

Leslie Speight Youtsey

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Education

Graduate

August 2023-Present

William & Mary's School of Marine Science at the Virginia Institute of Marine Science

Ph.D. Marine Science | Natural Resources

Advisors | Jan McDowell-Ph.D. and Richard Snyder-Ph.D.

Dissertation | *In development*

Cumulative GPA | 3.77

Graduating | May 2027

Graduate

August 2020-January 2023

William & Mary's School of Marine Science at the Virginia Institute of Marine Science

M.S. Marine Science | Department of Fisheries Science

Advisors | Jan McDowell-Ph.D. and Kim Reece-Ph.D.

Thesis | "Comparing Low Salinity Transcriptomic Profiles among Hard Clam, *Mercenaria mercenaria*, Lines"

Relevant Coursework | *Fundamentals in Biological Oceanography, Fundamentals in Aquatic Health, Fundamentals in Stats Methods & Data Analysis, Fundamentals in Marine Fisheries Science, Statistics & Graphics in R, Molecular Techniques, Malacology, Linear Models in Ecology, & Marine Molecular Genetics*

Cumulative GPA | 3.77

Thesis Defense Date | January 5, 2023

Graduated | January 2023

Undergraduate

August 2016-May 2020

University of Iowa

B.S. Biological Sciences (Honors) | Genetics and Biotechnology

Minor | Environmental Science

Advisor | Maurine Neiman-Ph.D.

Honors Thesis | "Investigation of Selection on Repetitive Histone Genes in *Potamopyrgus antipodarum*"

Relevant Coursework | *Organic Chemistry I, Biochemistry, Fundamentals of Genetics, Molecular Genetics, Evolution, Ecology, Genetic and Biotechnology Lab, Intro to Scientific Computing, & Genomics*

Cumulative GPA | 3.78

Graduated | May 2020

Research/ Work Experience

Hatchery, Field, and Lab Specialist

February 2023 – August 2023

Aquaculture Genetics and Breeding Technology Center's (ABC) at the Virginia Institute of Marine Science (VIMS)

- Work Experience
 - Help maintain brood stock by cleaning oysters and tanks.
 - Assist in intricate oyster spawns and larvae rearing.
 - Tissue sample collections for DNA and flow cytometry analysis
 - Count and measure oysters to assess families.
 - Assist in boat navigation and oyster bag deployment and recovery.

Graduate Research Experience

August 2020 – January 2023

William & Mary's School of Marine Science at the Virginia Institute of Marine Science | Department of Fisheries Science

- Graduate Research
 - Designed and ran experiments with hard clams and different salinities at the VIMS Eastern Shore Seawater Lab
 - Clam dissections and tissue sample collections for RNA extraction
 - RNA extraction with DNA Digest Step
 - Quantity and quality assessment with NanoDrop, Qubit 4.0, and gel electrophoresis
 - RNA-Seq bioinformatic analysis
 - Proficient in R and Linux (bash, tcsh shells) scripting
 - Experience working in HPC systems
- Other Skills and Experience
 - DNA extractions (spin columns and magnetic bead protocols)
 - PCR
 - qPCR
 - Sanger Sequencing
 - TOPO Cloning with *E. coli*
 - Environmental DNA (eDNA) extractions

Undergraduate Research Experience

University of Iowa | Biology Department

July 2018- May 2020

- Undergrad Researcher
 - Snail dissection and fluorescent *in-situ* hybridization (FISH)
 - Data analyses and figures coded in python and R

Old Dominion University | Biomedical Chemistry and Biochemistry Department

May–June 2019

- Volunteer research
 - Assembly and Comparative Genomics of a Florida Isolate of *Synechococcus*
 - RNA isolation, cDNA synthesis, cDNA amplification, gene expression studies, and computational analysis with CLC genomics and NCBI BLAST database

University of Iowa | Internal Medicine

June-August 2018

- Shadowing
 - Spent 30 hours shadowing members of the lab, helping with care of mouse lines, observing open heart surgery on mice, replacing media of fibroblast cultures, and preparing media for bacterial growth.

Awards

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- First Place Poster Presentation at Tidewater AFS \$200 Spring 2022
 - GSA Student Research Grant \$1000 Fall 2021
 - VIMS Student Research Grant \$2000 Fall 2021

- VIMS Student Research Grant \$1000 Spring 2021
- University of Iowa Dean’s List 2017-2020
- Distinguished Big Ten Scholar 2017-2018, 2018-2019
- NFHCA Division I National Academic Squad 2016-2017, 2017-2018, 2018-2019
- Academic All- Big Ten Honoree 2016-2017, 2017-2018, 2018-2019
- Dewey Stuit Fund for Undergraduate Research \$400 Fall 2018

Outreach

- Aquaculture presentation Spring 2022 & 23
 - Talking with AP environmental science students at Tabb high school
- Virginia Scientists & Educators Alliance (VA SEA) 2021-2022
 - Patterns of inheritance lesson plan for high school biology: “Selectively breeding Hard Clams”
- Scientist Walk Into A Bar (SWIB) Spring 2021
 - Public talk: “What Is RNA, What Does It Tell Us, And How Can We Use It?”

Memberships

VIMS Shellfish Aquaculture Program Exchange (SHAPE)	2021-Present
National Shellfisheries Association	2021-2022
VIMS Sail and Paddle Club	2021-2022
Honor Society	2017-2020
Phi Eta Sigma Honor Society	2017-2020

Non-Academic Experience

VIMS Sail and Paddle Club Treasurer	2021-2022
<ul style="list-style-type: none"> • Create budget and collect dues 	
Field Hockey Coach and Swim Instructor	2015-2021
<ul style="list-style-type: none"> • Work with all age groups (ages 3 – 18) • Teach skills that are desired by player or swimmer 	
University of Iowa Women’s Field Hockey Team	2016-2019
<ul style="list-style-type: none"> • Starting goalkeeper in 2018 and 2019 season • BigTen in season and tournament champion in 2019 • NCAA appearance in 2018 and 2019 	
Co-Manager of Poquoson Public Pool	Summer 2014-2020
<ul style="list-style-type: none"> • Lifeguard (2014-2016), Head Guard (2017-2019), Co-Manager (2020) • Chemical testing, scheduling, opening and closing, and handling money 	