

# 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 (USGCRP), 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)

*Dec 2013 - Dec 2017 Curatorial Assistant* (Ted Daeschler, PhD.)

Vertebrate Paleontology, Academy of Natural Sciences (ANSP), Philadelphia, PA

- \* Designed and implemented a FileMaker Pro database of 20,000+ specimens and 3D images for ANSP

*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 STAR (Students Tackling Advanced Research) Scholar* (Daniel Duran, PhD.)

Drexel University Office of Undergraduate Research (OUR), Philadelphia, PA

- \* Forecasted potential range expansion of invasive crayfish using MaxEnt and online environmental data

## Teaching and Outreach

*2018 English Second Language Teacher*

- \* Assisted Aquinas Center with their “English for Speakers of Other Languages” courses

*2017 - 2018 Society for Science and the Public Advocate*

- \* Volunteered with Lindy Center for Civic Engagement and School District of Philadelphia as a teaching assistant in 9th and 10th grade science classrooms

*2016 - 2017 Drexel Community Scholar*

- \* Coordinated after-school STEM activities for 3rd and 4th grade students in the School District of Philadelphia

*2014 - 2015* I co-developed a new community-based-learning course at Drexel University focused on climate change, urban ecology, and scientific communication along the Schuylkill River

*2008 - 2013* I directed educational activities such as children’s summer camps and special events at the Oglebay Good Zoo

## 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, 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.