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## EDUCATION

**Ph.D. (anticipated 2011)**, Brown University, Planetary Sciences (Thesis advisor: John Mustard)  
**Sc. M.**, Brown University, Geological Sciences, 2008  
**M.Sc. by research**, University of Oxford, Physical Geography, 2007 (Thesis advisor: Heather Viles)  
**M.Sc. with distinction**, University of Oxford, Environmental Change and Management, 2005  
**A.B. Summa Cum Laude**, Washington University in St. Louis, 2004 (Thesis advisor: Raymond Arvidson)  
Majors: Earth & Planetary Sciences, Environmental Studies; Minor: Mathematics

## AWARDS AND FELLOWSHIPS

NASA Group Achievement Award, Mars Exploration Rover Science Operations Team (2005)  
National Science Foundation Graduate Research Fellowship (2004)  
Rhodes Scholar (Missouri and Keble/Hertford, 2004)  
Morris K. Udall Scholar in Environmental Studies (2002, 2003)  
Barry M. Goldwater Scholar in Science, Mathematics, and Engineering (2002)

## WORK AND RESEARCH EXPERIENCE

Compact Reconnaissance Imaging Spectrometer for Mars, science team collaborator (2006-present)  
MSL landing site selection workshop II and III participant (2007-2008)  
Student Collaborator, NASA Mars Exploration Rover Athena Science Team (on-site, JPL, Jan –Sep 2004)  
Space Studies Board Intern, National Research Council, National Academy of Sci., Washington, DC, 2003  
Student Science Consultant, Interdisciplinary Environ. Law Clinic, Washington Univ. School of Law, 2003  
Research Associate, NASA Astrobiology Academy, Ames Research Center, 2002

## SELECTED PEER-REVIEWED PUBLICATIONS

EHLMANN, BL, JF Mustard, SL Murchie, F Poulet, JL Bishop, AJ Brown, WM Calvin, RN Clark, DJ Des Marais, RE Milliken, LH Roach, TL Roush, GA Swayze, JJ Wray. Orbital Identification of Carbonate-Bearing Rocks on Mars. under review, *Science*

Wray, J.J., BL EHLMANN, SW Squyres, JF Mustard, RL Kirk. Compositional Stratigraphy of Clay-Bearing Layered Deposits at Mawrth Vallis, Mars. 2008. *Geophysical Research Letters* 35, L12202, doi:10.1029/2008GL034385.

Mustard JF, et al., Hydrated Silicate Minerals on Mars Observed by the CRISM Instrument on MRO. 2008. *Nature* 454, 305-309.

EHLMANN, BL, et al. Clay mineralogy and organic preservation potential of lacustrine sediments from a Martian delta environment, Jezero Crater, Nili Fossae, Mars. 2008. *Nature Geoscience*

EHLMANN, BL., HA Viles, and MC Bourke. 2008. Quantitative morphologic analysis of boulder shape and surface texture to infer environmental history: A case study of rock breakdown at the Ephrata Fan, Channeled Scabland, Washington. *J. Geophys. Res.*, 113, F02012, doi:10.1029/2007JF000872.

EHLMANN, BL and RE Criss, 2006. Enhanced Stage and Stage Variability on the Lower Missouri River benchmarked by Lewis and Clark. *Geology* 34(11), 977-980.

EHLMANN, BL, et al, 2005, Hydrologic and Isotopic Modeling of Alpine Lake Waiau, Mauna Kea, Hawaii. *Pacific Science* 59 (1), p1-15.

EHLMANN, BL, et al., 2005. Humans to Mars: A Feasibility and Cost-Benefit Analysis. *Acta Astronautica* 56 (9-12), 851-858.

Golombek, MP, et al., 2005. Assessment of Mars Exploration Rover Landing Site Predictions and Implications for Climate Change. *Nature*, 436, p43-46.

Arvidson, RE et al., 2004. Localization and Physical Properties Experiments Conducted by Opportunity at Meridiani Planum. *Science* 306, 1730-1733.

Arvidson, RE, et al., 2004. Localization and physical properties experiments conducted by Spirit at Gusev crater. *Science* 305, 821-824.

Grant, JA, et al. 2004. Surficial Deposits at Gusev Crater Along Spirit Rover Traverses. *Science*, 305, 807-810.

Soderblom, LA, et al., 2004. Soils of Eagle Crater and Meridiani Planum at the Opportunity Rover Landing Site. *Science* 306, 1723-1726.

Solar System Exploration Survey, National Academy of Sciences, Space Studies Board, 2003. (Brian Dewhurst, BETHANY EHLMANN, and David Smith, text ed.), *New Frontiers in Solar System Exploration*. National Academies Press. <<http://www.nap.edu/openbook/NI000529/html/index.html>>

### **RECENT FIRST-AUTHOR CONFERENCE PUBLICATIONS AND PRESENTATIONS**

(invited) EHLMANN, BL et al. "Orbital Identification of Carbonate-Bearing Rocks on Mars" AGU Fall Mtg. 2008

(invited) EHLMANN, BL et al. "Diverse Alteration Minerals Around Martian Impact Craters Revealed by MRO-CRISM: Indicators of Hydrothermal Activity or Subsurface Aqueous Alteration?" AGU Fall Mtg. 2008

EHLMANN, BL et al. "Phyllosilicates, zeolites, and carbonate near Nili Fossae: evidence for distinct environments of aqueous alteration. Workshop on Martian Phyllosilicates, Paris, October 2008.

EHLMANN, BL, et al. "Distinct provinces of aqueous alteration in the western Isidis region identified with MRO-CRISM" LPSC 38, Houston, Texas, March 10-14, 2008, Abstract #2326

EHLMANN, BL, et al. "Infrared spectra of impact products from Lomar Crater: the effects of weathering and implications for Mars." LPSC 38, Houston, Texas, March 10-14, 2008, Abstract #2437

EHLMANN, BL, et al. "New secondary minerals detected by MRO CRISM and their geologic settings: kaolinite, chlorite, illite/muscovite, and the possibility of serpentine or carbonate in Nili Fossae" Seventh International Conference on Mars, Pasadena, California, July 9-13, 2007, Abstract #3270. (talk)

### **TEACHING EXPERIENCE**

Teaching assistant, geosciences undergraduate spring break field trip, Brown University 2008

Tutor for Remote Sensing-GIS, Oxford University Hilary and Trinity terms 2005, Michaelmas term 2006. Hired by colleges to teach seminar courses in remote sensing (term-long and revision) for first-year Geography students (Mansfield, Worcester, St. Hilda's, Christ Church, Merton, Wadham, St. Edmond's Hall Colleges)

Teaching Assistant for EPSc 407 Remote Sensing, Washington University, 2003

Academic Tutor, Earth & Planetary Sci. Courses, Student Educational Services, Washington Univ., 2001-2002

### **PROFESSIONAL ASSOCIATIONS AND SERVICE**

Reviewer for the *Journal of Geophysical Research*

American Geophysical Union (since 2001)

Geological Society of America (since 2003)

NASA Academy Alumni Association (since 2002)

Phone Interviewer, 2004, 2007; Executive Selection Board, 2005-8; Soffen Grant Committee, 2006-8

### **BROWN UNIVERSITY COMMITTEES AND SERVICE**

University Resources Committee, Brown University, 2008-present

Rhodes/Marshall Scholarship Nominating Committee, Brown University, 2006-present

Geoclub (geoscience graduate student group), Treasurer, 2007; Rep. to Grad Student Council, 2008