DR. BRIDGET R. SMITH-KONTER

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EXECUTIVE SUMMARY: Bridget Smith-Konter is a Professor of Geophysics at the University of Hawai'i at Mānoa, with research and educational endeavors focused on the study of remotely-sensed crustal motions of planetary surfaces, quantification of earthquake and volcanic hazards using high-precision geodetic imaging techniques, and development of educational pathways in the geosciences aimed at increasing participation of underrepresented groups. Her research, supported by over 40 federally funded awards as PI or Co-PI, is aimed at combining state-of-the-art remote sensing observations and 4D geomechanical modeling to understand 1) *how the Earth's surface deforms along major earthquake-generating fault systems and volcanic systems* and 2) *how gravitational tidal forces between large planets and their moons give rise to tectonic activity in the outer Solar System*. Smith-Konter is a Board of Regents Excellence in Teaching recipient from both the University of Hawai'i and the University of Texas systems. Smith-Konter formerly served on the EarthScope/UNAVCO Board of Directors and the Southern California Earthquake Center (SCEC) Science Committee. Beyond these scholarly activities, for nearly 20 years Smith-Konter has been a spirited promoter of STEM communication and education methods that resonate with non-scientists, devoting a significant portion of her career toward increasing participation of underrepresented groups in the geosciences through place-based education.

EDUCATION

- **Ph.D., University of California, San Diego, 2005**
  Emphasis: Earth Science/Geophysics, supervised by Dr. David Sandwell
  Dissertation title: "Three dimensional deformation and stress models: Exploring one thousand years of earthquake history along the San Andreas Fault System"
  National Science Foundation Graduate Fellowship (1999-2002)
  NASA Earth System Science Graduate Fellowship (2003-2005)

- **B.S., Northern Arizona University, 1999**
  Major: Physics & Astronomy (Magna Cum Laude)
  NASA Space Grant Scholarship at NAU (amongst others, full tuition 1995-1999)

UHM INSTRUCTIONAL PORTFOLIO

GG/ERTH 101 – Dynamic Earth (Fall 2015, Spring 2018 (*online*), Fall 2019 (*online*), Spring 2020 (*online*), Fall 2020 (*online*), Spring 2021 (*online*))
This introductory course studies the natural physical environment, the landscape, rocks and minerals, rivers and oceans, volcanism, earthquakes, and other processes inside the Earth and the effects of human use of the Earth and its resources.

GG/ERTH 105 – Voyage Through the Solar System (Fall 2014, Spring 2015, Spring 2016, Fall 2017) This introductory course will offer an illustrated voyage through the Solar System based on recent scientific results. In this course, we will focus on the origin, evolution, and current knowledge of the eight planets, their moons, asteroids, comets, and the Sun. Course topics will emphasize applicable geology, tectonic activity, material properties, and atmospheric conditions of the planets and how these properties compare to planet Earth. Recent findings from current planetary missions, as well as knowledge gained from past missions, will be incorporated into lecture discussions whenever possible and relevant.

GG/ERTH 303 – Structural Geology (Fall 2021)

This course explores the geometry, kinematics, and mechanics of crustal deformation and continuum mechanics in geology. We develop skills in three-dimensional thinking through geologic maps, cross sections, various projections, experiments, and vector analyses. Topics covered include kinematics and mechanics, stress and strain, rheology, fracture and brittle deformation, tectonics and deformation regimes, and rock failure.

ERTH 303 – Natural Hazards and Geomechanics (Fall 2023) (New curriculum)
Natural hazards, or geohazards, are geological conditions and events resulting from active geological and/or geophysical processes, such as earthquakes, volcanic eruptions, tsunamis, and landslides. Geohazards are capable of causing widespread damage to the environment, or loss of property and life, and can also result from human activities. Thanks, in part, to the advances of satellite- based technologies and geohazard observatories, global monitoring of geohazards is possible through high-quality data that are continuously collected and made available to scientists (and students!) to improve our understanding of geohazard conditions, causes, and implications.

ERTH 313 – Plate Tectonics and Geodynamics (Fall 2024) (New curriculum)
This course explores the geometry, kinematics, and mechanics of tectonics and crustal deformation, spanning a range of geologic settings and spatial/temporal scales, to better understand global tectonic motions. The course also focuses on local and regional structural styles and associated landforms related to plate tectonic convergence, rifting and strike-slip faulting, and the evolution of mountain belts. A primary objective of this course is to emphasize theory, principles, and practical techniques to measure, describe, analyze, and interpret deformation-related structures on Earth. Skill development in three-dimensional thinking through geologic maps, cross sections, various projections, vector analysis, computational analysis, and lab experiments is emphasized throughout the course. Topics covered include kinematics and mechanics, stress and strain, rheology, fracture and brittle deformation, tectonics and deformation regimes, and rock failure.

GG/ERTH 451– Earthquakes and Crustal Deformation (Spring 2017, Spring 2019, Spring 2022, Spring 2024)
This course explores the fundamentals of earthquakes and tectonic crustal deformation through modern seismological and geodetic observations. In this course, we focus on elastic properties of rocks, earthquake waves, and the causes, detection, location, and prediction of earthquakes. We explore the role of plate tectonic stress and strain in earthquake generation and crustal motions associated with the earthquake cycle. Tsunami wave generation, liquefaction, and relevant planetary observations of "quake" like events are also be discussed.

GG/ERTH 631 – Geophysics I: Solid, Fluid, and Wave Mechanics (Fall 2016, Fall 2018)
The solid Earth deforms over a wide range of length scales, locations, and time scales, and in a variety of different ways in response to different forcing mechanisms. In this class, we study continuum mechanics in geophysics, as applied to the deformation of Earth materials (elastic, viscoelastic, and plastic deformations) and seismic wave propagation (body waves, surface waves, anisotropy, and attenuation). Topics covered include tensors, stress and strain in solids, rock failure, moment tensors, elasticity, ductile rheology, viscous flow, equations of motion & boundary conditions, the vector wave equation, wave field energy, reflection and transmission of seismic waves, and surface waves.

GG/ERTH 711 – Crustal Deformation Monitoring and Modeling (Spring 2014)
This course is a literature-based seminar-style course focused on discussion of crustal deformation monitoring and modeling methods and applications. Each week we will read 1 to 2 assigned papers about specific aspects of crustal deformation. Topics include GPS and InSAR methods and observations, earthquake/plate boundary/ volcanic deformation, episodic tremor and slip, crustal stress accumulation, fault creep, and numerical modeling techniques.

PROFESSIONAL EXPERIENCE

2021	Full Professor, University of Hawai'i at Mānoa
2016 - 2021	Associate Professor, University of Hawai'i at Mānoa (with tenure)
2014 - 2016	Assistant Professor, University of Hawai'i at Mānoa
2012 - 2014	Associate Professor, University of Texas at El Paso (with tenure)

2008 - 2012	Assistant Professor, University of Texas at El Paso
2007 - 2008	Postdoctoral Researcher, California Inst. of Technology, NASA JPL
2005 - 2007	Postdoctoral Researcher, UC San Diego, Scripps Inst. Oceanography
1999 - 2005	Graduate Research Asst., UC San Diego, Scripps Inst. Oceanography
1999	Undergraduate Research Asst., NASA Ames, NASA Astrobiology Academy
1998	Undergraduate Research Asst., Stanford University (SLAC)
1997 - 1999	Undergraduate Research Asst., NASA Space Grant, Lowell Observatory

RESEARCH EXPERTISE

TERRESTRIAL

- Integration of GPS/GNSS and InSAR (Interferometric Synthetic Aperture Radar) to investigate surface deformation and lithosphere dynamics active fault systems and volcanoes
- 4D earthquake cycle stress evolution modeling of the San Andreas Fault System
- Geodetic imaging of the 2018 and 2020 Kīlauea eruption
- Constraining seismic moment accumulation rate from geodesy
- Coastal-tectonic deformation dynamics due to sea level rise
- Shuttle Radar Topography Mission (SRTM) data resolution analysis and application
- Spectral method crustal deformation and stress evolution code and software development (Maxwell)
- 4D data visualization, immersion, and simulation

PLANETARY

- Modeling tidally-driven failure dynamics of Enceladus, Titan, and Ganymede
- Morphological mapping and strike-slip tectonics of Ganymede
- Crustal deformation mechanisms of fractures on Enceladus and Europa
- Statistical modeling of biological/chemical constraints of a Mars terraformation
- Modeling the rotational morphology of gas and dust jets in Comet Hale-Bopp

AWARDS AND HONORS

University of Hawai'i Board of Regents Excellence in Teaching Award
University of Hawai'i at Mānoa (2022)
The Regents' Medal for Excellence in Teaching is awarded by the Board of Regents as tribute to faculty members who exhibit an extraordinary level of subject mastery and scholarship, teaching effectiveness and creativity, and personal values that benefit students (https://www.hawaii.edu/news/2022/05/16/bor-medal-for-teaching-2022/)

SOEST Teaching Excellence Award
University of Hawai'i at Mānoa, School of Ocean and Earth Science and Technology (2022)

University of Texas System Regents' Outstanding Teaching Award
University of Texas System (2011)
This award recognizes "an outstanding commitment to teaching through the delivery of the highest quality undergraduate instruction throughout the entire University of Texas System". Smith-Konter was 1 of 17 tenure-track faculty members from 16 institutions in UT System to receive this award. (http://www.utsystem.edu/teachingawards)

EarthScope Speaker Series Lecturer
NSF EarthScope Program (2011)

"Speakers are selected based on their outstanding research accomplishments involving EarthScope, as well as their abilities to engage a variety of audiences." (http://www.earthscope.org/speakers)

College of Science Distinguished Achievement Award for Teaching
University of Texas at El Paso (2011)
This award recognizes "distinguished achievement in teaching by UTEP's College of Science". Smith-Konter was one of the first instructors within UTEP's College of Science to receive this award.

Office of Research and Sponsored Projects Outstanding Research Award
University of Texas at El Paso (2009)
This award recognizes an outstanding performance in securing external funding. Smith-Konter was awarded 5 federal grants (NSF and NASA) from 2008-2009, totaling $1,403,721.

Faculty Early Career Award
National Science Foundation (2008)
The National Science Foundation Early Career grant (a 5-year award for ~$500,000) is "a prestigious award in support of junior faculty who exemplify the role of teacher-scholars through outstanding research, excellent education and the integration of education and research within the context of the mission of their organizations." (http://www.nsf.gov/pubs/2011/nsf11038/nsf11038.jsp)

Outstanding Postdoctoral Research Award
NASA Jet Propulsion Laboratory (2007)
This award recognizes "outstanding research efforts" at NASA's Jet Propulsion Laboratory. Smith-Konter received this award for her presentation titled "*Tidally driven stress accumulation and shear failure at Enceladus's Tiger Stripes*" at JPL's annual Postdoctoral Research Competition.

Outstanding Undergraduate Teaching Award
Scripps Institution of Oceanography, University of California San Diego (2005)
This award recognizes "excellence in undergraduate teaching and an outstanding commitment to student learning". Smith-Konter received this award in 2005, competing against over 200 seasoned educators, and was also a finalist for this award in 2006. (http://sio.ucsd.edu/About/Awards/teaching.php)

Outstanding Geodesy Student Paper Award
American Geophysical Union Annual Meeting (2004)
This award recognizes outstanding student research at the American Geophysical Union Fall Meeting, Geodesy Section. Smith-Konter received this award for her presentation titled "*A 3-D semi-analytic viscoelastic model of the San Andreas Fault System: A 1000-year perspective of the earthquake cycle".*

1st Place, SIO Visualization Contest
Scripps Institution of Oceanography, University of California San Diego (2004)
This prize was awarded for the creation of research-based digital movie, *San Andreas: Earthquake Machine*.

E. Frieman Director's Prize for Outstanding Graduate Research
Scripps Institution of Oceanography, University of California San Diego (2003)

This prize is awarded annually to a Scripps graduate student who has published an outstanding research paper, as evaluated by a Scripps faculty committee.

NASA Earth System Science Fellowship
National Aeronautics and Space Administration (2003-2005)

National Science Foundation Graduate Fellowship
National Science Foundation (1999-2002)

Outstanding Graduating Senior in the Arts and Sciences
Northern Arizona University (1999)

PUBLICATIONS

- Smith-Konter on medical leave Summer 2022 - Spring 2023 (recovering from car accident injuries)
- Articles from 1997-2007 were published under name B. Smith; all contributions since 2007 have been published under the name B. Smith-Konter.
- Student authorship denoted with underline.

Data Products

Smith-Konter, Bridget; Burkhard, Liliane; Ward, Lauren; Wessel, Paul; Xu, Xiaohua; Sandwell, David (2022), San Andreas Fault System deformation and stress evolution (1600-2022), Media, https://doi.org/10.6084/m9.figshare.19589626.v1

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Ward, L., B. Smith-Konter, P. Wessel, and L. Uieda (2020), Seismicity of the Hawaiian Islands (2008 - 2019), https://doi.org/10.6084/m9.figshare.13065953.v1

Smith-Konter, B., L.Ward, L. Burkhard, X. Xu, and D.T. Sandwell (2018), 2018 Kilauea eruption and Mw 6.9 Leilani Estates earthquake: Line of sight displacement revealed by Sentinel-1 interferometry, Dataset. https://doi.org/10.6084/m9.figshare.6272219.

Commentary

Burkhard, L.M., L. Ward, H.A. Janiszewski, B.R. Smith-Konter, and J.R. Weiss (2021), Hawai'i offshore quake related to tectonic plate bending, *Temblor*, http://doi.org/10.32858/temblor.TK

Tong, X., B. Smith-Konter, and D.T. Sandwell (2014), A new viscoelastic earthquake cycle model may explain discrepancies in San Andreas fault slip, *EOS AGU Research Spotlight*, v. 95, no. 34.

Publications

Wei, M. and B. Smith-Konter, A model of the earthquake cycle along the Gofar oceanic transform fault system, *submitted to Seismica, Spring 2024*.

Ward, L., J.H. Foster, B.R. Smith-Konter, N. Frazer, and E.K. Montgomery-Brown, A century of deformation and stress change on Kīlauea's décollement, *Journal of Geophysical Research,* June 2024 (in review, 2024JB028714).

Guns, K., D.T. Sandwell, X. Xu, Y. Bock, L. Ward, and B. Smith-Konter, Uncertainties in calculating seismic moment accumulation rate from geodesy, *Journal of Geophysical Research* (2023JB027939).

Burkhard, L., E.S. Costello, B. Smith-Konter, M.E. Cameron, G.C. Collins, and R.L.Pappalardo (2023), Uncovering Ganymede's past: Tectonics at Nippur/Philus Sulci, *Icarus*, https://doi.org/10.1016/j.icarus.2023.115823.

Ward, L., Guns, K., B. Smith-Konter, X. Xu, Y. Bock, and D.T. Sandwell (2022), Vertical postseismic deformation of the 2019 Ridgecrest Earthquake sequence, *Journal of Geophysical Research,* https://doi.org/10.1029/2021JB023331.

Burkhard, L., B. Smith-Konter, M.E. Cameron, S. Fagents, G. Collins, and R.L Pappalardo, Strike-slip faulting on Titan? (2021) Modeling shear failure conditions due to pore fluid interactions*, Icarus*, https://doi.org/10.1016/j.icarus.2021.114700/.

Ward, L., B. Smith-Konter, X. Xu, X. Tong, and D.T. Sandwell (2021), Seismic moment dependence on crustal rigidity for the southern San Andreas Fault System, *Journal of Geophysical Research,* https://doi.org/10.1029/2020JB021208.

Dawson, T., C. DuRoss, R. Gold, K. Scharer, D. Ponti, T. Ladinsky, V.E. Langenheim, D. McPhillips, A. Morelan, C. Milliner, K. Kendrick, J. Hernandez, K. Hudnut, S. Akciz, S. Angster, J.P. Avouac, S. Bacon, J. Bachhuber, N. Barth, S. Bennett, L. Blair, K. Blake, S. Bork, B. Brooks, T. Bullard, W.P. Burgess, C. Chupik, M. DeFrisco, J. Delano, J. Dolan, A. Donnellan, T. Ericksen, E. Frost, G. Funning, N. Graehl, C. Guttierez, E. Haddon, P. Holland, A. Hatem, J. Helms, C. Hitchcock, J. Thompson Jobe, R. Koehler, O. Kozaci, C. Madugo, R. Leeper, M. Mareschal, D. McPhillips, M. O'Neil, J. Nevitt, B. Olson, S. Padilla, J. Patton, B. Philibosian, A. J. Pickering, I. Pierce, C. Pridmore, N. Roth, D. Sandwell, G. Seitz[1], D. Singleton, B. Smith-Konter, E. Spangler, B. Swanson, K. Thomas, J. Treiman, F. Valencia, A. Williams, X. Xu, J. Zachariasen, J. Zimmerman, and R. Zinke (2020), Field-based observations of surface ruptures associated with the 2019 Ridgecrest earthquake sequence, *Bulletin of the Seismological Society of America*.

Xu, X., D.T. Sandwell, L. Ward, C. Milliner, B. Smith-Konter, P. Feng, and Y. Bock (2020), Surface deformation associated with fractures near the 2019 Ridgecrest earthquake sequence, *Science*, 370, https://doi:10.1126/science.abd1690.

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Ponti, D., J. L. Blair, C. M. Rosa, K. Thomas, A. J. Pickering, S. Akciz, S. Angster, J. P. Avouac, J. Bachhuber, S. Bacon, S. Bennett, K. Blake, S. Bork, B. Brooks, T. Bullard, P. Burgess, C. Chupik, T. Dawson, M. DeFrisco, J. Delano, S. DeLeong, J. Dolan, A. Donnellan, C. DuRoss, T. Ericksen, E. Frost, G. Funning, R. Gold, N. Graehl, C. Gutierrez, E. Haddon, A. Hatem, J. Helms, J. Hernandez, C. Hitchcock, P. Holland, K. Hudnut, K. Kendrick, R. Koehler, O. Kozaci T. Ladinsky, R. Leeper, C. Madugo, M. Mareschal, J. McDonald, D. McPhillips, C. Milliner, D. Mongovin, A. Morelan, J. Nevitt, M. O'Neal, B. Olson, M. Oskin, S. Padilla, J. Patton, B. Philibosian, I. Pierce, C. Pridmore, N. Roth, D. Sandwell, K. Scharer, G.Seitz, D. Singleton, B. Smith-Konter, E. Spangler, B. Swanson, J. Thompson Job, J. Treiman, F. Turner, A. Williams, X. Xu, J. Zachariasen, J. Zimmerman, R. Zinke (2020), Documentation of surface fault rupture and ground-deformation features produced by the 4 and 5 July 2019 Mw 6.4 and Mw 7.1 Ridgecrest earthquake sequence, (2019)*, Seismological Research Letters,* https://doi.org/10.1785/0220190322.

Cameron, M., B. Smith-Konter, L. Burkhard, G. Collins, D. Patthoff, and R.T. Pappalardo (2020), Ganymede then and now: How past eccentricity may have altered tidally-driven Coulomb failure, *Journal of Geophysical Research Planets*, doi:10.1029/2019JE005995.

Cameron, M., B. Smith-Konter, G. Collins, D. Patthoff, and R.T. Pappalardo (2019), Tidal stress

modeling of Ganymede: Strike-slip tectonism and Coulomb failure, *Icarus, 319,* doi: 10.1016/j.icarus.2018.09.002.

Xu, X., L. Ward, J. Jiang, B. Smith-Konter, E. Tymofyeyeva, E. O. Lindsey, A. G. Sylvester and D.T. Sandwell (2018), Surface creep rate of the Southern San Andreas Fault modulated by stress perturbations from nearby large events, *Geophysical Research Letters*, doi: 10.1029/2018GL080137.

Sandwell, D.T. and B. Smith-Konter (2018), Maxwell: A semi-analytic 4-D code for earthquake cycle modeling of transform fault systems, *Computers and Geosciences*, doi: 10.1016/j.cageo.2017.737.

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Boston, B., Howell, S., Sleeper, J., Anderson, A., Cameron, M., Sigurdardottir, T., Tree, J., Togia, H., Smith-Konter, B., Moore, G. F. (2018), Seafloor mapping at your fingertips: setting sail on sonar education with an interactive exhibit. *The Earth Scientist*, 34, 1, 11-15.

Luttrell, K. and B. Smith-Konter (2017), Limits on crustal differential stress in southern California from topography and earthquake focal mechanisms, *Geophysical Journal International,* doi: 10.1093/gji/ggx301.

Howell, S., B. Smith-Konter, N. Frazer, X. Tong, and D.T. Sandwell (2016), The vertical fingerprint of earthquake-cycle loading in Southern California, *Nature Geosciences*, doi: 10.1093/2015-03-04591.

Carrick, T., K. Miller, E. Hagedorn, B. Smith-Konter, and A. Velasco (2016), Pathways to the Geosciences Summer High School Program: A ten-year evaluation, *Journal of Geoscience Education*, 64, 87-97, doi: 10.5408/15-088.1.

Schleicher, D.G., A.N. Bair, S. Sackey, L.A. Alciatore, R.M. Eby, and B. Smith-Konter (2015), The evolving photometric lightcurve of Comet 1P/Halley's coma during the 1985/86 apparition, *The Astronomical Journal*, 150:79, doi:10.1088/0004-6256/150/3/79.

Tong, X., D.T. Sandwell, and B. Smith-Konter (2015), An integral method to estimate the moment accumulation rate on the Creeping Section of the San Andreas Fault, *Geophysical Journal International*, doi: 10.1093/gji/gjis140783.

Smith-Konter, B., G.M. Thornton, and D.T. Sandwell (2014), Vertical crustal displacement due to interseismic deformation along the San Andreas fault: Constraints from tide gauges, *Geophysical Research Letters*, doi:10.1029/2014GL060091.

Tong, X., B. Smith-Konter, and D.T. Sandwell (2014), Is there a discrepancy between geological and geodetic slip rates along the San Andreas Fault System?, *Journal of Geophysical Research*, doi:10.1029/2013JB010765.

Tong, X., D.T. Sandwell, and B. Smith-Konter (2013), High-resolution interseismic velocity data along the San Andreas Fault System, *Journal of Geophysical Research*, 118, doi:10.1029/2012JB009442.

Del Pardo, C., B. Smith-Konter, C. Kreemer, G. Blewitt, W. Hammond, and L. Serpa (2012), Interseismic deformation and stress evolution of the Death Valley Fault Zone, *Journal of Geophysical Research*, 117, B060404, doi:10.1029/2011JB008552.

Smith-Konter, B., D.T. Sandwell, and P. Shearer (2011), Locking depths estimated from geodesy and seismology along the San Andreas Fault System: Implications for seismic moment release, *Journal of Geophysical Research*, 116, B06401, doi:10.1029/2010JB008117.

Olgin, J., B. Smith-Konter, and R.L. Pappalardo (2011), The limits of Enceladus's ice shell thickness from tidally driven tiger stripe failure, *Geophysical Research Letters*, 38, doi:10.1029/2010GL044950.

Smith-Konter, B., D.T. Sandwell, and M. Wei (2010), Integrating GPS and InSAR to resolve stressing rates of the SAF System, *EarthScope inSights*, Summer 2010.

Wei, M., D.T. Sandwell, and B. Smith-Konter (2010), Optimal combination of InSAR and GPS for measuring interseismic crustal deformation, *Journal of Advances in Space Research,* doi: 10.1016/j.asr.2010.03.013.

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Sandwell, D.T. and B. Smith (2007), California Earthquakes, Glimpses of a Changing World: Views of Planet Earth from Space, M. D. King, C. L. Parkinson, K. C. Partington, and R. G. Williams, Eds., *Cambridge University Press*, 140-143.

Wdowinski, S., B. Smith-Konter, Y. Bock, and D.T. Sandwell (2007), Diffuse interseismic deformation across the Pacific-North America plate boundary, *Geology*, doi:10.1130/G2938A.1.

Smith, B. and D.T. Sandwell (2006), A model of the earthquake cycle along the San Andreas Fault System for the past 1000 years, *Journal of Geophysical Research*, 111, doi:10.1029/2005JB003703.

Taesombut, N., X. Wu, A. Chien, A. Nayak, B. Smith, D. Kilb, T. Im, D. Samilo, G. Kent, and J. Orcutt (2006), Collaborative data visualization for Earth sciences with the OptIPuter, *Journal of Future Generation Computational Systems*, 22, doi:10.1016/j.future.2006.03.023.

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Woodney, L.M., M.F. A'Hearn, D.G. Schleicher, T.L. Farnham, J.P. McMullin, M.C.H. Wright, J.M. Veal, L. E. Snyder, I. De Pater, J.R. Forster, P. Palmer, Y. J. Kuan, W. R. Williams, C.C. Cheung, and B. Smith (2002), Morphology of HCN and CN in Comet Hale-Bopp (1995 O1), *Icarus* 157, 193.

Schleicher, D.G., T.L. Farnham, W.R. Williams, B. Smith, and C.C. Cheung (1999), Modeling the rotational morphology of gas and dust jets in Comet Hale-Bopp (1995 O1) At Perihelion, *Bulletin of American Astronomical Society,* 31, 1128.

RESEARCH FUNDING

ACTIVE

NASA Earth Surface and Interior ($123,423) 01/01/23 – 12/31/25; *Strain rate and moment rate in Western North America from InSAR and GPS* , UCSD PI = D. Sandwell; UH **PI = B. Smith-Konter.**

NSF GEO/EAR Education and Human Resources ($586,363) 04/01/20 – 05/31/24; *REU Site: Earth Science on Volcanic Islands*, **PI = B. Smith-Konter**; Co-PI = S. Coats; Collaborators = B. Chen, H. Dulaiova, C. Glenn, N. Grobbe, J. Hammer, G. Ito, H. Janiszewski, J. Konter, A. Pietruszka, B. Popp, T. Shea, C. Smith.

NSF GP-IMPACT ($318,679) 08/01/19 – 05/31/24; *Project EPIK – Earth, Planets, Ike, and Kuleana – Preparing the next generation of diverse geoscientists in Hawaii,* **PI = B. Smith-Konter**; Co-PIs = H. Dulai, J. Engels, J. Konter, S. Rowland; Collaborators = T. Anderson, A El-Kadi, M. Grabrowski, J. Hammer, B. Houghton, H. Ishi, G. Ito, T. Shea.

NSF Geophysics ($369,439) 09/15/18 – 08/30/24; *The earthquake cycle and the evolution of fault friction at Kīlauea Volcano, Hawaii,* PI = J. Foster; Co-PI = **B. Smith-Konter**.

COMPLETED

NSF-GeoPRISMS ($390,630) 05/01/20 – 04/30/23; GeoPRISMS postdoctoral fellowship; *Contrasting active magma- and fault-dominated segments of the East African Rift through the synthesis of InSAR and GPS time series: Implications for rifting dynamics and hazards*, PI (and postdoc mentor) = **B. Smith-Konter**, Postdoctoral Co-PI = K. Murray.

NASA Earth Surface and Interior ($146,627) 06/01/19 – 05/31/22; *Estimating seismic hazard along the San Andreas Fault System from InSAR and GNSS,* UCSD subcontract, UH **PI = B. Smith-Konter.**

NSF GP-IMPACT ($9,905) 9/14/20 – 07/31/22; *Supplement: Project EPIK – Earth, Planets, Ike, and Kuleana – Preparing the next generation of diverse geoscientists in Hawaii,* **PI = B. Smith-Konter**; Co-PIs = H. Dulai, J. Engels, J. Konter, S. Rowland;

UHM Strategic Investment Award ($69,498) 02/01/20 – 1/31/21; *Strategic investment in high-impact practices in UHM online undergraduate education: Immersive virtual huakaʻi (field trips)*, **PI = B. Smith-Konter**, Co-PIs = H. Janiszewski, B. Houghton, S. Martel, J. Sinton, T. Shea, J. Konter, A. Anderson, J. Hammer, S. Rowland, H. Cremer, S. White, L. Koga, A. Swift, D. Hirata.

Southern California Earthquake Center ($29,782) 2/01/20 - 1/31/21; *Crustal stress models for Cajon Pass with epistemic uncertainty and implications earthquake gate behavior*; PI = K. Luttrell (LSU); Co-PI = **B. Smith-Konter**.

NSF EarthScope ($42,812) 8/1/18 – 7/30/20; The Earth Moves Me! (EAR supplement); **PI = B. Smith-Konter**.

NSF EarthScope ($174,975) 9/1/18 – 8/31/20; The EarthScope/GMT Analysis and Visualization Toolbox; PI = P. Wessel; Co-PI = **B. Smith-Konter**, L. Uidea.

NSF EarthScope ($246,810) 08/15/16 – 07/31/21; *Imaging Vertical Earthquake Cycle Crustal Deformation of the San Andreas Fault System Utilizing the GAGE Facility,* **PI = B. Smith-Konter**.

Southern California Earthquake Center ($15,000) 2/1/19 - 1/31/20; *Assessing the sensitivity of earthquake cycle vertical deformation of the San Andreas Fault System*; **PI = B. Smith-Konter**; Co-PI = D. Sandwell (UCSD).

NSF GEO/EAR Education and Human Resources ($509,273) 10/01/16 – 12/31/19; *REU Site: Earth Science on Volcanic Islands*, PI = P. Wessel; Collaborators = H. Dulaiova, M. Garcia, C. Glenn, A. El-Kadi, J. Hammer, G. Ito, J. Konter, S. Martel, B. Popp, **B. Smith-Konter** .

Southern California Earthquake Center ($15,000) 5/1/18 - 4/30/19; *Investigating earthquake gate stress evolution at Cajon Pass*; PI = **B. Smith-Konter**; Co-PI = K. Scharer (USGS), D. Sandwell (UCSD).

Japanese Aerospace Exploration Agency (ALOS-2 data acquisition) 04/01/16 – 03/01/19; *Moment and strain accumulation rate along the Southern San Andreas Fault System from InSAR and GPS*; **PI = B. Smith-Konter;** Co-Is = D. Sandwell (UCSD), Y. Fialko (UCSD), X. Tong (UW), C. Crosby (UNAVCO), P. Wessel (UH), E. Fielding (JPL), R. Burgmann (Berkeley), M. Shirzaei (ASU), A. Gonzalez (CICESE).

Japanese Aerospace Exploration Agency (ALOS-2 data acquisition) 04/01/16 – 03/01/19; *Moment and strain accumulation rate along the Northern San Andreas Fault System from InSAR and GPS*; PI = D. Sandwell (UCSD); **Co-Is = B. Smith-Konter**, Y. Fialko (UCSD), X. Tong (UW), C. Crosby (UNAVCO), P. Wessel (UH), E. Fielding (JPL), R. Burgmann (Berkeley), M. Shirzaei (ASU), A. Gonzalez (CICESE).

NASA Earth Surface and Interior ($339,662) 03/01/16 – 02/29/19; *Moment and strain accumulation rate along the San Andreas Fault System from InSAR and GPS,* PI = D. Sandwell (UCSD); Funded Collaborators = **B. Smith-Konter** and X. Tong (UW).

NASA Outer Planets Research ($342,978) 10/1/13 - 2/18/19; *Strike-slip faulting processes of Ganymede: Morphological inferences and failure mechanics;* **PI = B. Smith-Konter**; Co-PI = R. L. Pappalardo (JPL), G. Collins (Wheaton).

Southern California Earthquake Center ($20,000) 5/1/17 - 4/30/18; *Development of 4-D models of the earthquake cycle that include spatial variations in crustal rheology*; **PI = B. Smith-Konter**; Co-PI = D. Sandwell (UCSD).

Southern California Earthquake Center ($25,577) 02/1/16 – 1/31/17; *Visualizing earthquake cycle stress evolution in 4D along the San Andreas Fault System*; **PI = B. Smith-Konter**; Co-PI K. Luttrell (LSU), D. Sandwell.

Southern California Earthquake Center ($19,878) 02/1/16 - 1/31/17; *Interpreting crustal stress orientation along the San Andreas and San Jacinto faults: A forward modeling study with constraints from seismology, geodesy, topography, and gravity*; PI = K. Luttrell (LSU); **Co-PI = B. Smith-Konter**.

NSF EarthScope ($170,797) 4/1/12 - 5/31/16; *Collaborative Research: Strain rate and moment accumulation rate along the San Andreas Fault System from InSAR and GPS*; **PI = B. Smith-Konter**; Co-PI = D. Sandwell (UCSD).

NSF CAREER ($501,048) 6/1/09 - 9/31/15; *CAREER: An integrated geologic, geodetic, and paleoseismic study of plate boundary stress evolution and geoscience education utilizing the EarthScope database*; **PI = B. Smith-Konter**.

Southern California Earthquake Center ($22,000) 2/1/15 - 1/31/16; *Improved analysis of crustal stress in Southern California, with constraints from seismology, geodesy, topography, and gravity*; PI = K. Luttrell (LSU); Co-PIs = **B. Smith-Konter**, D. Sandwell (UCSD).

Southern California Earthquake Center ($20,000) 2/1/15 - 1/31/16; *Improving the Community Geodetic Model with GPS and InSAR*; PI = D. Sandwell (UCSD); Co-PIs = A. Gonzalez-Ortega (CICESE), J. Gonzalez (CICESE), **B. Smith-Konter**, Y. Zeng (USGS).

Southern California Earthquake Center ($19,000) 2/1/14 - 1/31/15; ***Toward integrating models of stress from multiple physical processes, timescales, and spatial scales in Southern California***;

PI = K. Luttrell (LSU); Co-PIs = **B. Smith-Konter**, D. Sandwell (UCSD).

Southern California Earthquake Center ($20,000) 2/1/14 - 1/31/15; *Improving the Community Geodetic Model with GPS and InSAR*; PI = D. Sandwell (UCSD); Co-PIs = **B. Smith-Konter**, X. Tong (UCSD), A. Gonzalez (CICESE), Y. Zang (USGS).

Southern California Earthquake Center ($25,000) 2/1/14 - 1/31/15; *Integrated static and dynamic stress modeling for investigating tremor source regions*; PI = H. Gonzalez-Huizar (UTEP); Co-PIs = B. Smith-Konter, A. Velasco (UTEP).

Strategic Conversions and Expansions Distance Education Efforts ($37,807) 9/1/12 – 12/31/14; *Strategic Online Conversion of the UTEP Geology MAT Program*; **PI = B. Smith-Konter**; Co-PI = L. Serpa (UTEP), E. Anthony (UTEP).

Southern California Earthquake Center ($15,000) 2/1/12 - 1/31/14; *Investigating absolute stress in Southern California constrained by earthquake focal mechanisms and models of stress contributions from topography and fault loading*; **PI = B. Smith-Konter**; Co-PIs = K. Luttrell (USGS), D. Sandwell (UCSD).

NSF Tectonics ($230,773) 1/1/09 - 12/31/13; *Integrating geologic, geodetic, and coastal tide gauge observations with 100-year vertical deformation models of California earthquake history*; **PI = B. Smith-Konter**.

NASA Outer Planets Research ($268,529) 7/13/09 - 7/12/13; *Three-dimensional semi-analytic viscoelastic earthquake modeling as applied to faulting processes on Enceladus and Europa*; **PI = B. Smith-Konter**; Co-PI = R.T. Pappalardo (JPL).

NASA EarthScope ($386,471) 1/1/09 - 12/31/13; *Geodetic imaging and modeling of the San Andreas Fault System*; PI = D. Sandwell (UCSD); Co-PI = B. Smith-Konter.

NSF MRI ($699,671) 5/1/09 - 4/30/12; *Acquisition of Cyber-ShARE Collaborative Visualization System*; PI = R. Romero; Co-PIs = V. Gonzalez, J. Hurtado, J. Konter, **B. Smith-Konter**.

Southern California Earthquake Center ($15,000) 2/1/11 - 1/31/12; *Investigating along-strike depth variations of seismicity along the San Andreas Fault System to better resolve geodetic locking depths*; **PI = B. Smith-Konter**; Co-PIs = D. Sandwell (UC San Diego), P. Shearer (UC San Diego), Y. Zeng (USGS).

Southern California Earthquake Center ($10,000) 2/1/10 - 1/31/11; *Earthquake-induced vertical deformation modeling constrained by geodetic and geologic observations*; PI = B. Hooks; Co-PI = **B. Smith-Konter**.

Southern California Earthquake Center ($16,000) 2/1/09 - 1/31/10; *Quantifying stress evolution models the San Andreas Fault System using an improved paleoseismic database spanning the last 2000 years*; **PI = B. Smith-Konter**; Co-PI = D. Sandwell (UCSD).

Southern California Earthquake Center ($16,900) 2/1/08 - 1/31/09; *Stress uncertainties of the San Andreas Fault System due to variations in slip rates, fault locking depths, & fault rheology*; **PI = B. Smith-Konter**; Co-PI = D. Sandwell (UCSD).

Southern California Earthquake Center ($13,600) 2/1/07 - 1/31/08; *Modeling secular and time-dependent stress accumulation in Southern California*; PI = D. Sandwell (UCSD); Co-PI = **B. Smith-Konter**.

INVITED PRESENTATIONS

- All contributions since 2007 have been presented under the name B. Smith-Konter

Smith-Konter, B. and H. Dulai (2022, invited), Advancing Native Hawaiian and Pacific Islander representation within REU programs: Kuikahi (collaboration), Ka hana hou (innovation), and holomua (progress), 2022 Goldschmidt Conference, Honolulu, HI.

Smith-Konter, B., L.A. Ward, L. Burkhard, X. Xu, P. Wessel, and D.T. Sandwell (2021, invited), Optimal stress but no big (recent) breaks – exploring the enigmatic earthquake cycle of the San Andreas Fault System, 2021 AGU Fall Meeting, New Orleans, LA.

Smith-Konter, B., Chronicles of the 2018 Kīlauea volcano eruption: Causes, consequences and community effortsto document an unprecendented geologic event, University of Michigan at Ann Arbor, invited Smith Lecture speaker, (September 2021).

Smith-Konter, B., The 2018 Kīlauea Volcano Eruption – Sequences, New Science, and Plenty of Surprises!, University of Texas at El Paso, invited 2021 UTEP Earth Sciences Colloquium, plenary speaker (April 2021).

Smith-Konter, B., Geodetic imaging and hazard analysis of the 2018 Kīlauea eruption, 2020 Goldschmidt Conference, invited plenary speaker, Honolulu, HI (June 2020), https://doi.org/10.46427/gold2020.2416.

Burkhard, L., B. Smith-Konter, M. Cameron, S. Fagents, G. Collins, and R.T. Pappalardo, Shear failure at Titan? Investigating strike-slip tectonism due to pore fluid interactions in Titan's shallow subsurface, JPL ICE Seminar, Pasadena, CA (April 2020).

Smith-Konter, B., Stress evolution of the Cajon Pass, SCEC Annual Meeting, Palm Springs, CA (September 2018).

Cameron, M., B. Smith-Konter, L. Burkhard, G. Collins, D. Patthoff, and R.T. Pappalardo (2017), Strike-slip tectonism on Ganymede: Investigating Coulomb failure at a global scale, *invited presentation*, GSA Annual Meeting, Denver, CO (October 2017).

Luttrell, K. and B. Smith-Konter (2016), How stressed are we really? Harnessing community models to characterize the crustal stress field in Southern California, invited plenary speaker, *2016 SCEC Annual Meeting,* Palm Springs, CA (September 2016).

Sandwell, D.T., B. Smith-Konter, and X. Tong (2015), *A 4-D earthquake cycle model for bounding seismic moment accumulation rate*, IUGG General Assembly, Prague (June 2015).

Luttrell, K., B. Smith-Konter, and D. Sandwell (2014), *Critically stressed crust in southern California: A model of crustal stress from plate driving, topography, and fault loading, with geodetic and seismic constraints*, 2014 AGU Fall Meeting, San Francisco (December 2014).

Smith-Konter, B. (2014), Keynote speaker: *4-D earthquake cycle modeling of the San Andreas Fault System: Stress rates, historical stress accumulation, and uncertainties*, SCEC Community Stress Modeling Workshop, Pamona, CA (October 2014).

Smith-Konter, B., K. Luttrell, and D.T. Sandwell (2014), *Investigating absolute stress in southern California: Constraints from compensated topography, tectonic loading, and earthquake focal mechanisms*, CIG Crustal Deformation Modeling Workshop, Stanford, CA (June 2014).

Smith-Konter, B. and T. Solis (2012), *Focusing the EarthScope for a broader audience: Advancing geoscience education with interactive kiosks*, *2012 AGU Annual Meeting*, San Francisco, CA (December 2012).

Smith-Konter, B., T. Solis, and M. Cameron, *EarthScope in 4D: Visualizing earthquake cycle stress evolution at depth along the San Andreas Fault System*, 2012 GSA Annual Meeting, Charlotte, NC (November 2012)

Sandwell, D., K. Luttrell, and B. Smith-Konter. (2012), *Investigating absolute stress in southern California: How well do stress models of compensated topography and fault loading match earthquake focal mechanisms?*, SCEC Community Stress Model Workshop (October 2012).

Smith-Konter, B. (2012), *Exploring earthquake stress history of seismically-active faults of the San Andreas Fault System*, SACNAS Annual Meeting (October 2012).

Smith-Konter, B. (2012), *Crustal dynamics of the seismic cycle: Investigating stress evolution of terrestrial faults and icy fractures of the outer Solar System*, Northern Arizona University (March 2012).

Smith-Konter, B. (2012), *Crustal dynamics of the seismic cycle: Investigating stress evolution of terrestrial faults and icy fractures of the outer Solar System*, Arizona State University (February 2012).

Smith-Konter, B. (2012), *Locked, loaded, and looming? Exploring earthquake cycle stress history of seismically-active faults of the San Andreas Fault System*, Stony Brook University (February 2012).

Smith-Konter, B. (2012), *Locked, loaded, and looming? Exploring earthquake cycle stress history of seismically-active faults of the San Andreas Fault System*, Utah State University (February 2012).

Smith-Konter, B. (2012), *Locked, loaded, and looming? Exploring earthquake cycle stress history of seismically-active faults of the San Andreas Fault System*, University of California Davis (February 2012).

Smith-Konter, B. (2011), *Locked, loaded, and looming? Exploring earthquake cycle stress history of seismically-active faults of the San Andreas Fault System*, East Los Angeles College, Los Angeles, CA.

Luttrell, K., D. Sandwell, and B. Smith-Konter (2011), *Connecting stress models to real world measurements*, 2011 Southern California Earthquake Center Annual Meeting, Palm Springs, CA.

Smith-Konter, B. (2011), S*tressed out in the Solar System: A day in the life of a San Andreas earthquake and Enceladus icequake*, University of California San Diego, San Diego, CA.

Hooks, B., Smith-Konter, B. (2010), *3D numerical mechanical modeling of the southern San Andreas Fault System,* 2010 Workshop on Numerical Modeling of Crustal Deformation and Earthquake Faulting, Golden, CO.

Smith-Konter, B. (2010), *Strain rate, stress rate, and moment rate from a time-dependent block model,* 2010 SCEC UCERF3 GPS Workshop, Southern California Earthquake Center, Pomona, CA.

Smith-Konter, B. (2009), *Tidally driven strike-slip fault activity at Enceladus's Tiger Stripe faults*, University of British Columbia.

Smith-Konter, B. (2009), *Stress evolution of the San Andreas Fault System*, University of British Columbia.

Smith-Konter, B. (2009), *Plate tectonics and tsunamis*, Cyberteam Teacher Workshop, San Diego, CA.

Smith-Konter, B. (2009), *Popularize or perish: Communicating, visualizing, and publicizing EarthScope data and model products for non-specialized audiences*, 2009 EarthScope National Meeting, Boise, ID.

Smith-Konter, B. (2009), *Getting your Career funded: Tips for submitting a successful NSF CAREER proposal*, College of Engineering, University of Texas at El Paso.

Smith-Konter, B. (2009), *Modeling active faults on Earth and icy moons*, College of Science Advisory Board, University of Texas at El Paso.

Smith-Konter, B. (2007), *Historical stress evolution of the San Andreas Fault System*, Colorado School of Mines.

Smith-Konter, B. (2007), *Historical deformation and stress evolution of the San Andreas Fault System*, Washington State University.

Smith-Konter, B. (2007), *Stress evolution of the San Andreas Fault System*, University of Texas at El Paso.

Smith-Konter, B. (2007), *Constructing and constraining time-dependent earthquake cycle models: Integrating 1000 years of seismic activity and modern deformation measurements*, University of California, Riverside.

Smith-Konter, B. (2007), *Historical stress evolution of the San Andreas Fault System*, University of North Carolina, Chapel Hill.

Smith, B. (2006), *Historical evolution of deformation and stress of the San Andreas Fault System*, Harvey Mudd College.

Smith, B. (2006), *Stress evolution of the San Andreas Fault System*, Jet Propulsion Laboratory.

Smith, B. (2006), *Modeling the evolution of stress of the San Andreas Fault System*, University of Southern California.

Smith, B. (2006), *Earthquakes 101*, Earthquake Education Workshop, Scripps Institution of Oceanography.

Smith, B. (2006), *1000 years of earthquake history along the San Andreas Fault System*, Jeffrey B. Graham Perspectives Lecture on Ocean Science, Birch Aquarium at Scripps.

ABSTRACTS

- Abstracts from 1997-2007 were published under name B. Smith; all contributions since 2007 have been published under the name B. Smith-Konter.
- Student authorship denoted with underline.

Wei, M., L. He, and B. Smith-Konter, A model of the earthquake cycle along the Gofar oceanic transform fault system, submitted to *AGU Fall Meeting 2024*.

Kamanu, A., B. Smith-Konter, H. Dulai, J. Engels, S. Rowland, S. Rowley, and G. Apuzen-Ito (2024), Earth-Planets-ʻIke-Kuleana (EPʻIK): Diversifying the geosciences and empowering Hawaiʻi's emerging Earth scientists through educational pathways, submitted to *AGU Fall Meeting 2024*, ED037.

Burkhard, L. B. Smith-Konter, K.M. Scharer, D.T. Sandwell, X. Xu (2022), Earthquake cycle stress accumulation disparities of the San Andreas Fault System in the Cajon Pass region, Southern California, *AGU Fall Meeting 2022*, G23A-062022 (**Outstanding Student Paper, Geodesy Section**).

Burkhard, L., E. Costello, B. Smith-Konter, and M. Cameron (2022), Uncovering the tectonic past of Ganymede through crater size frequency distribution and tidal Coulomb failure modeling a Nipper/Philus Sulci, *European Planetary Science Congress*, EPSC2022-3052022.

Anderson, A., B. Smith-Konter, T. Anderson, H. Dulai, L. Burkhard, J. Engels, J. Konter, S. Rowland (2022), Connecting geoscience knowledge, traditional stories, and the traditional practice of observation (kilo) to stimulate a more diversified geoscience community, *2022 Goldschmidt Conference*, Honolulu, HI.

Smith-Konter, B. and H. Dulai (2022, invited), Advancing Native Hawaiian and Pacific Islander representation within REU programs: Kuikahi (collaboration), Ka hana hou (innovation), and holomua (progress), *2022 Goldschmidt Conference*, Honolulu, HI.

Smith-Konter, B., S. Coats, J. Drazen, R. Dunn, D. Eason, B. Glazer, B. Howe, B. Popp, J. Potemra, and K. Seraphin (2022), Bringing the sea to the students: Virtual research cruises throughout the COVID- 19 pandemic, *2022 Ocean Sciences Meeting,* Honolulu, HI.

Burkhard, L.M., B. Smith-Konter, and M.E. Cameron (2022), Diurnal tidal stresses reveal regions of interest for exploration on ocean worlds, *2022 Ocean Sciences Meeting,* Honolulu, HI.

Smith-Konter, B., L.A. Ward, L. Burkhard, X. Xu, P. Wessel, and D.T. Sandwell (2021, invited), Optimal stress but no big (recent) breaks – exploring the enigmatic earthquake cycle of the San Andreas Fault System, *2021 AGU Fall Meeting*, New Orleans, LA.

Murray, K., B. Smith-Konter (2021), Survey of deformation across the East African Rift System using GPS and InSAR. *2021 AGU Fall Meeting*, New Orleans, LA.

Ward, L.A., J.H. Foster, B. Smith-Konter, and I. Johanson (2021), Investigating the past 100 years of yault zone deformation and Coulomb stress changes of Kilauea's decollement, *2021 AGU Fall Meeting*, New Orleans, LA.

Tamer, A.J., M. Narish, G. Bruce, B. Smith-Konter, A. Anderson, B. Houghton, S. Rowland, N. Gomes, and A. Anbar (2021), Providing context for virtual tours of Kilauea with indigenous voices, *2021 AGU Fall Meeting*, New Orleans, LA.

Tamer, A.J., M. Narish, G. Bruce, B. Smith-Konter, A. Anderson, B. Houghton, S. Rowland, K. Kaupiko, L. Patao, P. Traub, E. Edwards, N. Gomes, and A. Anbar (2021), Giving local experts the tools to create their own place-based, digital learning experiences: A case study, *2021 AGU Fall Meeting*, New Orleans, LA.

A. Anderson, B. Smith-Konter, T. Anderson, L. Burkhard, H. Dulai, J. Engels, Hope Ishii, G. Ito, J. Konter, Haunani Kane, K. McDonald, B. Okuhata, S. Rowland, K. Rubin, D. Tachera, and K. Tavares (2021), Connecting traditional storiess, geoscience knowledge, and the traditional practice of observation (kilo) to stimulate a more diversified geoscience community, *2021 AGU Fall Meeting*, New Orleans, LA.

Burkhard, L., B. Smith-Konter, S. Fagents, M. Cameron, G. Collins, R.T. Pappalardo (2021), Investigating inferred strike-slip features on Titan: Modeling possible shear failure due to tidal stress pore fluid interactions, European Planetary Science Congress, EPSC2021-450 (**Outstanding Virtual Presentation Award**).

Smith-Konter, B., A. Anderson, T. Anderson, L. Burkhard, H. Dulai, J. Engels, G. Ito, J. Konter, K. McDonald, B. Okuhata, and S. Rowland (2020), EPʻIK Summer: Integrating Earth, Planets, ʻIke, and Kuleana into an online summer camp for high school students and teachers in Hawaiʻi, *2020 AGU Fall Meeting*, San Francisco, CA.

Xu, X., L. Ward, C. Milliner, B. Smith-Konter, P. Fang, Y. Bock, and D.T. Sandwell (2020), Surface fractures nearby the Ridgecrest earthquakes: what can we learn on the regional stress and fault properties?, *2020 AGU Fall Meeting*, San Francisco, CA.

Xu, X., L. Ward, B. Smith-Konter, C. Milliner, P. Fang, Y. Bock, and D.T. Sandwell (2020), Surface fractures nearby the Ridgecrest earthquakes: Frictional slip or compliant fault?, *2020 SCEC Annual Meeting*.

Ward, L., B. Smith-Konter, X. Xu, S. Howell, and D.T. Sandwell (2020), Vertical deformation dependency on spatially variable elastic plate thickness: Insights from the 2019 Ridgecrest earthquake sequence, *2020 SCEC Annual Meeting*.

Smith-Konter, B., Geodetic imaging and hazard analysis of the 2018 Kilauea eruption (2020), *2020 Goldschmidt Conference*, invited plenary speaker (virtual), https://doi.org/10.46427/gold2020.2416.

Xu, X., L. Ward, B. Smith-Konter, C. Milliner, P. Fang, Y. Bock, and D.T. Sandwell (2020), Antithetic surface deformation on nearby faults from the Ridgecrest earthquakes: Compliant faults zones or triggered slip?, *SSA Meeting* (virtual).

Burkhard, L., B. Smith-Konter, S. Fagents, M. Cameron, G.C. Collins, and R.T. Pappalardo (2020), Shear failure at Titan? Investigating strike-slip tectonism due to pore fluid interactions in Titan's shallow subsurface, *Lunar and Planetary Sciences Meeting*, Houston, TX.

Smith-Konter, B.R., X. Xu, L.A. Ward, L. Burkhard, J.H. Foster, and D.T. Sandwell (2020), Geodetic imaging of the 2018 Kīlauea Volcano eruption, *Chapman Conference on Distributed Volcanism and Volcanic Hazards*, Flagstaff, AZ.

Smith-Konter, B., P. Wessel, and S. Kanaiaupuni (2019), Advancing Native Hawaiian and Pacific Islander representation within REU programs: Kuikahi (collaboration), Ka Hana Hou (innovation), and Holomua (progress), *2019 AGU Fall Meeting*, San Francisco, CA.

Smith-Konter, B.R., L. Ward, X. Xu, and D.T. Sandwell (2019c), The Ups and Downs From Afar: Vertical Deformation of the 2019 M6.4 Searles Valley and M7.1 Ridgecrest Earthquakes, *2019 AGU Fall Meeting*, San Francisco, CA.

Xu, X., L. Ward, C. Milliner, B. Smith-Konter, P. Fang, Y. Bock, and D.T. Sandwell (2019c), Surface rupturing and triggered slip on nearby faults from the Ridgecrest earthquakes revealed by InSAR, *2019 AGU Fall Meeting*, San Francisco, CA.

Smith-Konter, B.R., L. Ward, X. Xu, and D.T. Sandwell (2019b), Vertical Deformation of the 2019 M6.4 Searles Valley and M7.1 Ridgecrest Earthquakes*, 2019 SCEC Annual Meeting*, Palm Springs, CA.

Xu, X., L. Ward, C. Milliner, B. Smith-Konter, P. Fang, Y. Bock, and D.T. Sandwell (2019b), Surface rupturing and triggered slip on nearby faults from the Ridgecrest earthquakes revealed by InSAR, *2019 SCEC Annual Meeting*, Palm Springs, CA.

Ward, L., B. Smith-Konter, X. Xu, S. Howell, and D.T. Sandwell (2019), Vertical deformation dependency on spatially variable elastic plate thickness, *2019 SCEC Annual Meeting*, Palm Springs, CA.

Sandwell, D.T., X. Xu, L.A. Ward, J. Jiang, B.R. Smith-Konter, E. Tymofyeyeva (2018), Surface creep rate of the Southern San Andreas fault modulated by stress perturbations from nearby large events, Abstract [T51J-0321] presented at the *2018 AGU Fall Meeting*, Washington, D.C.

Ward, L.A., B.R. Smith-Konter, J.T. Higa, X. Xu, X. Tong & D.T. Sandwell (2018b), Seismic moment variations of the San Andreas Fault System: Exploring sensitivity of crustal rheology in southern California, Abstract [T13D-0259] presented at the *2018 AGU Fall Meeting*, Washington, D.C.

Burkhard, L., B. Smith-Konter, and D.T. Sandwell, Stress accumulation rates of the San Andreas Fault System derived from spatial variations in crustal rigidity, *2018 AGU Fall Meeting*, Washington, D.C.

Smith-Konter, B.R., L.A. Ward, L. Burkhard, A. Aryal, J.H. Foster, X. Xu & D.T. Sandwell (2018), Geodetic Imaging of the 2018 Kīlauea Volcano Eruption, Abstract [V43J-0272] presented at the *2018 AGU Fall Meeting*, Washington, D.C.

Xu, X., B.R. Smith-Konter, L.A Ward, L. Burkhard, G. Blewitt and D.T. Sandwell (2018), InSAR deformation time-series of the 2018 Kīlauea events: depletion of the volcano, the east rift zone and the Mw 6.9 Earthquake, Abstract [V43J-0279] presented at the *2018 AGU Fall Meeting*, Washington, D.C.

Xu, X., L. Ward, J. Jiang, B.R. Smith-Konter, E. Tymofyeyeva, E.O Lindsey, A.G. Sylvester and D.T. Sandwell (2018), Surface creep rate of the southern San Andreas Fault modulated by stress perturbations from nearby large events, *2018 SCEC Annual Meeting*, Washington, D.C.

Burkhard, L., B.R. Smith-Konter, L. Ward, K.M. Scharer & D.T. Sandwell (2018), Earthquake cycle stress accumulation disparities of the Cajon Pass region. *Poster 2018 SCEC Annual Meeting*.

Smith-Konter, B.R., X. Xu, L. Ward, L. Burkhard & D.T. Sandwell (2018), InSAR/GPS time series deformation of the 2018 Kīlauea event: Preparation for a large Southern California event. *2018 SCEC Annual Meeting*.

Ward, L., B.R. Smith-Konter, X. Xu & D.T. Sandwell (2018), Strain rate dependence on crustal rheology for the Cajon Pass, California. *2018 SCEC Annual Meeting*.

Smith-Konter, B., L. Ward, J. Higa, X. Xu, X. Tong, and D.T. Sandwell (2017), New constraints on slip rates and locking depths of the San Andreas Fault System from Sentinel-1A InSAR and GAGE GPS observations, *2017AGU Fall Meeting*, New Orleans, La.

Burkhard, L. and B. Smith-Konter (2017), 4D stress evolution models of the San Andreas Fault System: Investigating time- and depth-dependent stress thresholds over multiple earthquake cycles, *2017 AGU Fall Meeting*, New Orleans, La.

Burnstein, J., B. Smith-Konter, and A. Aryal (2017), 4-D visualization of seismic and geodetic

data of the Big Island of Hawai'i, *2017 AGU Fall Meeting*, New Orleans, LA.

Cameron, M., B. Smith-Konter, L. Burkhard, G. Collins, D. Patthoff, and R.T. Pappalardo (2017), Ganymede past and present: How evolving eccentricity effects tidally-driven Coulomb failure, *2017 AGU Fall Meeting*, New Orleans, La.

Cameron, M., B. Smith-Konter, L. Burkhard, G. Collins, D. Patthoff, and R.T. Pappalardo (2017), Strike-slip tectonism on Ganymede: Investigating Coulomb failure at a global scale, *invited presentation*, *GSA Annual Meeting*.

Smith-Konter, B., D.T. Sandwell, X. Tong, X. Xu, L. Ward, and J. Higa (2017), Deformation of the southern San Andreas Fault System induced by lateral variations in crustal rigidity, *2017 SCEC Annual Meeting,* Palm Springs, CA.

Sandwell, D.T. and B. Smith-Konter (2017), A 4D earthquake cycle model with lateral variations in shear modulus, *2017 SCEC Annual Meeting,* Palm Springs, CA.

Cameron, M., B. Smith-Konter, L. Burkhard, R.T. Pappalardo, and G. Collins (2017), Strike-slip tectonism and shear failure on Ganymede, *Lunar and Planetary Sciences Meeting,* Abstract #2111, Houston, TX.

Cameron, M., B. Smith-Konter, L. Burkhard, R.T. Pappalardo, and G. Collins (2016), A case study on Uruk Sulcus, Ganymede: How variations in fault strike and stress distribution can affect shear failure, *2016 AGU Fall Meeting,* San Francisco, CA.

Smith-Konter, B., A. Gonzalez-Ortega, X. Tong, D. Sandwell, M. Merrifield, S. Hardy, and S. Howell (2016), Six years after the El Mayor-Cucapah earthquake: Transient far-field postseismic vertical motion observed by tide gauges and GPS, *2016 AGU Fall Meeting,* San Francisco, CA.

Smith-Konter, B., K. Luttrell, X. Tong, and D.T. Sandwell (2016), 4D stress evolution models of the San Andreas Fault System using improved geodetic and paleoseismic constraints, *2016 SCEC Annual Meeting,* Palm Springs, CA.

Luttrell, K. and B. Smith-Konter (2016), How stressed are we really? Harnessing community models to characterize the crustal stress field in Southern California, invited plenary speaker, *2016 SCEC Annual Meeting,* Palm Springs, CA.

Tong, X., A. Gonzalez-Ortega, B. Smith-Konter, and D.T. Sandwell (2016), Postseismic deformation and viscosity of the Mexicali region following the El-Mayor Cucapah earthquake inferred from GPS observations, *2016 SCEC Annual Meeting*, Abstract 156, Palm Springs, CA.

Gonzalez-Huizar, H., S. Hardy, and B. Smith-Konter (2016), Investigating tremor sources along the San Andreas Fault using integrated static and dynamic stress models, *2016 SCEC Annual Meeting*, Abstract 179, Palm Springs, CA.

Luttrell, K., and B. Smith-Konter (2016), Regional-scale models of crustal stress in Southern California, with implications for heterogeneous tectonic loading and in situ stress magnitude, *SSA Annual Meeting*, Abstract 16-698.

M. Cameron, B. Smith-Konter, L. Burkhard, R.T. Pappalardo, and G. Collins (2016), Strike-slip faulting on Ganymede: Morphological mapping and failure mechanics, *Lunar and Planetary Sciences Meeting,* Abstract #2630, Houston, TX.

Luttrell, K. and B. Smith-Konter (2016), Regional-scale models of crustal stress along the Pacific-North American plate boundary, with implications for heterogeneous tectonic loading and in situ stress magnitude, 2016 *GSA South-Central Section Meeting,* Abstract #273845*,* Baton Rouge, LA.

Sandwell, D.T., B. Smith-Konter, and X. Tong (2015), Interseismic Moment Accumulation Rate along the San Andreas Fault System from InSAR and GPS, *NASA ESI Strategic Plan Workshop,* Pasadena, CA.

Tong, X., E. Lindsey, D. Sandwell, Y. Fialko, B. Smith-Konter, B. Crowell, and S. Baker (2015), A preliminary Community Geodetic Velocity Model of the San Andreas Fault System from GPS and InSAR, *2015 SCEC Annual Meeting,* Palm Springs, CA.

Gonzalez-Huizar, H., S. Hardy, A. Velasco, B. Smith-Konter, and K. Luttrell (2015), Integrated Static and Dynamic Stress Models for Investigating Tremor Source Regions, *2015 SCEC Annual Meeting,* Palm Springs, CA.

Luttrell, K., B. Smith-Konter, and D.T. Sandwell (2015), Interpreting crustal stress orientation along the San Andreas and San Jacinto faults: A forward modeling study with constraints from seismology, geodesy, topography, and gravity, *2015 SCEC Annual Meeting,* Palm Springs, CA.

Luttrell, K., B. Smith-Konter, and D.T. Sandwell (2015), Crustal stress rotation along the San Andreas and San Jacinto faults: a modeling study with constraints from seismology, geodesy, topography, and gravity, *2015 AGU Fall Meeting,* San Francisco, CA.

Aryal, A., S. Howell, and B. Smith-Konter (2015), Comparing GPS and geologic vertical velocities in Southern California, *2015 AGU Fall Meeting,* San Francisco, CA.

Hardy, S., H. Geonzalez-Huizar, and B. Smith-Konter (2015), Integrated static and dynamic stress modeling for investigating tremor source regions in the San Andreas Fault System, *2015 AGU Fall Meeting,* San Francisco, CA.

Burkhard, L., M. Cameron, B. Smith-Konter, F. Seifert, R. Pappalardo, and G. Collins (2015), Strike-slip faulting processes on Ganymede: Global morphological mapping and structural interpretation of grooved and transitional terrain, *2015 AGU Fall Meeting,* San Francisco, CA.

Cameron, M., B. Smith-Konter, L. Burkhard, G. Collins, F. Siefert, and R. Pappalardo (2015), What causes an icy fault to slip? Investigating strike-slip failure conditions on Ganymede at Dardanus and Tiamat Sulcus, *2015 AGU Fall Meeting,* San Francisco, CA.

Howell, S., B. Smith-Konter, N. Frazer, X. Tong, and D. Sandwell (2015), The vertical fingerprint of earthquake cycle loading in Southern California, *2015 EarthScope National Meeting,* Stowe, VT.

Aryal, A., S. Howell, and B. Smith-Konter (2015), Comparison of geodetic and geologic vertical motion rates in Southern California, *2015 EarthScope National Meeting,* Stowe, VT.

Sandwell, D.T., B. Smith-Konter, and X. Tong (2015), A 4-D earthquake cycle model for bounding seismic moment accumulation rate, IUGG General Assembly, Prague, CZ.

Seifert. F., M. Cameron, B. Smith-Konter, R.T. Pappalardo, and G. Collins (2015), Global morphological mapping of strike-slip structures on Ganymede, *Lunar and Planetary Sciences Meeting,* Abstract #2985, Houston, TX.

Howell, S., B. Smith-Konter, N. Frazer, X. Tong, and D. Sandwell (2014), Statistical analysis of GPS vertical uplift in southern California, *2014 AGU Fall Meeting,* San Francisco, CA.

Smith-Konter, B., M. Cameron, F. Seifert, R.T. Pappalardo, and G. Collins (2014), Global morphological mapping of strike-slip structures on Ganymede, *2014 AGU Fall Meeting,* San Francisco, CA.

Aryal, A., B. Smith-Konter, J. Foster, and P. Okubo (2014), Coseismic and postseismic slip of the 2006 Kiholo Bay earthquake in Hawaii from GPS data, 2014 *AGU Fall Meeting,* San Francisco, CA.

Cameron, M., B. Smith-Konter, and R.T. Papplardo (2014), Investigating stress sources and fault parameters along major strike-slip lineae on Europa, 2014 *AGU Fall Meeting,* San Francisco, CA.

Luttrell, K., B. Smith-Konter, and D. Sandwell (2014), Critically stressed crust in southern California: A model of crustal stress from plate driving, topography, and fault loading, with geodetic and seismic constraints, 2014 *AGU Fall Meeting,* San Francisco, CA. (*invited*)

Cameron, M., B. Smith-Konter, and R.T. Pappalardo (2014), What causes an icy fault to slip? Investigating the depth and frictional conditions for tidally driven Coulomb failure along major strike-slip faults of Europa and Ganymede, *2014 DPS Meeting, Tucson, AZ.*

Tong, X., D.T. Sandwell, and B. Smith-Konter (2014), An integral method to estimate the moment accumulation rate on the Creeping Section of the San Andreas Fault, *2014 SCEC Annual Meeting,* Palm Springs, CA.

Howell, S., B. Smith-Konter, N. Frazer, X. Tong, and D. Sandwell (2014), Statistical analysis of GPS vertical uplift in southern California, *2014 SCEC Annual Meeting,* Palm Springs, CA.

Tong, X., B. Smith-Konter, and D. Sandwell (2013), Is there a discrepancy in slip rates along the San Andreas Fault System?, *2013 AGU Annual Meeting*, San Francisco, CA.

D. Sandwell, B. Smith-Konter, and X. Tong (2013), 4-D strain rate of the San Andreas Fault System: Knowns and unknowns, *2013 AGU Annual Meeting*, San Francisco, CA.

Tong, X., B. Smith-Konter, and D. Sandwell (2013), Is there a discrepancy in slip rates along the San Andreas Fault System?, *2013 AGU Annual Meeting*, San Francisco, CA.

Hardy, S., and B. Smith-Konter (2013), Investigating earthquake cycle vertical deformation recorded by GPS and regional tide gauge stations in California, *2013 AGU Annual Meeting*, San Francisco, CA.

M. Cameron, B. Smith-Konter, and R.T. Pappalardo (2013), Tidally-driven failure along Europa's Rhadamanthys Linea, *2013 AGU Annual Meeting*, San Francisco, CA.

Nahm, A., M. Cameron, B. Smith-Konter, and R.T. Pappalardo (2013), Displacement magnitude and distribution along Agenor Linea, Europa: Effect of orbital eccentricity, Geological Society of America Abstracts with Programs. Vol. 45, No. 7, paper 305-10.

Tong, X., B. Smith-Konter, and D. Sandwell (2013), Is there a discrepancy in slip rates along the San Andreas Fault System?, *SCEC Annual Meeting*, Palm Springs, CA.

Luttrell, K., B. Smith-Konter, and D. Sandwell (2013), Toward constraining absolute stress in Southern California, *SCEC Annual Meeting*, Palm Springs, CA.

Solis, T., and B. Smith-Konter (2013), Estimating variations in locking depth for the Mojave segment of the San Andreas fault over the past 1500 years from paleoseismic stress drop, *2013 EarthScope Meeting*, Raleigh, NC.

Hardy, S., and B. Smith-Konter (2013), Comparing vertical deformation recorded by PBO GPS and regional tide gauge stations in California, *2013 EarthScope Meeting*, Raleigh, NC.

Tong, X., D. Sandwell, and B. Smith-Konter (2013), Earthquake cycle model of the San Andreas fault constrained by GPS and ALOS radar interferometry, *2013 EarthScope Meeting*, Raleigh, NC.

M. Cameron, B. Smith-Konter, R.T. Pappalardo, G. Collins, and F. Nimmo (2013), Tidally-driven strike-slip failure mechanics on Ganymede, 44th *Lunar and Planetary Science Conference, Abstract #2711.*

Nahm, A., M. Cameron, B. Smith-Konter, and R.T. Pappalardo (2013), Stress-triggered faulting along Agenor Linea, Europa, 44th *Lunar and Planetary Science Conference, Abstract #2968.*

Sandwell, D., X. Tong, R. Mellors, M. Wei, B. Smith-Konter, and P. Wessel (2012), Towards automated processing and integration of InSAR and GPS data, submitted to the *2012 AGU Annual Meeting*, San Francisco, CA.

Solis, T., and B. Smith-Konter (2012), Variations in stress accumulation over the past 1500 years at Wrightwood, CA due to changes in locking depth, submitted to the *2012 AGU Annual Meeting*, San Francisco, CA.

M. Cameron, B. Smith-Konter, and R.T. Pappalardo (2012), Shear failure of icy satellites: Present-day implications along Enceladus's Tiger Stripes and indications of past strike-slip faulting on Ganymede's Dardanus Sulcus, submitted to the *2012 AGU Annual Meeting*, San Francisco, CA.

Nahm, A., M. Cameron, B. Smith-Konter, and R.T. Pappalardo (2012), Modeling of stress-triggered faulting and displacement magnitude along Agenor Linea, Europa, submitted to the *2012 AGU Annual Meeting*, San Francisco, CA.

Tong, X., D. Sandwell, and B. Smith-Konter (2012), High resolution velocity model of the San Andreas Fault System from a combined GPS/InSAR inversion, submitted to the *2012 AGU Annual Meeting*, San Francisco, CA.

Smith-Konter, B. and T. Solis (2012), Focusing the EarthScope for a broader audience: Advancing geoscience education with interactive kiosks, submitted to the *2012 AGU Annual Meeting*, San Francisco, CA (invited).

Nahm, A., J. Villalobos, J. White, and B. Smith-Konter (2012), Workshop results: Teaching geoscience to K-12 teachers, submitted to the *2012 AGU Annual Meeting*, San Francisco, CA.

Smith-Konter, B., T. Solis, and M. Cameron (2012), EarthScope in 4D: Visualizing earthquake cycle stress evolution at depth along the San Andreas Fault System, submitted to the *2012 GSA Annual Meeting*, Charlotte, NC (invited).

Pappalardo, R.T., B. Smith-Konter, M. Cameron, L. DeRemer-Keeney, and F. Nimmo (2012), Strike-slip faulting on Ganymede, now and then, 44th *Division for Planetary Sciences Meeting,* Reno, NV.

Luttrell, K., B. Smith-Konter, and D. Sandwell (2012), Investigating absolute stress in southern California: How well do stress models of compensated topography and fault loading match earthquake focal mechanisms?, *SCEC Annual Meeting*, Palm Springs, CA.

Tong, X., D. Sandwell, and B. Smith-Konter (2012), A systematic estimation of fault creep rates along major faults in California from L-band radar interferometry, *SCEC Annual Meeting*, Palm Springs, CA.

Sandwell, D., S. Barbot, C. Williams, A. Freed, S. Ellis, M. Huang, and B. Smith-Konter (2012), Investigations into effects of different modeling codes and rheology on predicted coseismic and postseismic surface deformation, *SCEC Annual Meeting*, Palm Springs, CA.

Nahm, A. L., M. E. Cameron, B. R. Smith-Konter, and R. T. Pappalardo, Modeling of Stress Triggered Faulting at Agenor Linea, Europa, *European Geosciences Union annual meeting*, Geophysical Research Abstracts, Vol. 14, EGU2012-3847, Vienna, Austria, April 22–27.

Cameron, M. E., A. L. Nahm, B. Smith-Konter, and R. L. Pappalardo (2012), Tidally driven Coulomb failure at Europa's Agenor Linea, 43rd *Lunar and Planetary Science Conference, Abstract #1718.*

Smith-Konter, B. (2012), Stress uncertainties of the San Andreas Fault System from 4-D deformation modeling, *2012 Seismological Society of America Meeting.*

Tong, X., D. Sandwell, and B. Smith-Konter (2012), High resolution interseismic crustal velocity model of the San Andreas fault from GPS and InSAR, *2012 Seismological Society of America Meeting.*

Smith-Konter, B. and C. Del Pardo (2011), EarthScope imaging of 4D stress evolution of the San Andreas Fault System, *Abstract G53C-03 presented at the 2011 Fall Meeting*, AGU, San Francisco, Calif., 5-9 Dec.

Smith-Konter, B. (2011) Focusing the EarthScope for a broader audience, *Abstract ED41C-05 presented at the 2011 Fall Meeting*, AGU, San Francisco, Calif., 5-9 Dec.

Tong, X., D. Sandwell, and B. Smith-Konter (2011), High resolution interseismic velocity model of the San Andreas fault from GPS and InSAR, *Abstract G41A-0723 presented at the 2011 Fall Meeting*, AGU, San Francisco, Calif., 5-9 Dec.

Solis, T. and B. Smith-Konter (2011) Investigating stress drop patterns of major southern San Andreas fault earthquakes over the last 2000 years, *Abstract T23B-2385 presented at the 2011 Fall Meeting*, AGU, San Francisco, Calif., 5-9 Dec.

Del Pardo, C. and B. Smith-Konter (2011), Investigating variations in strain rate of the San Andreas Fault System due to dipping fault geometry resolved by geodetic and seismicity data, *Abstract G41A-0722 presented at the 2011 Fall Meeting*, AGU, San Francisco, Calif., 5-9 Dec.

Thornton, G. and B. Smith-Konter (2011), Modeling vertical deformation along the San Andreas Fault System using geodetic, geologic, groundwater, and tide gauge data, *Abstract G23B-01 presented at the 2011 Fall Meeting*, AGU, San Francisco, Calif., 5-9 Dec. (**Outstanding Student Paper, Geodesy Section)**

Hughes, K., B. Hooks, B. Smith-Konter (2011), Role of advection, vertical stresses, and strain

accumulation in the partitioning of deformation along the San Andreas Fault, Southern California, *Abstract T13C-2388 presented at the 2011 Fall Meeting*, AGU, San Francisco, Calif., 5-9 Dec.

Thornton, G. and B. Smith-Konter (2011), Investigating geodetic and geologic vertical velocity discrepancies along the southern San Andreas Fault System using multiple comparison techniques and developing a groundwater correction, *Geological Society of America Meeting,* Minneapolis, MN.

Tong, X., D.T. Sandwell, and B. Smith-Konter (2011), High resolution interseismic crustal velocity model of the San Andreas Fault System from GPS and InSAR, *SCEC Annual Meeting*, Palm Springs, CA.

Luttrell, K., D.T. Sandwell, and B. Smith-Konter (2011), Absolute stress in southern California constrained by earthquake focal mechanisms and models of stress contributions from topography and fault loading, *SCEC Annual Meeting*, Palm Springs, CA.

Solis, T. and B. Smith-Konter (2011), Stress drop variations of the San Andreas Fault System, Mojave segment, over the last 2000 years, *SCEC Annual Meeting*, Palm Springs, CA.

Thornton, G.M., B. Smith-Konter, and J. Konter (2011), Discerpancies in observed vertical motion from geodetic, geologic, and groundwater data along the southern San Andreas Fault System , *SCEC Annual Meeting*, Palm Springs, CA.

Del Pardo, C., B. Smith-Konter, D. Sandwell, P. Shearer, and Y. Zeng (2011), Investigating along-strike depth variations of seismicity in the San Andreas Fault System to better resolve geodetic locking depths, *SCEC Annual Meeting*, Palm Springs, CA

Hooks, B.P., B. Smith-Konter, and G. Thornton (2011), Numerical modeling of interseismic earthquake-induced vertical motion associated with the San Andreas Fault System , *SCEC Annual Meeting*, Palm Springs, CA.

Thornton, G.M. and B. Smith-Konter (2011), Investigating geodetic and geologic vertical velocity discrepancies along the southern San Andreas Fault System using multiple comparison techniques and developing a groundwater correction, *GSA Abstracts with Programs*, 43, 5, Abstract No. 195760.

Smith-Konter, B. (2011), Locked, loaded, and looming? Exploring earthquake cycle stress history of seismically-active faults of the San Andreas Fault System, *2011-2012 EarthScope Speaker Series*, http:// www.earthscope.org/speakers.

Smith-Konter, B. and C. Del Pardo (2011), 3D volume visualizations of stress accumulation rates of the San Andreas Fault System, *2011 EarthScope National Meeting*.

Solis, T. and B. Smith-Konter (2011), Investigating stress drop variations of major San Andreas fault earthquakes over the last 1000 years, *2011 EarthScope National Meeting*. (**Outstanding Student Poster, 2nd place)**

Del Pardo, C., B.P. Hooks, B. Smith-Konter, L.F. Serpa, and T.L. Pavlis (2011), Investigating 3D strain patterns due to thermal intrusions: Death Valley Fault Zone, Death Valley, CA *2011 EarthScope National Meeting*.

Thornton, G.M. and B. Smith-Konter (2011), Investigating geologic and geodetic vertical motion discrepancies of the Southern San Andreas Fault System, *2011 EarthScope National Meeting*.

Tong, X., D.T. Sandwell, and B. Smith-Konter (2011), High resolution interseismic crustal velocity model of the San Andreas Fault System from GPS, InSAR, and a dislocation model, *2011 EarthScope National Meeting*.

Sandwell, D., M. Wei, and B. Smith-Konter (2011), Integrating GPS and InSAR to Resolve Strain Rates Along the San Andreas Fault System: Contributions from ALOS-1/2 and DESDynI, *2011 IGARRS Meeting*.

Smith-Konter, B., D. Sandwell, and P. Shearer (2010), Comparison of locking depths estimated from geodesy and seismology along the San Andreas Fault System, *Abstract S31C-04 presented at the 2010 Fall Meeting*, AGU, San Francisco, Calif., 13-17 Dec.

Olgin, J., B. Smith-Konter, and R.T. Pappalardo (2010), Tidally driven Coulomb failure of faults

on Enceladus and Europa, *Abstract P33B-1578 presented at the 2010 Fall Meeting*, AGU, San Francisco, Calif., 13-17 Dec.

Smith-Konter, B., D. Sandwell, and P. Shearer (2010), Comparison of locking depths estimated from geodesy and seismology along the San Andreas Fault System, *SCEC Annual Meeting*, Palm Springs, CA.

Solis, T., G. Thornton, and B. Smith-Konter (2010), Integrating new SoSAFE paleo-event chronologies with stress evolution models of the San Andreas Fault System over the last 2000 years, *SCEC Annual Meeting*, Palm Springs, CA.

Del Pardo, C., B.P. Hooks, B. Smith-Konter, T. Pavlis, and L. Serpa (2010), Three-dimensional thermo-mechanical modeling of the Death Valley Fault Zone, *SCEC Annual Meeting*, Palm Springs, CA.

Hooks, B.P. and B. Smith-Konter (2010), Numerical modeling of the San Andreas Fault System: Comparison with analytic solutions and geological observations, *SCEC Annual Meeting*, Palm Springs, CA.

Houser, P., and B. Smith-Konter (2010), EarthScope Active Earth Kiosk Display Offers a Dynamic Digital Scientific Exhibit for Museums and Educational Centers, *2010 IRIS Workshop*, Snowbird, UT.

Hooks, B., Smith-Konter, B. (2010), 3D numerical mechanical modeling of the southern San Andreas Fault System, *2010 Workshop on Numerical Modeling of Crustal Deformation and Earthquake Faulting*, Golden, CO.

Hooks, B., Smith-Konter, B. (2010), Preliminary strain results from 3D continuum mechanics models (FLAC3D) of the San Andreas Fault System, *2010 SCEC UCERF3 GPS Workshop*, Southern California Earthquake Center, Pomona, CA.

Smith-Konter, B. (2010), Strain rate, stress rate, and moment rate from a time-dependent block model, *2010 SCEC UCERF3 GPS Workshop*, Southern California Earthquake Center, Pomona, CA.

Olgin, J., B. Smith-Konter, and R. Pappalardo (2009), Investigating the limits of Enceladus's tidally driven tiger stripe failure scenario: Exploration of ice shell thickness, coefficient of friction, and fault depth, *2009 Lunar and Planetary Science Consortium Annual Meeting*.

Wei, M., D.T. Sandwell, and B. Smith-Konter (2009), Relationship between fault creep and shallow stress accumulation rate, *EOS Trans. AGU, 90 (54)*, Fall Meet. Suppl. Abstract T21D-1859.

Del Pardo, C., B. Smith-Konter, and L. Serpa (2009), Stress accumulation and interseismic deformation of the Death Valley Fault Zone, *EOS Trans. AGU, 90 (54)*, Fall Meet. Suppl. Abstract G23B-0690.

Olgin, J., B. Smith-Konter, and R. Pappalardo (2009), Constraining Enceladus's ice shell thickness using tidally driven Coulomb failure models of the tiger stripe fractures, *EOS Trans. AGU, 90 (54)*, Fall Meet. Suppl. Abstract P51A-1117.

Olgin, J., B. Smith-Konter, and R. Pappalardo (2009), Tidally driven strike-slip fault activity of Enceladus's Tiger Stripes: Comparison of thin and thick ice shell models, Geological Society of America *Abstracts with Programs*, Vol. 41, No. 7, 268.

Houser, P., and B. Smith-Konter (2009), Shaping education with technology: EarthScope Active Earth kiosk creates an interactive medium for exploring dynamic geological settings, Geological Society of America *Abstracts with Programs*, Vol. 41, No. 7, 92.

Smith-Konter, B. and P. Houser (2009), Communicating, visualizing, and publicizing EarthScope data and model products using Active Earth kiosks, Geological Society of America *Abstracts with Programs*, Vol. 41, No. 7, 598.

Smith-Konter, B., J. Olgin, and R. Pappalardo (2009), Tidally-driven Coulomb failure conditions of strike-slip faults on Enceladus and Europa, Geological Society of America *Abstracts with Programs*, Vol. 41, No. 7, 413.

Smith-Konter, B., T. Solis, and D.T. Sandwell (2009), Quantifying stress evolution models of the San Andreas Fault System using an improved paleoseismic database spanning the last 2000

years, *Proceedings from the 2009 SCEC Annual Meeting*.

Del Pardo, C., B. Smith-Konter, and L. Serpa (2009), Interseismic deformation of the Death Valley Fault Zone, *Proceedings from the 2009 SCEC Annual Meeting.*

Solis, T., and B. Smith-Konter (2009), Investigating active fault segment locations of the San Andreas Fault System using B4 and GeoEarthScope LIDAR data and the SCEC Community Fault Model, *Proceedings from the 2009 SCEC Annual Meeting*.

Sandwell, D., T. Becker, P. Bird, Y. Fialko, A. Freed, W. Holt, C. Kreemer, J. Loveless, B. Meade, R. McCaffrey, F. Pollitz, B. Smith-Konter, Y. Zeng (2009), Comparison of strain-rate maps of Western North America, *Proceedings from the 2009 SCEC Annual Meeting*.

Olgin, J., and B. Smith-Konter (2009), Investigation of tidal stress variations and fault mechanisms of Enceladus and Europa, *2009 Annual UTEP SACNAS Meeting.*

Solis, T., and B. Smith-Konter (2009), Investigating active fault segment locations of the San Andreas Fault System using high-resolution LIDAR data and the SCEC Community Fault Model, *2009 Annual UTEP SACNAS Meeting*.

Smith-Konter, B., D.T. Sandwell, and T. Solis (2009), New locking depth estimates of the San Andreas Fault System derived from the PBO GPS network, *Proceedings from the 2009 EarthScope National Meeting*.

Sandwell, D.T., P. Bird, A. Freed, C. Kreemer, T. Parsons, B. Smith-Konter, and S. Wdowinski (2009), Comparison of strain-rate maps of Western North America, *Proceedings from the 2009 EarthScope National Meeting*.

Wei, M., D. Sandwell, and B. Smith-Konter (2009), Optimal combination of InSAR and GPS for measuring interseismic crustal deformation*, Proceedings from the 2009 EarthScope National Meeting*.

Smith-Konter, B., J. Olgin, and R.T. Pappalardo (2009), Tidally driven strike-slip fault activity at Encealdus's tiger stripes, *EOS Trans. AGU*, *90 (22)*, Jt. Assem. Suppl., P33A-02.

Olgin, J., and B. Smith-Konter (2009), Investigation of Tidal Stress Variations and Fault Mechanisms of Enceladus and Europa, *UTEP Geological Sciences 23rd annual Colloquium*.

Solis, T., and B. Smith-Konter (2009), Investigating active fault segment locations of the San Andreas Fault System using high-resolution LIDAR data and the SCEC Community Fault Model, *UTEP Geological Sciences 23rd annual Colloquium*.

Konter, J., and B. Smith-Konter (2008), Vizcano: Student development of 3-D volcanic visualizations*, EOS Trans. AGU*, *89 (53)*, Fall Meet. Suppl., ED21C-07.

Smith-Konter, B., T. Solis, and D.T. Sandwell (2008), Data-derived stress uncertainties of the San Andreas Fault System, *EOS Trans. AGU*, *89 (53)*, Fall Meet. Suppl., U51B-0029.

Smith-Konter, B., T. Solis, and D.T. Sandwell (2008), Stress evolution of the San Andreas Fault System: Hindcast stress accumulation models and stress rate uncertainties, *Proceedings from the 7th U.S./Japan Natural Resources Panel for Earthquake Research, Invited presentation.*

Smith-Konter, B., T. Solis, and D.T. Sandwell (2008), Stress uncertainties of the San Andreas Fault System, *Proceedings from the 2008 Southern California Earthquake Center Annual Meeting,* Volume XVIII.

Sandwell, D. B. Smith-Konter, and M. Wei (2008), Geodetic imaging of large-scale continental deformation with ALOS InSAR and CGPS, *Proceedings from the* 2008 *GSA Joint Annual Meeting*, 204-6.

Sandwell, D. and B. Smith-Konter (2008), Imaging crustal deformation along the San Andreas Fault System with ALOS InSAR and GPS, *Proceedings from the IGAR Meeting*.

Smith-Konter, B. and R.T. Pappalardo (2007), Tidally driven stress accumulation and fault displacements of Enceladus's Tiger Stripes, *EOS Trans. AGU*, *88(52)*, Fall Meet. Suppl., PFF-06.

Smith-Konter, B. and R.T. Pappalardo (2007), Tidally driven stress accumulation and shear failure at Enceladus's Tiger Stripes, *Proceedings from the DPS Annual Meeting*, 383.

Smith-Konter, B. and D.T. Sandwell, Stress evolution of the San Andreas Fault System:

Dependencies on paleoseismicity, recurrence intervals, and fault locking depths, *Proceedings from the 2007 Southern California Earthquake Center Annual Meeting*, Volume XVII.

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Kilb, D., A. Nayak, and B. Smith (2006), Scientific visualization and collaboration tools enhance understanding of seismological data, *Seismol. Res. Lett*., 77:2.

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Smith, B., and D.T. Sandwell (2005), Is the elastic half-space dislocation model appropriate for estimating far-field velocity, *EOS Trans*. AGU, Fall Meet. Suppl., G53A-0864.

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Smith, B. and D. T. Sandwell (2005), Historical deformation models of the San Andreas Fault System: Integrating 1000 years of earthquake activity with modern deformation measurements, *EOS Trans*. AGU, Spring Meet. Suppl. 86(18), Jt. Assem. Suppl, G21A-05, *Invited presentation.*

Smith, B. and D.T. Sandwell, A 3-D semi-analytic viscoelastic model of the San Andreas Fault System: A 1000-year perspective of the earthquake cycle, *EOS Trans. AGU,* Fall Meet. Suppl*., 85(47), G14A-02*, 2004.

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Smith, B. and D.T. Sandwell (2004), A 3-D semi-analytic viscoelastic model for time-dependent analyses of the earthquake cycle: A 1000-year perspective of the San Andreas Fault System, *Proceedings from the 2004 Southern California Earthquake Center Annual Meeting*, Volume XIV.

Smith, B. and D.T. Sandwell (2003), Time-dependent Coulomb stress along the San Andreas Fault System, *EOS Trans. AGU*, *84*(46), Fall Meet. Suppl., G31B-0708.

Smith, B. and D.T. Sandwell (2003), A 4-D semi-analytic model of stress evolution along the San Andreas Fault System, *Proceedings from the 2003 Southern California Earthquake Center*

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Smith, B. and D.T. Sandwell (2003), Magnitude of deviatoric stress along the San Andreas fault, *EOS Trans. AGU, Spring Meet. Suppl.*, EAE03-A-14336.
Smith, B., D.T. Sandwell, and B. Bills (2002), Estimating SRTM resolution for applications of fault offset recovery, *EOS Trans. AGU*, *83*(47), Fall Meet. Suppl., T71E-1221.
Sandwell, D.T. and B. Smith (2001), Variations in normal stress along the San Andreas fault due to isostatically compensated topography, *EOS Trans. AGU*, *82*(47), Fall Meet. Suppl., G52A-10.
Smith, B. and D. T. Sandwell (2001), Variations in Coulomb stress accumulation along the San Andreas Fault System, *EOS Trans. AGU*, *82*(47), Fall Meet. Suppl., G52A-12, *Invited presentation.*
Sandwell, D.T., L. Sichiox, and B. Smith (2000), Hector Mine Earthquake: Vector coseismic displacement from ERS InSAR, *EOS Trans. AGU*, *81*(48), Fall Meet. Suppl., S61A-02.

TEACHING

[1]MAT: Masters of Arts in Teaching, a masters program for both pre- and in-service teachers
* Mean score for overall instructor performance, converted to 1-5 scale

Courses taught at The University of Hawaii (see pg 1)

Courses taught at The University of Texas at El Paso

- *Principles of Earth Science II* (GEOL 1312) is course aimed at the study of the Earth as a planet. This course covers topics in Earth history as interpreted from and exhibited by plants, animals, rocks, and minerals. This course also focuses on planetary properties and provides a survey of physical processes operating in the hydrosphere. 2008-2012.
  http://www.geo.utep.edu/pub/bkonter/geol_1312
  Teaching evaluation mean score for overall instructor performance*: 4.8/5

- *Introduction to Geographic Information Systems (GIS)* (GEOL 4385) is a course that provides an introduction to the principals, practice, and applications of GIS emphasizing the importance of producing map products, data structures, spatial analysis, and visualization techniques. 2010.
  http://www.geo.utep.edu/pub/bkonter/geol_4385
  Teaching evaluation mean score for overall instructor performance*: 5/5

- *Computer Applications in Geosciences* (GEOL 4315) is a course aimed at exploring common software and computational methods frequently utilized in the geological sciences. Topics include introductory Unix applications, general Adobe suite tips/tricks, computational techniques using MATLAB, and digital mapping/visualization using Surfer, GMT, and Fledermaus software. 2008-2011.
  http://www.geo.utep.edu/pub/bkonter/geol_4315
  Teaching evaluation mean score for overall instructor performance*: 4.9/5

- *Digital Image Processing* (GEOP 5336) is a course focused on the processing of remotely sensed digital images in the context the Earth and environmental sciences, emphasizing both basic concepts and mathematical treatments of topics in statistical analysis, Fourier analysis, photogrammetry, and interferometry. 2008.
  http://www.geo.utep.edu/pub/hurtado/5336

Teaching evaluation mean score for overall instructor performance*: N/A

- *MAT[I] Computer Applications in Earth Science* (GEOL 5303) is teaching training course aimed at "hands on" computer exercises designed to expose participants to software programs frequently utilized in Earth science classrooms. Aligned with UTEP's Masters of Arts in Teaching (MAT) Science Program, this course provides its participants with an improved conceptual understanding of Earth science topics they teach (or plan to teach) and pertinent information in science and technology. This course explores the fundamentals of plate tectonics, earthquakes, fault systems, and volcanoes using Earth science freeware programs such as *Seismac*, *Seismic/Eruption*, *Seismic Waves*, *EqLocate*, and *Global Earthquake Explorer*. 2009-2011.
  http://www.geo.utep.edu/pub/bkonter/geol_5303
  Teaching evaluation mean score for overall instructor performance*: 4.9/5

- *MAT[I] Earth Structure* (GEOL 5304) is a teacher training course class designed to give teachers a strong understanding of the 3-dimensional character of the Earth and how that relates to global geological and geophysical processes. 2010.
  Teaching evaluation mean score for overall instructor performance*: 4.9/5

Courses taught at The University of California San Diego

- *The Planets* (ERTH 01) is an introductory course designed to teach undergraduate students a broad range of topics about the origin, evolution, and present state of the planets of our solar system. This course focuses on the geology, tectonic activity, material properties, and atmospheric conditions of the planets. 2005-2006.
  http://topex.ucsd.edu/erth01.
  Teaching evaluation mean score for overall instructor performance*: N/A

- *Frontiers in Plate Boundary Deformation* (SIO 239) is a graduate seminar course that explores state-of-the-art measurement techniques and contemporary observations of active plate boundaries, with particular emphasis on the North American continent and the San Andreas Fault System. 2006.
  http://topex.ucsd.edu/sio239
  Teaching evaluation mean score for overall instructor performance*: N/A

- *Earthquakes in Action* is a high school summer science course designed for the COSMOS (California State Summer School for Mathematics and Science) Program through the University of California. *Earthquakes in Action* consists of classroom lectures, lab experiments, and a final research project designed to foster geophysical innovations, technological inquiries, and effective scientific communication at the high school level. 2005-2006.
  http://topex.ucsd.edu/cosmos/earthquakes
  Teaching evaluation mean score for overall instructor performance*: N/A

STUDENT/POSTDOC MENTORING

Undergraduate Supervised Research

- *Crustal deformation modeling of Kīlauea volcano and the San Andreas Fault System* (June 2024 -).
  Advised: Gregor Umhoefer
- *Crustal deformation modeling of the 2018 Kīlauea eruption* (October 2021 – May 2022).
  Advised: Kimberly Martin
- *Real-time Geologic Hazard Monitoring of Kīlauea volcano with InSAR* (October 2021 – May 2022).
  Advised: Kana Anderson
- *Earth Moves Me!: An education and outreach campaign for broadening geoscience awareness in Hawaii* (August 2019 – December 2019).
  Advised: Katherine Creadick
- *Crustal deformation modeling of variable rheology* (August 2017 – May 2018).
  Advised: Justin Higa
- *Geophysical data visualization of Kilauea tectonics and seismicity* (June 2017 – August 2017).
  Advised: Joshua Burstein
- *Vertical deformation and well log analysis* (August 2016 – May 2017).
  Advised: Aaron Lee
- *Morphological mapping of Ganymede strike-slip structures* (February 2015 – 2017).
  Advised: Lilliane Burkhard
- *Coulomb stress fault modeling of icy fractures on Europa* (June 2011 – May 2012).
  Advised: Marissa Cameron
- *Analysis of tide gauge data in California* (July 2009 - August 2009).
  Advised: Slade Jones
- *Active Earth interactive kiosks* (June 2009 – May 2012).
  Advised: Perry Houser
- *Investigating active fault segment locations of the San Andreas Fault System using B4 and GeoEarthScope LIDAR data* (July 2008 - December 2010).
  Advised: Teira Solis

Master's Thesis Research

- *Faulting mechanics icy fractures on Enceladus, Europa, and Ganymede* (June 2012 – May 2014).
  Advised: Marissa Cameron
- *Paleoseismic stress evolution models of the San Andreas Fault System* (January 2011 – May 2013).
  Advised: Teira Solis
- *Vertical deformation of the San Andreas fault*. (August 2010 – May 2012)
  Advised: Garrett Thornton
  UTEP Geophysics Academic Excellence Award recipient
- *Numerical modeling of tectonics and fault activity of icy satellites: Enceladus and Europa* (February 2009 - April 2011)
  Advised: John Olgin

- *Seismic velocity structure of the Rio Grande Rift* (September 2008 - July 2010)
  Advised: Lennox Thompson (co-advised by A. Velasco)

Ph.D. Dissertation Research

- *Earthquake cycle stress evolution of the San Andreas Fault System and icy moons of the outer Solar System* (August 2017 – September 2022).
  Advised: Liliane Burkhard
- *Geodetic imaging of 3D earthquake cycle crustal deformation: San Andreas, CA and Kīlauea, HI* (August 2017 – November 2021).
  Advised: Lauren Ward
- *Coulomb stress fault modeling of icy fractures on Ganymede* (August 2014 – April 2017).
  Advised: Marissa Cameron
- *Vertical deformation in California recorded by tide gauge stations, GPS, and geologic observations* (August 2012 –)
  Advised: Sandra Hardy
- *Three-dimensional models of crustal deformation in the Death Valley Fault Zone and evolution of the pull-apart basin* (April 2009 – May 2012)
  Advised: Cecilia Del Pardo (co-advised by L. Serpa)
  UTEP Geophysics Research Excellence Award recipient

Postdoctoral

- *Contrasting active magma- and fault-dominated segments of the East African Rift through the synthesis of InSAR and GPS time series* (May 2020 – June 2022)
  Advised: Kyle Murray
- *3D deformation and stress fields on dipping faults* (February 2014 – September 2016)
  Advised: Arjun Aryal
- *Coulomb stress triggering of faults on Europa* (August 2012 – May 2013)
  Advised: Amanda Nahm
- *Mechanical fault modeling of the San Andreas Fault* (August 2009 – May 2010)
  Advised: Benjamin Hooks

SERVICE

University/Department Service

- **Director**, ESVI REU (Earth Science on Volcanic Islands Research Experiences for Undergraduates) program; highly-competitive national internship program involving 40 UHM research mentors & 56 undergraduate students across the country (2018-present)
- **Director**, Earth-Planets-ʻIke-Kuleana (EPʻIK) high school outreach program; initiative for high school students (summer camp, campus field trip visits) in Hawaiʻi to gain exposure to Earth and planetary science in preparation for a successful college experience (2019-present)
- **Director**, Earth Moves Me!; K-12 STEM education and outreach program in Hawaiʻi; managed activities of 21 UHM undergraduate participants (2018-present)
- **Director**, ERTH-U-ROC (ERTH Undergraduate Research Opportunities Cohort); research and professional development program for ERTH undergraduate students (2021-2022)

- **Chair**, UHM Department of Earth Sciences Geophysics & Tectonics Division (2018-2022)
- **Undergraduate Academic Advisor** for 100+ Earth Sciences majors; 23-25 advisees (~60 contact hours) per semester (2017-2022)
- Member, UHM Geology and Geophysics Ad hoc Recruiting Committee (2016-2018)
- Member, UHM Geology and Geophysics Curriculum Committee (2015-2017)
- Member, UHM Geology and Geophysics Grad Studies Committee (2014-2016)
- Member, UHM Geology and Geophysics Student Committee (2014-2015)
- Member, UTEP Department of Geological Sciences Personnel Committee (2012)
- Member, UTEP College of Science Dean Search Committee (2012)
- Member, UTEP College of Science MAT Task Force Committee (2012)
- Chair, UTEP Earth Science Week Committee (2010-2011)
- Contributor, Centennial Museum Geology exhibit (2010)
- Member, UTEP Earth Science Week Committee (2009)
- Member, UTEP Geology Computational Facilities Committee (2008-present)
- Member, UTEP Geology Library Liaison Committee (2008-present)
- Member, UTEP Geology Webpage Committee (2008-present)
- Chair, Students@SIO (2003-2004)
- Chair, SIO Teaching Award Committee (2003-2004)
- Vice-Chair, Students@SIO (2002-2003)
- Geophysics Representative, Students@SIO (2001-2002)

Professional Service and Memberships

- Member, EarthScope/UNAVCO[2] Board of Directors; Education and Community Engagement Advisory Committee Board Liaison (2020-2022)
- UH University Member Representative, UNAVCO (2020)
- Member, Southern California Earthquake Center (SCEC)[1] Science Planning Committee; Co-Lead of the Stress and Deformation Over Time (SDOT) Interdisciplinary Focus Group (2016-2021)
- Member, UNAVCO Geodetic Infrastructure Advisory Committee (2015-2017)
- Plenary Session Chair, 2016 UNAVCO Science Workshop (2015-2016)
- Invited participant, Future of PBO in the GAGE Facility (2013-2018) and After EarthScope Workshop (September 2014)
- Member, UNAVCO Plate Boundary Observatory Working Group Committee (2014-2015)
- Invited virtual participant, EarthCube Charrette (2012)
- Invited series speaker, EarthScope Speaker Series (2011-2012); 1 of 5 U.S. geoscientists to participate in the 2011-2012 NSF EarthScope Speaker Series, a nationwide traveling seminar program providing accomplished researchers the opportunity to present EarthScope results to a large audience of faculty and students at universities across the country.
- Member, EarthScope Education and Outreach Sub-Committee (2011-2014)
- Peer Reviewer, Netherlands Space Office (NSO/NWO), Southern California Earthquake Center (SCEC), NSF EarthScope Program, NSF CAREER Program, NSF Geophysics Program, NSF Tectonics Program, NSF Frontiers in Earth Systems Dynamics Program, NASA Outer Planets Research Program (2008-present)
- Peer Reviewer, *J. Geophys. Res*., *Geology*, *Icarus*, *Earth Planet Sci. Lett*., *Geophys. J. Int*., *Tectonophysics*, *Bull. Seismol. Soc. Amer*., *G-cubed* , *Physics of the Earth and Planetary Interiors* (2007-present)

- Member, Division of Planetary Sciences AAS (2014-present)
- Member, Seismological Society of America (2008-present)

- Member, Geological Society of America (2008-present)
- Member, Sigma Xi (2008-)
- Member, American Geophysical Society (1999-present)
- Member, Golden Key National Honor Society (1997-1999)
- Member, Phi Kappa Phi National Honor Society (1997-1999)

[1] The Southern California Earthquake Center (SCEC) is a leading international earthquake science research center, comprised of 86 participating national and international institutions (www.scec.org/about).
[2] UNAVCO (University NAVSTAR Consortium) is a non-profit university governed consortium and World Data Center that facilitates geoscience research and education using geodesy. UNAVCO is comprised of 122 US academic members and 113 global organizations (www.unavco.org).

Education and Outreach Service

- PI, major STEM initiative *Virtual Huaka'i*; virtual field trip to Hawaiian volcanoes project, aimed at broadening geoscience participation through place-based education (2019-present)
- Member, UHM-KS Native Hawaiian STEM Advancement Committee; involved regular meetings with Kamehameha Schools administrative and educational representatives, targeting strategies for enhanced recruitment, retention, and promotion of Native Hawaiian students in STEM fields (2019-2020)
- Exhibitor, The Great ShakeOut, 2019 SOEST Open House (October 2019)
- The Manoa Experience – University Preview Day (March 2017, 2018, 2019)
- Hawaii P-20 (Hawaii Middle School Career Fair) (Feb. 2018)
- Hawaii Baptist Academy Connection (Oct. 2017)
- Exhibitor, Earthquakes and Plates, 2017 SOEST Open House (Oct. 2017)
- The Early School Geology and Geophysics UH tour (Oct. 2017)
- Waialae Elementary School 2nd grade Earth Science presentation (Sept. 2017)
- Kapiolani Community College STEM Pa'ina (Sept. 2017)
- Think Tech Hawaii, Life on Icy Moons (Aug. 2017)
- Exhibitor, STEM Expo, Kaimuki High School (Aug. 2017)
- Planets of the Solar System craft activity, The Early School (May 2017)
- Exhibitor, Quake Catcher Kinect Game, 2015 SOEST Open House (2015)
- Development, construction, and installation of *Active Earth Kiosk* for Manoa Elementary School and Waialae Public Charter School (2014-2015); for UTEP Centennial Museum and Hueco Tanks State Park (2009-2011)
- Advised 3rd grade teachers from Palolo Elementary School on earthquake demonstrations (April 2015)
- Assisted undergraduate students with internship applications (January 2015)
- UH Lab School Plate Tectonics demonstration (July 2, 2014)
- The Early School Earth Science demonstration (January 23, 2014)
- Certificate of Completion, UTEP Digital Academy (2012)
- Contributor/Creator, UTEP Earth Science Week promotional flyer and video (http://www.geo.utep.edu/esweek) (2009-present)
- Contributor, Cyberteam Teacher Workshop instructor (2009)
- Guest Speaker, North Loop Elementary (3rd grade) visit; lead plate tectonic visualization demonstrations (2009)
- Contributor/Creator, UTEP Centennial Museum Geology brochure (2009)
- Coordinator/Participant, UTEP Earth Science Day, plate tectonics visualizations (2008-2011)
- Contributor, UTEP Pathways to the Geosciences Summer Program (2008-present)
- Co-Organizer and Contributor, SIO Earthquake Education Workshop (2005-2007)
- Contributor, Earthquake! S. Birch Aquarium exhibit (2005)
- Contributor, *Earthquakes in Action* high school summer enrichment course on seismology, remote sensing, and Earth science topics (2005-2006)
- Contributor, Enduring Resources for Earth Science Education (ERESE) Workshop (2004)
- Graduate mentor for Summer Training Academy for Research in the Sciences (STARS), a

UCSD summer program for underrepresented undergraduate students (2002-2003).

Media Contributions

- ESVI REU 2019 and 2021 *R/V Kilo Moana* cruise video: https://www.soest.hawaii.edu/EarthScience-reu/reu_media.htm
- 2019 SOEST Open House Voice of the Sea Episode (Bronze Telly Award); Smith-Konter's Hawai'i Shakeout Exercise is featured at timestamp 06:45 http://seagrant.soest.hawaii.edu/soest-open-house-2019/
- Hawai'i News Now coverage of 2019 ESVI REU *R/V Kilo Moana* cruise: https://www.hawaiinewsnow.com/2019/06/30/uh-students-set-off-explore-uncharted-volcanic-zones-off-kahoolawe/
- Scripps News online article (https://scripps.ucsd.edu/news/14075) (2014)
- Blast Beyond (Kcos13), children's television program, taped three live episodes on Earth structure, great earthquakes, and seismic shaking (2013)
- Contributor for *Discovery* special about geological evolution of North America, S. Petzold, Dreamtime Pictures (2012)
- Contributed animation of 3D perspective of global seismicity for *The National Geographic's X-Ray Earth* video (http://channel.nationalgeographic.com/episode/x-ray-earth-5102/Overview) (2011)
- Contributed illustration for "What makes faults slip?" chapter in *A History of the Earth in 100 Discoveries* by Douglas Palmer of the University of Cambridge Institute of Continuing Education (2011)
- UTEP Magazine feature, Spring 2010 Edition, *Centennial Museum Makeover* (2010)
- UTEP Magazine feature, Spring 2009 Edition, College of Science Profile, *Seismic Science* (2009)
- Contributor, video interview for internet course *Physical Geology* offered by the LeCroy Center for Educational Telecommunications (2008)
- San Andreas Fault model graphic featured in *Apple.com*'s website in online article *Seeing the Big Picture* (http://www.apple.com/science/profiles/sio/) (2006)
- San Andreas Fault model graphic featured in *The National Geographic*'s coverage of the 100th anniversary of the Great San Francisco Earthquake in their article *The Next Big One* (April 2006 issue)

MISSION CONCEPT DESIGN, FIELD EXPERIENCE AND CRUISE PARTICIPATION

- GPS/GNSS station installation of the Ridgecrest earthquake rupture zone, Searles Valley (UCSD rapid response team, Summer 2019)
- Venus Discovery Mission Design Team, Evenstar (PI Bob Grim, SWRI, 2019)
- Europa Reconnaissance and Geodesy Camera, LoveCam (PI M. Watkins, JPL, 2014)
- Geodetic mapping survey of the Ancient Lake Cahuilla shoreline, Salton Trough (PI K. Luttrell, Winter 2006)
- Geodetic and photographic survey of permanent scatterers in the Coachella Valley (PI S. Lyons, Fall 2002)
- Geodetic survey of Mexicali Valley, Cerro Prieto fault, and Laguna Salada fault (PI S. Lyons, Spring 2001)
- Southern Mid-Atlantic Ridge Transit, R/V Nathaniel B. Palmer (PIs J. Stock & S. Cande, Spring 2001)
- Rapid-static GPS survey of Imperial Valley geodetic network (PIs S. Lyons, Spring 2000)

Graduate Advisor: David Sandwell (Scripps Inst. of Oceanography, UC San Diego)
Postdoctoral Advisors: David Sandwell (Scripps Inst. of Oceanography, UC San Diego)
Robert Pappalardo (Jet Propulsion Laboratory, Cal. Inst. Tech.)