

Edward Clennett

Jackson School of Geosciences & Institute for Geophysics, The University of Texas, Austin, TX, USA

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Education

- 2020-2025 **University of Texas at Austin**, Jackson School of Geosciences & Institute for Geophysics **PhD**, Geological Sciences. Current GPA: 4.00.
- Awarded a Fulbright Scholarship to support my studies in the USA.
 - Proposed PhD thesis: “*Plate Motion and Continental Deformation Through Time: Insights from Plate Driving Force Calculations*”. Supervised by Thorsten Becker.
 - Methods include: *GPlates* plate modelling, python coding, synthesis of geological data and numerical inverse methods.
 - Looking at the Arabia-Eurasia collision and Hawaiian-Emperor Bend as case studies.
- 2015-2019 **University of Oxford**, Exeter College & Department of Earth Sciences **MEarthSci**, Earth Sciences. Classification: First class.
- MEarthSci thesis: “*A Quantitative Tomotectonic Plate Reconstruction of Western North America and the Eastern Pacific Basin*”. Supervised by Karin Sigloch. Placed 1st in year, grade: 1st class.
 - BA Extended essay: “*The relative importance of static and dynamic stress changes in triggering aftershocks*”. Advised by Jessica Hawthorne. Grade: 1st class.
 - BA Independent mapping project: “*Geology of Kekerengu, South Island, New Zealand*”. Grade: 1st class.
- 2008-2015 **Reading School**
A Levels: Mathematics A*, Further Mathematics A*, Chemistry A*, Physics A*, Geography A.
GCSEs: 9 A*s, 2 As and FSMQ: Additional Maths – A.

Professional Experience

- 2019-2020 *Researcher*, Department of Earth Sciences, University of Oxford.
- 08-09/2019 *Scientist*, RV Investigator, CSIRO Marine National Facility/University of Sydney.
- 11-12/2018 *Visiting Research Student*, EarthByte Group, School of Geosciences, University of Sydney.
- 07-08/2018 *Scientific Research Intern*, National Institute of Space Research, Brazil.
- 2016-2018 *Volunteer*, Oxford University Museum of Natural History.

Awards and Grants

- 04/2022 **1st place, SEG Gulf Coast Challenge Bowl** – \$1000 prize for winning first place in the Society of Exploration Geophysics regional quiz.
- 2021-2022 **Graduate Fellowship** – \$51,281 scholarship to cover tuition, insurance and salary from the Jackson School of Geosciences, University of Texas.
- 2021 **Top Downloaded Paper Award, G-Cubed**: awarded for writing a paper downloaded at the top 10% rate during 2020-2021 (Clennett et al., 2020)
- 2020-2021 **Fulbright All Disciplines Postgraduate Award** – \$45,000 scholarship awarded by the US-UK Fulbright Commission to support postgraduate study in the USA.
- 07/2020 **Second Prize, Halliburton Landmark Earth Model Award** – Global industry-recognized award for master’s geoscience projects.
- 02/2020 **UKOGL Prize** – awarded by the Geologists’ Association, for an outstanding UK MSci thesis.
- 06/2019 **BP Prize for Best Master’s Project** – awarded by the Department of Earth Sciences, Oxford.
- 06/2019 **Fitzgerald Prize** – awarded by Exeter College, Oxford, for achieving a 1st class honours degree.
- 12/2018 **University of Sydney Prize for Best Seminar on Natural Hazards** – Geological Society of Australia Earth Science Student Symposium New South Wales 2018.
- 11/2018 **Burdett-Coutts fund** – travel grant awarded by the Department of Earth Sciences, Oxford, to support a research visit to the University of Sydney.
- 07/2018 **BP Scholarship** – to fund an internship at the National Institute of Space Research, Brazil.
- 06/2018 **AWE prize in Geophysics** – awarded by the Department of Earth Sciences, for best 3rd year performance in Geophysics and Mathematics.

- 07/2017 **Oxford University Expeditions Council** – grant to support fieldwork in Kekerengu, New Zealand.
- 07/2017 **Gilchrist Educational Trust** – grant to support fieldwork in Kekerengu, New Zealand.
- 07/2017 **Exeter College Academic Grant** – to support fieldwork in Kekerengu, New Zealand.
- 07/2017 **Department of Earth Sciences Travel Grant** – to support fieldwork in Kekerengu, New Zealand.
- 2017-2019 **East Scholarship** – Exeter College, Oxford, for 1st class marks in 2nd & 3rd year examinations.
- 2016-2017 **East Exhibition** – Exeter College, Oxford, for excellent performance in 1st year examinations.
- 08/2013 **Silver Medal, 2013 International Geography Olympiad, Kyoto** – placed 23rd out of 126.
- 05/2012 **1st place, Geographical Association Worldwide Challenge** – captain of a team of 3.

Teaching Experience

Vector Calculus

- Tutor for the 3rd year undergraduate course, Department of Earth Sciences, University of Oxford, taught by Tarje Nissen-Meyer.
- Taught 6 tutorials in total, to students from Exeter College, Oxford.

GPlates tutorials

- Prepared a GPlates tutorial sheet and ran sessions with PhD students at the University of Oxford.

Fieldwork planning

- Invited seminar to the Oxford University Exploration Club about undertaking geological fieldwork and planning expeditions.

Snowdonia Field Course

- Led a 3-day field course to Snowdonia, Wales, with the Oxford University Geological Society.

Service and Outreach

- 2021 *Reviewer*, National Science Foundation (NSF) Tectonics program.
- 2019 *Convenor*, Oxford University Earth Sciences 4th Year Mini-Conference.
- 2016-2018 *Volunteer*, Oxford University Museum of Natural History.
- 2016 *Student Ambassador*, University of Oxford.

Fieldwork

Field experience in: *Coral Sea* (marine geology & geophysics), *Greece* (active tectonics), *Almería* (basin evolution), *Kekerengu* (independent mapping project), *Assynt* (metamorphic petrology and structural geology), *Snowdonia* (geology – field trip leader), *Dorset* (sedimentary geology and palaeontology), *Oxfordshire* (sedimentary geology), *Gloucestershire* (sedimentary geology), *Arran* (geology), *Pembrokeshire* (geology; fluvial geography), *Surrey* (fluvial geography), *Kyoto* (geography) and the *English Lake District* (geography).

Publications

Clennett, E. J., Sigloch, K., Mihalynuk, M. G., Seton, M., Henderson, M. A., Hosseini, K., Mohammadzaheri, A., Johnston, S. T., & Müller, R. D. (2020) A Quantitative Tomotectonic Plate Reconstruction of Western North America and the Eastern Pacific Basin. *Geochemistry, Geophysics, Geosystems*, 21, e2020GC009117. <https://doi.org/10.1029/2020GC009117>

Science Articles

Chui, F., **Clennett, E. J.**, Orth, K., & Marrison, M. (2019) Keeping it plutonic with underwater hot rocks. *CSIROscope blog*. <https://blog.csiro.au/underwater-rocks-coral-sea/>

Conference Presentations

Clennett, E. J., Becker, T. W., Holt, A. F., Tetley, M. G., & Faccenna, C. (2021) Investigating Plate Driving Forces in Plate Reconstruction Models using pyGPlates. Presented at Jackson School of Geosciences Research Symposium 2021, Austin, TX, 26 Mar.

Clennett, E. J., Becker, T. W., Holt, A. F., Tetley, M. G., & Faccenna, C. (2021) Investigating Plate Driving Forces in Plate Reconstruction Models using pyGPlates, Abstract G25C-0379. Presented at 2021 Fall Meeting, AGU, New Orleans, LA, 13-17 Dec.

Clennett, E. J., Becker, T. W., Tetley, M. G., Holt, A. F., & Faccenna, C. (2021) On the Consistency of Plate Driving Forces in Plate Reconstructions. Presented at Jackson School of Geosciences Research Symposium 2021, Austin, TX, 6 Mar.

Sigloch, K., **Clennett, E.**, Mihalynuk, M. G., Seton, M., Henderson, M. A., Hosseini, K., Mohammadzaheri, A., Johnston, S. T., & Müller, R. D. (2020) Tomotectonic Reconstruction of Cordilleran North America and the Eastern Proto-Pacific, Abstract T050-01. Presented at 2020 Fall Meeting, AGU, San Francisco, CA, 7-11 Dec. **[INVITED]**

Clennett, E., Sigloch, K., Mihalynuk, M., Seton, M., Henderson, M., Hosseini, K., Mohammadzaheri, A., Johnston, S., & Müller, D. (2020) Reconstructing western North America using lower mantle slabs. Presented at the Mini-Workshop on Feedbacks Between Mantle Composition, Structure, and Evolution, 14-16 Sep.

Clennett, E. J., Sigloch, K., Mihalynuk, M. G., Seton, M., & Müller, R. D. (2019) A Quantitative Tomotectonic Plate Reconstruction of Western North America and the Eastern Pacific Basin, Abstract T33C-04. Presented at 2019 Fall Meeting, AGU, San Francisco, CA, 9-13 Dec.

Clennett, E. J. & Naccarato, K. P. (2018) Electrostatic field patterns produced by ordinary and severe storms in the region of Campinas. Presented at GESSS NSW 2018, Sydney, NSW, 3-4 Dec. **[INVITED]**

Professional Memberships & Societies

2021-present	Texas Geophysical Society – Member, Treasurer
2020-present	Geologists' Association – Member
2019-present	American Geophysical Union – Student member
2017-present	Institute of Materials, Minerals and Mining – Young member
2015-present	Oxford University Geological Society – Member, field trip representative (2016-2017)