



Katherine Fiocca

Postdoctoral Scholar, Biology

Bio

STANFORD ADVISORS

- Lauren O'Connell, Postdoctoral Faculty Sponsor
- Deborah Gordon, Postdoctoral Research Mentor

Publications

PUBLICATIONS

- **Argentine ant extract induces an *osm-9* dependent chemotaxis response in *C. elegans*.** *microPublication biology*
Alfonso, S. A., Arango Sumano, D., Bhatt, D. A., Cullen, A. B., Hajian, C. M., Huang, W., Jaeger, E. L., Li, E., Maske, A. K., Offenberg, E. G., Ta, V., Whiting, W. W., Adebogun, et al
2023; 2023
- **Poison frog dietary preference depends on prey type and alkaloid load.** *PloS one*
Moskowitz, N. A., D'Agui, R., Alvarez-Buylla, A., Fiocca, K., O'Connell, L. A.
2022; 17 (12): e0276331
- **Body size correlations with female aggression and physiology suggest pre-adult effects on caste in an independent-founding eusocial paper wasp (*Mischocyttarus pallidipectus*, Hymenoptera Vespidae)** *ETHOLOGY ECOLOGY & EVOLUTION*
Fiocca, K., Congdon, R., O'Donnell, S.
2022
- **Social Network Analysis of Male Dominance in the Paper Wasp *Mischocyttarus mastigophorus* (Hymenoptera: Vespidae)** *JOURNAL OF INSECT BEHAVIOR*
O'Donnell, S., Fiocca, K., Congdon, R.
2021; 34 (3): 106-113
- **Reproductive physiology corresponds to adult nutrition and task performance in a Neotropical paper wasp: a test of dominance-nutrition hypothesis predictions** *BEHAVIORAL ECOLOGY AND SOCIOBIOLOGY*
Fiocca, K., Capobianco, K., Fanwick, E., Moynahan, K., Congdon, R., Zelanko, P., Velinsky, D., O'Donnell, S.
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- **Functionalized Single-Walled Carbon Nanotubes and Nanographene Oxide to Overcome Antibiotic Resistance in Tetracycline-Resistant *Escherichia coli*** *ACS APPLIED NANO MATERIALS*
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- **First person - Meghan Barrett and Katherine Fiocca** *BIOLOGY OPEN*
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2019; 8 (12)

- **Larval mannitol diets increase mortality, prolong development and decrease adult body sizes in fruit flies (*Drosophila melanogaster*)** *BIOLOGY OPEN*
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- **Brain structure differences between solitary and social wasp species are independent of body size allometry** *JOURNAL OF COMPARATIVE PHYSIOLOGY A-NEUROETHOLOGY SENSORY NEURAL AND BEHAVIORAL PHYSIOLOGY*
O'Donnell, S., Bulova, S., DeLeon, S., Barrett, M., Fiocca, K.
2019; 205 (6): 911-916
- **Mannitol ingestion causes concentration-dependent, sex-biased mortality in adults of the fruit fly (*Drosophila melanogaster*)** *PLOS ONE*
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2019; 14 (5): e0213760
- **Adult nutrition and reproductive physiology: a stable isotope analysis in a eusocial paper wasp (*Mischocyttarus mastigophorus*, Hymenoptera: Vespidae)** *BEHAVIORAL ECOLOGY AND SOCIOBIOLOGY*
O'Donnell, S., Fiocca, K., Campbell, M., Bulova, S., Zelanko, P., Velinsky, D.
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- **Erythritol ingestion impairs adult reproduction and causes larval mortality in *Drosophila melanogaster* fruit flies (Diptera: Drosophilidae)** *JOURNAL OF APPLIED ENTOMOLOGY*
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O'Donnell, S., Bulova, S. J., Barrett, M., Fiocca, K.
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- **Caste differences in the mushroom bodies of swarm-founding paper wasps: implications for brain plasticity and brain evolution (Vespidae, Epiponini)** *BEHAVIORAL ECOLOGY AND SOCIOBIOLOGY*
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