

J. J. Brown | Curriculum Vitae

Education

Planetary and Space Science Centre – University of New Brunswick	Fredericton
<i>Masters of Science, GPA – 4.1/4.3</i>	<i>2014–2016</i>
Earth Sciences – specialisation in Planetary Sciences	
University of New Brunswick	Fredericton
<i>Bachelor of Science, GPA – 4.1/4.3</i>	<i>2010–2014</i>
First Class Honours in Earth Sciences and Physics; Minor in Mathematics	

Undergraduate Thesis

Title: *Modification-stage tectonics prior to melt sheet emplacement: Constraints from the Manicouagan Impact Structure*

Supervisors: Professor John Spray & Senior Research Scientist Dr. Lucy Thompson

Description: This thesis established a minimum diameter for the Manicouagan impact structure based on the distribution of collapsed Ordovician blocks. Ordovician sedimentary rocks formed the uppermost veneer of the target package at the time of impact, and were subsequently removed from the region by glacial erosion. Their unique preservation within the collapsed cavity provides a minimum estimate of the collapsed, eroded transient cavity diameter.

Experience

Research Experience.....

University of New Brunswick	Fredericton
<i>Master of Science</i>	<i>2014–2016</i>

Field Training and Research Program at Meteor Crater	Arizona
<i>Barringer Meteorite Crater</i>	<i>2014</i>

- Examined and mapped ejecta distribution in the immediate vicinity of the impact structure
- Contributed to a poster presented at 46th Lunar and Planetary Science Conference

Planetary and Space Science Centre – University of New Brunswick	Fredericton
<i>Summer Research Assistant</i>	<i>2013</i>

- Independently researched the mechanics of impact crater collapse
- Participated in field work at the Manicouagan Impact Structure
- Mapped a section of the Manicouagan Impact Structure

Canadian Society of Petroleum Geologists	Calgary
<i>Student Industry Field Trip</i>	<i>2013</i>

- Awarded the Bill Ayrton Technical Award for analysis of hydrocarbon-bearing geology

University of New Brunswick	Fredericton
<i>Summer Research Assistant</i>	<i>2012</i>

- Configured EARTH WORM software to display data from UNB's seismograph online and in the Quartermain Earth Science Centre.
- Assisted in installation of seismograph
- Assisted in field work, acquiring geophysical data down-hole
- Assisted in design of analytical procedure and performed analysis of geophysical properties of core samples in the lab

Teaching Experience.....

University of New Brunswick **Fredericton**
Teaching Assistant: Mineralogy, Geology Lab for Engineers, & Applied Geophysics *2015-2016*
Teaching Assistant: Applied Geophysics & Petroleum Geoscience *2014-2015*
Peer Assisted Learning Leader *2012-2013, 2013-2014*

- Planned and facilitated tutorial-style sessions with first year physics students
- Liaised with faculty to provide class feedback to professor and enhance the students' learning environment

Conferences

47th Lunar and Planetary Science Conference **The Woodlands**
Poster *March 2016*
Shock attenuation within the Manicouagan impact structure

46th Lunar and Planetary Science Conference **The Woodlands**
Poster *March 2015*
Constraining the dimensions of the Manicouagan impact structure: Analysis of the gravity anomaly

Poster
Distribution of continuous Kaibab ejecta north of Meteor Crater, Arizona

Geological & Mineralogical Association of Canada Joint Annual Meeting **Fredericton**
Oral Presentation *May 2014*
Collapse processes prior to melt sheet emplacement within the Manicouagan impact structure

45th Lunar and Planetary Science Conference **The Woodlands**
Poster *March 2014*
Modification-stage tectonics prior to melt sheet emplacement: Constraints from the Manicouagan Impact Structure

YSS Undergraduate Research Conference **The Woodlands**
Poster *March 2014*
Modification-stage tectonics prior to melt sheet emplacement: Constraints from the Manicouagan Impact Structure

Honours and Awards

2014–2015: Natural Sciences & Engineering Research Council – Canada Graduate Scholarship (Masters); Board of Governors Merit Awards for Graduate Studies; Pam & John Little Overseas Scholarship

2014: Applied Statistics Centre Prize

2010–2011, 2011–2012, 2012–2013, 2013–2014: Dean's List – University of New Brunswick

2012, 2013: Natural Sciences & Engineering Research Council – Undergraduate Student Research Award

2013–2014: Dr. Ker-Ping Lee Memorial Scholarship; C. W. Argue Prize

2013: Bill Ayrton Technical Award

2012–2013, 2013–2014: Marven L. Blakely Scholarship

2012–2013, 2013–2014: Dorothy & Kenneth Langmaid Scholarship

2011–2012, 2012–2013, 2013–2014: Hazen M. & Margaret A. Smith Scholarship

2012–2013: Geological Association of Canada & Mineralogical Association of Canada Scholarship; Dr. Haider R. Zaidi Memorial Scholarship

2010: Dr. Donald "Digger" Gorman Prize in Geology