Harms, J. Heffernan, A. Jani, G. Katz, C. Soykan, J. Watts, and J. Welter. 2005. Riparian zones increase regional species diversity by harboring different, not more species. *Ecology* 86:56-62.

**OTHER PUBLICATIONS AND ABSTRACTS**

- Mack, S. J., A. J. Jani, J. Below, N. Arceneaux, N. Saha, M. Sartakova, and H. E. Erlich. 2002. Population genetics of HLA polymorphism in Asian populations: Implications for the history of Amerindians and Polynesians. *Tissue Antigens* 59:100-100.
- Mack, Steven J., Diogo Meyer, Andrea J. Jani, Henry A. Erlich. 2001(27th Annual Meeting of the American Society for Histocompatibility and Immunogenetics San Francisco, California, USA October 13-17, 2001). Preliminary report of the anthropology/human genetic diversity component of the IHWG. In: *Human Immunology* 2001. 62 (Supplement 1): S59.
- Mack, S. J., A. J. Jani, L. N. Geyer, J. Below, N. Arceneaux, and H. A. Erlich. 2003. Using global patterns of HLA diversity to infer recent demographic events in human population history. *Anthropological Science* 111:56-56.
- Daane, K.M., M. Bianchi, A. Jani, K.M. Weir. 2000. Biological control of the obscure mealybug, *Pseudococcus viburni*, in the north and central coast regions. Annual Report, Crop Year 1999. American Vineyard Foundation. 8 pp.
- Geiger, C.A., K.M. Daane, K.D. Weir, A. Jani, N. Scascighini, G.Y. Yokota, W.J. Bentley. 1999. Investigation of mealybug population dynamics to forecast and prevent outbreaks and improve biological controls. 1998-99 Viticulture Research Report. CTGC Annual Report. Vol. 27: 18 pp.

## PRESENTATIONS

- Jani, A.J., Bushell, J., Boiano, D.M., Brown, C., and Knapp, R.A. Infection by a fungal pathogen compromises microbiome resistance to further perturbation. Gordon Research Conference on Animal-Microbe Symbioses. Poster presentation. June 2019.
- Jani, A.J. Stability of the skin microbiome of an endangered frog: implications for disease management. Microbiology Department Seminar, University of Hawai'i at Mānoa. April 2019.
- Jani, A.J., Knapp, R.K., and Briggs, C.J. Understanding the assembly and function of the *Rana sierrae* microbiome. Annual Meeting on Amphibian Diseases: Integrated Research Challenges in Environmental Biology. Arizona State University, Tempe, AZ. November 2018.
- Jani, A.J. Assembly and function of the amphibian microbiome: implications for a nasty infectious disease. PBRC seminar, University of Hawai'i at Mānoa. November 2017.
- Jani, A.J., Briggs, C.J. and Knapp, R.K. Evidence for reciprocal effects between symbiotic bacteria and an infectious pathogen at a landscape scale. Gordon Research Conference on Animal-Microbe Symbioses. Poster presentation. June 2015.
- Jani, A.J. Microbial ecology of an infectious disease: Do symbiotic bacteria protect an endangered frog from the fungal pathogen *Batrachochytrium dendrobatidis*? University of Hawai'i at Mānoa, Oceanography Department Seminar. November 2014.
- Jani, A.J. and Briggs, C.J. Shifts in amphibian symbiotic bacterial communities are linked to epizootic spread of the aquatic fungal pathogen *Batrachochytrium dendrobatidis*. Meeting of the Association for the Sciences of Limnology and Oceanography (ASLO). February 2013.
- Jani, A.J. and Briggs, C.J. Shifts in *Rana sierrae* skin microbial communities associated with epidemic chytridiomycosis. Annual Meeting on Amphibian Diseases: Integrated Research Challenges in Environmental Biology. Arizona State University, Tempe, AZ. 2011.
- Jani, A.J. and S.H. Faeth. Community-level effects of *Neotyphodium* endophytes in native grasses. 89<sup>th</sup> Meeting of the Ecological Society of America. Portland, OR, August 2004.
- Jani, A.J. and Daane, K.M. Studies of *Goniozus legneri* (Hym.: Bethyilidae) development, fecundity and longevity used to improve biological control programs. XII International Entomophagous Insects Workshop. Asilomar, CA. Sept 1999.

## TEACHING AND MENTORING

### COURSES TAUGHT

Instructor of Record: Ecology of Infectious Disease and Symbiosis (OCN 340, UH Mānoa)	2017-2018
Guest Instructor: Global Environmental Science Seminar (OCN 100, UH Mānoa)	2016
Guest Speaker: Freshman Seminar, Intro to Research (EEMB 4FS, UCSB)	2012
Guest Lecturer: Applied Aquatic Ecology (EEMB 167, UCSB)	2010
Graduate Student Instructor: Applied Aquatic Ecology (EEMB 167, UCSB)	2010
Graduate Student Instructor: Invertebrate Zoology (EEMB 116, UCSB)	2008-2011
Graduate Student Instructor: Biology (BIO 100, BIO 181, ASU)	2004, 2005