



ECOLOGY PROJECT  
INTERNATIONAL

# EPI TEACHER FELLOWSHIP

PROFESSIONAL DEVELOPMENT PROGRAM

# EPI TEACHER FELLOWSHIPS

2022 PROFESSIONAL DEVELOPMENT PROGRAM



## PROGRAM HISTORY & OVERVIEW

Since 2000, Ecology Project International (EPI) has involved more than 45,000 students in conservation education field programs in six countries. In 2013, EPI began hosting an educator-exclusive course, now known as EPI's Teacher Fellowship, which immerses teachers in our experiential education curriculum.

The Teacher Fellowship is an 8-day field workshop designed to engage participants in hands-on investigations, citizen science research projects, and inquiry-based learning activities that strengthen understanding of key ecosystems and their global importance. This powerful field experience also incorporates cultural exchange, service learning, and (in Mexico) urban sustainability in order to provide participants with cross-curricular learning experiences that inspire classroom instruction and deepen their students' understanding of the complexities of global environmental issues.

## PROGRAM CONTACT HOURS

- 40 hours of active participation in daily activities

## PROGRAM DATES & CONTACT INFORMATION

- **4.2.2022 - Costa Rica** Costa Rica Contact: Haley Hanson - [haley@ecologyproject.org](mailto:haley@ecologyproject.org)
- **3.5.2022 - Mexico** Mexico Contact: Tyler Eisenhand - [tyler@ecologyproject.org](mailto:tyler@ecologyproject.org)
- **4.2.2022 - Mexico** Mexico Contact: Miles Knotek - [miles@ecologyproject.org](mailto:miles@ecologyproject.org)
- **4.2.2022 - Yellowstone** Yellowstone Contact: Katie Connelly - [katie@ecologyproject.org](mailto:katie@ecologyproject.org)

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## EPI PARTNERS

- Pacuare Reserve (CR)
- Tirimbina Biological Reserve (CR)
- Centro Interdisciplinario de Ciencias Marinas (MX)
- National Park Service (YEL)

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## EDUCATING, INSPIRING, & EMPOWERING NEW LEADERS

At EPI, we strive to change the way youth connect with nature by engaging them with authentic hands-on science that makes a difference in conservation. Learning with EPI—whether across the country, across the globe, or in your community—is a life-changing experience.

EPI was founded around three principal values: scientific literacy, environmental protection, and cultural exchange.

We acknowledge the challenges facing our planet today and aspire, together with our students and teachers, to help create a motivated, informed, critical, and creative citizenry who, based on a better understanding of nature and their role in it, practice positive behaviors.

**The Question:** How do we nurture the next generation to appreciate the role of science in addressing local as well as global problems related to climate change, sustainable development, and resource conservation?

Teachers, teacher educators, and non-formal educators need to participate in and develop a robust understanding of science themselves in order to incorporate science-related competencies in their classrooms. They need to use inquiry-based techniques to guide students in the tools and skills of research. They need to experience critical ecosystems first-hand in order to teach about their importance to global health.

**Our Approach:** EPI's Teacher Fellowship addresses these needs by engaging participants in hands-on investigations, citizen science research projects, and inquiry-based learning activities. These authentic learning experiences are set in ecologically sensitive & biodiverse locations in Yellowstone, Costa Rica, and Mexico, where the intensity of natural systems and the complex human interactions within them are observable as part of one, interrelated system. EPI's Fellowship locations help model the importance of using authentic life experiences to teach science. Our professional staff of instructors implements a robust curriculum that focuses on promoting environmental literacy through the incorporation of the Next Generation Science Standards (NGSS).

In the pre-field phase of the Fellowship, beginning with your invitation to our online learning platform, EPI works to familiarize Fellows with the fieldwork ahead. Short writing prompts and an open forum for discussion are intended to provide building blocks for group formation and assess baseline knowledge and expectations.

During the Teacher Fellowship, participants get a close-up view of complex ecosystems and their interconnected relationships between soil, water, plants, wildlife, climate, and people. We explore how organisms have adapted and survived the test of immense competition to become unusual, diverse, and fascinating. Experiencing these unique ecosystems encourages a "new set of glasses" for one's local environment and provides a wider context for exploring significant questions, such as: What is biodiversity and why does it matter to me? What factors determine the biodiversity of these ecosystems, my hometown, and our planet? How will climate change affect them? How will it affect us locally? As a global citizen, what is my responsibility? How can I use this experience to improve my teaching?

In the post-field phase, we provide a framework through which to cement your findings from the field and implement them into your teaching, and we gather your experiences to share widely.

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## FELLOWSHIP LOCATIONS

**Greater Yellowstone Ecosystem** - As soon as you touch down in Bozeman, Montana, you'll understand why this ecosystem inspired our national parks. The landscape's singular beauty, abundance of wildlife, and fascinating thermal features combine to make this high-altitude plateau unique. Fellows will pursue a suite of research projects with teams from the National Park Service, spending time on foot or snowshoe (depending on weather conditions) and collecting data on species migration and land use in and around the park.

**Baja, Mexico** - While camping on this UNESCO-protected biosphere reserve, Fellows conduct a snorkel-based census of marine invertebrates and learn about the island's unique desert ecosystem. Based out of EPI's student campus in the city of La Paz, Fellows meet with local teachers and students and explore the culture of the city. The program includes a range of water- and land-based activities, including boat access and educational excursions. Fellows are expected to snorkel and participate in ongoing monitoring projects.

**Costa Rica** - Based primarily on the Caribbean coast, Fellows monitor a protected tropical beach, alongside instructors and researchers, in search of nesting leatherback sea turtles. These censuses are conducted at night, on foot. Fellows should expect long days in tropical conditions during this unique opportunity to participate in the conservation of Earth's largest turtle species. Fellows will also explore biological rainforest reserves and learn about tropical forest ecology.



## MENTAL PACKING LIST

Of all the things you bring into the field, **the most important will be your open and inquiring mind.** During the Teacher Fellowship, you'll be guided by your curiosity, inquiry, and drive for discovery. Unlike a typical classroom course of study, this experience offers the opportunity to overcome fears, build confidence, recharge enthusiasm, explore different teaching techniques, experience the value of reflection, and develop connections with fellow educators while spending time in critical ecosystems. Your outcomes, however, are rooted in your personal investment, preparation, and willingness to engage.

## FELLOWSHIP GOALS AND OBJECTIVES

**Develop your familiarity with EPI's approach to education through field science & cultural exchange.**

- Build a global perspective of the rich and interconnected nature of societies, cultures, and environments, as well as an awareness of the personal actions needed to sustain them.
- Observe the impact of globalization on local communities and ecosystems.
- Reflect on how personal experiences, choices, perspectives, and assumptions fit within the larger global context.

**Celebrate and reconnect with the fundamentals of how students learn.**

- Identify specific ecosystem-related topics that can be used to create engaging standards-based STEM learning experiences for students and communities.
- Identify research activities, protocols, and teaching strategies that can be used at a local level to engage students in inquiry-based learning and address national curriculum standards in a variety of subjects (e.g. science, social studies, language arts, & Spanish language).
- Deepen understandings of how to effectively use inquiry-based explorations as a means of constructing knowledge about the world.

# EPI TEACHER FELLOWSHIPS

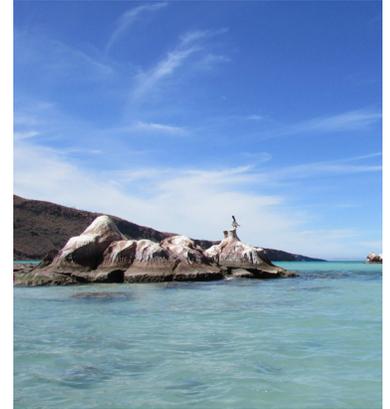
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### **Provide unique experiences and activities to take back to your classroom.**

- Engage in hands-on guided explorations of your site's ecosystem.
- Explore and describe the basic structure, components, and function of an ecosystem, and explain its role in maintaining a healthy global ecosystem.
- Understand different types of field investigations and how to use them to develop inquiry-based explorations with students.

### **Build a supportive network of science educators working toward similar goals.**

- Engage in group conversations on challenges and opportunities in 21<sup>st</sup> century education.
- Share lessons, examples, and successes from your home institutions with a supportive group of engaged educators.
- Identify challenges to overcome in applying these concepts in the classroom—where help is required, how Fellows can contribute to each other, and how to develop an action plan.



### **Introduce you to EPI's work and promote future student courses to program sites.**

- Gain competency in using traditional field research tools as well as digital technology to monitor and evaluate different ecosystem components.
- Explore how basic tools and protocols of scientific exploration, as well as innovative science education resources, can be used to deepen knowledge and understanding about ecosystems, one's local environment, and the world.
- Participate in field research projects developed by EPI and its research partners to gain an appreciation for the opportunities and rewards of field research.

## **PROGRAM ASSESSMENT**

### **Pre-Assessment Tasks**

- Complete a pre-course goal setting assignment.

### **Formative Assessment Tasks**

- Use daily journaling time to stimulate reflection and guide discussions.
- Process daily activities and learn from other Fellows through reflection meetings facilitated by your instructors.
- Use guided questions and other tools in small groups to share what you're learning and discuss applications in your classroom, community, and local environment.

### **Summative Assessment Tasks**

- Use your daily log and prompts provided by EPI to write a reflection paper about your course experience.

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### PROGRAM FORMAT

#### Pre-Departure

The Teacher Fellowship takes place primarily in remote field locations. Before departure, EPI provides Fellows with background information, readings, a pre-course assignment, and curriculum documents through an online platform. Thorough participation in the pre-departure program greatly enhances the experience for all participants.

#### In the Field

The field component of the Teacher Fellowship takes full advantage of learning resources in each course's home ecosystem. Each day offers new learning opportunities and is broken into morning and afternoon sessions. Sessions last 2-3 hours and include an initial challenge or question as well as a guided reflection activity. Field sessions are designed to actively engage participants via guided natural history explorations, inquiry-based learning activities, citizen-science research projects, cultural explorations, and more. Incorporated into each session are activities designed to help participants deepen their understanding of best practices in inquiry-based learning and sustainability science.

Daily sessions are facilitated by course instructors, guest faculty, researchers, and local naturalist guides (in some cases). The following page contains an example of sessions and associated topics planned for the Teacher Fellowship.

#### Upon Return

The future of our planet depends on our youth. As teachers, we have the responsibility to help our students develop the dispositions, knowledge, competencies, and behaviors they will need to actively participate in a sustainable future. As an EPI Teacher Fellow, your task is to share and apply what you learn with your students, your district, and your community. Drawing upon all that you experience with us, what commitment will you make? What impact will you have? What legacy will you leave? We provide the tools, resources, and facilitation to stay connected to one another and share stories and successes.

### COMMON SCIENTIFIC COMPETENCIES CONNECTIONS

Session Title	Ecological Knowledge / Competencies Connection
Types of Questions for Field Research Studies	<ul style="list-style-type: none"><li>Ask well-defined questions to conduct an investigation.</li></ul>
Descriptive Field Investigations	<ul style="list-style-type: none"><li>Plan a field research procedure, identifying relevant independent and dependent variables.</li><li>Plan for control of your design and level of accuracy required.</li><li>Decide how much data is needed to produce reliable measurements, and consider any limitations on the precision of the data.</li></ul>
Comparative Field Investigations	<ul style="list-style-type: none"><li>Use spreadsheets, databases, tables, charts, graphs, statistics, and mathematics to collate, summarize, and display data and to explore relationships between variables, especially those representing input and output.</li></ul>
Correlative Field Investigations	<ul style="list-style-type: none"><li>Recognize patterns in data that suggest relationships worth investigating further.</li><li>Distinguish between causal and correlational relationships.</li></ul>

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Session Title	Ecological Knowledge / Competencies Connection
Research Project Presentations	<ul style="list-style-type: none"><li>• Identify gaps or weaknesses in explanatory accounts.</li><li>• Identify flaws in arguments; modify and improve them in response to constructive feedback.</li><li>• Use text, tables, diagrams, and graphs to communicate understanding or to ask questions about a system under study.</li><li>• Make oral presentations of results and conclusions and engage in appropriate discourse with other Fellows by asking questions and discussing issues raised in presentations.</li></ul>

## PROGRAM ASSIGNMENTS/RESPONSIBILITIES

Fellows are expected to:

- Review and respond to pre-departure readings and activities
- Share and apply what they learn during the field experience
- Be a positive, active, engaged team member before, during, and after the field experience
- Maintain a daily log while in the field
- Submit a post-course reflection paper about their field experiences



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## PRE-COURSE ASSIGNMENT

**Objective:** Using the template available on your Fellowship's Google Classroom platform, conduct a self-assessment on your goals, questions, and concerns for your upcoming Fellowship experience.

**Due Date:** This activity is due **one month before your course departure date**, and should be submitted through the Google Classroom platform once complete.

**Content:** This self-assessment asks you to reflect on your preparation, personal goals, and expectations for professional development through a series of open-ended questions. You are also encouraged to develop questions of your own.

**Our Goals:** We designed this assignment for two reasons: to encourage EPI Fellows to mentally prepare and reflect on their participation, and to ensure that we're as prepared as possible to meet (or help adjust) your expectations for the Fellowship experience.

**Recommended:** Review EPI's pre-course resources and the materials available in your Google Classroom before completing this assignment to create a frame for thinking about your upcoming field experience.



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## ON-COURSE & POST-FELLOWSHIP ASSIGNMENTS

**Description:** While you're in the field with EPI on your Teacher Fellowship, we'll ask you to keep a daily log—in your own journal or in the space provided in your EPI course journal. Plan to use this space to reflect on your daily experiences. Beyond describing what happened, challenge yourself to analyze those events and reach the *why* that underlies them.

The field portion of your Fellowship is an intensive period of learning, study, and reflection. How do we hold on to the knowledge and experiences obtained on course? You will be asked to write a reflection paper using your daily log and the prompts provided on your Google Classroom platform.

**Due Date:** The reflection is due **one month after your course return date** and should be submitted through the Google Classroom platform once complete.

**Our Goals:** Every EPI Teacher Fellow serves a community of learners back home; our goal is to help you extend what you learned through your field experience to create the largest possible impact upon your return. We envision this assignment as the cement to help you build on the Fellowship and its impact on participants. By keeping a daily log and synthesizing those thoughts into a reflection paper, we're aiming to lock in the knowledge and experiences you gained in the field, making them accessible and meaningful.



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## MEXICO FELLOW BIOGRAPHIES

MARCH 5 - 12, 2022



### Anna Burkett

Anna is from Gordonsville, VA where she lives with her husband and 2 children. Anna has been teaching for 14 years and currently teaches Biology, Ecology, and Equine Science at Orange County High School in Orange, VA. In 2017 she was recognized as “Rookie Teacher of the Year” and in 2019 was recognized as “Teacher of the Year” for Orange County High School. In 2018-2019 she was awarded grants to build a greenhouse on the campus of Orange County High School. Anna is passionate about horses and is currently involved in creating curriculum for the new Equine Science and Vet Science courses offered in the OCHS Agriculture department as well as being a FFA sponsor.



### Melody Clausen

After graduating with a degree in Biology from the University of Memphis Melody had a goal to become a field and marine biologist. Fate landed her in a position training animals, developing, and teaching education programs with the Memphis Zoo for four years followed by six years with the Oregon Coast Aquarium in Newport, OR. Finding a passion for educating students about the natural world she decided to go back to school to earn an MS in Science Education from Oregon State University. Melody has been a classroom teacher now for 10 years teaching math and science to 6-10th grade. She is currently living in Pittsburgh, PA teaching high school biology at The Neighborhood Academy.



### Sarah Compton

Sarah has been teaching high school science in Chicago, IL for the past 15 years. She currently teaches Biology, Chemistry, and dual credit Biology courses at Tilden High School. She earned her B.A. in Biology and M.A.Ed in Secondary Education from the College of St. Catherine in St. Paul, MN and her M.A. in Biology from Miami University. She is passionate about creating authentic learning experiences that extend beyond the classroom to help students make meaningful connections to nature, their communities, and places around the globe. In her free time Sarah loves to travel, bake, and spend time with her family.



### Krista Cunningham

Krista has been teaching science since 2003 in a myriad of settings: teaching military dependents at Misawa Air Base Japan, teaching middle and high school in Montana, leading students on outdoor field trips with the Montana Audubon Center, and now teaching biology and AP Environmental Science at Billings Central Catholic High School. Krista is a certified Master Naturalist and a graduate of NASA Space Camp for Educators and the ReCharge Wind Energy Education Academy. She has a true passion for science and the natural world and believes that the best path towards conservation is to share this passion and sense of stewardship with her students.

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### Heidi Frederick

Heidi has been teaching Earth Science in East Haddam, CT for over 20 years. She loves being active outdoors and is an avid hiker, kayaker, and birder. Heidi is excited to have this opportunity to engage in field work in the Baja and then to share it with her students.



### Matthew Holden

Matt is in his 4th year as a high school science teacher, currently teaching Biology, AP Biology, and Anatomy/Physiology at Fayetteville High School in Fayetteville, AR. He completed a Bachelor of Science and Master of Science in Biology from the University of Arkansas before working as a conservation biologist specializing in herpetology. He decided to pursue a career in science education and received a Master of Arts in Teaching before entering the classroom. He strives to implement his background in scientific research and conservation into his instruction and provides students with the skills to become the environmental leaders of the future.



### Tricia Kearns

Tricia, a National Geographic Certified Educator, has been teaching secondary science for 18 years. She was a finalist for the 2021 Colorado Teacher of the Year Award and received the 2021 Colorado Earth Science Teacher of the Year Award. She recently relocated from Fort Collins, CO to Northbrook, IL and is currently teaching 8th Grade Science at South Middle School in Arlington Heights, IL. She coaches Science Olympiad and sponsors the Dungeons and Dragons club at school. She enjoys exploring nature, traveling, and sharing her experiences with students.



### Laura Lanik

Laura has been a social studies educator for 26 years. She lives in St. Paul, MN, and teaches high school in Minneapolis. Currently, she teaches AP Human Geography and two senior electives. Laura is a published poet and her poetry anthology, *Upon Waking; 58 Voices Speaking Out from the Shadow of Abuse* was released in April of 2019. She volunteers as a Peacemaker for the Little Earth of United Tribes. She is an avid reader and loves to read in the hammock and be outside in the wilderness. Her hobbies include trying to write a poem every day, hiking, photography, art journaling, and traveling the world. Each year she takes her students on an international trip.



### Rebecca Maynard

Rebecca is an honors biology and AP environmental science teacher in Framingham, MA. She has taught for over 19 years and is originally from the Buffalo, NY area. She moved to MA after meeting her husband on a waterfall jumping excursion in the Dominican Republic. Rebecca has found new inspiration in teaching environmental science and co-advising the school's Environmental Awareness Club, which is working on increasing environmental literacy across all curricular areas. She is working to produce the school's first environmental education newsletter that contains resources for teachers to incorporate environmental lessons into their classes.



### Kristy Schneider

Kristy has spent her career teaching grades 2-8, with the last 25 teaching middle school in a small rural district in Washington. She was a WA State Science Teacher board member for 10 years, has taught science workshops at regional, state, and national levels and has been involved with numerous science grants including the WSU GK-12 program, Univ. of WA Dig School, KidWind, and NASA programs. Currently she teaches 6th grade STEM, robotics, beginning electronics, and 2 sections of 8th grade science. She is also on the district Computer Science committee, part of the Clean Energy/Bright Futures Green Shed Grant, and a UBTech Ambassador.

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### **Blair Stuhlmuller**

Blair Stuhlmuller teaches Biology and two science electives she designed herself—Marine Biology and Mass Extinctions—at Parkrose High School in Portland, OR. Originally from Virginia, Blair first moved out to the west coast to teach marine science in the field on Catalina Island. Since then, she jumps at any opportunity to get her students outside and experiencing hands on, feet wet science. When not with her students, Blair enjoys scuba diving, hiking in the Pacific Northwest, or curling up with a good book on a rainy day.



### **Samantha Willsey**

Over the past 14 years Samantha has taught geology, astronomy, biomedical science, and 8th grade science. While most of her work has been at home in Indiana, the joy of an adrenaline rush and her curiosity to discover new places has led to a variety of teaching experiences in Uganda, Kenya, Costa Rica, and South Korea. As a Fulbright Teacher for Global Classrooms and National Geographic Certified Educator, her classroom is a gateway to global education. She now leads students on educational adventures all over the world. This EPI fellowship will strengthen her practice as she strives to encourage the next generation of explorers.



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## YELLOWSTONE FELLOW BIOGRAPHIES

APRIL 2 - 9, 2022



### Lauren Couto

Lauren has had the privilege of teaching middle school science in the Bronx for the last 12 years. She earned a BS in Environmental Science from Emory University in Atlanta, GA and a MS in Science Education from Lehman College in NYC. After college she joined the U.S. Peace Corps and served for two years as an environmental volunteer in Jamaica. She loves to travel and was a scuba instructor in Honduras and St. Martin. Lauren has been an Urban Advantage Lead Teacher at the American Museum of Natural History for 10 years and has a Math for America Fellowship. She enjoys taking students abroad and has led trips to Ecuador and the Dominican Republic.



### Robert "Bob" Ford

Bob has taught all levels of science at Fairfield College Preparatory School in Fairfield CT since 1977, and has degrees from Fairfield and Harvard Universities. He currently teaches Environmental Science and Physics. He is an avid outdoorsman, coached distance runners in cross country and track and field for over 30 years, led domestic and international trips for students, and is the senior teacher at his school. He believes hands-on experiences lead to the greatest deep learning. After he and his wife Peggy raised their four now-adult children they continue to explore new outdoor experiences especially at our National Parks. The chance to study in Yellowstone is the opportunity of a lifetime.



### Joya Holden

Joya Holden teaches Science and Language Arts to some of the most amazing fourth graders ever in San Antonio, TX. She is originally from Flint, MI and between both places, she has been teaching for 22 years. She was a National Geographic Grosvenor Teacher Fellow in 2019 which has greatly impacted her teaching—reaching beyond content and curriculum. She values curiosity and creativity; collaboration and critical thinking and engages her students through a lens of space and place. She challenges her students to be problem finders and work together to make a positive change in their communities.



### Sandra Kaplan

Sandra is a biology instructor at Central Lakes College, a two-year community college, in Brainerd, MN. Her undergraduate degree is from Bemidji State Univ. and her graduate degree is from Northern Arizona Univ. Sandra has been teaching biology for 30 years. She feels blessed to be an undergraduate educator and considers the development of students' science literacy skills to be paramount. As she thinks about students in this modern world—in which sustainable food production, mitigating climate change, and advancing solutions to health issues are urgent it is her hope that they develop skills and a world-view that includes a deep understanding of Ecology.



### Kelly Koller

Kelly is a technology integration specialist at Bay View Middle School in Northeast WI. Her passion for ecology, science, and the outdoors began with lots of time spent as a kid wandering in the woods, catching frogs, and going on family camping adventures. A 2018 Grosvenor Teacher Fellow, Koller journeyed to the High Arctic on a 24-day expedition learning about natural and human communities, viewing the impacts of climate change, and delving into how an Explorer Mindset could benefit the learning process. Kelly was a 2019-2022 National Geographic Society grantee and the developer of ExplorerMindset.org and #OutdoorSE.

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### **Tiffany Lissick**

Tiffany is a seventh grade science teacher in New Richmond, WI. She teaches because she wants to help students discover their interests, fall in love with what's around them, and discover a passion for science that will not only fulfill them, but also propel them to positively impact the world in which they live. Last year, she was selected as the sole recipient of the Wisconsin Society of Science Teacher's Frank Zeurner New Teacher Award for her efforts to continually engage in professional development and showcase demonstrated leadership abilities. She has spent time teaching in the country of Myanmar, in addition to Wisconsin.



### **Ann Marie Mahar**

Ann Marie is a 23-year Nationally Board Certified Biology Teacher at Rutland High School in Vermont. She teaches A.P. Biology, and Anatomy and Physiology. She has had adventures with students in Costa Rica and Yellowstone National Park. She obtained her B.S. in Wildlife Biology and Nutritional Sciences from the University of Vermont along with her Masters in Education. She and her family have a horse farm and a maple sugaring business in the mountains of Vermont. They vacation in national parks out west every summer.



### **Tammy Orilio**

Tammy has been teaching AP Environmental Science and Marine Science at Marjory Stoneman Douglas High School in Parkland, FL for the past 18 years. Originally from upstate New York, she moved to Florida to study marine ecology and then fell in love with teaching science. Tammy tries to bring hands-on research into her classroom as much as possible, and to that end, has participated in other teacher research experiences in the past. In the summer months, Tammy works as a first mate on a whale watch tour boat in Alaska, allowing her to see whales, puffins, sea lions, and glaciers every day!



### **Jeanine Ryan-Frandsen**

Jeanine is a second-generation middle school science and social studies teacher from the Paradise Valley School District in Phoenix, AZ. Over her 21-year career in public education, she has taught every grade K-8. Over the years, she has pursued grants to enhance experiential learning. She has helped her students explore hydroponic and aquaponics. She started a school garden, and a desert tortoise habitat with plants native to the Sonoran Desert. Jeanine is currently teaching in a blended and project-based learning program for gifted learners called Journey that she helped open in 2020.



### **Michele Thill**

After a trip to the Grand Canyon with her parents, Michele was hooked on all things science. She earned a Bachelor's degree in geology and a minor in environmental science from James Madison University. After college, she worked as an environmental educator at YMCA South Mountain in Pennsylvania and YMCA Camp Thunderbird in South Carolina. Currently, she is in her 19th year of teaching middle school science and her 12th year of teaching 6th and 7th grade science at Pinewood Preparatory School in Summerville, SC. In her free time she enjoys running, hiking, and going to the beach with her husband and two daughters.



### **Casey Vogel**

Casey is a middle school STEM exploratory teacher working toward increasing the learning of environmental stewardship and conservation. She taught science for 20 years before moving to STEM, attaining a master's in biology along the way. She participates in programs that connect students with both technology and the environment including some through the San Diego Zoo and Safari Park. She is currently joining in with California Fish and Wildlife's "Trout in the Classroom" program so her students can raise trout from eggs and release them into approved body of water. When she's not teaching, she can usually be found outdoors!

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## MEXICO FELLOW BIOGRAPHIES

APRIL 2 - 9, 2022



### **Susan Brown**

Susan Brown is a 7th grade science teacher at Northland Preparatory Academy in Flagstaff, AZ. She believes that doing science is the best way to learn it and strives to find opportunities that engage students in authentic science activities, from sending experiments up to the International Space Station or monitoring lichen growth in elevated gardens to simulate climate change. When not teaching, you can find Susan in a kayak or out exploring the wilderness, or relaxing with a good book with her 14 year old and 20-pound Siamese cat.



### **Pam Fedas**

Pam is an honors and AP Biology teacher as well as the science department chair at King's Ridge Christian School in Alpharetta, GA. She received her biology degree from Auburn University and her masters in microbiology from Georgia State University. She was named the Georgia AP math, science, and technology teacher of the year in 2007-2008. She has lived and travelled all over the world from London to Saudi Arabia to Australia. She loves adventure trips and has taken her students to Belize, Costa Rica, Galapagos Islands, and Kenya/Tanzania. She was awarded a Save the Rainforest fellowship and had the opportunity to attend Oxford University in England for a course titled "Boundaries of Science."



### **Joelle Lilavois**

Joelle is originally from Pasadena, CA, where she fell in love with the ocean. She graduated from CSU, Los Angeles with a Bachelor's degree in Biology. She obtained my Masters in Education, along with a Ed.S. degree in Curriculum and Instruction in 2015. She became a National Geographic Certified Educator in 2017. She moved to Alabama in 2012 to be closer to family, where she is currently an educator at James Clemens HS teaching Environmental Science and Marine Biology. She has taught Biology and Environmental Science at all levels, Forensics, Earth Space, and Chemistry. She even dabbled at teaching Yoga and Kickboxing. She has two dogs and two teenage daughters who dance for a local company.



### **Jennifer Lucero**

For most of her career, Jennifer has been teaching at Coalinga High School in the central valley of California. She's taught every level of Biology from Introductory Life science to AP Biology. She is the advisor of the SOAR club (Student Outdoor Adventure and Recreation) and has taken students on multi day field trips which include camping, hiking, and environmental stewardship and service. She runs the Green Routine Club. In her free time she enjoys any outdoor adventure, reading, watching nature and survival documentaries as well as baking. She has a husband and four sons as adventure buddies.

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### **Ganesh Nayak**

Ganesh completed his bachelors in Engineering from Manipal Institute of Technology in 2004. He has over 8 years of experience in mobile electronics and for the last 6 years has been working as a professor in electronics at his alma mater. He earned a diploma in outdoor education from NOLS, USA. In 2019, he released his first book, *Uncharted, My journey into the Himalayas*. He is an invited speaker, delivering talks to hundreds of students every year. He runs "The Adventurer" —a pioneering effort in outdoor education at the undergraduate level in India. He is an aspiring documentary photographer focusing on the impact of climate change.



### **Claire Pichette**

Claire started her teaching career as a Webber Scholar at Willamette University in Salem, OR. After graduation, she found work as an outdoor educator at Montana Outdoor Science School in Bozeman, MT and completed a teaching degree at Montana State in 2007. Since then, she's been teaching life science, biomedical science and earth and environmental sciences at Helena High School in Helena, MT. Her passion is helping kids understand the complexities of living systems from the biochemical to ecosystem level, especially through field experiences and hands-on lab investigations. She is a coach for the school's Science Olympiad and Envirothon teams.



### **Mari Rice**

Mari has worked as a lecturer for the Environmental Studies program at Boise State University for the past eight years and also coordinates internships, experiential learning, and a certificate in environmental education. She earned her Ed.D at BSU, an M.S. in Environmental Studies from the University of Montana, and a B.A. from the University of Oregon. She has worked in education for over 20 years, leading outdoor and environmental education courses in the US and abroad, coordination for TRIO Upward Bound, and classroom teaching. Originally from Oregon, she now calls Boise, ID home and lives with her husband, two kids (ages 10 and 13), and cattle dog mutt.



### **Emily Schmidt**

Emily is from central New Jersey where she teaches high school anatomy and physiology, biology, environmental science, and forensics. She uses NGSS storylines and real world phenomena to make topics more relatable. Although her background is in molecular biology research, she has become interested in environmental sustainability and conservation efforts. She is a teacher leader with Nourish the Future, exploring modern and sustainable agriculture with fellow science teachers. Emily is a National Geographic Certified Educator. She's also a yoga teacher and spends as much time hiking, surfing, and swimming as possible.



### **Olivia Seger**

Olivia has been teaching chemistry, physics, and a variety of other science courses for over ten years in Southwest Kansas. She received her bachelor's degree in Physical Science Teaching from Brigham Young University and master's degree in Instructional Technology from Fort Hays State University. She currently serves as the Science Department Head for Lighthouse Connections Academy headquartered in Troy, MI. Olivia loves getting to know her students and their families and hopes to spark joy in learning in them. She enjoys bird photography, taking care of her Mini Nubian goats, and reading books. Olivia is married and has three children.



### **Lindsay Smith**

Lindsay is a Marine Science, Environmental Earth Science, and AP Environmental Science teacher at Mooresville High School in Mooresville, NC. To connect her students to scientists and real-time data she has participated in the Ocean Exploration Trust Science Communications Fellowship, NOAA Teacher at Sea, and the NSF PolarTREC program. Through these experiences she traveled to Antarctica, the Bering Sea, Galapagos Islands, and the Caribbean Sea to bring real science into her classroom and encourage her students to be scientists too. Lindsay loves anything outdoors and especially out on the water. She is a proud cat and chicken mom of 2 cats and 12 chickens.

# EPI TEACHER FELLOWSHIPS

2022 PROFESSIONAL DEVELOPMENT PROGRAM



## COSTA RICA FELLOW BIOGRAPHIES

APRIL 2 - 9, 2022



### Rebecca "Beckes" Allen

Rebecca has a huge passion for EEB with an undergraduate focus in Neotropical Ecology that ignited during a college semester abroad with STRI in Panama. For the past 10 years, she's been a science educator and department chair at BBA in Manchester, VT. She's had the opportunity to build programming that inspires, empowers, and prepares students for an ever-changing world. She feels traveling with EPI to Costa Rica will reinvigorate her and help her engineer the next step in her career which will involve helping students find their "True North." She is excited to learn as much as possible, network, experience, get outside, and dream big!



### Dolores Dang-Wright

Dolores teaches Chemistry and AP Environmental Science at Dana Hills High School. Her students collect data on water quality and fish and plankton identification through Crystal Cove Conservancy Marine Protected Area Citizen Science Field Study. Through the Picerne Family Foundation, she and ten students were awarded scholarships for an Earthwatch Expedition to Mankwe Wildlife Reserve in South Africa to conduct research on scavengers. She has taken students to Acadia National Park in Maine to study the effects of climate change on food sources for the migrating and local bird populations. When she's not teaching, Dolores enjoys camping, hiking, and paddling outrigger canoes.



### Karen Flood

Karen is a Gifted Education Specialist for the Francis Howell School District in St Charles, MO. She previously taught 5th grade, AP Capstone. This is her 7th year teaching gifted education. She is involved in the robotics & NJHS, Speech & Debate, and Scholar Bowl clubs at her school. Karen is working on several STEAM and environmental-based units. She has a strong passion for learning about other cultures and developing an international curiosity in her students by bringing these experiences into the classroom. She has led educational STEAM trips with students to Europe and Central America. She loves hiking and getting to know the people in the places she visits.



### Alexandra Guest

Alex is a middle school science teacher at Hyla Middle School on Bainbridge Island, WA. She studied abroad in Panama during her undergrad at Skidmore College and she is very excited to be returning to Central America for this teacher fellowship! She has a Masters in Science Education from the University of Washington and did her teacher residency in environmental education at IslandWood. She loves working with students outside and helping them get involved with service learning projects that address environmental issues.

# EPI TEACHER FELLOWSHIPS

## 2022 PROFESSIONAL DEVELOPMENT PROGRAM



### **Megan Hyllok**

Megan has been teaching for 23 years, currently at Papillion-La Vista South High School, Nebraska. She is the Science Department Chair, teaches AP Biology and Environmental Science, coaches Cross Country, and sponsors the Science Club. She's a graduate of Creighton University (B.S.), UNOmaha (M.S.) and UNLincoln (Ph.D.) with degrees in biology, secondary education, and curriculum and instruction. She was awarded the 2010 Nebraska Biology Teacher of the Year. She credits her research in Honduras and Costa Rica to be the foundation of her teaching philosophy. She enjoys reading, running, hiking, and spending time with her husband and three boys.



### **Shannon Klemann**

Shannon has been teaching Biology and Marine Biology for 22 years in Ventura County. Her husband is a Middle School History/Language Arts Teacher. They have two daughters: a senior in high school and a sophomore at Berkeley. As a returned Peace Corps Volunteer of Paraguay, South America, Shannon loves to experience the world, practice language, immerse herself in other cultures, and learn the local biology—then bring those experiences back to her students.



### **Laurie McClure**

Laurie is currently in her 18th year teaching Biology, Climatology, and AP Environmental Science at Manheim Central High School, Pennsylvania. She earned master's degrees in Curriculum Design and Online Instruction. She previously worked briefly in corn seed genetics at DuPont Pioneer and participated in the population studies of both Delaware Bay horseshoe crabs and Isle Royale wolves and moose. In the summer months, Laurie is an avid traveler and enjoys kayaking, waterskiing, and hiking with her dog, Nieko.



### **Maija Niemisto**

Maija attended University of Wisconsin-Madison and the American University of Beirut. Through a United Nations internship in Lebanon, she gained a passion for protecting wetland habitats. After graduating, Maija lived aboard a 28-foot sailboat, eventually discovering the Hudson River Sloop Clearwater. She joined their crew and spent almost 10 years living on the Hudson and teaching about the tidal estuary. Maija completed her graduate studies at Stony Brook University's School of Marine and Atmospheric Sciences with bioacoustic research of fish and zooplankton of the Hudson River Estuary. In 2019, she joined the Cornell University Water Resources Institute, NYSDEC, and teaches at Marist College in New York.



### **Victoria Obenchain**

Vickie is in her fifteenth year teaching at The Saklan School in Moraga, CA. She has made science her passion with a BS in Environmental Science and an MA in Environmental Education. In the science lab, Vickie works with students in grades K-8, where she incorporates labs, lecture, simulations, hands on activities, research, field experiences and other activities to bring concepts to life. Vickie started teaching while in college as a lab assistant and later at environmental education centers, teaching how the environment works and how people play a role in the health of their surroundings.

# EPI TEACHER FELLOWSHIPS

## 2022 PROFESSIONAL DEVELOPMENT PROGRAM

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### Jason Stevens

Jason encourages his students to treat their peers with respect, be professional, and write. Before teaching Jason worked as a cook; two fingers on his left hand are shorter from all the years holding a knife in his right. Now instead of menus, Jason builds curricula for the school district. Tattooed with pictures of Darwin and Lucy, evolution is Jason's favorite subject to teach. Partnered with an incredible wife, they raise a large garden and a flock of chickens to feed their sons.



### Adriana Targa

Adriana is a high school science teacher who currently lives in Managua, Nicaragua with her husband Mario and their 4 pets; two dogs and two cats. Her undergraduate degree was in Biology from Penn State University and has an M.Ed in International Teaching. She has been teaching science for 11 years and is currently teaching AP Biology, Honors Biology, and Chemistry. She is passionate about science literacy and is looking forward to the fellowship to learn more about field-based education.



### Brooke Zanetell

Brooke is an Assistant Professor at a small, rural community college where the Rocky Mountains meet desert mesas in Northern New Mexico. She serves a student body of Hispanic, Native American, and Anglo students, many of whom are low-income and the first in their family to earn a college-level degree. With the help of two grants from the US Department of Agriculture, Brooke created the Northern New Mexico Climate Change Corps (CCC) and built a new program in Natural Resources Management (NRM) at the University of New Mexico in Taos.



# EPI TEACHER FELLOWSHIPS

2022 PROFESSIONAL DEVELOPMENT PROGRAM

## THINK OUTSIDE THE CLASSROOM

There are more ways than ever to stay connected to EPI's mission, re-energize your teaching methods, and inspire the next generation of environmental stewards.

### **The EPI Classroom**

Bring EPI's curriculum, real research and data sets, and engaging interactive activities to your students—all without ever leaving the classroom. Download lesson plans inspired by our program sites, sign up for webinars, check out trail cams at Pacuare Reserve, and more at [www.ecologyproject.org/epi-classroom](http://www.ecologyproject.org/epi-classroom)

### **Professional Development Opportunities**

After your Fellowship experience, you can explore more of our program sites, dive into more research, and meet a whole new cohort of like-minded educators with our Professional Development programs. Opportunities are available throughout the year in Mexico, Costa Rica, the Galapagos, Hawaii, and the Greater Yellowstone Ecosystem. No application is required to enroll. More at [ecologyproject.org/professional-development](http://ecologyproject.org/professional-development)

### **Share Your Experience with Students**

Bring science to life by introducing a group of students to an EPI program! Our Student and Teacher Expeditions are designed to nurture the sense of discovery at the heart of all learning. Plus, our dedicated staff make enrolling large groups a breeze. Learn more at [ecologyproject.org/student-and-teacher-expeditions](http://ecologyproject.org/student-and-teacher-expeditions)

**Questions? Contact your Fellowship Coordinator directly or visit:**

**[www.ecologyproject.org/travel-programs](http://www.ecologyproject.org/travel-programs)**

