

# VICTORIA MILANEZ FERNANDES

Imperial College London  
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## PROFESSIONAL EXPERIENCE & EDUCATION

- from 2017 Imperial College London**  
Understanding Continental-Scale Landscape Evolution: A Multi-Proxy Approach  
PhD Candidate, Geology/Geophysics  
Investigating the driving forces behind the formation, evolution, and decay of the Earth's surface, with a particular focus on modelling the coupled interactions between fluvial erosion, geology and tectonics recorded at a variety of spatial and temporal scales.
- **FIELDWORK**
- 2019 Cairngorms, Scotland Geochemistry Fieldwork**  
Sample collection for major element geochemical analysis of mud-silt grade fluvial sediment.
- 2018 Calabria, Italy Geomorphology Fieldwork**  
Sedimentology and geomorphology. Rock description, fracture characterisation, Schmidt hammer measurement.
- 2017 North Iceland Geomorphology Fieldwork**  
Sample collection for cosmogenic nuclei dating. Geomorphic descriptions, angle grinder, hammer and chisel, Trimble high-res GPS, UAV photogrammetry.
- **TEACHING**
- 2017 - 2020 Graduate Teaching Assistant Imperial College London**  
Practical demonstrating for Global Geophysics, Basin and Tectonics, Structural Geology I and III, Continental Tectonics, Basin Analysis, Applied Geomorphology, Stratigraphy and Geomaterials, Year 1 Graphics workshop. Teaching assistant for the MSci Apennines field trip and MSc Pyrenees trip, including 2020 virtual field trip.
- **STUDENT SUPERVISION**
- 2019 - 2020 I. Wapenhans, *North American rivers: Scale-dependence, scale-variance and correlation to environment***  
**2018 - 2019 M. Morris, *Neogene evolution of the New Jersey margin***  
**S. Mitchell, *Long-term response to faulting: Insights from tectonic and landscape evolution modelling***  
**2017 - 2018 B. Conway-Jones, *Neogene Epeirogeny of Iberia*.**
- **AWARDS**
- 2020 Faculty of Engineering Graduate Teaching Assistant of the Year**  
**2020 Outstanding Graduate Teaching Assistant** Student Union Choice Award nomination  
**2019 Janet Watson Research Prize** for excellence in research, Imperial College  
**2019 Imperial Trust Award** for invited conference talk by PhD student  
**2018 AGU Fall Meeting - Outstanding Student Presentation Award**
- 2012 - 2016 Newnham College, University of Cambridge**  
MSci Geological Sciences 2.1; BA Natural Science 2.1
- 1997 - 2011 The British School of Rio de Janeiro**  
International Baccalaureate (IB) Diploma 44 points

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## PUBLICATIONS & PRESENTATIONS

- Lipp, A. G., Roberts, G. G., Whittaker, A., Gowing, C. & **Fernandes, V. M.** (*accepted*). The Propagation of Geochemical Signals through Fluvial Systems, *Journal of Geophysical Research: Earth Surface*, preprint: <http://dx.doi.org/10.31223/osf.io/mf3s5>
- Wapenhans, I., **Fernandes, V. M.**, O'Malley, C. & Roberts, G. (*submitted*). Scale-Dependant Tectonic and Lithological Controls on River Profile Shapes, *Journal of Geophysical Research – Earth Surface*.
- Fernandes, V. M.** & G. Roberts (2020), Patterns and Scales of Uplift from a Global Paleobiology Inventory, *Geological Society of America Bulletin*, <https://doi.org/10.1130/B35739.1>.
- Fernandes, V. M.**, G. Roberts, N. White, A. Whittaker (2020). Continental-Scale Landscape Evolution: A History of North American Topography, *Journal of Geophysical Research – Earth Surface*, 124(11), pp. 2689–2722, <https://doi.org/10.1029/2018JF004979>.

Morris, M., **Fernandes, V. M.** & Roberts, G. G. (2020). Extricating dynamic topography from subsidence patterns: Examples from Eastern North America's passive margin, *Earth and Planetary Science Letters*, 530, <https://doi.org/10.1016/j.epsl.2019.115840>.

Stucky de Quay, G., Roberts, G. G., Rood, D. H. & **Fernandes, V. M.** (2019). Holocene uplift and rapid fluvial erosion of Iceland: A record of post-glacial landscape evolution, *Earth Planet. Sci. Lett.*, 505, pp. 118–130, <https://doi.org/10.1016/j.epsl.2018.10.026>.

2019 **AGU (Invited)** Fall Meeting (Talk, Poster, eLightning).  
2018 **AGU** Fall Meeting (Poster), doi: 10.1002/essoar.10500772.  
2018 **University of Chicago**, Department of Geophysical Sciences (Invited Speaker)  
2017 **Schlumberger** Abingdon Research Centre, R&D Team (Invited Speaker)

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## OTHER RESEARCH EXPERIENCE

2015/2016 **MSci Research Project - Investigation of Cratonic Basins** Supervisor: Prof. N. White  
Examined the subsidence history of Parnaíba cratonic basin (NE Brazil). Use of Petrel software to analyse wells and 2D seismic reflection profiles. Produced and modelled subsidence curves using a 1D rift model. Contributions to understanding the evolution of cratonic basins. Results contributed to Rodríguez Tribaldos et al. (2018).  
Funding and data: BP

2014 **Geological Mapping, Serra da Capivara National Park (NE Brazil)** Supervisor: Prof. N. White  
Undergraduate project geological map and report of a 20km<sup>2</sup> area in NE Brazil, on the SE edge of the Parnaíba Basin. Results yielded the first 1 : 10 000 geological map of the area. Results contributed to Rodríguez Tribaldos et al. (2018).  
Funding: Shell, BP, and Chevron research grants, Santander South America Travel Grant, Royal Geological Society Award, College Travel Grant, Earth Sciences Department fieldwork grant

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## OTHER WORK EXPERIENCE

2017 - 2019 **Tutor** Oxbridge Applications - Dukes Education, London  
Student mentoring, admissions test support, mock interviewing and tutorial group leader for students applying to Oxford and Cambridge for all physical sciences.

2016 **Schlumberger - Internship** Abingdon Technology Centre, UK (3 months)  
Part of the Petrel gridding research team – user experience testing.

2013 **Petrobras - Technical Internship** CENPES, Rio de Janeiro, Br (3 months)

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## POSITIONS OF RESPONSIBILITY, OUTREACH & PUBLIC ENGAGEMENT

2019 - 2020 **Athena SWAN Committee**  
Application for the Bronze Award, special focus on understanding gender bias in outreach and societal engagement activities in Earth Sciences at Imperial.

2019 **Imperial Lates** “Science Without Borders” (leading stand about what geologists take to the field).

2019 **European Researcher Night** at the Natural History Museum (talk and Q&A).

2019 **Great Exhibition Road Festival** “Blast from the Past”, showcasing IODP projects.

2019 **4Cs of Science Communication Competition**

2019 **Kingston Grammar School Visit** student activity helper, workshop on landscape evolution models.

2018 **Heathland School Visit** personal statement workshop for science applicants

2018 - 2019 **Imperial College Graduate Society Committee**  
Organisation of post-graduate events such as an annual PhD conference, Mental Health week, 3-minute thesis competition, as well as voicing student concerns and liaising solutions at department staff meetings.

2017 - 2018 **EAGE Student Chapter - Graduate Student Representative**

2015 - 2016 **Cambridge Earth Sciences Time Truck** – Outreach arm of the Cambridge Earth Sciences Department

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## SKILLS & OTHERS

2019 **Doctoral Summer School for Advanced Spatial Modelling** UCL Bartlett Centre for Advanced Spatial Analytics

2018 **Marlin Fieldwork First Aid**

2017 **YES! Unleash Your Ingenuity Competition** Part of 4 person team representing Imperial College at the Biotechnology YES! Entrepreneurship Competition.

**Professional Body Memberships** EAGE, AGU, AAPG

**Languages** Fluent in English and Portuguese, conversational Spanish, basic French and German

**Computing** Office Package; Adobe Photoshop, CorelDraw; ArcGIS, Petrel; UNIX, GMT, Python, R, SQL

**Other skills** PADI Open Water Diving License; UAV piloting and photogrammetry; Full Drivers licence (Brazil); Mental Health First Aid