**Education**

2013 – 2018 **Drexel University** Pennoni Honors College Philadelphia, PA; Cumulative GPA 3.56

BS Environmental Science, minors in Mathematics, Geoscience

2015 **Reykjavik University** Reykjavik, Iceland – studied climate and energy policy

**Academic and Professional History**

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

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

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

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, ANS Philadelphia, PA

* Migrated and organized 8800+ records in 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, ANS 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 Philadelphia, PA

* Modeled the range expansion of invasive crayﬁsh using MaxEnt and online environmental data

**Awards and Grants**

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

**Skills**

*Computer* ArcGIS, GDAL/OGR, QGIS, Python, R, OpenRefine, SQL, FileMaker Pro, Git/GitHub, Microsoft Office Suite (Word, Excel, PowerPoint, Access), Bash, HTML, LaTeX

*Field and Lab* Kinematic surveying using RTK/PPK and total station (TST) units, Barcode and laser level surveying, Water quality measurements via YSI, Open channel hydraulic surveys, Titration, Scanning electron (SEM) and Petrographic microscopy, Managing lab notebook

**Teaching and Outreach**

2017 – *present* Society for Science and the Public Advocate working with the Drexel Lindy Center and community partners to develop and oversee a high school science fair mentorship program in West Philadelphia high schools

2017 Science fair volunteer judge for Alain Locke Elementary School Science Fair

2017 Guest lecturer for Alain Locke Elementary School ﬁfth grade students

2016 Drexel Community Scholar coordinating after–school STEM activities for students in West Philadelphia elementary schools

2014 Co–created a new community based learning course at Drexel focused around climate change, urban ecology, and scientiﬁc communication oﬀered to 18 students

2008 – 2013 Educator for the Oglebay Good Zoo Wheeling, WV

**Presentations**

8 – **O’Leary, V.,** C. Amante. GLOBATO: An enhanced global relief model at 30 arc–seconds resolution. NOAA Hollings Scholarship Science and Education Symposium 2017.

7 – Shirey, V., **V. O’Leary,** S. Dilliplane. More Than a Map: Adventures in Biodiversity Informatics Visualization. The Society for The Preservation of Natural History Collections Annual Meeting 2017.

6 – **O’Leary,V.** Digitization of the ANSP Vertebrate Paleontology collections. Drexel University’s Week of Undergraduate Excellence 2017.

5 – **O’Leary, V.** Building Communities around a Shared River. Drexel University’s Week of Undergraduate Excellence 2017.

4 – **O’Leary, V.,** T. Daeschler. Building an urban ecology curriculum along the Schuylkill River walking trail. Student Conference on Global Challenges 2016.

3 – **O’Leary, V.** 1 Footpath, 100 Stories: Climate change and the importance of “talking science”. Presented twice for Drexel University’s Undergraduate Research Nerd Nite 2016.

2 – **O’Leary, V.,** M. Sei, G. Rosenberg and J. Mead. Deﬁning spatial distributions of landsnail biodiversity in Jamaica. 1) the National Conference on Undergraduate Research, 2) the Harvard Undergraduate Research Conference, and 3) the Stanford Undergraduate Research Conference 2016.

1 – **O’Leary, V.,** Z. Loughman. Habitat Preferences and Movement Patterns of Invasive Virile Crayﬁsh Determined by Radio–Telemetry. National Junior Science and Humanities Symposium 2013.

**Posters**

6 – **O’Leary, V.,** C. Amante. GLOBATO: An enhanced global relief model at 30 arc–seconds resolution. American Geophysical Union Annual Meeting 2017.

5 – (DECLINED) **O’Leary, V.,** V. Shirey, S. Dilliplane. Connecting natural history collections to their historical context and telling those stories to a global online audience. Ecological Society of America Annual Meeting 2017.

4 – Shirey, V., **V. O’Leary,** S. Dilliplane. Big Data Opportunities in Ecological and Biodiversity Informatics: A Functional Trait Perspective. Digital Data in Biodiversity Research Conference 2017.

3 – Raphelson, M., **V. O’Leary,** A. Adams, K. Luckenbill and T. Daeschler. Student projects using digital imaging techniques in Vertebrate Paleontology to capture new details of Late Devonian–age fossils. Drexel University Research Day 2016.

2 – **O’Leary, V.,** D. Duran. Niche Modeling for Management of Invasive Crayﬁsh. STAR Scholars Summer Showcase Program 2014.

1 – **O’Leary, V.,** Z. Loughman. A Multi–Year Analysis of Orconectid Crayﬁsh Invasion Dynamics in West Virginia Utilizing Laboratory and Field Methodologies. Science Talent Search Competition 2013.