

# Sally Susan Kuhn Sennert

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## PROFESSIONAL EXPERIENCE

- **Science Writer/Editor/Volcanologist (2006-present):** produced products from collaboration between the Smithsonian's Global Volcanism Program and the US Geological Survey's Volcano Hazard Program
  - Wrote Smithsonian Institution/US Geological Survey Weekly Volcanic Activity Report by synthesizing information about volcanic eruptions from multiple sources into a summary intended for both scientists and non-scientists
  - Managed and improved Weekly Volcanic Activity Report website ([www.volcano.si.edu/reports/usgs](http://www.volcano.si.edu/reports/usgs))
  - Assistant Editor and writer for the Bulletin of the Global Volcanism Network (GVN) and GVN summaries for the Bulletin of Volcanology
  - Produced film scripts intended for non-scientists, handled public inquiries, interacted with media sources about volcanic activity, assisted in training volunteers
- **Geospatial Analyst (2004-2006):** GeoEye, Inc.
  - Perform radiometric balancing, orthorectification, and mosaicking on satellite and aerial image data for the production of high quality seamless digital image products using the latest technology and equipment
  - Measured tie and ground points from digital images and source maps, created procedures
- **Graduate Researcher and Instructor (2001-2004):** Department of Geology and Planetary Science, University of Pittsburgh
  - **Instructor (2004)** for Introduction to GIS, GPS, and Computer Methods
  - **Research Specialist (2004):**
    - Analysed thermal infrared satellite data for numerous remote sensing projects, designed an educational program to introduce remote sensing to high-school students, attended conferences and presented data, and assisted in designing department volcanology web page
  - **Graduate Researcher and Teaching Fellow (2001-2003):**
    - Research focus on thermal infrared satellite remote sensing including, sub-pixel analysis, temperature distribution, innovative image processing techniques, ordering and classifying state-of-the-art NASA data
    - Created and statistically analyzed a database of explosive and effusive volcanological processes to enhance image data interpretation, monitoring and mitigation of volcanological hazards
    - Recitation instructor for Introduction to Geology, Environmental Geology, and The Planets. Instructor for Introduction to GIS, GPS, and Computer Methods.
- **Research Assistant (1993-1996; 1999-2001)/ Laboratory Manager (1997-1998):** University of Pittsburgh Medical Center/ Oregon Regional Primate Research Center
  - Oversaw all aspects of primate research for reproductive physiology, neuroscience, behavior science, and endocrinology studies
  - Designed, implemented, and supervised experimental procedures
  - Wrote and quality controlled standard operating procedures
  - Interviewed and trained new employees, as well as administered budgets and schedules
  - Created medical illustrations for Merck Pharmaceuticals and associates

## EDUCATION

- **M.Sc.**, Geology and Planetary Science, University of Pittsburgh, December 2003
  - Thesis title- *Characterization of Dome Processes at Soufriere Hills Volcano, Montserrat: Synthesis of Infrared Remote Sensing Data with a Multi-parameter Database*
- **B.A.**, Anthropology, University of Pittsburgh, May 1997

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## COMPUTER EXPERIENCE/OTHER

- Completed 3 day Fast Track to Coldfusion MX 7 through Fig Leaf Software Training (January 2007)
- ESRI ArcGIS software certification (January 2003)
- Software proficiency or familiarity in: Kodak ENVI and ERDAS IMAGINE remote sensing suites, ArcInfo, ArcView, ArcGIS and extensions, statistical analysis and database management using Statistical Package for the Social Sciences (SPSS) and Excel, Trimble Pathfinder Office (GPS), Adobe suite (Photoshop and Illustrator), Frontpage, Dreamweaver, and Net Objects Fusion web design, Microsoft Office, Corel image suite, Paradox database management, and MapInfo
- Operating system proficiency: Apple Macintosh, Microsoft Windows, DOS, and UNIX operating systems
- Skilled artist and illustrator utilizing various media

## FIELD TRAINING AND COURSEWORK EXPERIENCE

- **Hawai'i (July 2003)**
  - analyzed explosive/effusive deposits for hazard monitoring and mitigation
  - mapped and explored flow velocity emplacement features and lava tubes
- **Oahu, Hawai'i (March 2003)**
  - served as field assistant for the study of channel formation at Koko Crater
  - collected samples for Mars spectroscopy study
- **Coursework Experience (2001-2003)**
  - Utilized and fused multiple data sets such as RADAR, Landsat, digital ortho quarter quads, and ASTER for urban planning, mineral mapping, and classification. Skilled with GIS software and techniques, use of a handheld GPS and map creation
  - analyzed volcanological and morphological features in Long Valley Caldera, California

## PUBLICATIONS, AWARDS AND ACCOMPLISHMENTS

- **Kuhn Sennert, S.S., Venzke, E., Siebert, L., Kimberly, P.,** New Advances in the Collaborative USGS/Smithsonian Weekly Volcanic Activity Reports: Documenting Current Activity for Scientists and Non-scientists, 6th Biennial Workshop on Japan-Kamchatka-Alaska Subduction Processes (JKASP-2009), Sci. Abst. & Progs., p. 295, 2009.
- **Kuhn, S. S.,** Ramsey, M. S., Growth of the Soufrière Hills Dome: Fusion of Thermal Infrared Spaceborne Data with a Multi-parameter Database. Cities on Volcanoes III Conference, July 2003, Hilo, Hawai'i.
- **Kuhn, S. S.,** Ramsey, M. S., Monitoring the Surface Changes and Growth of the Soufrière Hills Lava Dome: Thermal Infrared Analyses of Field and Spaceborne Data. EOS Trans. AGU, 83(47), Fall Meet. Suppl., Abstract V12-1407, 2002
- Invited speaker for Girl Scout troop and large home schooling group (January 2006)
- Invited speaker and award recipient for joint meeting of the Allegheny-Ohio Section of the Association of Engineering Geologists, the Geotechnical Group of the Pittsburgh Section of the American Society of Civil Engineers, and the Pittsburgh Geological Society (April 2004)
- Guest lecturer for Introduction to GIS, GPS, and Computer Methods (Fall 2003)
- Received student grant award for the Cities on Volcanoes III Student Workshop, Hilo, Hawai'i (July 2003)
- Awarded outstanding poster presentation: University of Pittsburgh Faculty of Arts and Sciences Graduate Student Organization Graduate Student Expo (Spring 2003)
- Invited speaker at the Department of Geology and Planetary Science weekly seminar (January 2003)

## PROFESSIONAL ORGANIZATIONS

- Sigma Gamma Epsilon National Honors Society for the Earth Sciences, (2000 - 2003), Geological Society of America, (2002 - present), American Geophysical Union, (2002 - 2004), Pittsburgh Geological Society (2004), Geological Association of Canada (2004)