



SOUTH AFRICA COSTA RICA

Field-Based Programs


- **Ecology**
- **Conservation**
- **Tropical Biology**
- **Global Health**




About OTS

OTS offers programs to immerse students in learning and research that will impact the future of the tropics and subtropics. Through the participation of field-based study abroad programs, as well as in-person practicums and internships, OTS hopes to inspire the next generation of change agents, critical thinkers, scientists, and practitioners on their paths to discovery and global leadership.

SOUTH AFRICA

 South Africa's rich biological and cultural diversity make it an exceptional location in which to examine critical issues in conservation biology and ecology. It is the ideal laboratory to understand the challenges of balancing development and conservation. It is a country in a state of change that continues to redefine itself in the post-apartheid era. OTS' base in South Africa is the species-rich savanna of Kruger National Park. The Skukuza Research Station offers students a unique opportunity to participate in "boots on the ground" research in South Africa's oldest and largest national park.

COSTA RICA

 Tropical rain forests, cloud forests, tropical dry forests, mangrove swamps, wetlands, high elevation páramo, coral reefs – Costa Rica boasts a stunning diversity of ecosystems. Part of the Mesoamerica biodiversity hotspot, Costa Rica is a pioneer in the preservation of its natural resources and a model for different strategies to "market the environment," solve local and global conservation issues, and encourage people to live with nature in a more sustainable way. Costa Rica's innovative environment, health, and education policies make it a perfect place to learn about tropical biodiversity, conservation, and climate change.



Arlene Polar



Martin Stoner



Hema Venkata

SOUTH AFRICA

SUMMER PROGRAM

GLOBAL HEALTH ISSUES

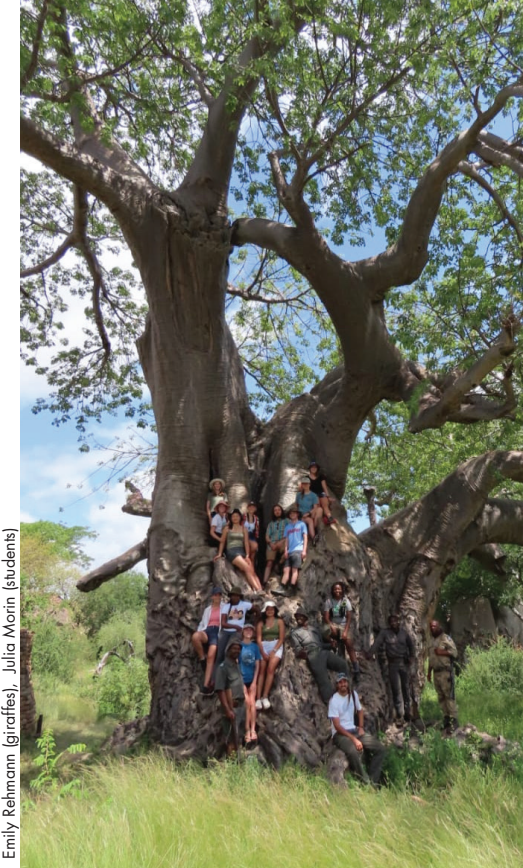
- What is the impact of economic and social policies on access to health care?
- What is the impact of historic, economic, and political legacies on the burden of disease and health care disparities?
- How does land use and climate change impact biodiversity, ecosystem services, and South African rural communities?

This program will allow you to explore a range of health issues and medical practices in South Africa through a transdisciplinary lens. An integrated learning model, which incorporates both classroom and field instruction will help you understand the fundamental principle of health as a human rights

issue. In order to understand how the burden of disease and access to health care changes along an urbanization gradient, you will travel extensively in northern South Africa from the urban center that is Johannesburg, the peri-urban settlements of Acornhoek, through to the deep rural areas of Venda. You will conduct faculty-led, collaborative research projects and participate in a three-night homestay in a village in the remote HaMakuya district in Venda, Limpopo Province. You will spend the last portion of the course at OTS' Skukuza Research Station in the world-renowned Kruger National Park, wrapping up the academics, exploring ethnobotany, and enjoying the spectacular wildlife.

COURSE:

Global Health Issues (4 credits)



Emily Rehmann (giraffes), Julia Morin (students)



AFRICAN ECOLOGY & CONSERVATION

- How are plants and animals adapted to life in South Africa's ecosystems?
- How do conservationists manage the extensive ecosystems required to maintain the world's largest land mammals?
- How can human communities and protected area managers collaborate to create sustainable landscapes for people and wildlife?
- How do protected area veterinarians manage diseases in vertebrate populations?

These are just some of the critical challenges that ecologists and conservationists face in Kruger National Park (KNP), one of the world's premier protected areas. You will delve into the origins and drivers of southern Africa's astonishing biodiversity and the behavioral, physiological, and morphological adaptations to survive and thrive in savannas and other disturbance-driven ecosystems. This field-based, experiential learning program includes field lectures, skills workshops, and fieldwork designed to introduce you to these types of challenges and guide you through research projects that will help address critical issues including wildlife diseases, the ecology and management of megaherbivores, and a landscape approach to ecosystem management. You will have the unique opportunity to live and work in the KNP and learn from invited professors, as well as experts in the fields of ecology, environmental economics, and conservation. You will work with your professors to design research projects that will contribute meaningful scientific data to the South African National Parks. As part of the history and culture course, you will spend three nights with a family in a rural village community to gain important socio-economic context for the ecology and conservation courses. At the end of the semester, you will conduct a three-week capstone research project, write up a short scientific paper, and present your findings to KNP scientists.



Laurence Kruger



Laurence Kruger

COURSES:

South African Ecosystems and Diversity (4 credits)

Directed Field Experience (4 credits)

Conservation, Biodiversity, Management, and Protected Area Design in South Africa (4 credits)

South Africa: Special Topics in History (3 credits)

Field Experience in South African History (1 credit)



Laurence Kruger



Michelle Li



SOUTH AFRICA

SUMMER FIELD PRACTICUM

DISEASE ECOLOGY & WILDLIFE MANAGEMENT

This field-based practicum focuses on disease ecology and applied veterinary epidemiology in and around Kruger National Park, where wild megafauna is all around you. It is perfect for pre-vet, animal science, and wildlife management focused students. It is run in partnership with local veterinary scientists and is designed to provide you with direct insights into current challenges faced by wildlife conservationists in South Africa and veterinary health care in resource-poor, rural agricultural areas. Spend your days with field veterinarians, gaining experience in practical and theoretical disease research work. This program is designed to get you trained in techniques for monitoring diseases in different vertebrate taxa in multiple environments. While promoting applied clinical and field skills, you will focus on the broader ecological, social, and economic context of animal disease ecology, conservation medicine, and One Health at the intersection of wild and domesticated animals. Your hard work will make a significant contribution to long-term scientific monitoring in the area. This program can also function as an internship.



Michelle Li



Brooks Bronner



COSTA RICA

SUMMER PROGRAM

TROPICAL BIOLOGY

- What are the components that maintain tropical biodiversity?
- What are key processes influencing species interactions, biodiversity, and ecosystem dynamics in tropical habitats?
- How do human activities impact tropical ecosystems?

During this 4-week field course, you will visit all three OTS research stations, as well as other unique sites throughout Costa Rica. Integrating classroom and field instruction introduces students to some of the most critical issues facing tropical biodiversity and threatened ecosystems, as well as the fundamental principles of tropical biology, ecology, and natural history of local plants and animals. The ecological complexity of the tropics, the patterns of species diversity, and the types of species interactions that characterize these systems are a major theme. You will complete the course by engaging in independent research and then present your results with the support of program faculty.

COURSE

Fundamentals of Tropical Biology (4 credits)



Ruben Ramos (monkey), Morin Stoner





RETURNING
SPRING 2024!

ADDITIONAL
SCHOLARSHIPS
AVAILABLE



SEMESTER PROGRAM

TROPICAL BIOLOGY ON A CHANGING PLANET

- How are biodiversity and ecosystem functions impacted by human actions?
- What are the challenges to ecological restoration in the tropics?
- How are the fundamentals of tropical biology used to understand conservation strategies?

This historically significant program will provide you with the opportunity to spend several months exploring some of the most endangered ecosystems on the planet. While staying at all three OTS field research stations, national parks, private reserves, and other important sites, you will learn first hand about the various strategies, challenges, and triumphs of balancing human needs with conservation. A three-week homestay accompanied by a Spanish language course will help you understand and explore Costa Rican culture. A series of research projects led by program faculty and invited experts will equip you with the necessary skills to develop research projects related to the ecology and conservation of Neotropical ecosystems.

Sign up on our website to be notified when applications are open!



Martin Stoner



Donovan Loh
Arlene Polar



Lisa Nupen



Laurence Kruger



Sofia Rodriguez, Ph.D.

DIRECTOR OF ACADEMICS –
COSTA RICA

I've been in love with nature since a child. My grandma used to take me to the forest and show me how to easily rinse off the mud by swimming in a creek. My connection with the forest, mountains, and reefs only deepened as a student, conservationist, and teacher in Costa Rica, Panama, Mexico, and the U.S. At OTS, I have taught courses at every level from high school to graduate, and I have spent endless hours immersed in the forests, wetlands, and laboratories at OTS' research stations, having the best time at what I love doing, sharing my love of forests (and frogs) to students. Outside OTS, I enjoy yoga, dancing, pottery, and baking sourdough bread.



Samantha Marzi

STUDENT – SOUTH AFRICA

College of the Holy Cross

The OTS African Ecology & Conservation program goes above and beyond as a study abroad program in every way. The enthusiasm of the lecturers for their work is infectious, creating a constant environment of encouraged curiosity and excitement around all the projects and research. I came to the program thinking I wanted to focus on one aspect of ecology (the animals) and left with a surprising new passion (savanna grass!). The academic projects were not only interesting but challenged me in all the right ways while providing once-in-a-lifetime field experiences that I'll never forget. The best part of the program, however, was living and growing alongside my peers, who are now some of my best friends. Learning about myself and how I want to shape my future was made all the better watching my friends have similar realizations right next to me. I cannot thank OTS enough for the friendships, experiences,

WHO SHOULD APPLY

In order to apply, you must:

- be at least 18 years old by the program's start date
- be in good standing at your home college/university
- have a minimum 2.7 GPA
- have completed at least 2 semesters of college-level biology, or related coursework (except for Global Health Issues which only requires 1 semester)
- additional requirements, depending on program (check website)

HOW & WHEN TO APPLY

DEADLINES

SPRING	November 1
SUMMER	March 1
FALL	April 1

Please note that OTS has a rolling admissions policy, and programs may fill before these deadlines. **APPLY EARLY!**

For application instructions, please visit our website at tropicalstudies.org. Contact us at undergraduate@tropicalstudies.org should you have any questions.

Scholarships – 60th Anniversary Funds

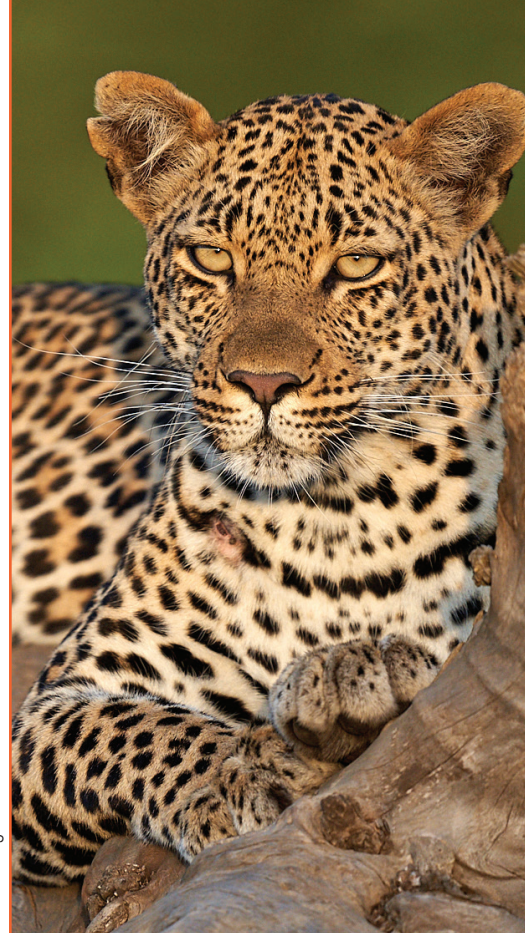
OTS is celebrating 60 years of studying the tropics by providing extra opportunities to all eligible students interested in participating in our programs. We make scholarship applications available to students upon acceptance into an OTS program. We encourage you to apply early if you will be requesting a scholarship. The earlier you apply, the better your chances of receiving an OTS Scholarship.

Health and Safety

OTS is deeply committed to student safety and well-being. We monitor national and international events that might affect our students. Five decades of risk assessment, emergency response, and crisis resolution have enabled OTS to maximize student safety and security. All students participate in an on-site orientation program upon arrival in Costa Rica or South Africa. For additional safety information, please contact the OTS Enrollment Management staff at undergraduate@tropicalstudies.org.

Covid-19 Vaccination Policy

To participate in an OTS field-based program, students must be fully vaccinated against Covid-19. All OTS students and staff must also adhere to any local health and safety guidelines. This policy is subject to change. For questions, or for more information, please visit <https://tropicalstudies.org/covid-info/>.



Laurence Kruger



Emma Szegvari



**Organization for
Tropical Studies**

**OTS ENROLLMENT
MANAGEMENT**

919.684.5155

undergraduate@tropicalstudies.org

tropicalstudies.org



@tropicalstudies



Laurence Kruger