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VIRTUAL CAREER FAIR 2018 TEACHER'S GUIDE

Explore STEM Careers: Meet Experts in Conservation, Environmental Policy, Engineering and More

Grades: 5-12

Event Air Date: Friday, October 5, 2018 at 1:00 PM ET (40-45 minutes)

Purpose: This guide contains information on teacher preparation for the event, including technical information, as well as a variety of student materials, with links to Nature Works Everywhere and other relevant resources.

Description of Event: A STEM career can mean so many things—like studying fish and coral reefs near Puerto Rico or exploring how environmental engineering can help improve human life, while protecting the environment. This virtual career fair is the perfect opportunity for middle and high school students to hear from three different professionals who are following their passions through STEM careers.

Maybe some of your students have already expressed interest in a STEM-related field after graduation, while others aren't sure exactly where they'd like to end up. This live event will introduce them to different careers they can pursue if they are interested in engineering, conservation, the environment and more. Panelists will discuss what they love about their work, how they got where they are today, and their best advice for students to find mentors along the way. We hope you'll join us!



STEM Virtual Career Fair

featuring STEM professionals Tito Rinaldo, Ruby Rivera, James Puerini, Fazena Bacchus

October 5, 2018
1PM ET

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Detailed Bios and More Information

MODERATOR

Tito Rinaldo, LEAF Northeast Region Coordinator, The Nature Conservancy

Career key words: youth engagement, urban planning, conflict resolution, peacebuilding



Raised in the growing metropolis of Tegucigalpa, Honduras, **Tito Rinaldo's** desire to protect the environment began with his interest in people. Based on these interests, *Tito went on to pursue a B.S. in Urban Studies and an M.S. in Conflict Resolution with a concentration on environmental conflicts.* His studies have mainly focused on how people relate to the natural world, whether in a city or a national park.

"I am interested in understanding why and how underrepresented groups disproportionately bare the burdens of nature yet have limited access to reap nature's many rewards."

- Find Tito on LinkedIn at <https://www.linkedin.com/in/tito-r-204b3729/>
- Learn more about The Nature's Conservancy's Youth Engagement work at <https://www.nature.org/en-us/about-us/who-we-are/how-we-work/youth-engagement/>

PANELISTS

Ruby Rivera, Diversity Fellow, The Nature Conservancy

Career key words: conservation, restoration, environmental outreach, community engagement



Ruby Rivera was born and raised in Puerto Rico, where she went on to study Environmental Science and Geography at the University of Puerto Rico. She has worked in watershed management and restoration of coral reefs and coastal ecosystems—in Puerto Rico, Hawaii, and American Samoa—and is passionate about sustainable urban agriculture and development.

Ruby now works as a Program Manager for the Global Diversity, Equity and Inclusion Team at The Nature Conservancy (TNC), where she focuses on diversity and equity issues within the organization, between TNC and community-based non-profit organizations (particularly those working in diverse communities), and in relation to gender and equitable conservation. Ruby is also working on a new project aimed at recruiting diverse talent for positions at TNC.

"I have a huge interest in urban environments and sustainable urban development and how to equitably incorporate agriculture and ecologically-functional green spaces into dense and compact environments."

- Find Ruby on LinkedIn at <https://www.linkedin.com/in/ruby-rivera-cruz-6b856ab5/>
- Read more about Ruby <https://nrctpr.com/rubyrivera>

James Puerini, Diversity Fellow, The Nature Conservancy

Career key words: forestry, environmental policy, community outreach



From his family, James Puerini learned a deep love of community and a dedication to justice. He brings that background to his passion for conservation. James' first foray into nature as an adult was as a Wildland Fire Initial Attack Squad Boss, Youth Conservation Corps Leader, and forest technician. After that, he worked in politics as a Congressional Hill Staffer before joining The Nature Conservancy (TNC). At TNC, James is a Program Manager for the Global Diversity, Equity and Inclusion Team, where, along with Ruby, he helps to develop equitable partnerships between TNC and community-based non-profit organizations in diverse communities and to recruit diverse talent for positions at TNC.

James is also working on developing environmental and social safeguards for TNC's international climate work.

"I am the son of an Italian father and a disabled immigrant mother from Mosul, Iraq. I grew up in the pro-peace protest community preceding the War in Iraq and take those lessons of community engagement, empowerment, and justice with me. I am deeply passionate about conservation, and aim to explore the relationships between race, gender, cultures, socio-economic status, and environmental equity."

- Find James on LinkedIn at <https://www.linkedin.com/in/jamespuerini/>

Fazena Bacchus, Water Resources Engineer and Student

Career key words: environmental engineering, wastewater treatment, stormwater management, coastal resilience, flood protection



Fazena Bacchus grew up in the city—Queens, New York—and nature seemed like something far away. Then, in her junior year of high school she had the opportunity to join The Nature Conservancy's program Leaders in Environmental Action for the Future (LEAF), where she spent time in Vermont working on trails, monitoring plants, and removing invasive plant species. It was her first experience really spending time in nature and it was life-changing! She went on to major in Environmental Engineering in college and continued to work with TNC during the summers on global freshwater and green infrastructure projects.

After graduating, Fazena worked as a Water Resources Engineer on projects related to wastewater treatment, coastal resiliency flood protection, and stormwater management. She is now pursuing her master's degree and is on the Board of Trustees of the New York State chapter of The Nature Conservancy.

"You don't have to go far to work on natural issues and there are so many opportunities within environmental engineering alone—renewables, air pollution control, waste management ... the sky is the limit!" – from [Lowe's Open House](#)

- Learn more about Fazena's journey to conservation, engineering and environmental leadership <https://youtu.be/UH0igAlap50?t=17m28s>
- Follow Fazena on
 - Twitter [@faz3na](#)
 - LinkedIn <https://www.linkedin.com/in/fazena-bacchus-9201a554/>

Nature Works Everywhere Resources

www.natureworkseverywhere.org

Learn more about the great work happening at The Nature Conservancy; check out the Nature Works Everywhere website where you can find free videos, virtual field trips, lessons, and more! With over 600 scientists and locations in all 50 states and conservation efforts in 72 countries, Nature Works Everywhere brings the science expertise of the world's largest environmental organization directly into the classroom.

Meet some of these experts with “Meet the Scientist” videos. Or, take your students a virtual field trip! You'll go around the world to explore remote tropical rainforests, coastal marine landscapes, and amazing underwater cities. Plus, your students will learn how the Conservancy uses innovative science to protect the lands and waters on which we depend—and be inspired by the career possibilities!

- Lessons and Videos: www.natureworkseverywhere.org/resources/?type=lesson-video
- Meet the Scientist: www.natureworkseverywhere.org/resources/?type=meet-the-scientist-video
- Virtual Field Trips: www.natureworkseverywhere.org/resources/?type=virtual-field-trip-video

Other Resources and Articles

Information on STEM Initiatives and Workforce

- Education Commission of the States – STEM & Vital Signs
<https://www.ecs.org/initiatives/stem-vital-signs/>
 - Explore the state of STEM education where you live and nationally through Vital Signs
<http://vitalsigns.ecs.org/>
 - STEM career infographics
<https://www.ecs.org/stemistics/>
- Education Week – Chart: Which STEM Jobs are in Demand and Pay Well? (May 22, 2108)
<https://www.edweek.org/ew/section/multimedia/chart-which-stem-jobs-will-be-in.html>
- STEM 101: Intro to tomorrow's jobs, Bureau of Labor Statistics – information on STEM occupations, projected job openings, annual wages, training, and experience.
<https://www.bls.gov/careeroutlook/2014/spring/art01.pdf>
- Read stories shared by young scientists (#NextGenSci) in Science Magazine online on how broad interests reap benefits for science
https://www.sciencemagazinedigital.org/sciencemagazine/06_july_2018/MobilePagedArticle.action?articleId=1408428&app=false#articleId1408428
- The Value of a STEM Education Infographic, Edutopia
<https://www.edutopia.org/stw-college-career-stem-infographic>

Mentorship, Resume, Profile, and New Job Tips

- The Scoop: What's a Mentor and How Do I Get One? by the College Board
<https://bigfuture.collegeboard.org/get-started/building-a-support-network/the-scoop-whats-a-mentor-and-how-do-i-get-one>
- How to Find a Mentor in High School, by Ruby Grace
<http://hbculifestyle.com/high-school-mentor/>
- What Your Resume Should Look Like in 2018, by Kristen Bahler
<http://time.com/money/5053350/resume-tips-free-template/>
- Career Experts Makeover these Mediocre LinkedIn Profiles, by Rich Bellis
<https://www.fastcompany.com/3069256/career-experts-makeover-these-mediocre-linkedin-profiles>
- 14 Things Successful People Do in the First Week of a New Job, by Diana Yukari
<http://www.businessinsider.com/first-week-of-a-new-job-2017-1>

Suggested Readings for Teachers and Students

- Diversity in STEM: What It Is and Why It Matters, by Kenneth Gibbs, Jr.
<https://blogs.scientificamerican.com/voices/diversity-in-stem-what-it-is-and-why-it-matters/>
- Diversity in STEM Is a Practical Goal, Not a Moral One, by Erika Hairston
http://www.huffingtonpost.com/the-well/diversity-in-stem-is-a-pr b_10229908.html
- Boosting Science with Diversity, by Vann R. Newkirk II
<http://www.pbs.org/wgbh/nova/next/body/stem-diversity/>