Justin S. Lesser

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Education

University of Louisiana at Lafayette, Lafayette, LA
- Began August 2016
- PhD Student, Ecology and Evolutionary Biology
- Louisiana Board of Regents Fellow, Nelson Lab

Three Seas Program, Northeastern University, Boston, MA
- Began August 2014, Graduated January 2016, M.Sc. in Marine Biology,

Brandeis University, Waltham, MA
- Began August 2010, Graduated May 2014, B.S. in Neuroscience, B.A. in Biology

Publications

- **Lesser, J. S.**, James, W. R., Stallings, C., Wilson, R., Nelson, J. A. (2020), Trophic niche size and overlap decreases with increasing ecosystem productivity, *Okios*. **(in review)**
- James, W. R., **Lesser, J. S.**, Litvin, S. Y., & Nelson, J. A. (2019). Assessment of food web recovery following restoration using resource niche metrics. Science of The Total Environment, 134801.
- Nelson, J. A., **Lesser, J.**, James, W. R., Behringer, D. P., Furka, V., & Doerr, J. C. (2019). Food web response to foundation species change in a coastal ecosystem. Food Webs, 21, e00125.
- Puebla, O., Picq, S., **Lesser, J.S.** and Moran, B., 2018. Social-trap or mimicry? An empirical evaluation of the *Hypoplectrus unicolor–Chaetodon capistratus* association in Bocas del Toro, Panama. Coral Reefs, 37(4), pp.1127-1137.
- Pepperberg, I. M., Gray, S. L., **Lesser, J. S.**, & Hartsfield, L. A. (2017). Piagetian liquid conservation in grey parrots (*Psittacus erithacus*). Journal of Comparative Psychology, 131(4), 370.

Awards and Grants

- March 2016 – Offered a Louisiana Board of Regents Fellowship for doctoral research in the lab of Dr. James Nelson at the University of Louisiana at Lafayette.
- February 14, 2016 - Received Honorable Mention in 2016 AAAS Student Poster Competition, Environment and Ecology Section
- November 20th,2019 – Received "Best Oral Presentation" at the 2019 ULL Graduate Student Symposium, Interdisciplinary section

Current Research

Ecosystems Ecology Lab – Dr. James Nelson, Department of Biology, University of Louisiana at Lafayette
PhD Student
- Impact of ecosystem productivity of the trophic niche, and the implications of change on food webs
- Developed the use of multidimensional hpervolume metrics to study trophic niche change
- **Work in Plum Island Estuary in Newbury, MA- Graduate student with the TIDE Project and PIE-LTER**
    - **Responsible for consumer field program in tidal creek ecosystems for TIDE project**
    - **Mentor for 2 REU students and 1 master's student (NEU Three Seas Program)**

Past Research Experience

Hughes Lab – Dr. Randall Hughes, Marine Science Center, Northeastern University, Nahant, MA
Research Assistant Oct 2015-Dec 2015
- Assisted with a meta-analysis project on the effect of altered freshwater input on coastal systems
- Performed general lab work and experiment breakdown, attended lab meetings about current projects

Puebla Lab – Dr. Oscar Puebla, GEOMAR Helmholtz Centre for Ocean Research
Intern, MSc Candidate Jun 2015 – Dec 2015
- Designed and collected data for a project involving the analysis of pattern and morphometrics in Caribbean hamlet morphs
- Assisted with a project on animal personality and speciation in *Hypoplectrus unicolor*

Pepperberg Lab – Dr. Irene Pepperberg, Harvard University, Cambridge MA June 2013 – August 2014
Undergraduate Research Assistant
- Collaborated in the design and execution of experiments testing the cognitive abilities of African Grey Parrots
- Collected data for a study of Piagetian Liquid Conservation
- Responsible for care of birds in the lab as well as cleanliness of the facility.

Katz Lab – Dr. Don Katz, Brandeis University, Waltham MA September 2011- April 2012
Undergraduate Assistant
- Studied taste response and conditioned taste aversions in rats
- Responsible for care of rats in the facility, including feeding, changing cages, and administering injections.
- Learned multiple lab techniques: Microtome/autoclave operation, electrode construction, perfusion

Relevant Skills

- SDI Basic Open Water and AAUS Scientific Diving certified (over 250 logged dives)**,** NAUI First-Aid Certified
- Variety of field work experience in marine, intertidal, and terrestrial systems, experience with genetic and analytical labwork and techniques.
- Familiarity with Image J, R, Microsoft Office and other data analysis software
- Proficient in the identification of fish and coral species, as well as seabirds, marine mammals, and macroalgae and marine plant species
- January 2017 – "Use of Stable Isotopes & Fatty Acids in Aquatic Ecology: Theory & Practice", Universidad de Antofagasta, Chile
    - Proficient in stable isotope analysis packages in R, including SIBER and mixSIAR