

**TIMOTHY L. COOK**

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**EDUCATION**

**University of Massachusetts, Amherst, MA**

Department of Geosciences – Ph.D. in Geology, expected August 2008

Dissertation topic: Investigation of the physical processes in Arctic lakes and reconstructing high-resolution records of climate/environmental change from lake sediments

Advisor: Raymond S. Bradley

**University of Delaware, Newark, DE**

Graduate College of Marine Studies – M.S. in Oceanography, 2004

Masters thesis: Observations of sediment transport in the Delaware Estuary during spring runoff conditions

Advisor: Christopher K. Sommerfield

**Brown University, Providence, RI**

Sc.B. in Geological Sciences, 2001

Senior thesis: Fluvial sediments of the Rhode Island Formation: lithofacies relationships at Dodgeville, Mass.

**University of Otago, Dunedin, New Zealand**

Semester abroad, 2000

**GRANTS & AWARDS**

- 2007 – NASA Alaska Satellite Facility, funding awarded for the project “Impacts of Climate Variability on High Arctic Lake-Ice Dynamics”
- 2007 – Massachusetts Space Grant Consortium Summer Fellowship
- 2004 – Kenneth N. Weaver Student Travel Award, Geological Society of America
- 2004 – Grant in Aid of Research, Sigma Xi Scientific Research Society
- 2001 – Elected to Sigma Xi Scientific Research Society

**RESEARCH EXPERIENCE**

2004 to present **University of Massachusetts, Amherst, MA**

Department of Geosciences – Research Assistant

- collected and analyzed high-resolution paleoclimatic data
- planned and led field expeditions to the Canadian and Norwegian Arctic
- conducted paleolimnologic field and laboratory studies

2002 to 2004 **University of Delaware, Lewes, DE**

Graduate College of Marine Studies – Research Assistant

- carried out field and laboratory investigations of coastal geology and oceanography
- collected and analyzed sedimentological, geophysical, and time-series data
- participant in multiple oceanographic research cruises

- Fall 2001      **University of Washington, Seattle, WA**  
Department of Earth and Space Science – Research Assistant
- conducted fluvial geomorphology research on Mt. Pinatubo, Philippines
  - carried out topographic and hydrologic surveys of river systems

## **TEACHING EXPERIENCE**

- Fall 2007      **University of Massachusetts, Amherst, MA**  
Department of Geosciences – Teaching Assistant
- instructed laboratory portion of *The Earth*, an introductory geology course
  - organized and led multiple field trips covering modern stream processes, glacial deposits, and regional Mesozoic geology
- Fall 2007      **University of Massachusetts, Amherst, MA**  
Athletic Department – Academic Tutor
- one-on-one tutoring of student-athletes in introductory geology course
- Summer 2001   **St. Paul’s School, Concord, NH**  
Advanced Studies Program – Teaching Intern in Marine Biology
- collaborated in the development and implementation of an advanced high-school marine biology class
  - led discussions, lectures, laboratory sessions, and field exercises
- 2000 to 2001   **Brown University, Providence, RI**  
Department of Geological Sciences – Teaching Assistant (two courses)
- “Mars Moon & Earth” (introduction to planetary geology): co-taught laboratory sessions
  - “Earth Systems History” (an introductory course for geology majors): co-developed and instructed laboratory and field curriculum
- 2000 to 2001   **Brown University, Providence, RI**  
Outdoor Leadership and Experiential Education Program – Mentor/Educator
- Responsible for the development and implementation of an experiential education curriculum in outdoor leadership and environmental studies for at-risk high school students

*Additional Teaching Experience:* guest lecturer for Smith College oceanography course, field trip leader for University of Massachusetts oceanography class

## **PUBLICATIONS** (peer reviewed)

**Cook, T. L.**, Sommerfield, C. K., and Wong, K.-C., 2007. Observations of tidal and springtime sediment transport in the upper Delaware Estuary, *Estuarine, Coastal and Shelf Science*, vol. 72: 235-246. doi:10.1016/j.ecss.2006.10.014.

## **PUBLISHED ABSTRACTS**

**Cook, T.**, Bradley, R., 2008. Sensitivity of High Arctic lake-ice conditions to climate change, 38<sup>th</sup> International Arctic Workshop, Program and Abstracts, p. 39.

**Cook, T. L.**, Bradley, R. S., and Stoner, J. S., 2007. 4,500 Years of annual sediment accumulation recorded in Lower Murray Lake in the Canadian High Arctic, *Eos Transactions. AGU*, 88(52), Fall Meeting, Supplement.

Davies, M. H., Stoner, J. S., St-Onge, G., **Cook, T. L.**, Bradley, R. S., Werner, A., 2007. Reconstructing Holocene Paleomagnetic Secular Variation From High Arctic Sediments, *Eos Transactions. AGU*, 88(52), Fall Meeting, Supplement.

**Cook, T.**, Bradley, R., 2007. Controls on recent sedimentation and lamina characteristics in two adjacent High-Arctic lakes, 37<sup>th</sup> International Arctic Workshop, Program and Abstracts, p. 71.

Stoner, J. S., Francus, P., Bradley, R., Lamoureux, S., Retelle, M., Patridge, W., **Cook, T.**, and Abbott, M., 2006. Late Holocene paleo-and-environmental magnetic records from high arctic lake sediment, Geological Society of America Abstracts with Programs, vol. 38, no. 7, p. 200.

**Cook, T.**, Patridge, W., Bradley, R., 2006. Sedimentary evidence of climate and landscape changes from Upper and Lower Murray Lakes in the Canadian High-Arctic, 36<sup>th</sup> International Arctic Workshop, Program and Abstracts, p. 53.

**Cook, T.**, Sommerfield, K., and Wong, K.-C., 2004. Observations of Sediment Transport in the Delaware Estuary During Spring Runoff Conditions, Geological Society of America Abstracts with Programs, vol. 36, no. 2, pp. 86.