# Ben A. Flanagan

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#### **RESEARCH INTERESTS**

Evolution – Invasion biology – Genomics – Oxidative stress – Sex differences – Aging

#### **EDUCATION**

University of Southern California, Los Angeles, CA

Expected May 2022

Ph.D. Candidate Biological Sciences

Advisor: Dr. Suzanne Edmands College of Charleston, Charleston, SC

May 2017

Master of Science in Marine Biology with Honors

Advisor: Dr. Erik Sotka

Clemson University, Clemson, SC

May 2014

Bachelor of Science in Genetics with Minor in Wildlife Fisheries Biology

Advisor: Dr. Julia Frugoli

# **PUBLICATIONS**

- [8] **Flanagan, B.A.**, Huang, E.<sup>‡</sup> and Edmands S. *In prep*. Exogenous oxidative stressors illicit differing age and sex effects. *Experimental Gerontology*.
- [7] Li, N., Flanagan, B.A., and Edmands, S. *Under review*. Food deprivation exposes sex-specific tradeoffs between stress tolerance and lifespan in the copepod *Tigriopus californicus*. *Journal of Evolutionary Biology*.
- [6] Murren, C.J., Krueger-Hadfield S.A., Clark A., **Flanagan, B.A.**, Lees, L.E. and <u>Sotka, E.E.</u>, *Accepted*. Individuals from non-native populations are stronger and bigger than individuals from native populations of a widespread seaweed. *Biological Invasions*.
- [5] **Flanagan, B.A.**, Li, N. and <u>Edmands, S.</u>, 2021. Mitonuclear interactions alter sex-specific longevity in a species without sex chromosomes. *Proceedings of the Royal Society B*, 288(1962), p.20211813.
- [4] Krueger-Hadfield, S.A., Flanagan, B.A., Godfroy, O., Hill-Spanik, K.M., Nice, C.C., Murren, C.J., Strand, A.E. and Sotka, E.E., 2021. Using RAD-seq to develop sex-linked markers in a haplodiplontic alga. *Journal of Phycology*, *57*(1), pp.279-294.
- [3] **Flanagan, B.A.**, Krueger-Hadfield, S.A., Murren, C.J., Nice, C.C., Strand, A.E. and Sotka, E.E., 2021. Founder effects shape linkage disequilibrium and genomic diversity of a partially clonal invader. *Molecular Ecology*, *30*(9), pp.1962-1978.
- [2] Li, N., Flanagan, B.A., Partridge, M., Huang, E.J.<sup>‡</sup> and Edmands, S., 2020. Sex differences in early transcriptomic responses to oxidative stress in the copepod Tigriopus californicus. *BMC genomics*, 21(1), pp.1-11.
- [1] Sotka, E.E., Baumgardner, A.W., Bippus, P.M., Destombe, C., Duermit, E.A., Endo, H., **Flanagan**, **B.A.**, Kamiya, M., Lees, L.E., Murren, C.J. and Nakaoka, M., 2018. Combining niche shift and population genetic analyses predicts rapid phenotypic evolution during invasion. *Evolutionary Applications*, *11*(5), pp.781-793.

underline indicates corresponding author(s), ‡ undergraduate mentee coauthor

# **PRESENTATIONS** - underline indicates presenter

#### **INVITED SEMINAR:**

- 2019 Women in Science and Engendering STEM-BYTES at the University of Southern California **Oral:**
- 2021 Marine and Environmental Biology Section Departmental Seminar; **B.A. Flanagan**,
- Joint conference of the American Society of Naturalists, the Society for the Study of Evolution, and the Society of Systematic Biologists; **B.A. Flanagan**, N. Li, S. Edmands
- 2020 Society for Integrative and Comparative Biologists; B.A. Flanagan, N. Li, S. Edmands
- Joint conference of the American Society of Naturalists, the Society for the Study of Evolution, and the Society of Systematic Biologists; **B.A. Flanagan**, N. Li, S. Edmands
- Joint conference of the American Society of Naturalists, the Society for the Study of Evolution, and the Society of Systematic Biologists; N. Li, B.A. Flanagan, S. Edmands
- Joint conference of the American Society of Naturalists, the Society for the Study of Evolution, and the Society of Systematic Biologists; M. Partridge, E. Watson, **B.A. Flanagan**, S. Edmands
- 2018 Marine and Environmental Biology Section Retreat, Department of Biological Sciences, University of Southern California; **B.A. Flanagan**, N. Li, S. Edmands
- 2018 Marine Evolution; <u>E.E. Sotka</u>, A. Baumgartner, P. Bippus, C. Destombe, E. Duermit, H. Endo, **B.A. Flanagan**, L. Lees, M. Kamiya, C.J. Murren, M. Nakaoka, S. Shainker, A.E. Strand, R. Terada, M. Valero, F. Weinberger, S.A. Krueger-Hadfield
- 2017 Western Society of Naturalists; **B.A. Flanagan**, S.A. Krueger-Hadfield, C.J. Murren, E.E. Sotka
- 2017 Benthic Ecology Meeting; B.A. Flanagan, S.A. Krueger-Hadfield, C.J. Murren, E.E. Sotka
- 2017 Benthic Ecology Meeting; <u>S.A. Krueger-Hadfield</u>, N. Kollars, **B.A. Flanagan**, S. Shainker, A.E. Strand, J.E. Byers, R. Terada, T. Greig, M. Hammann, D. Murray, F. Weinberger, E.E. Sotka
- 2017 Benthic Ecology Meeting; <u>E.E. Sotka</u>, A. Baumgartner, P. Bippus, C. Destombe, E. Duermit, H. Endo, **B.A. Flanagan**, L. Lees, M. Kamiya, C.J. Murren, M. Nakaoka, S. Shainker, A.E. Strand, R. Terada, M. Valero, F. Weinberger, S.A. Krueger-Hadfield
- 2016 Western Society of Naturalists; <u>E.E. Sotka</u>, A. Baumgartner, P. Bippus, C. Destombe, E. Duermit, H. Endo, **B.A. Flanagan**, M. Kamiya, L. Lees, C.J. Murren, M. Nakaoka, S. Shainker, A.E. Strand, R. Terada, M. Valero, F. Weinberger, S.A. Krueger-Hadfield
- Joint conference of the American Society of Naturalists, the Society for the Study of Evolution, and the Society of Systematic Biologists; **B.A. Flanagan**, S.A. Krueger-Hadfield, E.E. Sotka
- 2016 College of Charleston Graduate Student Research Colloquium; **B.A. Flanagan**, S.A. Krueger-Hadfield, E.E. Sotka

### POSTER:

- Joint conference of the American Society of Naturalists, the Society for the Study of Evolution, and the Society of Systematic Biologists; N. Li, B.A. Flanagan, S. Edmands
- 2018 Population, Evolutionary and Quantitative Genetics Conference; N. Li, B.A. Flanagan, S. Edmands
- 2018 National Conference on Undergraduate Research; K. Campbell<sup>‡</sup>, B.A. Flanagan, E.E. Sotka
- 2015 College of Charleston Graduate Student Research Colloquium; <u>B.A. Flanagan</u>, S.A. Krueger-Hadfield, E.E. Sotka
- 2015 Plant Symbiotic Association: ASPB Southern Section; <u>S. Nowak</u>, T. Kassaw, **B.A. Flanagan**, E. Schnabel, J. Frugoli
- 2014 Undergraduate Creative Inquiry Research Symposium; **B.A. Flanagan**, K. Kotwis, T. Kassaw, E. Schnabel, J. Frugoli

2014 Plant Symbiotic Associations: ASPB Southern Section; <u>B.A. Flanagan</u>, T. Kassaw, E. Schnabel, J. Frugoli

‡ undergraduate mentee

# **COMPETATIVE GRANTS**

2019 R.C. Lewontin Early Award, Society for the Study of Evolution (\$3,000)

# LEADERSHIP, SERVICE, AND OUTREACH

- 2021 2022 Graduate Student Worker Organization Committee, University of Southern California
- 2021 Admission Committee Student Representative, Department of Biological Sciences, University of Southern California
- 2021 Graduate Student Recruitment Coordinator, Department of Biological Sciences, University of Southern California
- 2018 Student Retreat Director, Department of Biological Sciences, University of Southern California
- 2014 2017 Community Outreach Research and Learning, College of Charleston
- 2015 Funding Director, Marine Biology Graduate Student Association, College of Charleston
- 2014 President, CLEMSONLIVE, Clemson University.
- 2013 Committee Director, CLEMSONLiVE, Clemson University

# HONORS, FELLOWSHIPS AND SCHOLARSHIPS

- 2022 University of Southern California Dornsife Fellow
- 2020 Most Outstanding Teaching Assistant Honors Organismal Biology and Evolution
- 2018 Most Outstanding Teaching Assistant Honors Organismal Biology and Evolution
- 2017 University of Southern California Dornsife Fellow
- 2017 Outstanding Graduate Student in Marine Biology
- 2016 College of Charleston Marine Genomics Fellow
- 2013, 2014 Clemson University Dean's List
- 2010, 2012 Clemson University President's List
- 2010 2014 South Carolina Palmetto LIFE Math and Science Scholarship

# **TEACHING EXPERIENCE**

- 2020 Honors Organismal Biology and Evolution TA. Fall. University of Southern California.
- 2019 Honors Organismal Biology and Evolution TA. Fall. University of Southern California.
- 2018 Honors Organismal Biology and Evolution TA. Fall. University of Southern California.
- 2018 Cell Biology and Physiology Lab TA. Spring. University of Southern California.
- 2016 Animal Behavior TA. Fall. College of Charleston.
- 2016 Molecular Biology TA. Spring. College of Charleston.
- 2015 Introduction to Cell and Molecular Biology TA. Spring. College of Charleston.
- 2014 Evolution, Form and Function of Organisms TA. Fall. College of Charleston.

#### **SOCEITY MEMBERSHIPS**

- 2015 Present Society for the Study of Evolution
- 2017 Present Western Society of Naturalists
- 2014 2015 American Society of Plant Biologists