

## Curriculum Vitae – Daniel S. Helman

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<http://hypatia-math.weebly.com>

<http://winklescience.weebly.com/about.html>

<http://daniel-helman-retrospective.weebly.com>

[https://www.researchgate.net/profile/Daniel\\_Helman2](https://www.researchgate.net/profile/Daniel_Helman2)

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### Current Affiliations

Winkle Institute: A Group of Independent Scientists, 501(c)(3) (CA, USA) – Founder, Executive Director, Scientist

Institute for Celestial Geodynamics (MN, USA) – Contract Scientist

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**Geoscience Research Interests:** Origin of life, Mineral-organism interactions, Structure of the core and mantle, Earth electricity, Seismic and non-seismic earthquake precursors, Mineral physics.

**Sustainability Research Interests:** Human dietary impacts on climate, Mental health, Novel solar panel materials, Novel piezoelectrics, Practical applications of lightning, Artificial ice thickening in the polar regions, Homelessness, Art therapy, Music therapy, Occupational therapy, Biogeengineering.

**Education Research Interests:** Novel classroom discipline strategies, Language-learning techniques in STEM, Curriculum design, Adult education.

**Artistic Interests (Static):** Sculpture, Transfer techniques for oil painting, Flute- and woodwind-making, Clay carving, Monoprinting, Painting and drawing, Stained glass.

**Artistic Interests (Temporal):** Playwriting, Folk dance, Music theory, Choral music performance, Songwriting, Poetry.

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### Education

Ph.D. Prescott College - Sustainability Education - 2017.

M.S. California State University Long Beach - Geology - 2013.

B.A. UCLA *cum laude* - Individual Major in Aesthetics: The search for beauty - 1994.

### Credentials

Clear Professional California Designated Subjects Adult FT Teaching Credential:

Elementary and Secondary Basic Skills

English as a Second Language

Fine Arts

Physical Science – including General Science

Social Sciences

Self-Maintenance Skills – Adults with Disabilities

Physical Fitness – Older Adults.

### Professional Experience

2013 - Present: Founder, Executive Director, Research Scientist, *Winkle Institute: A Group of Independent Scientists*.

2013 - Present: Consultant, *Institute for Celestial Geodynamics*.

2014 - 2017: PhD Student, *Prescott College*, Sustainability Education.

2007 - 2013: Master's Student, *California State University Long Beach*, Geology, including two years as teaching associate.

2001 - 2007: Various teaching positions in adult schools, *Pasadena City College*, and K-12.

1994-2001: Fine Artist.

### Current Professional Service

Executive Director (Volunteer): *Winkle Institute: A Group of Independent Scientists*.

Language Editor (Volunteer): *Open Geosciences* (formerly *Central European Journal of Geosciences*).

Peer Reviewer: *Health: An Interdisciplinary Journal for the Social Study of Health, Illness and Medicine*.

Peer Reviewer: *Psychological Services*.

### Teaching Experience

Independent Study Course Instructor -  
Reading Methods and Literacy for Jewish  
Philosophy, MA Program in Education,  
Prescott College, Prescott, AZ, USA. 1/17  
to 5/17.

Teaching Associate - University, Introductory  
Lab in Geology, California State University,  
Long Beach, USA. 9/07 to 5/09.

Substitute Teacher - K-12, Kelly Educational  
Staffing, CA, USA. 3/07 to 9/07.

Substitute Yoga Teacher, for adults, older adults  
and the MS Society, CA, USA. 12/04 to  
9/07.

Substitute Teacher- Adult ESL; Students With  
Disabilities; And Older Adults, Azusa Adult  
School, CA, USA. 10/01 to 2/06.

Substitute Teacher - K-12, Azusa Unified  
School District, CA, USA. 10/04 to 2/06.

Substitute Teacher - Adult ESL and Academic  
Classes, Bassett Adult School, CA, USA.  
11/01 to 2/06.

Substitute Teacher - High School, Discovery  
Charter Preparatory School, Pacoima, CA,  
USA. 9/05.

Yoga Teacher, Pasadena City College Extended  
Learning, CA, USA. 6/05 to 10/05.

- Instructor - Adult ESL, Pasadena City College, Community Education Center, CA, USA. 8/04 to 8/05.
- Substitute Teacher - K-12, Teachers On Reserve, CA, USA. 3/05 to 7/05.
- Substitute Teacher - 7-12, Monrovia Unified School District, CA, USA. 9/04 to 6/05.
- Substitute Teacher - Adult ESL, Los Angeles Unified School District, Franklin Community Adult School, CA, USA. 12/04.
- Substitute Teacher - Adult ESL, Los Angeles Unified School District, East Side Learning Center, CA, USA. 7/04.
- Teacher - Adult ESL, Hacienda La Puente Unified School District, Hacienda – La Puente Adult School, CA, USA. 7/02 to 6/04.
- Substitute Teacher (including a long term assignment) - Adult ESL, Hacienda La Puente Unified School District, Hacienda – La Puente Adult School, CA, USA. 12/01 to 6/04.
- Substitute Teacher - Adult ESL, Los Angeles Unified School District, South Gate Adult School, CA, USA. 2/02.
- ESL Teacher - Middle School, South Pasadena Middle School, CA, USA. 6/01 to 7/01.
- Pre-Algebra Teacher's Assistant - Middle School, South Pasadena Middle School, CA, USA. 6/01 to 7/01.
- Tutor - Community College, Pasadena City College- Extended Opportunities, Programs and Services, CA, USA. 8/99 to 6/01.
- Latin Tutor - Middle School, The Brentwood School, Los Angeles, CA, USA. 1/86 to 6/86.

### Publications - Journal Articles

- Helman, D.S. (2017). Recovery from schizophrenia: An autoethnography. *Deviant Behavior*, article in press.
- Helman, D.S. (2016). Symmetry-based electricity in minerals and rocks: A review with examples of centrosymmetric minerals that exhibit pyro- and piezoelectricity. *Periodico di Mineralogia*, 85(3), 201-248.
- Helman, D.S. (2016). Schizophrenia is normal: My journey through diagnosis, treatment, and recovery. *Schizophrenia Bulletin*, 42(6), 1309-1311.
- Helman, D.S. (2014). Earth electricity: A review of mechanisms which cause telluric currents in the lithosphere. *Annals of Geophysics*, 56(5), G0564.
- Helman, D.S. (2012). Public geology at Griffith Park in Los Angeles: A sample teachers' guide. *Electronic Green Journal*, 1(33).
- Helman, D.S. (2011). Catching lightning for alternative energy. *Renewable Energy*, 36(5), 1311-1314.

### Journal Articles [in review & near submission]

- Helman, D.S. Climate change context: An ontology of progress and resilience. Submitted March 2017 - *Geography, Environment, Sustainability*. [in review].
- Helman, D.S. School Leadership: School Culture, Constructivist Discipline, and Healing. Submitted May 2017 - *Academic Exchange Quarterly*. [in review].
- Helman, D.S. Finding or creating a living organism? From astrobiology to computer science. Submitted July 2017 - *Artificial Intelligence*. [in review].
- Helman, D.S. Deformation mechanisms in earth materials: Electromagnetic phenomena? Submitted August 2017 - *Earth-Science Reviews*. [in review].
- Helman, D.S. Factors leading to medication-free recovery from schizophrenia. Submitted August 2017 - *Schizophrenia Research and Treatment*. [in review].

- Helman, D.S. Seismic electric signals (SES) and earthquakes: A review of the latest VAN method. Submitted August 2017 - *Natural Hazards*. [in review].
- Helman, D.S. Online media resources for teaching in sustainability. Submitted August 2017 - *Journal of Teacher Education for Sustainability*. [in review].
- Helman, D.S. Galactic distribution of chirality sources. Submitted August 2017 - *The Journal of Wild Culture*. [in review]. Pre-print published on arXiv December 2016.
- Helman, D.S. Tree-planting to fight climate change: An online survey to gather practical ideas. Submitted August 2017 - *Public Understanding of Science* [in review].
- Helman, D.S. Ecopsychology, Deep Ecology, Ecofeminism and War: Looking for a Bridge. Submitted August 2017 - *Resilience: A Journal of the Environmental Humanities*. [in review].
- Helman, D.S. Showers for Mental Health: Portable Programs. Submitted August 2017 - *The Trumpeter*. [in review].
- Helman, D.S. Long term mental health treatment flexibility: A systems approach. [near submission].
- Helman, D.S. Lightning for energy and material uses. [near submission].
- Helman, D.S. Artificial ice caps? [near submission].
- Helman, D.S. Forestation and climate change: Rough assessment of a tree-based preventive strategy. [near submission].
- Helman, D.S. Solar panels from ice: Preliminary efforts. [near submission].
- Helman, D.S. Positing an inner plasma core for the Earth. [near submission].
- Helman, D.S. Repurposing materials: A lifecycle analysis of paint pigments versus novel scrap. [near submission].
- Helman, D.S. On the columnar shape of stacked graphs of multiple variables: Optimizing variable adjacency. [near submission].

#### **Publications – Theses / Dissertations**

- Helman, D.S. (2017). Ethical Considerations for Living Organisms Found Off-Planet or Created: Ideas from Astrobiologists and Computer Scientists. Doctoral Dissertation. Prescott College.
- Helman, D.S. (2013). Metamorphic Contributions to Electrical Phenomena in the Earth's Crust. Master's Thesis. California State University Long Beach.

#### **Publications - Conference Papers**

- Helman, D.S. (2017). Preserving Arctic and Antarctic ice: Ideas about artificial processes. In *Proceedings of SUSCON-V, IIM Shillong, Shillong, India, 17-19 March 2016*.
- Helman, D.S. (2016). Recycled glass innovation: Ground glass as a pigment and filler material. In *Proceedings of ICETETS 2016, Kings College of Engineering, Thanjavur, India, 24-26 February 2016*.
- Helman, D.S. (2015). Scientific creativity to fuel sustainability: Teaching math and science in a way that inspires and heals. In *Proceedings of RE-DO: Conference on sustainability and culture's role in sustainable futures, Aarhus, Denmark, 28-31 October, 2015*.
- Helman, D.S. (2015). Ice as a novel material for solar panels in cold climates: Potential for adoption and usage. In *Proceedings of ECPR General C., Université de Montréal, 26-29 August 2015*.

#### **Publications - Book Reviews**

- Helman, D.S. (2016). Review of *British Columbia's Inland Rainforest: Ecology, Conservation, and Management* by Susan K. Stevenson et al. *Electronic Green Journal*. 1(39).

- Helman, D.S. (2015). Review of *Forest Economics* by Daowei Zhang & Peter H. Pearse. *Electronic Green Journal*, 1(38).
- Helman, D.S. (2013). Review of *Dry River: Stories of Life, Death, and Redemption on the Santa Cruz* by Ken Lamberton. *Electronic Green Journal*, 1(36).
- Helman, D.S. (2013). Review of *Food and the Mid-Level Farm: Renewing an Agriculture of the Middle* by Lyson, Stevenson & Welsh (Eds.). *Electronic Green Journal*, 1(35).

### **Publications - Poetry**

- Helman, D.S. (2015). Finding nature, finding love. *Journal of Sustainability Education*, 7.
- Helman, D.S. When the whales left. Submitted March 2017 - *Plumwood Mountain*. [in review].
- Helman, D.S. Natural capital: I pray. Submitted March 2017 - *Interdisciplinary Literary Studies*. [in review].

### **Publications - Short Story**

- Helman, D.S. (2017, March 30). Flash Fiction: My iFriend. *365tomorrows*.
- Helman, D.S. (2016, October 6). Flash Fiction: Malia Read the Paper and Then Again. *365tomorrows*.
- Helman, D.S. A vitamin story. Submitted March 2017 - *Image Journal*. [in review].

### **Published Comments & Letters to the Editor**

- Helman, D.S. (2014). Comment: Structure and evolution of the lunar Procellarum region as revealed by GRAIL gravity data. *Nature*, online comment.
- Helman, D.S. (2012). Comment: Paternal age and technological pollution. *Nature*, online comment.
- Helman, D.S. (2011). Letter to the Editor: The levity of dark energy. *Physics Today*, 64(10), 10.

### **Grants**

- 2/2016. John Templeton Foundation. [\$50,000; proposal rejected.]
- 12/2015. NSF 15-592: Discovery Research PreK-12. [\$120,000; proposal rejected.]
- 7/2015. NSF 14-589: Enriched Doctoral Training in the Mathematical Sciences. [\$600,000; proposal rejected.]
- 7/2015. Paul G Allen Family Foundation. [not specified; no response to initial query.]
- 6/2015. HHS 93.060: Competitive Abstinence Education Grant Program. [\$200,000; proposal rejected.]
- 6/2015. USAID Conflict Mitigation and Reconciliation Programs and Activities. [\$50,000; proposal rejected.]
- 9/2014. Brinson Foundation. [not specified; proposal rejected.]
- 8/2014. Lawrence Foundation. [\$10,000; proposal rejected.]
- 8/2014. Durfee Foundation. [\$50,000; proposal rejected.]
- 7/2014. Energy Foundation. [\$50,000; proposal rejected.]
- 7/2014. Surdna Foundation. [\$100,000; proposal rejected.]
- 7/2014. Environmental Resources Management (ERM) Sustainability Grant. [\$11,900; no response to initial query.]

### Patents

- 2017-2018. Electrochemical Cells From Ice For Use in Cold Environments. USPTO. [provisional].
- 2015-2016. Photovoltaic Cells From Ice For Use In Cold Environments. USPTO. [provisional, expired].
- 2011-2012. Method For Making Anisotropic Glass To Be Used In Photovoltaic Or Piezoelectric Or Related Applications. USPTO. [provisional, expired].
- 2008-2009. Cryobaric Electric Generation. USPTO. [provisional, expired].

### Workshops, Talks and Posters

- “Water Ice as a Surface for Proto-Metabolism: Electrical Benefits.” Astrobiology Science Conference (AbSciCon) Mesa, AZ. 2017. [Poster].
- “Ethical Considerations for Living Organisms Found Off- Planet or Created: Ideas from Astrobiologists and Computer Scientists” Sustainability Symposium. Prescott College, Prescott, AZ. 2017. [Talk].
- “Using TPR in the Pre-Calculus Class: Math Instruction Inspired by Second-Language Learning.” Joint Mathematics Meetings. Atlanta, GA. 2017. [Talk].
- “Ethical Considerations: Humans, Machines and the Future of Work.” De Lange Conference X. Rice University, Houston, TX. 2016. [Poster].
- “Set-Theoretic Analysis of Ethical Systems for Off-Planet Future Engagement with Living Systems.” Division for Planetary Sciences (DPS) of the American Astronomical Society (AAS) and the European Planetary Science Congress (EPSC). Pasadena, CA. Annual Meeting. 2016. [Poster].
- “A Bond-Topology Approach to Ice as Solar Panel Material.” Society for Industrial and Applied Mathematics (SIAM). Philadelphia, PA. Mathematics of Planet Earth. 2016. [Poster].
- “Plenary Speech: Sustainability and the Triple Bottom Line” Indian Institute of Management (IIM) Shillong, Meghalaya, India. Fifth Annual International Conference on Sustainability (SUSCON V). 2016. [Talk].
- “Preserving Arctic and Antarctic Ice: Ideas about Artificial Processes.” Indian Institute of Management (IIM) Shillong, Meghalaya, India. Fifth Annual International Conference on Sustainability (SUSCON V). 2016. [Talk].
- “Recycled glass innovation: Ground glass as a pigment and filler material.” Thanjavur, Tamil Nadu, India. Kings College of Engineering. First International Conference on Emerging Trends in Engineering, Technology and Science. 2016. [Talk].
- “Using Closed Sets to Model Cognitive Behavior.” (author: John Pfaltz). Canberra. Australasian Conference on Artificial Life and Computational Intelligence. 2016. [Talk].
- “Defining Life Scientifically: How Research Would Benefit If There Were an Official Definition for Life & How to Get There.” Galveston. Gordon Research Seminar, Gordon Research Conference. 2016. [Poster].
- “Critical review: Is Earth's outer core liquid or a high density plasma?” Earth-Life Science Institute, Tokyo Institute of Technology. Early Earth, Venus & Mars: Three Experiments in Biological Origins. 2016. [Poster].
- “Sustentabilidad: Charla e intercambio de ideas con los participantes.” Valparaíso, Chile. Universidad Libre—La Desuniversidad. 2015. [Workshop].

- "Calcium Carbonate in Paper Production: Potential to Mitigate Climate Change." Concepción, Chile. Biorrefinerías: Ciencia, Tecnología e Innovación para la Bioeconomía. 2015. [Poster].
- "Using the Axiom of Choice as a Means of Inferring Consciousness in Systems: A Novel Perspective on System Analysis." Carnegie Institution for Science. Washington, DC. Re-conceptualizing the Origin of Life. 2015. [Poster].
- "Scientific Creativity to Fuel Sustainability: Teaching Math and Science in a Way that Inspires and Heals." Aarhus, Denmark. Re-Do: On Sustainability and Culture's Role in Sustainable Futures. Also given at AGH University of Science and Technology to engineering geology PhD students. 2015. [Talk].
- "Ice as a Novel Material for Solar Panels in Cold Climates: Potential for Adoption and Usage." University of Montreal. European Consortium for Political Research (ECPR) General Conference. 2015. [Talk].
- "Conceptual Foundations of Earth System Governance." University of Montreal. European Consortium for Political Research (ECPR) General Conference. 2015. [Discussant].
- "Yoga as a Research Methodology." Prescott College. Sustainability Symposium. 2015. [Talk].
- "Defining Life: A Study of the Thoughts and Needs of Astrobiologists in Setting up an Official Definition." Sustainability Symposium. Prescott College, Prescott, AZ. 2017. [Poster].
- "Using Case Studies in Science Teaching." Prescott College. MAP Colloquium. 2015. [Workshop].
- "Lightning for Energy and Material Uses." American Association of Physics Teachers, Southern California, Irvine Valley College. 2014. [Talk].
- "Metamorphic Contributions to Electrical Phenomena in the Earth's Crust." CSULB Geology Department. March 2013. [Master's Thesis Defense].
- "Tourmaline Data: EBSD for Orientation Data of Plates Cut from Tourmaline Crystals for Electricity Work." Southern California Society for Microscopy and Microanalysis. CalTech Symposium. March 2012. [Poster].
- "Sequester Carbon with Shellfish Farms: A Potential Offset Strategy for CSULB." CSULB - Ideas Exposition of the Student Sustainability Task Force. May 2011. [Poster]. 2nd place in Division, \$100 prize.
- "What Happened to the Physical Study of Minerals? A Brief History of Piezoelectricity and Related Phenomena." Institute for Pure and Applied Mathematics, UCLA - Workshop II: Optimization, Search and Graph-Theoretical Algorithms for Chemical Compound Space. April 2011. [Poster].
- "Get a Hydrogen Car for about \$6,000." Earl Burns Miller Japanese Garden, CSULB - Transportation Green Generation Mixer. March 2011. [Poster].
- "Fossils of the Puente Formation: A Hands-On Presentation." Monrovia Rock Hounds. January 2009. [Talk].

**Professional Activities – Math,  
Science & Social Science  
[Last 10 Years]**

- 4.2017: Astrobiology Science Conference (AbSciCon), Mesa, AZ, USA. [Attendee]
- 4.2017: 9<sup>th</sup> Sustainability Symposium, Prescott College, Arizona, USA.
- 3.2017: Mextrópolis: Festival Internacional de Arquitectura y Ciudad. Ciudad Mexico, Mexico. [Attendee]
- 2.2017: 27<sup>th</sup> International Conference on Electronics, Communications and Computers. Universidad de las Americas, Cholula, Puebla, Mexico. [Attendee]

- 2.2017: 2<sup>nd</sup> Borderlands History Conference. University of Texas at El Paso, USA. [Attendee]
- 1.2017: Joint Mathematics Meetings. Atlanta, GA, USA. [Attendee].
- 12.2016: De Lange Conference X. "Humans, Machines and the Future of Work." Rice University, Houston, TX, USA. [Attendee]
- 10.2016: 48<sup>th</sup> Division for Planetary Sciences of the American Astronomical Society and 11<sup>th</sup> European Planetary Science Congress (DPS 48 / EPSC 11). Pasadena, CA, USA. [Attendee]
- 9-10.2016: Society for Industrial and Applied Mathematics (SIAM) Conference. "Mathematics of Planet Earth" Philadelphia, PA, USA. [Attendee]
- 9.2016: 2<sup>nd</sup> California Adaptation Forum. Long Beach, CA, USA. [Attendee]
- 5.2016: 8<sup>th</sup> Sustainability Symposium, Prescott College, Arizona, USA.
- 3.2016: Sixth International Conference on Religion & Spirituality in Society. The Catholic University of America, Washington DC, USA. [Attendee]
- 3.2016: Fifth Annual International Conference on Sustainability (SUSCON V). Indian Institute of Management (IIM) Shillong, Meghalaya, India.
- 2.2016: First International Conference on Emerging Trends in Engineering, Technology and Science. Kings College of Engineering, Thanjavur, Tamil Nadu, India. [Attendee]
- 2.2016: Australasian Conference on Artificial Life and Computational Intelligence (ACALCI). Canberra, Australia. [Attendee]
- 1.2016: Gordon Research Conference. "Bridging Disciplinary Perspectives to See Further Into Life's Origins." Galveston, TX, USA. [Attendee]
- 1.2016: Gordon Research Seminar. "Understanding Life's Origin by Diving Outside of the Pool." Galveston, TX, USA. [Attendee]
- 1.2016: "Early Earth, Venus & Mars: Three Experiments in Biological Origins." Earth-Life Science Institute, Tokyo Institute of Technology, Japan. [Attendee]
- 11.2015: 3<sup>er</sup> Congreso Iberoamericano sobre Biorrefinerías (CIAB), 4<sup>to</sup> Congreso Latinoamericano sobre Biorrefinerías y 2<sup>do</sup> Simposio Internacional sobre Materiales Lignocelulósicos "Biorrefinerías: Ciencia, Tecnología e Innovación para la Bioeconomía." Concepción, Chile. [Attendee]
- 11.2015: "Re-conceptualizing the Origin of Life." Carnegie Institution for Science, Washington DC, USA. [Attendee]
- 10.2015: Aarhus 2017: European Capital of Culture. "Re-Do: On Sustainability and Culture's Role in Sustainable Futures." Aarhus Universitet, Denmark. [Attendee]
- 8.2015: European Consortium for Political Research (ECPR) General Conference. Université de Montréal, Canada. [Attendee]
- 5.2015: 7<sup>th</sup> Sustainability Symposium, Prescott College, Arizona, USA.
- 4.2015: Seismological Society of America (SSA) Annual Meeting. Pasadena, CA, USA. [Attendee]
- 12.2014: International Geohazards Research Society (IGRS) Conference. "4th Bi-Annual International Geo-Hazards Research Symposium." NASA Ames Research Center, Moffett Field, CA, USA. [Attendee]
- 5.2014: 6<sup>th</sup> Sustainability Symposium, Prescott College, Arizona, USA.
- 4.2011: Institute for Pure and Applied Mathematics (IPAM) Workshop. "Optimization, Search and Graph-Theoretical Algorithms for Chemical Compound Space." UCLA, CA, USA. [Attendee]
- 3.2011: Society for Industrial and Applied Mathematics (SIAM) Conference. "Mathematical & Computational Issues in the Geosciences." Long Beach



Convention Center, CA, USA.  
[Attendee]

Materials Authority, Cairo, Egypt,  
Contact: Kamal Hasan,  
egy100@yahoo.com, 9/12 to present.

### **Professional Activities - Art**

#### **[Last 10 Years]**

Oil painting. Portraits. (Ongoing).  
Relief sculpture. Portraits. (Ongoing).  
Art materials for sustainability: Paint pigments. Prescott College. 2016.  
Watercolor classes. RumiMayu. 2013.  
Sculpture instructor. Private student. 2010.  
Flute-making. 2007-2013.  
Plaster Shop & Moldmaking, CSULB, 2008.  
Beginning Ceramics, Handbuilding, CSULB, 2007.  
Figure Drawing, McGroarty Art Center, 2007.

### **Professional Activities - Playwright**

11.2016: *Hypatia's Math*. Workshop performance by a Spotlighters Theatre and Strand Theater cooperative, Alice Stanley director, Fuzz Roarke and Elena Kostakis co-producers, Michael Tan music, at the Maryland STEM Festival.  
9.2016: *Hypatia's Math*. Performance by the Flagstaff Arts & Leadership Academy, Mike Levin producer-director, Chase Coleman music, at the Flagstaff Festival of the Arts, Coconino Center for the Arts.

### **Additional Professional Experience**

#### **[Last 10 Years]**

Independent Contractor, Scientific Editor, editorial comments and revisions for geophysics papers, Doug Zbikowski, Institute for Celestial Geodynamics [www.celestialgeodynamics.org](http://www.celestialgeodynamics.org), Contact: Doug Zbikowski, [zbiko001@umn.edu](mailto:zbiko001@umn.edu), (Volunteer: 6/12 to 11/13), Paid: 11/13 to present.  
Independent Contractor, Scientific Editor, editorial comments and revisions for geology and hydrology papers, Kamal Hasan, Research Sector, Nuclear

### **Professional & Public Service**

#### **[Last 10 Years]**

9/11-1/14: Handing out gloves (about 300/year) to the homeless.  
9/12-6/13: Choir member. Kol HaEmek. San Gabriel Valley Federation.  
1/08-5/10: Choir member. 49<sup>er</sup> chorus. California State University Long Beach.  
9/09-5/10: Founder / Editor-in-Chief: *GradWilt* (Graduate Student News Digest). California State University Long Beach.  
9/07-12/07: Notetaker, Disabled Student Services, California State University Long Beach.

### **Art Shows & Craft Fairs**

Sustainability Symposium, Prescott College - 2016. (Exhibit).  
First Fridays Long Beach - 2009-2011. (Craft Fair).  
Summer Bazaar, Arcadia Temple - 2005. (Craft Fair).  
Friends' Gallery, American Friends Service Committee, Pasadena, 2002, 2003 - Slate Sculptures, Prints.  
Artists' Show, Workman's Circle, Los Angeles, 2002 - B&W Photograph. (Juried).  
Without Alarm: Issues of Public and Private Security, 1998, Lincoln Heights, CA - Sculpture in Pumice. (Juried, Governmental funding).  
Grapevine Festival, San Gabriel - 1998. (Craft Fair).  
Alumni Art Night, Brentwood School, 1998 - Wooden Drum.  
Artists' Night, Pasadena Jewish Temple & Center, 1998- Photographs, Sculpture and Rubbings.

Northern Colorado Artist Association  
Annual Exhibition, 1997 - B&W  
Photographs. (Juried)  
Israeli Festival- 1996, 1997. (Craft Fair).  
Pasadena Arts & Craft Faire - 1995, 1996,  
1997. (Craft Fair.)

#### **Commissions - Art**

Sculpture commission. Angels. Carved foam  
with gesso. Private. 2014.  
Sculpture commission. Krishna with Flute.  
Pumice. Private. 1995.

#### **Languages**

English (Mother tongue)  
Spanish (Basic fluency)  
Some familiarity with:  
Russian, French, American Sign  
Language, Latin, Hebrew, German,  
Yiddish, Greek.

#### **Scientific / Technical Equipment Skills**

SEM, EBSD, sample preparation, basic  
electronic circuitry and equipment,  
prototyping, fabrication, geology  
mapmaking, scientific illustration, etc.

#### **Computer Skills**

Graphic design, Desktop publishing, Book  
design Wordprocessing, Spreadsheet,  
HTML (basic skill level), Internet  
research, Coding (basic skill level), etc.

#### **Art Methods & Skills**

Pigment development, Flute making, stone  
and plaster carving, Low-tech printing,  
Mold making, Figure drawing, Oil  
painting, Portraiture, Relief sculpture,  
Etching, Musical-instrument making,  
Paper sculpture, Photography, Paper  
cuts, Stained glass, etc. Also graphic  
design, T-Shirt design, Book design.

**PROFESSIONAL REFERENCES**

Dr. Denise Mitten

[She was my professor and also my doctoral program coordinator for one year.]

Program Coordinator, Graduate  
Chair, Sustainability Education, Adventure  
Education

Prescott College

220 Grove Ave.

Prescott, Arizona 86301

E-mail: dmitten@prescott.edu

Phone: (928) 350-1004

Dr. Pramod Parajuli

[He was my professor and my dissertation committee chair.]

Associate Faculty

Prescott College

220 Grove Ave.

Prescott, Arizona 86301

E-mail: pp692619@gmail.com

Phone: (928) 350-3222

Dr. Loren Thomas

[He was my doctoral program coordinator for two years.]

Associate Faculty

Prescott College

220 Grove Ave.

Prescott, Arizona 86301

E-mail: loren.thomas@prescott.edu

Phone: (928) 350-3225

Josie Schwartzstein

[She was my student.]

London Disability

400 E. Pratt St., Suite 510

Baltimore, MD 21202

E-mail: jschwartzstein@londondisability.com

Phone: (410) 685-3737

Dr. Henderson (Jim) Cleaves

[He was the external reader for my doctoral dissertation.]

Director, ELSI Origins Network

Project Associate Professor

Earth-Life Science Institute

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