

Zoe A. Learner Ponterio

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Manager, Spacecraft Planetary Imaging Facility (SPIF)

Data Manager/GIS Specialist/Research Support Specialist (2017-present)

Duties include archiving hardcopy images from past planetary missions, planetary research support, coordinating K12 outreach and communicating science to the public.

Education

PHD STUDENT, ASTRONOMY | 2002-2006 | CORNELL UNIVERSITY

- Planetary science, minor in geology, research related to Mars Exploration Rovers mission
- Advisor: Dr. Steve Squyres
- Coursework (GPA 3.79) and qualifying exam completed, degree not completed

BS ASTROPHYSICS, BS MATHEMATICS | 2002 | UNIVERSITY OF OKLAHOMA

- Summa Cum Laude in Astrophysics (GPA 3.89)
- Special Distinction in Mathematics (GPA 4.00)

Previous Experience

MATH & PHYSICS TEACHER | CASCADILLA SCHOOL | 2008-2017

- I taught all high school level math and physics classes, focusing mostly on AP and honors courses, as well as an astronomy elective course.

STUDENT SCIENCE TEAM MEMBER | MARS EXPLORATION ROVERS | 2002-2006

- In addition to the Science Team, I also served in the mission critical operations role of Documentarian.

GRADUATE RESEARCH ASSISTANT | CORNELL UNIVERSITY | 2002-2006

- I performed research on Martian geology based on data obtained by the MER mission, under the advisement of Dr. Steve Squyres.

VOLUNTEER GUEST SPEAKER | CORNELL UNIVERSITY & NASA | 2003-2006

- I traveled throughout the Central New York region and Oklahoma, speaking at schools of all levels and at special events on space exploration and career opportunities related to science and math. Some events involved hands-on activities for the students and curriculum enrichment ideas I developed for the teachers.

WORKSHOP PRESENTER | SCIENCE TEACHERS ASSOC. OF NYS | NOVEMBER 2005

- I presented a workshop for teachers on activities that I had developed, inspired by planetary exploration, to enhance math and science curricula.

EDUCATION & PUBLIC OUTREACH REPRESENTATIVE | NASA/CORNELL | 2003-2005

- I participated in live webcasts with students regarding my work on the Mars Exploration Rover Mission; was featured in live television broadcasts including two educational programs hosted by Bill Nye “The Science Guy”; and participated in *Marsapalooza*, a NASA-endorsed and sponsored, NSF-funded cross-country tour produced by Passport to Knowledge, with appearances at schools, museums, planetariums, and observatories to audiences of all ages.

WORKSHOP LEADER | CORNELL UNIVERSITY | APRIL 2003

- I helped organize and lead the Cornell University Expand Your Horizons workshop, a day-long workshop on rocketry for junior high school girls.

UNDERGRAD. RESEARCH ASST. | HARVARD-SMITHSONIAN CFA; OU | 2000-2002

- I performed research on various topics in astronomy, including CCD camera optics and supernovae. My advisors were Dr. Eric Schlegel (Harvard-Smithsonian Center for Astrophysics), Dr. Richard Henry (Univ. of Oklahoma), and Dr. William Romanishin (Univ. of Oklahoma).

TEACHING ASST. | UNIVERSITY OF OKLAHOMA | FALL 2001

- I taught General Physics Laboratory as an undergraduate.

Publications

- Knoll, A. H., et al. (2008). Veneers, rinds, and fracture fills: Relatively late alteration of sedimentary rocks at Meridiani Planum, Mars. *Journal of Geophysical Research E: Planets*, 113(6).
- Learner, Z. A., et al. (2005). Fracture fills and surface coatings at Meridiani Planum, Mars. *Division of Planetary Studies (American Astronomical Society), 37th Meeting, Session 21 Mars II, 21.07 (Oral Presentation)*.
- McLennan, S. M., et al. (2005). Provenance and diagenesis of the evaporate-bearing Burns formation, Meridiani Planum, Mars. *Earth and Planetary Sciences Letters*, 240(1), 95-121.
- Soderblom, L. A., et al. (2004). Soils of Eagle Crater and Meridiani Planum at the Opportunity Rover Landing Site. *Science*, 306(5702), 1723-1726.
- Siloti, S. Z.*, Schlegel, E. M., Challis, P., Jha, S., Kirshner, R. P., & Garnavich, P. (2000). Photometric and spectroscopic observations of the type II_n supernova SN1999E. *Bulletin of the American Astronomical Society*, 32, 1538. (previously presented at the American Astronomical Society, 197th Meeting, 81.07)

*published under my previous name