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RESEARCH INTERESTS

- Time scales and mechanisms of magma generation
- Terrestrial planet formation and early solar system evolution
- Isotope fractionation processes in terrestrial and extraterrestrial systems
- New laser ablation techniques for isotope measurements
- Ion microprobe studies (esp. the crystal and melt record of young (\leq m.y.'s) magma systems)

EDUCATION

- 2005 Ph.D. (Geology) University of California, Los Angeles
Title: *High resolution geochronology: from planetary progenitors to terrestrial rhyolites*, (advisers Edward Young and Mary Reid)
- 2000 MSc. (Geochemistry) Colorado School of Mines
Title: *A Petrogenetic Comparison of Early Crystal-poor Ash-flow Tuffs, San Juan Volcanic Field, South-central Colorado* (adviser Richard Wendlandt).
- 2000 University of New Mexico and LANL, volcanology field camp
- 1996 Indiana University, geology summer field camp
- 1996 B.A. (Geology with honors) Macalester College, MN

PROFESSIONAL EXPERIENCE

Postdoctoral Researcher, Earth and Planetary Sciences, University of California, Berkeley (2005-present; Don DePaolo and Paul Renne)

Electron Microprobe Research Tech., CSM (1998-1999; Richard Wendlandt)

NAGT Career Development Workshop, University of Minnesota (2004)

Teaching Experience

UCLA (1999-2004 graduate student teaching assistant):

- Optical Mineralogy and Lithology (3 terms with Abby Kavner and Edward Young)
- Igneous Petrology (1 term with Mary Reid)

- The Major Events in the History of Life (1 term with J. William Schopf)
- Introduction to Oceanography (1 term with Frank Kyte)

CSM (1996-1999 graduate student teaching assistant):

- Combined Igneous, Metamorphic, and Sedimentary Petrology (3 terms with Richard Wendlandt, Greg Holden, Wendy Harrison)

Field Experience

- Long Valley volcanic field, CA, PhD (1 month combined)
- San Juan volcanic field, CO, MSc (2 months combined)
- UNM-LANL volcanology field camp, 2000 (1 month)
- UCLA Cascades field seminar (assisted Jon Davidson, Graham Pearson, and Clarence Hall, 3 weeks)
- CSM volcanology section of undergraduate summer field camp (assisted Sam Romberger, Richard Wendlandt, and Greg Holden, 1 week)
- UCLA Northern Britain field seminar (3 weeks, trip lead by Jon Davidson)
- UCLA Baja California field seminar (1 week, trip lead by Gary Axen)

Analytical Instrumentation Experience

- Laser ablation and solution techniques for isotope measurements using a multi-collector ICP-MS for Mg, Fe, and Pb isotope systems
- Ion microprobe studies using Cameca ims 1270 ion microprobe (SIMS) for B, Pb, Th, and U isotope systems and trace elements
- Thermal ionization mass spectrometry (TIMS) for Ca, Sr, Nd, and Pb isotope systems
- Cameca electron microprobe (major and trace elements)
- Bulk rock and water compositional analyses by ICP-AES
- Powder and oriented (e.g., clay minerals) x-ray diffraction (XRD) methods
- Petrographic and scanning electron microscopy (SEM)
- 5+ years of clean lab experience

ACADEMIC AWARDS AND ACHIEVEMENTS

- University of California Dissertation Year Fellowship, UCLA, 2004-05
- Departmental recognition for excellent teaching at UCLA, 2000-04 (5 courses)
- Honorable Mention: North Central Section meeting GSA, 1996
- Honors Project: Macalester College, MN, September 1995-completed May 1996

PUBLICATIONS

- Simon, J. I.**, Reid, M. R., and E. D. Young (in preparation). Lead isotopes by LA-MC-ICPMS: signatures of evolving time scales of silicic magma transfer in the crust
- Simon, J. I.**, Russell, S. S., Tonui, E., and E. D. Young (in preparation). Reconstructing changing conditions in the solar nebula: model constraints and evidence from magnesium isotopes in CAIs
- Simon, J. I.** Young, E. D., Russell, S. S., Tonui, E. K., Dyl, K., and C. E. Manning, 2005. A short timescale for changing oxygen fugacity in the solar nebula revealed by high-resolution ^{26}Al - ^{26}Mg dating of CAI, *Earth and Planetary Science Letters*. Vol. 238, 272-283
- Simon, J. I.** and M. R. Reid, 2005. The pace of rhyolite differentiation and storage in an 'archetypical' silicic magma system, Long Valley, California, *Earth and Planetary Science Letters*. Vol. 235, 123-140
- Kavner, A., F. Bonet, A. Shahar, **J. Simon**, and E. Young, 2005. Electrochemical Separation of the Stable Isotopes of Iron, *Geochimica et Cosmochimica Acta*, Vol. 69, No. 12 2971-2979
- Young, E. D., **Simon, J. I.**, Galy, A., Tonui, E., Russell, S. S., and O. Lovera, 2005. Supracanonical $^{26}\text{Al}/^{27}\text{Al}$ and the Residence Time of CAIs in the Solar Protoplanetary Disk, *Science*. Vol. 308, 223-227, 10.1126/science.1108140
- Schmitt, A. K. and **J. I. Simon**, 2003. Boron isotopic variations in hydrous rhyolitic melts: a case study from Long Valley, California, *Contributions to Mineralogy and Petrology*, Vol. 146, 590-605
- Wendlandt, R. F., Harrison, W. J., **Simon, J. I.**, Chastain, E. A., and J. Jecha-Ernstberger, 1998. Integrated experimental and numerical assessment of acid buffer capacity evolution in soils, Proceedings of Tailings and Mine Waste 1998, January 26-29, *Balkema*, pp. 689-700.
- Simon, J. I.**, 1996. Proterozoic Evolution of South West Minnesota: Evidence from Mafic Dikes, pp. 80 (undergraduate thesis, advised by Karl Wirth)