

Rosie L. Oakes, Ph.D.

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SUMMARY

Applied climate scientist working at the interface of climate change research and climate action. Extensive international experience working with collaborators to co-create climate information to help inform decisions. Excellent communicator of the science and implications of climate change to experts and non-experts. Passionate about making climate science accessible to all.

WORK EXPERIENCE

Senior Scientist – International Climate Services 2020 – present

UK Met Office, Exeter, UK

- Engage with users of climate information to identify their needs and understand decisions
- Run interactive workshops to train and engage with diverse communities on climate change
- Collaborate with international partners to create climate information that can help inform decisions to increase climate resilience
- Evaluate model data that feeds into climate services using python and jupyter notebooks
- Mentor junior scientists to help them navigate the work environment and reach their potential
- Communicate to general audiences via TV, YouTube, TikTok and community events

John J. and Anna H. Gallagher Fellow 2019 – 2020

Academy of Natural Sciences of Drexel University, Philadelphia, PA

- Designed a data collection plan to assess how plankton from Shetland, Scotland have been impacted by ocean acidification over the past 150 years
- Analysed data in R to test whether ocean acidification affects plankton shell formation
- Created long-term data storage plan in collaboration with the IT and collections departments
- Collaborated with the exhibits team to create a museum exhibit about my research

Postdoctoral Researcher 2017 - 2019

Department of Biodiversity, Earth and Environmental Sciences, Drexel University, Philadelphia, PA

- Designed a research project to assess the natural variability of plankton shell thickness
- Established a precise method to measure plankton shell thickness using micro CT scanning
- Created graphics to communicate the results of the study using Adobe Illustrator
- Presented the results to both academic audiences and the general public
- Collaborated with colleagues across 5 departments at the Academy of Natural Sciences

EDUCATION

Ph.D. in Geosciences - *The Pennsylvania State University, PA, USA* - GPA 3.9/4.0 2017

M.Sc. in Geology - *University of Toronto, ON, Canada* 2012

B.Sc. Geology and Physical Geography - *University of Edinburgh, Scotland* - 1st Class Hons. 2011

International Exchange Student at the *University of Toronto, Canada* 2009

VOLUNTEER EXPERIENCE

Early Career Representative

2019 - present

American Geophysical Union Council and Council Leadership Team

- Elected to represent over 10,000 early career scientists in the AGU Council.
- Selected to be part of the council leadership team where I work with the CEO, president, and section leaders to outline new initiatives and ensure correct protocols are followed.

Mentor

2021 - present

Social Mobility Foundation

- Support and advise talented high school students who have limited family and school support as they apply for university to help increase social mobility.

Letter Writer

Letters to a Pre-Scientist

2018 – 2020

- Wrote letters to a student from a low performing school to break down barriers between scientists and the general public and empower students to see themselves as future scientists

Academy Seminar Coordinator

2019 - 2020

Academy of Natural Science of Drexel University

- Organised a series of lunchtime seminars to highlight the work of museum employees and colleagues from local institutions to help initiate new collaborations across the city.

PUBLICATIONS AND PRESENTATIONS

• Peer reviewed scientific articles

Published 10 peer reviewed scientific articles on climate change-related research aimed at a technical audience <https://scholar.google.com/citations?user=z2McXXsAAAAJ&hl=en>

• Presentations at scientific conferences

Delivered 3 oral, and 10 poster presentations at national and international conferences. Awarded the AGU Outstanding Presentation Award in at AGU 2014 (awarded to top 2-5%)

• Presentations to a general audience

Delivered climate-change talks to a range of audiences including museum visitors, school children, and amateur fossil groups. Have presented via a range of media including podcasts, YouTube documentary, children's education programme, TikTok and regional news.

SELECTED GRANTS AND AWARDS

- **Best Newcomer (Runner up)**– Institutional – *UK Met Office* **2021**
Awarded to new starter within the first 5 years of their career for significant contribution
- **AGU Centennial Award** – International - *American Geophysical Union* **2019**
Awarded funding to send four minority students to a science and leadership academy (\$9,400)
- **Arthur J. Boucot Research Grant** – International – *Paleontological Society* **2018**
Funding to research the impact of ocean acidification on plankton (\$3,600)
- **Deike Research Fellowship** – co-PI with Bralower – Institutional – *Penn State Uni.* **2016**
Funding to research the impact of ocean acidification on plankton (\$50,000)

SOFTWARE

Experienced in: R, Python, Linux, Microsoft Office Suite, Illustrator, Avizo, Volume Graphics, ArcGIS