Vincent O'Leary

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Professional History

Jun - Jul 2018 **Truman Scholarship Summer Institute Intern** (Reid Sherman, PhD.)
U.S. Global Change Research Program, White House Office of Science and Technology Policy, Washington, DC
* Identify and rank data links in GCIS's web of provenance based on source material completeness
* Support development of the Fourth National Climate Assessment (NCA4)

Jun - Aug 2017 **NOAA Hollings Scholar Intern** (Chris Amante, PhD.)
National Centers for Environmental Information (NCEI), NOAA, Boulder, CO.
* Developed a global model of elevation with public bathymetric and topographic datasets using ArcGIS and Bash, available as an update to NOAA's previous ETOPO1 model

Mar - Sep 2016 **Biodiversity Informatics Research CO-OP** (Steve Dilliplane)
Center for Systematic Biology and Evolution, Academy of Natural Sciences (ANSP), Philadelphia, PA
* Migrated 8800+ records into FileMaker Pro using recognized metadata standards
* Documented an automated work-flow using MySQL to import and standardize several distinct Symbiota, Microsoft Excel, and FileMaker Pro databases into a single Specify repository

Mar - Sep 2015 **Geographic Information System (GIS) Research CO-OP** (Jerry Mead, PhD.)
Patrick Center for Environmental Research, Academy of Natural Sciences (ANSP), Philadelphia, PA
* Visualized biodiversity for 600+ sampled locations in Jamaica using ArcGIS, QGIS, and R

Jun - Aug 2014 **Students Tackling Advanced Research (STAR) Scholar** (Daniel Duran, PhD.)
Office of Undergraduate Research, Drexel University, Philadelphia, PA
* Forecasted potential range expansion of invasive crayfish using MaxEnt and online environmental data

Dec 2013 - Dec 2017 **Curatorial Assistant** (Ted Daeschler, PhD.)
Vertebrate Paleontology Collection, Academy of Natural Sciences (ANSP), Philadelphia, PA
* Designed and implemented a FileMaker Pro database of 20,000+ specimens and 3D images for ANSP

Teaching and Outreach

2018 **English Second Language Teacher**
St. Thomas Aquinas Catholic Community Center, Philadelphia, PA
* Assisted with "English for Speakers of Other Languages" courses for 15+ adults 2 hours per week

2017 - 2018 **High School STEM Mentor**
Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP), Philadelphia, PA
* Mentored 50+ students in 9th and 10th grade science classrooms for 8 hours per week

2016 - 2017 **Drexel Community Scholar**
Lindy Center for Civic Engagement, Drexel University, Philadelphia, PA
* Coordinated after-school STEM activities for 30+ 3rd and 4th grade students for 5 hours per week

2014 - 2015 **Guest Instructor**
College of Arts and Science, Drexel University, Philadelphia, PA
* Co-developed a new community hybrid course for Drexel University, which combined lectures in the classroom and in the community. 18 students presented ideas to engage Philadelphia residents on topics of climate change, urban ecology, and public health along the Schuylkill River Walking Trail.

2008 - 2013 **Educator**
Education Department, Oglebay Good Zoo, Wheeling, WV
* Directed educational activities including summer camps for 4 to 6 year old children for 40 hours per week

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Education

2013 - 2018 **Drexel University**, Pennoni Honors College, Philadelphia, PA GPA - 3.5
BS Environmental Science, minor in Geoscience
Relevant Courses: Biogeography, Biodiversity, Conservation Biology, Phylogenetic Analysis, Physical Geology, Earth System Processes, GIS & Environmental Modeling, Scientific Data Analysis, Statistics and Probability, Community Mobilization and Advocacy, American Political Thought, Systems Approach to Global Challenges

Other education
2018 **Young Involved Philadelphia (YIP)**, Board Prep Program, Philadelphia, PA
2017 **Native Nations Institute at University of Arizona**, Rebuilding Native Nations, Tuscon, AZ
2015 **The GREEN Program at Reykjavik University**, Renewable Energy & Sustainability, Reykjavik, Iceland

Skills

Computer - ArcGIS, GDAL/OGR, QGIS, Python, R, OpenRefine, SQL, FileMaker Pro, Git/GitHub, Microsoft Office Suite (Word, Excel, PowerPoint, Access), Bash, Markdown (this resume written in Markdown), HTML, LaTeX

Field and Lab - Managing lab notebooks, Titration, Filtration, RTK/PPK and laser level surveying, Open channel hydraulic surveys, Backpack electrofishing, Radio-telemetry, Scanning electron (SEM) and petrographic microscopy

Awards and Grants

2018 - James C. Gaither Junior Fellows program university nominee
2017 - Harry S. Truman Scholarship
2017 - Morris K. and Stewart L. Udall Scholarship
2017 - Society for Science and the Public Advocacy Grant ($3,000)
2017 - Drexel University Arcadia Grant ($3,000)
2016 - National Oceanic and Atmospheric Administration (NOAA) Ernest F. Hollings Scholarship
2016 - Drexel University ExCITe Center Seed Fund Research Grant ($5,000)
2016 - Drexel University Steinbright Corporate Partners Grant ($4,000)
2013 - Finalist of the Intel (now Regeneron) Science Talent Search by Society for Science and the Public

Oral Presentations

11 - **O'Leary, V**. (2018), How to create a new map of the world. Presented at Week of Undergraduate Excellence, Drexel University, Philadelphia, PA, 14-18 May.
10 - **O'Leary, V**., C. Amante (2018), GLOBATO: An enhanced global relief model at 30 arc-seconds resolution. Presented at Student Conference on Global Challenges, Drexel University, Philadelphia, PA, 1 Mar.
9 - **O'Leary, V**., C. Amante (2017), GLOBATO: An enhanced global relief model at 30 arc-seconds resolution. Presented at Science and Education Symposium, NOAA, Silver Springs, MD, 1-3 Aug.
8 - Shirey, V., **V. O'Leary**, S. Dilliplane (2017), More Than a Map: Adventures in Biodiversity Informatics Visualization. Presented at 2017 Annual Meeting, SPNHC, Denver, CO, 18-24, Jun.
7 - **O'Leary, V** (2017), Digitization of the ANSP Vertebrate Paleontology collections. Presented at Week of Undergraduate Excellence, Drexel University, Philadelphia, PA, 1-5 May.
6 - **O'Leary, V** (2017), Building Communities around a Shared River. Presented at Week of Undergraduate Excellence, Drexel University, Philadelphia, PA, 1-5 May.
5 - **O'Leary, V** (2017), From Online to On the River: Opportunities for Data Storytelling. Presented at River Research Seminar, University of Pennsylvania, Philadelphia, PA, 28 Apr.
4 - **O'Leary, V**., M. Sei, G. Rosenberg and J. Mead (2016), Modeling species distributions of landsnail biodiversity. Presented at National Conference on Undergraduate Research, University of North Carolina, Asheville, NC, 7-9, Apr.
3 - **O'Leary, V**., M. Sei, G. Rosenberg and J. Mead (2016), Describing multivariate relationships and spatial distributions of snail biodiversity in Jamaica. Presented at BEES Research Day, Drexel University, Philadelphia, PA,

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10 Mar.

2 - **O'Leary, V**., T. Daeschler (2016), Building an urban ecology curriculum along the Schuylkill River walking trail. Presented at Student Conference on Global Challenges, Drexel University, Philadelphia, PA, 25 Feb.

1 - **O'Leary, V** (2016), 1 Footpath, 100 Stories: Climate change and the importance of "talking science". Presented twice at Undergraduate Research Nerd Night, Drexel University.

Poster Presentations

8 - **O'Leary, V**., C. Amante (2017), GLOBATO: An enhanced global relief model at 30 arc-seconds resolution. Abstract OS31C-1412 presented at 2017 Fall Meeting, AGU, New Orleans, LA, 11-15 Dec.

7 - *(declined)* **O'Leary, V**., V. Shirey, and S. Dilliplane (2017), Connecting natural history collections to their historical context and telling those stories to a global online audience. Annual Meeting, ESA, Portland, OR, 6-11 Aug.

6 - Shirey, V., **V. O'Leary**, and S. Dilliplane (2017), Big Data Opportunities in Ecological and Biodiversity Informatics: A Functional Trait Perspective. Presented at Digital Data in Biodiversity Research Conference, iDigBio, Ann Arbor, MI, 5-6 Jun.

5 - **O'Leary, V**., M. Sei, G. Rosenberg and J. Mead (2016), Describing multivariate relationships and spatial distributions of snail biodiversity in Jamaica. Presented at Stanford Research Conference, Stanford University, Stanford, CA, 15-17 Apr.

4 - Raphelson, M., **V. O'Leary**, A. Adams, K. Luckenbill and T. Daeschler (2016), Student projects using digital imaging techniques in Vertebrate Paleontology to capture new details of Late Devonian-age fossils. Presented at BEES Research Day, Drexel University, Philadelphia, PA, 10 Mar.

3 - **O'Leary, V**., M. Sei, G. Rosenberg and J. Mead (2016), Describing multivariate relationships and spatial distributions of snail biodiversity in Jamaica. Presented at National Collegiate Research Conference, Harvard University, Cambridge, MA, 21-23 Jan.

2 - **O'Leary, V**., D. Duran (2014), Niche Modeling for Management of Invasive Crayfish. Presented at STAR Scholars Summer Showcase, Drexel University, Philadelphia, PA, 27 Aug.

1 - **O'Leary, V**., Z. Loughman (2014), A Multi-Year Analysis of Orconectid Crayfish Invasion Dynamics in West Virginia Utilizing Laboratory and Field Methodologies. Presented at COAS Research Days, Drexel University, Philadelphia, PA, 17-18 Feb.