Education

MRes in Environmental Geoscience with Distinction (2020-2021)

Newcastle University

School of Natural and Environmental Sciences

Dissertation Title: 'Tectonically driven oxidant production in the hot biosphere'

Dissertation Supervisor: Jon Telling

1st Class BSc in Zoology (2017-2020)

Aberystwyth University

Institute of Biological, Environmental and Rural Sciences

Dissertation Title: 'Species Composition and Diversity Differences Related to Structural Complexity of

Breakwaters and a Nearby Natural Rocky Shore at Borth, Wales'

Dissertation Supervisor: Karl Hoffmann

Work & Volunteering Experience

Scientific figure editor (Sept 21 – present)

Stone Science (stonescience.org)

(paid) Freelance scientific illustrator and editor producing, vetting, and editing scientific diagrams and graphics.

Graphic Artist (02/22 – 05/22)

Ukraine Global Taskforce

(volunteer) I create visuals and manage social media channels for an NGO creating tech solutions to provide aid to those suffering from the invasion of Ukraine.

Graphic Artist (08/21 – 01/22)

Mars Space Construction, LLC.

(paid) Production of promotional material and technical diagrams for the design of a Mars analogue site and colony on Mars.

Volunteer representative (10/20 - 08/21)

Newcastle University

Supported student volunteers and represented their voices at the Students Union Council.

Citizen Scientist (2019 – 2020)

Zooniverse.com

I vetted over 10,000 NASA images and then joined a team to classify stars submitted on Zooniverse.com.

Awards

Top Project Award (2020)

Royal Society of Biology

For best undergraduate research dissertation of all Royal Society of Biology accredited degree schemes at Aberystwyth University.

Best Undergraduate Dissertation (2020)

Aberystwyth University

For highest grade dissertation in the Institute of Biological, Environmental and Rural Sciences (~1000 students).

Gold Aber Award (2020)

Aberystwyth University

For completing a total of 400 hours of volunteering during my last year of study at Aberystwyth University.

Publications

- Stone J, Edgar JO, Gould JA, Telling J. Tectonically-driven oxidant production in the hot biosphere.
 Nature Communications. 2022 Aug 8;13(1):1-0.
- Stone, J., Edgar, J., Rutherford, J., Gill-Olivas, B., Tranter, M., Telling, J. (2022). Flash heating boosts mechanochemical energy sources for subglacial ecosystems. *In draft form, to be submitted to Frontiers in Earth Science*.

Presentations

Astrobiology Graduates in Europe: Space Law and Governance Conference, 2020. Talk on "Mars Terraforming: The Ultimate Ecological Restoration Project"

Mars Society MDRS crew meeting, January 2020. Project proposal on "Microbial Trace Gas Utilisation in the Utah Desert"

Newcastle University, December 2021. Invited talk on "Making oxygen from rocks: Tectonically driven oxidant generation"

European Astrobiology Institute, Astrobiology and Society Conference, June 2022. Talk on "Astrobiology and the Climate Crisis: Saving life on Earth and Beyond"

Imperial College London, Environmental Design Challenge Workshop, September 2022. Talk on "Planetary science and ecosystems"

Memberships

Mars Society UK (since November 2020)

Mars Society Ambassador | Volunteered with conference video editing, speaker introductions, Q&A management, and experiment proposition.

Astrobiology Society of Britain (since April 2020)

British Interplanetary Society (since March 2022)

Space Generation Advisory Council (since March 2022)

Member of a policy working group on 'Space for Climate Action' | Mentee on Mentoring program

References

Dr Jon Telling – Senior Lecturer at Newcastle University, <u>i.telling@newcastle.ac.uk</u>

Karl Hoffmann – Lecturer at Aberystwyth University, krh@aber.ac.uk

Online courses

Data Science: R Basics. edX, Harvard University.

Astrobiology and the Search for Extraterrestrial Life. Coursera, The University of Edinburgh.

Super Earths and Life. *edX*, *Harvard University*.

Astrobiology: Exploring Other Worlds. Coursera, The University of Arizona.

Astronomy: Exploring Time and Space. Coursera, The University of Arizona.

Atmospheric Chemistry: Planets and Life Beyond Earth. FutureLearn, University of Leeds.

Introduction to Geochemistry. *edX*, *Kyoto University*.

Introduction to Microbiology. FutureLearn, University of Reading.

C# Fundamentals for Absolute Beginners. Developer University.

Genes and the Human Condition. Coursera, University of Maryland.