

# 15th Biennial Feng Graduate Research Colloquium



Thursday, May 15th, 2025  
Department of Marine Sciences  
University of Connecticut, Avery Point

This colloquium honors the memory of Professor S. Y. Feng, Director of the former Marine Sciences Institute, and founding Head of the Department of Marine Sciences, University of Connecticut. The Colloquium is funded by the Department of Marine Sciences and the S.Y. Feng Scholarship Fund. Donations to this fund are accepted through the University of Connecticut Foundation and are tax deductible.

All donations are greatly appreciated

The Department of Marine Sciences wishes to thank Mrs. Jean Feng for her support of Marine Sciences and the growth of its students.

**Student Steering Committee**

Yifan Zhu  
Emily Watling  
Anne Gilewski

**Faculty Coordinator**

Julie Granger

**Logistical Support**

Debra Schuler  
Todd Fake

**Artwork**

Matthew Leason

LWB 103 *Coffee/Tea/Water available throughout the Symposium*

8:00 - 8:30 am: **Breakfast (Bagels/Cream Cheese/Fruit) and Coffee/Tea**

8:45 am: **Opening Remarks by Julie Granger**

**SESSION I: Oral Presentations & Lightning Talks Group 1**

**9:00 - 10:30 am**

**Moderator: Anne Gilewski**

LWB 103

TIME	PRESENTER	TITLE
9:00 - 9:15 am	Samantha Rush	Organic alkalinity in Arctic Sea ice brine: The dominant role in carbonate speciation
9:15 - 9:30 am	Hannah Collins	Tissue-specific resident and transient microbial communities of the freshwater Unionid <i>Elliptio complanata</i>
9:30 - 9:45 am	Rowan Batts	Thermal plasticity rather than adaptation to warming dominates reproduction and CT <sub>max</sub> of a common copepod
9:45 - 9:50 am	Olivia Patrino	Carbonate system dynamics in the oxygen minimum zones of the Sargasso Sea ( <i>Lightning Talk</i> )
9:50 - 9:55 am	Kelsey Ward	Quantifying rates of denitrification and nitrogen fixation in <i>Zostera marina</i> beds using noble gas tracers ( <i>Lightning Talk</i> )
9:55 - 10:00 am	Monica Garity	Progressively greater biological carbon storage in the deep Atlantic during glacial inception ( <i>Lightning Talk</i> )
10:00 - 10:15 am	Anagha Payyambally	Nitrous oxide dynamics and fluxes in the Southern Benguela Upwelling System (SBUS) in August 2023
10:15 - 10:30 am	Halle Berger	Modeling the spatiotemporal effects of ocean acidification and warming on atlantic sea scallop growth to guide adaptive fisheries management

**SESSION II: Posters Group 1**

**10:30 - 12:00 pm**

LWB 3rd Floor

PRESENTER	TITLE
Anne Gilewski	The long and winding road: Tire wear particles in connecticut estuaries and their interactions with bivalve shellfish
Quin Zabel	Machine-learning driven non-targeted mass spectrometry approach for pesticide screening in Sri Lankan drinking water samples
Erin Leathrum	The oxygen isotope ratio of benthic foraminifera as a conservative tracer of deep ocean circulation during the Last Glacial Maximum
Julia Lara Navarrete	Will there be crab for Christmas? Forecasting Dungeness crab ( <i>Metacarcinus magister</i> ) meat quality.
Vicki You	Identifying sand lance species and their distributions in the Northwest Atlantic using real-time PCR (qPCR)
Jessica Vorse	Planktonic diversity in the Revolution Wind project area
Meg Shah	Surface currents and coastal connectivity: Insights from seasonal drifter deployments in offshore Rhode Island Sound

**SESSION II: Posters Group 1 (continued)****10:30 - 12:00 pm***LWB 3rd Floor*

PRESENTER	TITLE
Alexander Francoeur	Potential genetic underpinning of differential response to turbulence in diatoms and dinoflagellates
Erich Nitchke	Monthly measurements of carbonate system parameters in Long Island Sound reveal hypercapnia as an additional stressor to the Western Sound
Matthew Leason	Assessing dock-based deployments as a proxy for light and temperature in nearby seagrass beds
Paxton Tomko	Uncovering the role of methanogens in CaCO <sub>3</sub> precipitation in microbial mats

**12:00 - 1:00 pm: Lunch (Paul's Pasta); LWB 3rd Floor****SESSION III: Oral Presentations Group 2****1:00 - 2:00 pm****Moderator: Yifan Zhu***LWB 103*

TIME	PRESENTER	TITLE
1:00 - 1:15 pm	Lisa Piastuch	Does adaptation to warming benefit the copepod, <i>Acartia tonsa</i> , during future marine heatwaves?
1:15 - 1:30 pm	Lucas Jones	Is there a genomic basis to CO <sub>2</sub> sensitivity in the Northern sand lance?
1:30 - 1:45 pm	Paban Bhuyan	Submesoscale frontogenesis observed using an array of saildrones

**SESSION IV: Posters Group 2****2:00 - 3:30 pm***LWB 3rd Floor, Snacks provided*

PRESENTER	TITLE
Emma Siegfried	Temperature effects on the time to hatch in American sand lance ( <i>Ammodytes americanus</i> )
Yifan Gu	Plankton community in Long Island Sound: Temporal and spatial dynamics
Eva Scrivner	Characterizing unique phytoplankton bio-optics to enhance estimates of pigments and productivity in Antarctic coastal waters
Sunnidae Gallien	Determining <i>Acartia</i> spp. nauplii abundance and phenology in Long Island Sound using mtCOI gene
Madison Sobol	Extending the record of carbon variables in the Northwest Atlantic Shelf utilizing the Regional Ocean Model System
Emily Watling	Oyster aquaculture associated with eelgrass ( <i>Zostera marina</i> ) habitat – Maybe we can get along after all
Melissa Sanchez	Examining the uptake of methylmercury by the mixotroph <i>Ochromonas</i> sp. during heterotrophic or autotrophic growth

**SESSION IV: Posters Group 2 (continued)****2:00 - 3:30 pm***LWB 3rd Floor*

<b>PRESENTER</b>	<b>TITLE</b>
Jackson Sanders	Molecular techniques for understanding harmful algal blooms: A review
Hayden Holcomb	Modeling larval transport and oyster reef connectivity in the Long Island Sound
Mehrnoosh Abbasian	Evaluating turbulence closure schemes under wave breaking conditions using the General Ocean Turbulence Model (GOTM)
Xavier Warren	Validation of atmospheric correction approaches of PACE imagery using ship-based radiometry across the coastal and open ocean Atlantic

**SESSION V: Oral Presentations & Lightning Talks Group 3****3:30 - 5:00 pm****Moderator: Emily Watling***LWB 103*

<b>TIME</b>	<b>PRESENTER</b>	<b>TITLE</b>
3:30 - 3:45 pm	Lucy Hendrickson	Sea Spray: The missing ocean feedback
3:45 - 4:00 pm	Hung Nguyen	Temporal trends and causes of deoxygenation in the northwest Atlantic Shelf
4:00 - 4:15 pm	Hannah Roby	Digesting the evidence: Black sea bass and trophic impacts in Long Island Sound
4:15 - 4:20 pm	Catherine Crowley	Phytoplankton nitrate assimilation and response to coastal upwelling in the California Current ( <i>Lightning Talk</i> )
4:20 - 4:25 pm	Gavin Jackson	Contribution of Long Island Sound light profile data to updated Eelgrass Habitat Suitability Index Model ( <i>Lightning Talk</i> )
4:25 - 4:40 pm	Luke Glass	Tide and beach geomorphology impacts on a small-scale plume at Rocky Neck Beach, Connecticut
4:40 - 4:55 pm	Riley Pena	Maintenance of top-down control at a Predator's Range Edge

**4:55 - 5:00 pm: Closing Remarks by Evan Ward****5:00 - 7:00 pm: Please join us for a post-Symposium Happy Hour at Par 4****Thank you to students, faculty, and staff for a successful 2025 Feng Symposium!**