

# Ibuki Sugiura

Graduate Student in Earth & Environmental Sciences Ph.D. Program

Columbia University  
Lamont-Doherty Earth Observatory  
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## EDUCATION

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### Columbia University

New York, NY | 2022–2027 (Expected)

*1st-year Ph.D. student, Earth & Environmental Sciences*

- Division: Ocean & Climate Physics
- Advisors: Dr. Jason Smerdon and Dr. Richard Seager

### Smith College

Northampton, MA | 2017–2022

*B.A., Geosciences*

- Highest Honors: Thesis titled “Reconstructing Past Temperature From Lake Sediments at Darwin Crater, Tasmania, Australia Using the brGDGT Biomarker Proxy” – Advisor: Dr. Gregory de Wet

*B.A., Mathematics*

*Cum laude (GPA: 3.91)*

### SEA Semester (1-Semester Study Away)

Woods Hole, MA | Spring 2020

*Oceans & Climate Program*

## RESEARCH EXPERIENCES

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### DEVELOP National Program

Remote | Spring 2022

*Space Systems And Innovations Laboratory Limited Co.*

- Project title: “Mapping Forest Carbon Stocks to Understand Carbon Implications of Treatment and Wildfire”
- Main advisors: Dr. Tony Vorster, Dr. Nicholas Young, Dr. Brian Buma, and Scott Cunningham
- Work involved mapping forest carbon stocks using field and satellite data in burned areas after the 2020 CalWood Fire in Boulder and Jefferson Counties, CO, modeling post-fire carbon stocks, and evaluating model outcomes to understand the implications of forest management practices

### Honors Thesis Research

Northampton, MA | Spring 2021–Fall 2022

*The de Wet Paleoclimatology Lab, Smith College*

- Reconstructed past temperature from lake sediments collected in Tasmania, Australia, using the brGDGT (branched glycerol dialkyl glycerol tetraether) biomarker proxy to understand past regional environment and climate (presumably MIS 5c–6)
- Work involved highly complex biogeochemical laboratory work and data analysis using R/RStudio
- Presented a poster online at Smith College Collaboration Conference on May 6, 2021
- Defended on January 7, 2022

### Marine Biology Summer Research Internship

Gloucester, MA | Summer 2019

*The Cheng Marine Biology Lab, University of Massachusetts Amherst (Gloucester Marine Station)*

- Assisted in master’s level research on the potential impacts of climate change on evolutionary processes in marine snail (*Urosalpinx cinerea*) for ten weeks
- Work involved care and husbandry of over 1000 marine snails, seawater tank maintenance, photographically recording the growth of juvenile snails with microscope, and data management

## AWARDS & HONORS

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Spring 2022	Elected to the Smith College Chapter of Phi Beta Kappa
Spring 2021	Nominated for associate membership in Sigma Xi, the international scientific research honor society
Summer 2020 & 2021	Accepted for DAAD's Research Internships in Science and Engineering (Both cancelled due to the COVID-19 pandemic and travel restrictions)
Summer 2019	Granted Five College Coastal & Marine Sciences summer internship scholarship
Summer 2019	Awarded Smith College's Praxis scholarship in 2019
Fall 2018–Spring 2019	Dean's List at Smith College

## PRESENTATIONS

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Sugiura, I., de Wet, G., Lisa-Pronovost, A., Fletcher, M.S., Cooley, S. (2022): Reconstructing Past Temperature From Lake Sediments in Darwin Crater, Tasmania, Australia Using the brGDGT Biomarker Proxy, The Geological Society of America Northeastern Section Meeting Poster Technical Sessions 2022, Lancaster PA

## TECHNICAL SKILLS

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- Computer programming: R, Python, Java, Mathematica
- Languages: Japanese, English

## OTHER RELEVANT EXPERIENCES

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### **OceanHackWeek 2021**

**East Boothbay, ME | August 2021**

*Bigelow Laboratory for Ocean Sciences*

- Participated in a 4-day collaborative learning experience focused on data science and oceanography
- Took part in a collaborative project to document a workflow for turning a big collection of climate projection data into formats that are easier to access for ecological modeling and other analysis

### **Internship at Friends of the Earth (FoE) Japan**

**Tokyo, Japan | Summer 2018**

- Summer internship at an international environmental NGO Japan office
- Served as a translator for two representatives from a local anti-nuclear power organization in Wales, UK
- Assisted event managers at environmental organizing and informational sessions

### **Internship at Global Environmental Forum**

**Tokyo, Japan | Summer 2018**

- Summer internship at a local environmental NGO, affiliated with Japanese Ministry of the Environment
- Translated and summarized reference materials for business and economic study meetings and other public informational sessions focused on environmental issues
- Wrote a short book review on an educational book highlighting the ocean-related issues from social, environmental, and economic perspectives for a magazine