Vincent O'Leary

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Education

2013 - 2018 **Drexel University** Pennoni Honors College Philadelphia, PA - Cumulative GPA 3.56 BS **Environmental Science** - Minors in *Mathematics, Geoscience*

Dec 2015 Reykjavik University Reykjavik, Iceland - studied energy and policy with the GREEN Program

Academic and Professional History

Dec 2013 - present Curatorial Assistant (Ted Daeschler, PhD.) Vertebrate Paleontology, Academy of Natural Sciences Philadelphia, PA

- Develop and standardize a FileMaker Pro database of 20,000+ specimens to publish online
- Describe morphology of fossils using scanning electron microscopy and 3D imaging techniques

Jun - Aug 2017 NOAA Hollings Scholar Intern (Chris Amante) National Centers for Environmental Information (NCEI) Boulder, CO.

- Created a global model of elevation with public bathymetric and topographic datasets, available publicly through NOAA as GLOBATO
- Wrote and maintained scripts for the development of this new model

Mar - Sep 2016 Biodiversity Informatics Research CO-OP (Steve Dilliplane) Center for Systematic Biology and Evolution, Academy of Natural Sciences Philadelphia, PA

- Migrated and organized 8860 records in FileMaker Pro using recognized metadata standards
- Developed 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 Philadelphia, PA

- Modeled Jamaican land snail biodiversity for 600+ sampled locations using ArcGIS, QGIS, and R
- Surveyed stream topography via bar-code and laser level techniques and sampled invertebrate biodiversity

Jun - Aug 2014 STAR (Students Tackling Advanced Research) Scholar (Daniel Duran, PhD.) Drexel University Office of Undergraduate Research Philadelphia, PA

• Forecasted potential range expansion of invasive crayfish using MaxEnt and online environmental data

Activities

2016 - present Student Ambassador for Drexel Fellowships Office

2015 Founding member and event coordinator of two new student professional societies at Drexel University

2013 - 2017 Vice President Phi Kappa Psi Fraternity Philadelphia, PA

• Presided over 70 members and implemented new messaging system to improve notifications and archiving

2013 - 2015 President Drexel Smart Initiatives Program - Drexel Smart House Project Philadelphia, PA

 Secured funding for original student research and partnered with Philadelphia Water Department and PECO

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

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

2017 Science fair judge for Alain Locke Elementary School science fair

2017 Guest lecturer for Alain Locke Elementary School fifth grade students

2014 Co-created new community based learning course at Drexel focused around climate change, urban ecology, and scientific communication which was offered to 18 students in the fall term of 2014

Awards and Grants

2017

- Truman Scholarship
- Udall Scholarship
- Society for Science and the Public Advocate Grant (\$3,000)
- Drexel University Arcadia Grant (\$3000)

2016

- National Oceanic and Atmospheric Administration (NOAA) Hollings Scholarship
- Drexel University ExCITe Center Seed Fund Research Grant (\$5,000)
- Drexel University Steinbright Corporate Partners Scholarship
- American Leadership Academy NBD Scholarship

2015

• Drexel University Office of Undergraduate Research SuperNova Fellow

2013

• One of 40 SSP Intel Science Talent Search finalists

Skills

Field and Lab

Kinematic surveying using RTK/PPK and total station (TST) units, Barcode and laser level surveying, Water quality via YSI measurements, Marsh-McBirney flow meter, Backpack electrofishing, Seine net collecting, Tracking via radio-telemetry, Open channel hydraulic surveys, Scanning electron (SEM) and Petrographic microscopy

Computer

R, Python, SQL, FileMaker Pro, Git/GitHub, Bash scripting, GDAL/OGR, QGIS, ArcGIS, MaxEnt, Markdown (This CV is originally written in Markdown), LaTeX