Curriculum Vitae

Susan R. Kennedy

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CURRENT POSITION

October 2018 - present: Postdoctoral Researcher, Okinawa Institute of Science and Technology (Japan). Supervisor: Prof. Evan Economo. Funded by Kick-start fund of Okinawa Inst. of Sci. & Tech.

Project title: "Pacific Scanner: Developing a high-throughput, whole-ecosystem DNA metabarcoding platform for Pacific-wide analysis of island biodiversity"

ADDITIONAL AFFILIATION

April 2019 - present: Guest Scientist at Trier University (Germany), Department of Biogeography

EDUCATION

August 2012 - October 2018: Ph.D. at University of California, Berkeley (USA), Dept. of Environmental Science, Policy and Management. Dissertation title: "Trophic niche differentiation within the adaptive radiation of Hawaiian *Tetragnatha* spiders." Advisor: Prof. Rosemary Gillespie.

August 2004 - May 2008: B.A. at Earlham College (Richmond, IN, USA), Dept. of Biology. Research project (Ford/Knight): "Spider community diversity across habitats of Dominica," supervised by Prof. Leslie Bishop.

SELECTED FUNDING AND AWARDS

NSF Graduate Research Fellowship Program (GRFP): 2012-2017

NSF Graduate Research Internship Program (GRIP): November 2016-January 2017

Outstanding Graduate Student Instructor Award (UC Berkeley): Spring 2018

Bob Lane and Sandy Purcell Graduate Summer Award (UC Berkeley): Summer 2017

Harvey I. Magy Memorial Scholarship Award (UC Berkeley): Fall 2016

California Scholarship Fund (Philanthropic Education Organization): September 2016

Robert L. Usinger Memorial Award (UC Berkeley): Spring 2015

Phi Beta Kappa induction: Spring 2008

Departmental and College Honors (Earlham College): Spring 2008

Millard S. Markle Award for excellence in field biology (Earlham College): Spring 2008

RESEARCH INTEREST AND EXPERTISE

My research focuses on community assembly of arthropods in island systems, using DNA metabarcoding. My primary expertise is in the evolutionary ecology and systematics of arachnids.

PROFESSIONAL ACTIVITIES

Journal reviews: *Journal of Arachnology*, *PLoS One*, *Annals of the Brazilian Academy of Sciences*, *Journal of Biogeography*, *Environmental DNA*, *Molecular Ecology*

Teaching of workshops: DNA metabarcoding of bulk community samples and spider gut content, Trier University (6-10 January 2020)

Organization of seminars: Essig Brunch Entomology Seminar, UC Berkeley (2015 - 2017); PhD/Postdoc Research Seminar, Trier University (2020 -)

Museum experience: Graduate Student Researcher, Essig Museum of Entomology (Berkeley, CA, USA), Fall 2017

TEACHING

Spider Biology (UC Berkeley), Spring 2017 & 2018

Field Entomology (UC Berkeley), Fall 2014 & 2015

Vertebrate Zoology (Earlham College), Spring 2008

PUBLICATIONS

Kennedy SR, Tsau S, Gillespie R, & Krehenwinkel H. 2020. Are you what you eat? A highly transient and prey-influenced gut microbiome in the grey house spider *Badumna longinqua*. *Molecular Ecology* 2020:1-15. https://doi.org/10.1111/mec.15370

Kennedy SR, Prost S, Overcast I, Rominger AJ, Gillespie RG, & Krehenwinkel H. 2020. High throughput sequencing for community analysis: The promise of DNA barcoding to uncover diversity, relatedness, abundances and interactions in spider communities. *Development, Genes and Evolution* 1-17. https://doi.org/10.1007/s00427-020-00652-x

de Kerdrel GA, Andersen J, **Kennedy SR**, Gillespie R, & Krehenwinkel H. 2020. Rapid and cost-effective generation of single specimen multilocus barcoding data from whole arthropod communities by multiple levels of multiplexing. *Scientific Reports* 10:1-12. doi:10.1038/s41598-019-54927-z

Kennedy S, Lim JY, Clavel J, Krehenwinkel H, & Gillespie RG. 2019. Spider webs, stable isotopes and molecular gut content analysis: Multiple lines of evidence support trophic niche differentiation in a community of Hawaiian spiders. *Functional Ecology* 33:1722-1733. doi:10.1111/1365-2435.13361

Krehenwinkel H, Pomerantz A, Henderson JB, **Kennedy SR**, Lim JY, Swamy V, Shoobridge JD, Graham N, Patel NH, Gillespie RG, & Prost S. 2019. Nanopore sequencing of long ribosomal DNA amplicons enables portable and simple biodiversity assessments with high phylogenetic resolution across broad taxonomic scale. *GigaScience* 8:p.giz006. doi:10.1093/gigascience/giz006

Krehenwinkel H, **Kennedy SR**, Adams SA, Stephenson GT, Roy K, & Gillespie RG. 2019. Multiplex PCR targeting lineage-specific SNPs: A highly efficient and simple approach to block out predator sequences in molecular gut content analysis. *Methods in Ecology and Evolution* 10:982-993. doi:10.1111/2041-210X.13183

Krehenwinkel H, **Kennedy SR**, Rueda A, Lam A, & Gillespie RG. 2018. Scaling up DNA barcoding – Primer sets for simple and cost efficient arthropod systematics by multiplex PCR and Illumina amplicon sequencing. *Methods in Ecology and Evolution* 2018:1-13. doi:10.1111/2041-210X.13064

Kennedy SR, Dawson TE, & Gillespie RG. 2018. Stable isotopes of Hawaiian spiders reflect substrate properties along a chronosequence. *PeerJ* 6:e4527. doi:10.7717/peerj.4527

Krehenwinkel H, Fong M, **Kennedy S**, Huang EG, Noriyuki S, Cayetano L, & Gillespie R. 2018. The effect of DNA degradation bias in passive sampling devices on metabarcoding studies of arthropod communities and their associated microbiota. *PLoS ONE* 13:e0189188. doi: 10.1371/journal.pone.0189188

Krehenwinkel H, **Kennedy S**, Pekár S, & Gillespie RG. 2017. A cost-efficient and simple protocol to enrich prey DNA from extractions of predatory arthropods for large scale gut content analysis by Illumina sequencing. *Methods in Ecology and Evolution* 8:126-134. doi:10.1111/2041-210X.12647