



# ENVIRONMENTAL SCIENCES GRADUATE PROGRAM



THE OHIO STATE UNIVERSITY

## MESSAGE FROM THE CO-DIRECTORS



The grand challenges of the 21st century — ecological, economic and political — will be those of an interconnected, interdependent world population. Ecological issues, such as environmental degradation and resource depletion, are often the ultimate cause of economic and social policies. Basic and applied research is needed to provide solutions to these global issues. The nature of the topic environmental scientists study is highly complex, with strong interdependence of environmental problems across the physical, biological and human domains. Scientists and professionals are needed who, after achieving a solid disciplinary education in science-related fields as undergraduates, have integrated and interdisciplinary approaches to deal with these environmental problems. The Ohio State University's Environmental Science Graduate Program (ESGP) is designed to cut across traditional academic disciplines and colleges to provide sound and effective graduate education and research on these important environmental issues.

The ESGP's goal is the pursuit and dissemination of knowledge in the interdisciplinary fields of environmental science. Specifically, our academic program provides an interdisciplinary curriculum across physical sciences and engineering, biological sciences, and social sciences with disciplinary depth in established specializations or self-designed by the graduate student's committee. The interdisciplinary curriculum to ESGP is unique and designed to avoid overlap with established graduate program curricula at Ohio State. ESGP is designed to provide novel interdisciplinary graduate education and research by bringing together disciplines and experts from across campus.

Apart from General Environmental Science degree, ESGP attendees are given the opportunity to pursue one of the following four specializations: Agroecosystems Sciences; Climate Change Science and Policy; Water Issues; and Environmental Public Health. The ESGP student body is a very active group of roughly 50 graduate students (MS and PhD) who are researching critical issues, synthesizing solutions that engage multiple stakeholders, and effectively communicate and apply their research results as policy. The demand for our graduates is very high. Our graduates pursue fulfilling careers in academia, private industry, consulting, and government.

**Nicholas Basta and Gil Bohrer**

Co-Directors of the Environmental Sciences Graduate Program



## CONTENTS

4 Introduction

5 By the Numbers

6 Specializations

8 Admissions

9 Application Instructions

11 Funding Opportunities

14 Collaborations on Campus

15 Research Resources

18 Our Students

20 Student Association Board

21 The University and the City

22 Campus Map

## INTRODUCTION

The dominant problems of the next century — ecological, economic and political — will be those of an interconnected, interdependent world population. Environmental issues, such as degradation and resource depletion, are often the ultimate cause of economic and social unrest, and the driving force behind regulatory policies. Basic and applied research is needed to provide solutions to these global issues. Scientists and professionals are needed who, after achieving a solid disciplinary education in science-related fields as undergraduates, have integrated and interdisciplinary approaches to deal with these complex and interconnected problems of the 21st century.

**The Ohio State University's Environmental Science Graduate Program (ESGP) is designed to cut across traditional academic disciplines and colleges to provide sound and effective graduate education and research on these important environmental science issues and solution technologies.**

## MISSION STATEMENT

The National Science Foundation “Grand Challenges for Biological and Environmental Research: A Long-Term Vision” emphasizes that the existential Grand Challenges of the future are: (i) inherently interdisciplinary and complex and (ii) involve not just science and engineering, but also policy, government, and geopolitics. Directly in light of these challenges, the mission of The Ohio State University's Environmental Science Graduate Program (ESGP) is **the pursuit and dissemination of knowledge and the training of skilled researchers and professionals in the interdisciplinary field of environmental science.** ESGP, an interdepartmental program, is designed to cut across traditional academic disciplines, departments and colleges to provide sound and effective graduate education and research on interdisciplinary environmental issues.

**The ESGP emphasizes basic research on ecological processes and effects and on applied research and teaching that will contribute to solving the world's pressing environmental problems.** Specifically, our academic program provides an interdisciplinary curriculum across physical sciences and engineering, biological sciences, and social sciences with disciplinary depth in established specializations or self-designed by the graduate student's committee.

The interdisciplinary curriculum of ESGP is uniquely designed to avoid overlap with established graduate program curricula at Ohio State. In line with the Discovery Themes Initiative at The Ohio State University, which focuses on critical societal needs and environmental issues, ESGP is designed to provide novel interdisciplinary graduate education and research by bringing together disciplines and experts from across campus.

# BY THE NUMBERS

## AUTUMN 2018 ADMISSIONS

*Total Applicants for 2017:* 83

MS – 39

PhD – 44

*Admitted and Confirmed for 2018*

MS – 10

PhD – 8

*Incoming Students GRE Avg.*

MS – 315

PhD – 316

*Incoming Avg. Undergrad GPA*

MS – 3.4

PhD – 3.3

## FELLOWSHIPS AND AWARDS

ESGP students competed for and won numerous fellowships between 2017 and 2018. 15 students received nationally competitive external and internal fellowships or monetary awards.

## PLACEMENT

ESGP graduates are successful in securing industry, government, and academic positions. From 2013 to 2017 we have graduated 52 total students (25 masters and 26 doctoral, and one student receiving both an MS and a PhD) from ESGP. The table below shows placement data. These graduates have been awarded positions at prestigious institutions in the U.S. and abroad, including:

- **Academia:** State University of New York (SUNY), Syracuse, NY
- **Post-doctoral Researcher / Research Scientist:** Passaic River Institute, Montclair State, New York, NY
- **Government:** U.S. Department of Energy, Washington, DC

## WHY ESGP?

- Access to high quality graduate students of diverse backgrounds
- Interdisciplinary education and training
- Meaningful interdisciplinary collaboration and access to resources and facilities through faculty across the full breadth of environmental research at The Ohio State University
- Flexibility in designing the students' curriculum
- Additional resources for supervisors' home departments and research programs in the form of fellowships, Graduate Teaching Associate support, travel and presentation support, and course credits
- Pursue degrees with specialization tracks: Agroecosystems, Water Issues, Climate Change Science and Policy
- Design new specialization tracks across departments and Discovery Themes

# SPECIALIZATIONS

M.S. and Ph.D. students can select one of five program options:

## **1. GENERAL STUDY (NO SPECIALIZATION)**

## **2. AGROECOSYSTEMS SCIENCES**

The whole-system approach to sustainable agricultural and food systems is the interdisciplinary area of agroecosystems sciences. Agroecology links ecology, culture, economics and society. Agroecosystems Science research areas include:

- Local food system development, food system assessment and sustainability
- Watershed ecology and participatory water quality management programs
- Renewable energy from agroecosystems
- Sustainability science and policy

## **3. CLIMATE CHANGE SCIENCE AND POLICY**

Research on climate change at both the scientific and policy-making level inherently requires an interdisciplinary approach that bridges the gap between social and natural sciences. Research themes addressed by the climate change specialization program include:

- The global water cycle including causes and consequences of sea level rise, and sustainability of water resources
- The global energy economy, including conventional and alternative energy sources, technology, and policy
- Rapid climate change including changes in the mean and variation in temperature and precipitation and their effects on managed and natural ecosystems, including biodiversity and agroecosystems

## **4. WATER ISSUES**

Research on Earth's water is interdisciplinary, requires ability to bridge the social and natural sciences and engineering. Water Specialization research areas include:

- Water in global change
- Water quantity, hydrologic forecasting and remote sensing
- Water quality, the role of water in biogeochemical cycles
- Consequences of human activities to aquatic ecosystem services
- Consequences of aquatic ecosystem conditions to public health
- Water rights in coupled human-natural systems
- Water contaminant fate and ecotoxicity
- Collaborative watershed planning
- Transboundary water governance

## 5. ENVIRONMENTAL PUBLIC HEALTH

Understanding the intersection between public health and the environment requires an interdisciplinary approach. Epidemiology, toxicology, and global health are all being affected by climate change. Environmental public health research interests include:

- Global health and environmental microbiology
- Environmental health science
- Epidemiology, toxicology, and public health
- The role of the environment in public health issues

Clarification: ESGP Specializations are not Ohio State Graduate Minors or Interdisciplinary Specializations.

The specializations listed above apply only to ESGP students. Once an ESGP student completes the requirements for an ESGP specialization, the accomplishment is written onto the student's official university transcript as a note under the degree program.

By contrast, there are other graduate minors and interdisciplinary specializations available at the university level that are open to any graduate students, including ESGP students. These are like “mini-degrees” outside of any one student's graduate program. More information about these university-wide graduate minors/ specializations can be found at the Graduate School.



# ADMISSIONS

## **Applicants must meet the minimum graduate school requirements**

- A four-year baccalaureate or higher degree from an accredited college or university prior to beginning graduate studies
- At minimum, a cumulative grade point average equivalent to at least 3.0 on a 4.0 scale (B grade) in all prior undergraduate and graduate level course work.
- International applicants must also provide a 550 on the paper based TOEFL test, a 213 on the computer based TOEFL, 79 on the Internet Based TOEFL or 7 on the International English Language Testing System (IELTS) exam.

## **Applicants must also meet the ESGP minimum standards**

- GRE score above 311 on the new GRE test or 1200 on the old test, combined verbal and quantitative, and 3.5 on analytical writing.
- An undergraduate degree from an accredited college or university with a major in natural, physical or social sciences. A minimum of 4 credits of college calculus and/or statistics; 7 credits in physical science; 3 credits in biological sciences.

Applications from those in fields not normally related to environmental science will be considered when special merit warrants. Students with limited course work deficiencies may be admitted conditionally and must remove deficiencies within an academic year.

The application is reviewed by the 7-member ESGP Graduate Studies Committee and all aspects of the application are considered. The committee is looking for evidence of interdisciplinary interest and leadership potential.

## **Applicants must find an ESGP advisor**

All ESGP students must have an advisor before they can be admitted to the program. This pairing is the most challenging step in the process. The pairing works in several directions.

- Prospective students contact faculty directly based on their information posted on the ESGP Directory.
- Faculty may request to review application files — both complete and pending — seeking appropriate students for their research team. If not yet accepted, faculty can inform the office of their willingness to serve as the student's advisor.
- Listings of accepted students needing advisors are circulated to the faculty to aid in finding advisors for students.

The pairing process can take time, based on the availability of GRA support.

Here are some application/acceptance/matriculation numbers from a typical year:

- Completed Application: 65 Students
- Accepted by ESGP Graduate Studies Committee: 50 Students
- Paired with advisors, admitted, and enrolled: 15 Students

# APPLICATION INSTRUCTIONS

## Application

Our program admits for autumn semester and students must apply online and submit all materials (Graduate Admissions and program requirements) electronically through the Office of Graduate Admissions. Your recommenders will receive an email from the university 1-3 days after you submit your application with instructions for uploading their letters.

*November 30:* International applicant deadline for fellowship consideration

*December 15:* Domestic applicant deadline for fellowship consideration

*February 15:* Deadline for non-fellowship consideration or self funded

As a member of the Big Ten Academic Alliance, Ohio State participates in the FreeApp Fee Waiver Program. For information on the program and to see if you are eligible, go to the Big 10 Academic Alliance web site.

## Application Components

- Personal statement
- Résumé and Curriculum Vitae
- Three letters of recommendation\*
- University Transcripts\*\*
- Graduate Record Examination (GRE) scores
- Test of English as a Foreign Language (TOEFL) scores (for international applicants)
- One or more Affidavit of Support for International Graduate Students forms and all required supporting financial documents (for international applicants)
- A \$70 application fee for foreign students or \$60 application fee for domestic students

\*Note on Letters of Recommendation: You will be asked to list 3 recommenders as part of the online application and they will receive an email with a link to upload letter.

\*\*Note on Transcripts: Please use the "Upload Transcript" button to send copies (front and back) of official transcripts from ALL institutions where college credit was earned — even if you attended while in high school. International Credentials should include certified educational records and degree certificates or diplomas in the original language with English translations. If you are admitted to the university as a graduate student, you will be required to submit final official transcripts. Do not send the Graduate and Professional Admissions Office paper official transcripts unless specifically requested by our office. Transcripts take 2-4 weeks to process once received. Students are responsible for requesting official transcripts from their institutions in plenty of time to allow Ohio State to process them prior to the deadline.

If you have questions about your application, please contact the Office of Graduate Admissions. Phone: (614) 292-9444 or email: gradadmissions@osu.edu.



### **Instructions for the Personal Statement**

The Graduate Studies Committee wants to understand as fully as possible your interest in research pursued through the Environmental Science Graduate Program. Toward this objective, prepare a detailed statement covering the questions and points as outlined. The questions below can be adequately addressed in two typed single-spaced pages or less.

1. Describe your understanding of the purpose of environmental science.
2. Describe the specific nature of your undergraduate and/or postgraduate research experience.
3. Describe full or part-time employment, volunteer, or extra-curricular activities as they relate to environmental science.
4. Discuss how your academic and social development has contributed to your motivation and potential for scientific research.
5. Why are you seeking advanced education at this time? Do you have the necessary resources to begin a study program if you do not receive financial support through Environmental Science or the university?
6. Why did you choose to apply to the Environmental Science Graduate Program at The Ohio State University?

On a separate sheet of paper: based on areas of research that interest you, select three members of the Environmental Science faculty. List your choices in order of preference and specify what particular research problems or fields of study interest you most. This will tell us your interests, as well as let us know who you are contacting. While faculty will sometimes peruse student applications themselves, it is up to you to contact faculty you would like to be your advisor. Feel free to contact more than one at a time.

## **Once Your Application is Complete**

The Graduate Studies Committee of the ESGP will ONLY review applications that are complete. If our graduate studies committee votes to admit a student and faculty member agrees to advise a student (the faculty member will email the ESGP office confirming this), then you will be admitted to the program. Since the pairing process with advisors can take some time, students are encouraged to begin contacting potential advisors at the time of application. Faculty can request to view your application materials through the ESGP office.

## **Contact Information for Questions**

Kelly Malone, the ESGP Coordinator, is your contact for questions about specific ESGP admissions criteria.  
Environmental Science Graduate Program  
3138A Smith Lab  
174 W. 18th Ave.  
Columbus, OH 43210 USA  
Phone: (614) 292-9762  
E-mail: enviro@osu.edu

Contact the Admissions Office if you have any questions about the application or admission process. An admissions counselor will also be happy to check the status of your application for you.

Admissions Office  
Graduate Area  
The Ohio State University  
SAS Bldg. 1st Floor, 281 West Lane Ave.  
Columbus Ohio 43210-1200  
Phone: (614) 292-9444  
Fax: (614) 292-3895

# **FUNDING OPPORTUNITIES**

A variety of funding opportunities are available to students in The Environmental Science Graduate Program (ESGP). Students may also seek funding through competitive grants. For more details on alternative funding sources, see The Graduate School's funding page.

## **GRADUATE FELLOWSHIPS**

Graduate fellowships are prestigious awards from the Graduate School that provide students with a stipend, coverage of all full tuition and fees, and subsidized health insurance.

### **The University Fellowship**

To be nominated for a University Fellowship you must have a complete application uploaded into the Admissions system by the December 15 deadline. For international applicants, the due date is November 30. Once your application

is complete, it will be presented to the Graduate Studies Committee. If you qualify, you will be nominated for a fellowship and your file will be sent to the Graduate School for evaluation by the Fellowship Committee. If you are awarded a University Fellowship, you will be notified by the Graduate School. Receiving a fellowship makes you a stronger candidate for your future advisor and is strongly encouraged.

### **The OARDC Fellowship**

Students studying at the Ohio Agricultural Research and Development Center (OARDC) in Wooster, Ohio are eligible for the OARDC Director's Associateship.

### **The Fay Fellowship**

Students pursuing the Doctor of Philosophy degree in various fields of environmental science are eligible for the Fay Fellowship. The fellowships support training of the scientists who will be spearheading environmental research, defining our global problems and developing and implementing solutions. Selection of Fellows is competitive based on superior academic ability, demonstrated leadership, relevance and quality of goals, experience related to environmental science and professional references. Applicants are evaluated by an interdisciplinary committee chaired by the Director of the Environmental Science Graduate Program.

## **GRADUATE ASSOCIATE POSITIONS**

Graduate Associateships also provide students with a stipend, coverage of all full tuition and fees, and subsidized health insurance. These positions typically involve a 20-hour per week commitment to research, teaching, or administrative work.

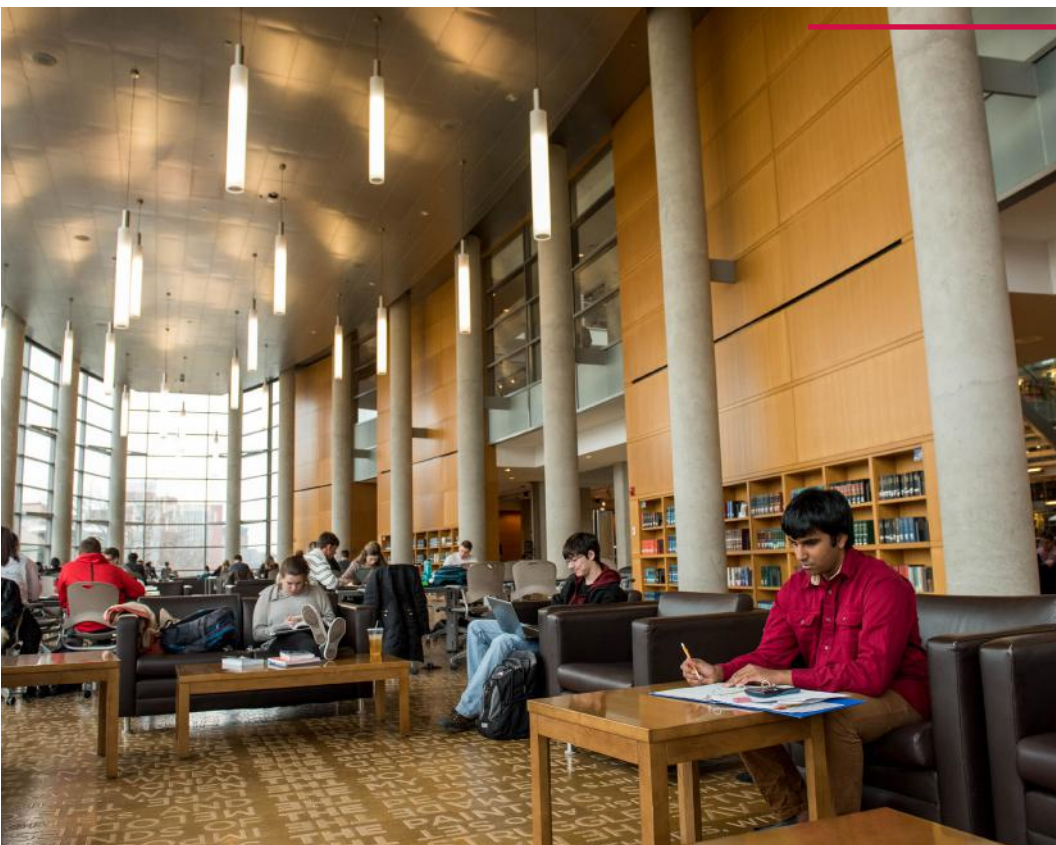
### **Graduate Research Associateships (GRA)**

Applicants can inquire if their potential faculty advisors have funding for a Graduate Research Associate position.

### **Graduate Teaching Associateships (GTA)**

The ESGP has agreements with four different colleges to provide a specified number of teaching assistants in the fields of biology, natural resources, chemistry, and engineering. We review all applications and assign some of our stronger students to the TA positions on a competitive basis. If you are one of the students chosen for these teaching assistant positions, all arrangements will be made for you through the ESGP office.

If you are admitted to the ESGP but do not receive an appointment as a teaching assistant, you are, of course, free to try to find employment on your own. The first place to contact would be the department of your ESGP advisor. We can help you identify those departments that would be the most likely match with your background and perhaps give you the name of a person to contact in that department. However, we will not know which students have been selected for teaching assistant positions until March or April.



### **Graduate Administrative Associateships (GAA)**

A Graduate Administrative Associate positions is offered each year through the ESGP office.

### **DIVERSITY IN GRADUATE STUDIES**

The Office of Recruitment and Diversity Services within Arts and Sciences works in partnership with departments, such as ESGP, research centers and other campus units to ensure a supportive and thriving intellectual environment for diverse populations of students as they pursue advanced degrees.

For more information about ASC graduate diversity services, visit their site: [asc.osu.edu/academics/graduate-students/diversity](http://asc.osu.edu/academics/graduate-students/diversity)

Some forms of support can be found below.

- Application Fee Waivers & SROP Fellow Fee Waivers
- Discovery Scholars Program
- Funding Resources: SROP & Enrichment Fellowships
- Student Support - for more info contact [hernandez.16@osu.edu](mailto:hernandez.16@osu.edu).

## COLLABORATIONS ON CAMPUS

DISCOVERY THEMES INITIATIVE	# OF ESGP FACULTY
Foods for Health	3
Initiative for Food and AgriCultural Transformation (InFact)	16
Infectious Disease	2
Materials and Manufacturing for Sustainability (M&MS)	3
Sustainable and Resilient Economy (SRE)	14
<b>TOTAL</b>	<b>38</b>

The interdisciplinary ESGP has established working relationships with centers, institutes, and the Discovery Themes Initiatives at Ohio State. Thirty-five percent of ESGP faculty are active participants in the five Discovery Themes above.

ESGP faculty represent 17% and 13% of all faculty in the InFact and SRE Discovery Theme Initiatives, respectively. Many of the new faculty DT hires have joined the ESGP program because their research programs are highly interdisciplinary, ESGP provides them with high quality interdisciplinary graduate students and with the possibility to effectively collaborate with other faculty in their Discovery Theme but in other departments as co-supervisors and committee members for these students. Many faculty have commented that ESGP is essential to meet their Discovery Theme research project needs.

*Discovery at Ohio State is the way in which we connect diverse ideas and people across disciplines and communities. It's the way that our outstanding faculty, devoted university campuses, and engaged partners connect to form and scale teams that translate knowledge into solutions. It is a passion to ask questions yet to be asked and tackle problems yet to be solved.*

*The Discovery Themes Initiative embodies this attitude. Building on the full strength of Ohio State's teaching and research, with the support of the Office of Research, we are further expanding our capacity to address complex problems at a pace and scale few others can match.*

# RESEARCH RESOURCES

## **Ohio Agricultural Research and Development Center (OARDC)**

[oardc.osu.edu/](http://oardc.osu.edu/)

The Ohio Agricultural Research and Development Center is committed to enhancing the well-being of Ohioans, Americans, and people worldwide by being the premier in food, agriculture, family, and environmental research, and by providing advanced education for both domestic and international students in these fields. Goals of the OARDC include sustainable agriculture, stewardship of natural resources, and the favorable positioning of Ohio in the global economy. These and other missions are achieved through the many centers and facilities that compose the OARDC itself; some are linked below:

- Carbon management and Sequestration Center
- Center for Advanced Functional Food Research and Entrepreneurship
- Center for Applied Plant Sciences
- Food Innovation Center
- Molecular and Cellular Imagine Center
- Ornamental Plant Germplasm Center
- Plant and animal Agrosecurity Research Facility
- Service Testing and Research Laboratory
- The Ohio BioProducts Innovation Center (OBIC)

## **The Wilma H. Schiermeier Olentangy River Wetland Research Park**

[senr.osu.edu/research/schiermeier-olentangy-river-wetland-research-park](http://senr.osu.edu/research/schiermeier-olentangy-river-wetland-research-park)

The Wilma H. Schiermeier Olentangy River Wetland Research Park is a 52-acre urban research facility intended for large-scale and long-term aquatic research. Located near the Olentangy River, the park boasts two experimental wetland basins, an oxbow wetland, bottomland hardwood forest, and a mesocosm compound. The site also includes both analytical and teaching laboratories, a wet laboratory, and classroom spaces located in the Heffner Teaching and Research Building. Faculty, staff and students all participate in applied research studying populations, ecosystems and landscapes. As a result, the Wetland Research Park has become a tremendous asset in graduate student training, environmental service, water resource management, and restoration and conservation efforts.

## **Stone Lab**

[stonelab.osu.edu](http://stonelab.osu.edu)

Located on Gibraltar Island, Put-In-Bay, Stone Laboratory — a fieldstation since 1895 — joined the Ohio State University in 1925. As an Ohio Sea Grant education and outreach facility, and in cooperation with the Lake Erie community, Stone Lab works to solve the region's most important environmental and economic issues. The wet-lab, which includes flow-through aquariums up to 250-gallons, offers a chance for herpetologists and ichthyologists to study lake-water systems. The Algal & Water Quality Lab allows researchers to measure levels of chlorophyll, cyanobacteria toxins, organic and inorganic suspended solids, and nutrients such as nitrogen and phosphorous. The complex also offers housing for researchers who study Lake Erie and who provide the science behind informed policy and management decisions regarding the both the environment as well as science education.

## **The Byrd Polar and Climate Research Center**

*bpcrc.osu.edu*

The Byrd Polar and Climate Research Center is an OSU Office of Research center focused on research, education, and outreach to further the understanding of: polar and alpine regions, cryospheric processes, reconstruction of past climates, climate variability and change, and the impacts of climate on the environment and society. The Byrd Center works to accomplish their mission by connecting experienced researchers with advanced research tools. The Center itself, named for arctic explorer, Admiral Richard E. Byrd, houses chemical analysis facilities, a cold storage (ice core) facility as well as cold labs, the Goldthwait Polar Library, a meteorology Laboratory, a polar rock repository, a remote sensing laboratory, and a sediment core repository and lab. These resources have allowed the Byrd Polar and Climate Research Center to lead in the areas of polar, alpine, and climate research for the last 60 years.

## **Center for Public Health Practice (Ohio Public Health Training Center)**

*u.osu.edu/cphp*

The Center for Public Health Practice focuses on organizational development, adult learning, group facilitation and process design, and project management in order to improve the skills of public health practitioners and to build the capacity of the organizations where they work. The CPHP has also been a part of the Public Health Training Collaborative (PHTC) network for nearly two decades, working directly with Ohio's Local Health Departments (LHDs) to ensure agencies have the tools and training to successfully complete accreditation requirements. Ultimately, through inclusivity and cooperative study, the Center works to better the health and well-being of communities.

## **Center for Health Outcomes, Policy and Evaluation Studies (HOPES)**

*cph.osu.edu/hopes*

## **Campus Microscopy & and Imaging Facility (CMIF)**

*cmif.osu.edu*

## **Orton Geological Museum**

*ortongeologicalmuseum.osu.edu*

## **University Libraries**

*libraries.osu.edu*

Ohio State maintains one of the largest library systems in the United States, with access to a collection totaling more than 5 million print volumes and 4.3 million microfilms. In addition to the Thompson Library and two undergraduate libraries, the University Libraries system also includes 24 individual subject-oriented libraries in such areas as social work, business, Black studies, women's studies, communication, East Asian studies, education, engineering, fine arts, and many more. Students also have access to the collections of the CIC (Big Ten plus University of Chicago) and Ohio regional libraries. The computer terminals in the Sociology Research Laboratory are linked to the online Ohio State catalogue and to a computerized catalogue of libraries at universities throughout Ohio. Materials also may be renewed online and sent directly to a campus address.

The professional staff in the Information Services Department, located in the Thompson Library, offers assistance to all patrons and is thoroughly familiar with the library's large collection of basic and specialized reference works. Students are encouraged to confer with a reference librarian or subject specialist for advice on bibliographic sources for research projects, including theses or dissertations. The libraries offer a wide variety of automated literature searching services, on CD-ROM. The Health Sciences Library provides access to the various databases of the National Library of Medicine, and the Moritz Law Library offers specialized searches. In addition, through our interlibrary loan service, materials from libraries throughout the world may be obtained.

### **Office of the Chief Information Officer (OCIO)**

*ocio.osu.edu*

OCIO helps faculty, students, and staff make the best use of technologies for learning, teaching, research and administration. Services include Internet/web access; e-mail; support for web design, multimedia, online learning and classrooms; and university database administration. Free workshops are offered each semester covering the use of a range of computer software, including widely used statistical and graphics programs and computing languages.

### **Office of International Affairs (OIA)**

*oia.osu.edu*

In addition to administering study abroad and international travel programs, OIA holds fellowship competition for foreign language study (FLAS), funds travel grants for international dissertation research, and coordinates international speakers and conferences. Ohio State is home to one of the strongest set of international studies centers in the country



## OUR STUDENTS



### ALFIAN ALFIAN

*Why did you choose the Environmental Science Graduate Program Ohio State for graduate school?*

As a local government officer of Environment and Forestry Agency in Indonesia, I definitely looking for a university which is offering master's degree along with specialization that is needed by my agency once I return to my country. I have found it at The Ohio State University Environmental Science Graduate Program that offered Climate Change and Policy specialization.

I am sure that all the skills and experiences that I will gain will definitely enrich me to develop fresh innovations, need-based planning, measurable indicators, and effective implementation strategies to contribute to the preservation of the environment in my region.

*What makes the Environmental Science Graduate Program at Ohio State unique?*

ESGP is an inter-disciplinary program, which allows students taking research topic and supervisor across the programs based on their area of interest. That makes ESGP unique. Furthermore, providing a variety of courses from three core sciences such as biology, physics and social sciences bring the students broader outlooks and thoughts. In ESGP, the students from different background will share knowledge and learning as well as build a strong network as a ESGP family.



### SAM COCHRAN

*Why did you choose the Environmental Science Graduate Program Ohio State for graduate school?*

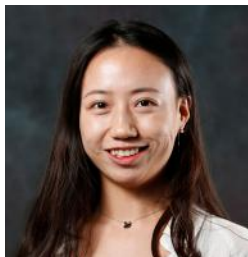
Originally, I began my graduate school experience pursuing a Master of Science in environmental health sciences through the College of Public Health. I had attended The Ohio State University for my Bachelor of Science in biology, with a minor in public health, and in looking toward furthering my education, I sought a program that combined my interest in human health and

health of the environmental. As I entered my program however, I was made aware that there would be some 'reshuffling' for the coming year. If I chose, rather than a degree in public health — focusing on environmental health science — I could pursue a degree in environmental science — with a specialization in environmental public health — offered through the Environmental Sciences Graduate Program. I was uneasy about switching at first, having already completed a full year, but the ESGP faculty have been incredibly accommodating, and I was impressed with the how diverse they were in their backgrounds and disciplines. I feel I immediately settled in and I am so excited to finish my Master of Science with ESGP.

*What makes the Environmental Science Graduate Program at Ohio State unique?*

The greatest asset of the Environmental Sciences Graduate Program is how interdisciplinary it is. As communities become ever more globalized, an inter-

disciplinary approach will be ever more necessary to find solutions for the social and environmental issues that become ever more intertwined. This is the lens through which ESGP core courses are selected, and through which ESGP students are taught to approach the world. I feel that is a valuable skill to have and is a skill imparted to a degree that is unique to the Environmental Sciences Graduate Program.



### **YANG LI**

*Why did you choose the Environmental Science Graduate Program Ohio State for graduate school?*

I think Environmental Science is interesting and useful. The ultimate goal of Environmental Science is to provide a better living environment for all living beings. Currently, several environmental problems, e.g., deforestation, water pollution, soil erosion, and salinization, are asking for multidisciplinary solutions.

This process involves studies of mechanisms of interaction between human beings and nature, climate

and vegetations, which is what exactly ESGP is focusing on. That makes me put ESGP on the top of my list.

*What makes the Environmental Science Graduate Program at Ohio State unique?*

1) Interdisciplinary is a worldwide trend for researchers from different areas to work together. The collision of wisdom can generate huge power. Moreover, sciences are not isolated islands, they interact with each other. Practical issues never belong to an exclusive area, that's why interdisciplinary is need to tackle those problems.

2) Because of the geographical location and the historical pollution issues, Ohio State has a long history of environmental science study as well as research background, which gives ESGP a strong and firm support.

3) Also, ESGP of OSU maintains its worldwide reputation through recruiting and retaining outstanding faculties. These excellent faculties will, in turn, bring an amazing amount of research resource. These resources support students in a comprehensive way by providing frontiers and insights in geography research, graduate assistantship, internship and job opportunities.



### **PATTAMA ULRICH**

*Why did you choose the Environmental Science Graduate Program Ohio State for graduate school?*

The diverse curriculum and majors match better with my career goal and interests.

*What makes the Environmental Science Graduate Program at Ohio State unique?*

Access to professors and advisors from across health science colleges and beyond makes my systems dynamic research interest and dissertation possible.

**For a complete list of our students, visit [esgp.osu.edu/directory](http://esgp.osu.edu/directory)**



## —● **STUDENT ASSOCIATION BOARD**

The Environmental Science Graduate Program - Student Association (ESGP-SA) organizes events for students, faculty and alumni to network and share ideas. These gatherings provide meaningful opportunities for ESGP peers to come together as the board is interested in hearing from faculty, students and alumni. Photos above courtesy of the ESGP-SA Instagram: @esgp\_sa

# THE UNIVERSITY AND THE CITY

## THE CITY OF COLUMBUS

The state's capital and largest city, Columbus is one of the fastest growing metropolitan areas in the United States. Columbus has maintained a strong economy and leadership in education, government, and business — which means plenty of part-time jobs for students and a variety of employment opportunities after graduation. Columbus has what you might expect from a major metropolitan area — excellent restaurants, a metropolitan park system, sporting events, specialty neighborhoods, theaters, and museums.

## A WORLD-CLASS UNIVERSITY

The Ohio State University's main Columbus campus is one of America's largest and most comprehensive. In our dynamic community, more than 56,000 students select from 165 undergraduate majors and more than 200 master's, doctoral, and professional degree programs. As Ohio's best and one of the nation's top-20 public universities, Ohio State is further recognized by a top-rated academic medical center and a premier cancer hospital and research center.

Exploration, discovery, and creativity are at the core of all we do. Our university community collaborates across disciplines to solve real-world problems, improve the quality of the human condition, and create new knowledge, particularly in critical areas such as global climate change, cancer, infectious disease, advanced materials, and ag-bio products that feed and fuel the world. Everything good about Ohio State derives from our vastness of resources: programs, people, and partnerships.

Students at Ohio State come from every state in the nation and from nearly every nation in the world. You'll find a wide range of social, cultural, and religious opportunities, as well as hundreds of student organizations. The diversity and quality of our student body over a unique learning environment both inside and outside the classroom.

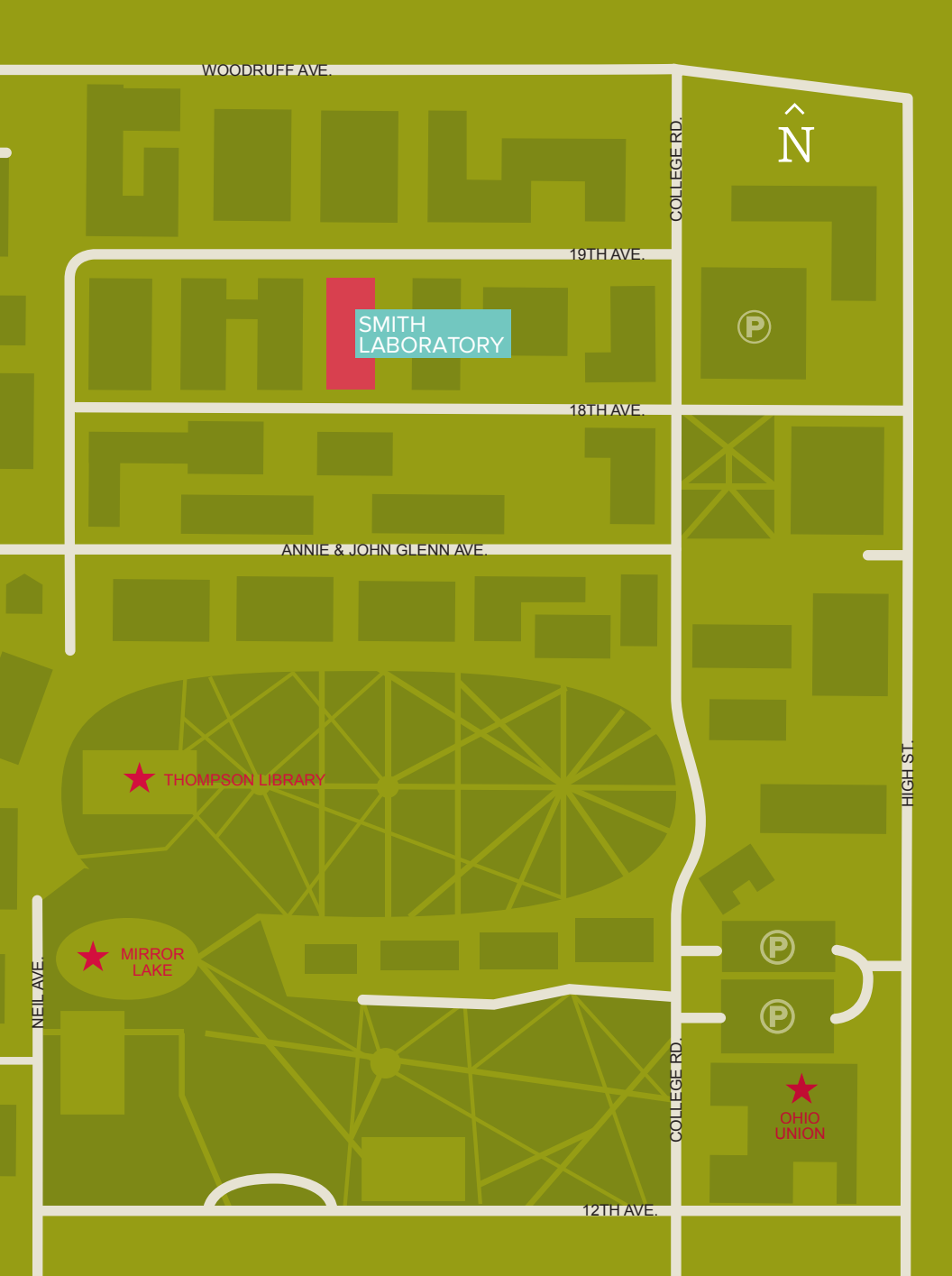
## GRADUATE STUDENT HOUSING

As an alternative to on-campus housing, you have a range of housing options available to you through Ohio State. The university maintains coed graduate residence halls, which offer attractively furnished single and double rooms designed to provide a mature atmosphere for advanced study.

The university also maintains student housing for families in Buckeye Village, an apartment complex close to campus, shopping, and other facilities. Learn more about on-campus housing by visiting [housing.osu.edu/gradpro.asp](http://housing.osu.edu/gradpro.asp), and get information on on-campus housing at [oncampus.osu.edu](http://oncampus.osu.edu). Contact University Residences and Dining Services, 350 Morrill Tower, 1910 Cannon Drive, Columbus, OH 43210, (614) 292-8266, if you have additional housing questions.



● **CAMPUS MAP**



**The Environmental Sciences Graduate Program is located at:**  
3138A Smith Lab | 174 W. 18th Ave. | Columbus, OH 43210



**THE OHIO STATE UNIVERSITY**

---

**ENVIRONMENTAL SCIENCE GRADUATE PROGRAM**

3138A Smith Lab  
174 W. 18th Ave.  
Columbus, OH 43210 USA

Phone: (614) 292-9762  
E-mail: [enviro@osu.edu](mailto:enviro@osu.edu)