# Xenia Boyes

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	Email:

Mobile:

### **EDUCATION AND QUALIFICATIONS**

# University of Cambridge

MSci. Natural Sciences (Earth Sciences) 2017 - 2018

- Project: Mush disaggregation in the Bardarbunga volcanic system, Iceland The aim of the project is to determine the depth at which the mush equilibrated, the depth at which a second phase of porosity-filling crystallisation occurred, and the timescales between mush disaggregation and eruption. Gabbroic nodule samples were collected earlier this summer during a 10 day trip to Iceland. In the next few months I will section, polish, and map the mush nodules using SEM and EPMA in Cambridge. Barometric and diffusional modelling will then be used to determine PT storage conditions and the timescale between disaggregation and eruption.
- Courses: I expect to be taking options primarily in the areas of Petrology, Mineralogy and Geophysics.
- Ba. (Hons, 1st class) Natural Sciences (Earth Sciences) 2014 2017
  - 3rd Year Courses:

Geophysics, Petrology, Mineralogy

Mapping Project: The Geology of the Southern Pyrenees, Riglos, Northern Spain. An area of approximately 16km² was mapped over 29 days between July and August 2016. A 6,000 word report, map, drift map and two cross-sections were produced. The report focussed mainly on the mechanism of formation for the deformation seen in a sequence of Mesozoic to Cenozoic sediments.

Grade: 1st class

· 2nd Year Courses:

Earth Sciences A: Focuses on understanding surface processes and structures.

Earth Sciences B: Looked at subsurface processes of the lithosphere and asthenosphere, focused on igneous and metamorphic processes and products

Field trips: 10 days introductory mapping course in Sedburgh, Cumbria; 10 day trip around the SW coast of the UK; 10 days mapping training in Skye, Scotland.

Chemistry A: Focused on the theories which are used to understand and probe chemical bonding, structures and reactions

Grade: 1st class

1st Year Courses:

Maths, Physics, Chemistry, Earth Sciences (Included a weeks field trip to Arran, Scotland) Grade: 2:1

# Marlwood School, Bristol, UK 2007 - 2014

- A-levels June 2014:
  Chemistry A\*, Physics A\*, Maths A\*, Further Maths A\*, Economics(AS) A
- GCSEs June 2012: 11 GCSEs A\* to A including English and Maths

#### ACADEMIC RECOGNITIONS and SCIENTIFIC MEMBERSHIPS

- Scholar of Trinity Hall, Cambridge for outstanding results in 2nd and 3rd year final exams.
- BP Achievement Award for outstanding results in 1st year Earth Sciences
- Member of the Sedgwick Club attend weekly seminars.
- Member of the Mineralogical Society of GB & I subscription to Elements Magazine

#### **ACTIVITIES AND INTERESTS**

- Played badminton for the university in 1st year. Captained and coached the college badminton team in 3rd year.
- Rowed and coxed for the college boat club and Captain of Coxes for 2017/18.

## **ADDITIONAL SKILLS**

- Computer Skills: Word, excel, Python, R-studio, Inkscape, QGIS, Igor Pro, Matlab, Mathimatica.
- Full, clean UK driving licence

## **REFERENCES**

Dr. Sasha Turchyn Department of Earth Sciences University of Cambridge

Dr. John Maclennan Department of Earth Sciences University of Cambridge