

Duke

NICHOLAS SCHOOL  
*of the* ENVIRONMENT

Graduation  
2025

Ph.D. GRADUATE STUDENT  
*Recognition Ceremony*

*FRIDAY, MAY 9 • 2025*

LOVE AUDITORIUM,  
LEVINE SCIENCE RESEARCH CENTER  
DUKE UNIVERSITY

# Graduation 2025

## WELCOME

**LORI SNYDER BENNEAR, Ph.D.**

Stanback Dean, Nicholas School of the Environment

## INTRODUCTION *of* CLASS SPEAKER

**DEAN BENNEAR, Ph.D.**

## CLASS SPEAKER

**RAFAELLA LOBO, Ph.D. '24**

## CEREMONY HOST

**PRASAD KASIBHATLA, Ph.D.**

Professor of Environmental Chemistry  
Senior Associate Dean of Research and Doctoral Programs

## RECOGNITION *of* DEGREE CANDIDATES

Master of Science  
Doctor of Philosophy

## PRESENTATION *of* AWARDS

The Dean's Award for Outstanding Research Paper  
The Norm Christensen Faculty Award for Excellence in Mentoring Doctoral Students

## CLOSING REMARKS

**LISA CAMPBELL, Ph.D.**

Rachel Carson Distinguished Professor of Marine Affairs & Policy  
and Chair, Marine Science & Conservation Division

Immediately following the ceremony, all graduates and their guests are cordially invited to a Celebratory Toast outside of Love Auditorium.

Followed by a light reception for graduates and their guests.

# MASTER OF SCIENCE

*The Master of Science is awarded through The Graduate School at Duke University.*

## Ecology

### JIMMY KIEU

The role of germination phenology in physiological adaptation in *Arabidopsis thaliana*  
Advisor: Kathleen Donohue

# DOCTOR OF PHILOSOPHY

*The Doctor of Philosophy is awarded through The Graduate School at Duke University.*

## Earth & Climate Sciences

### KEQI HE (SUMMER 2024)

Climate-Driven Wetland Degradation and Carbon Emissions in the Southeastern United States  
Advisor: Dr. Wenhong Li

### CONNER LESTER

Synthesizing Theory and Observations to Understand Sediment Deposition Patterns: Sand Ripples and Salt Marshes  
Advisor: Dr. Brad Murray

### ALEXANDRIA KATERINA NIEBERGALL (SUMMER 2024)

Exploring Net Community Production Estimates and Drivers in the North Pacific and North Atlantic  
Advisor: Dr. Nicolas Cassar

## Environment

### SHAZA GABALLAH\*

Exposure to Legacy & Alternative Brominated Flame Retardants During Pregnancy and Associations with Placental Thyroid Hormones  
Advisor: Dr. Heather Stapleton

### MAURICIO HERNANDEZ HERNANDEZ (FALL 2024)

Essays on Residential Electricity Consumption and Heuristics to Solve the Unit Commitment Problem  
Advisor: Dr. Dalia Patino-Echeverri

### TAYLOR ELIZABETH SCHRONCE HOXIE\* (FALL 2024)

Assessing Exposure to Per- and Polyfluoroalkyl Substances in the Indoor and Ambient Environment Utilizing Silicone Wristbands  
Advisor: Dr. Heather Stapleton

### KATHERINE SAVANNAH MORTON\* (FALL 2024)

Mitochondrial Mechanisms of Toxicant Induced Dopaminergic Neurodegeneration in *Caenorhabditis elegans*  
Advisor: Dr. Joel Meyer

### ERIK MARK PATTON (FALL 2024)

Climate Change Impacts on the U.S. Army Basic Combat Training Program  
Advisor: Dr. Martin Doyle

### XIANGTIAN WANG

Development and Applications of Novel Exposure Biomarkers for Polycyclic Aromatic Hydrocarbons (PAHs) Reflecting Long-term Exposures or Wood Smoke Exposure  
Advisor: Dr. Junfeng Jim Zhang

### XIAODONG ZHANG

Leveraging Publicly Available Data and Production Cost Models for Risk Assessment and Enhanced Operational Strategies in Electric Power Systems  
Advisor: Dr. Dalia Patino-Echeverri

## Marine Science & Conservation

### GABRIELLE CARMINE

'Right to Fish' for Whom? A Geospatial Study of High Seas Fisheries and their Governance for Ocean Conservation  
Advisor: Dr. Patrick Halpin

### BRIANNA WILCKE ELLIOTT

Overfished and Understudied: The Critical Conservation Threat of Cetacean Bycatch in Indian Ocean  
Advisor: Dr. Andrew Read

### ROBIN ELIZABETH FAIL

Discourse, Values, and Contested Futures for Maine Aquaculture  
Advisor: Dr. Grant Murray

### LAURA ANN GIVENS (SUMMER 2024)

Characterizing Genetic and Ecological Consequences of Shellfish Aquaculture  
Advisor: Dr. Thomas Schultz

### JUNYAO GU (SUMMER 2024)

The Balance of Bottom-up and Top-down Processes in Regulating the Phenology of Closely Related Populations of Marine Cyanobacteria  
Advisor: Dr. Zackary Johnson

### XINYAN LIN

Mobilizing Ocean Equity: Global and Chinese Assemblages, Onto-epistemological Possibilities, and Gongyi (Chinese Non-Profit) Agency  
Advisor: Dr. Xavier Basurto

### RAFAELLA LOBO (SUMMER 2024)

Western Superwhales or Ballenas Hermanas? Agency, Power, and Identity in the International Politics of Whaling & Whale Conservation  
Advisor: Dr. Lisa M. Campbell

### ELISABETTA MENINI

Knowledge Exchange in Seabed Mining Governance: Barriers, Opportunities, and Lessons Learned  
Advisor: Dr. Patrick Halpin

### STEPHANIE R. VALDEZ (SUMMER 2024)

Variable Responses to Consumer and Nutrient Availability in Coastal Wetland Plants  
Advisor: Dr. Brian Silliman

## University Program in Ecology

### DAVID SMITH

DE LA MATER III (FALL 2024)  
Functional Biogeography: Leveraging Trait-Based Methodologies to Study Species Form and Function Across Scales  
Advisor: Drs. Brian Silliman and Justin P. Wright

### CAMILLE DESISTO

Plant-Animal Interactions in a Changing World  
Advisor: Dr. Charles Nunn

### GREGORY BRUCE MERRILL JR.

Drivers and Consequences of Ingesting Plastic Marine Debris for Marine Mammals  
Advisor: Dr. Douglas Nowacek

### ANNA ELIZABETH

NORDSETH (SUMMER 2024)  
Fruiting, Frugivory, and Fieldwork: Ecological Interactions and Actors in a Changing World  
Advisor: Dr. Justin P. Wright

### RYAN D. O'CONNELL

(SUMMER 2024)  
Modeling Realities: Towards an Improved Understanding of Population Responses to Changes in Complex Environmental Drivers  
Advisor: Dr. William F. Morris

### RENATA ELIZABETH LEE

POULTON KAMAKURA (SUMMER 2024)  
Urban Tree Stress in Socio-ecological Systems  
Advisor: Dr. James S. Clark

## University Program in Environmental Policy

### MATTHEW REALE-HATEM

Three Essays on the Economics of Conservation Policy  
Advisor: Dr. Jeffrey Vincent



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