

Vincent O’Leary

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Education

2013 - 2018 Drexel University, Pennoni Honors College, Philadelphia, PA GPA - 3.56

BS Environmental Science, minors in Mathematics, Geoscience

Relevant Courses: Biogeography, Biodiversity, Phylogenetic Analysis, Earth System Processes, GIS & Environmental Modeling, Scientific Data Analysis, Community Mobilization and Advocacy, American Political Thought

2015 Reykjavik University, GREEN Program for climate and energy policy, Reykjavik, Iceland

Academic and Professional History

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

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

* Design and implement a FileMaker Pro database of 20,000+ specimens and 3D images for ANSP

Jun - Aug 2017 NOAA Hollings Scholar Intern (Chris Amante)

National Centers for Environmental Information (NCEI) 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 Society for Science and the Public Advocate working with the Drexel Lindy Center and School of the Future to develop and oversee a high school science fair mentorship program

2017 Drexel Community Scholar coordinated after-school STEM activities for Alain Locke Elementary School students and served as science fair judge

2014 Co-created a new community based learning course at Drexel focused around climate change, urban ecology, and scientific communication

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)
2015 - Drexel University Office of Undergraduate Research Fellow designation
2013 - Finalist of the Intel (now Regeneron) Science Talent Search by Society for Science and the Public

Recent 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.

Recent 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.