

AEG's 2020 Virtual Annual Meeting September 16-18, 2020

TECHNICAL SESSION #6: LANDSLIDE SYMPOSIUM: SEEKING STABLE SLOPES IN A TIME OF RAPID CHANGE

Presenter Biographies (In order of Presentation)

Paul Santi - Environmental and Geologic Hazards near Small-Scale Gold Mines in Peru: An Analog for 19th and Early 20th Century Mining in Colorado



Paul Santi is a Professor of Geological Engineering at the Colorado School of Mines, where he has been on the faculty for over 18 years. Previously, he taught for 6 years at the Missouri University of Science and Technology, and worked for 6 years as an engineering consultant in San Francisco and Denver. His recent research has focused on analysis and mitigation design for geologic hazards. He holds Bachelor's degree in Geology and Physics from Duke University, an MS in Geology from Texas A&M, and a PhD in Geological Engineering from the Colorado School of Mines. He is a Fellow of the Geological Society of America, and he has been the chair of the Engineering Geology Division of that organization, and the President of the Association of Environmental and Engineering Geologists.

Anna Stanczyk - Permafrost Thaw, Precipitation, and the Pretty Rocks Slump – A Climate Change Induced Landslide in Denali National Park?



Anna Stanczyk is a geologist at Golder Associates, Inc. in Redmond, WA who specializes in landslide hazard and risk assessments. She is fascinated by geomorphology, earth surface processes, and the intersection of geology and society. Anna received her bachelor's in geological sciences from the University of Alaska Anchorage, attended the Wasatch-Uinta Field Camp, and earned her master's in geology at the University of Utah. She also has a bachelor's in French Literature from the University of Colorado.

Frank Jordan - Interrelationship of Faulting and Landsliding in the San Bernardino and San Jacinto-Santa Rosa Mountains (Presented by Kerry Cato)



Dr. Kerry Cato is an Associate Professor of Geology at Cal State San Bernardino where he has been a faculty member since 2016. Since 1995, Kerry has been a practicing engineering geologist in Southern California and is a Professional Geologist and Certified Engineering Geologist. He went to California to map dam foundations at the East & West Dams for MWD's Diamond Valley Lake; the largest reservoir in Southern California. More recently, he continues to serve as the geology member of Boards of Consultants for DWR's Oroville Spillway Recovery Project and the Los Vaqueros Dam Enhancement Project. At Cal State, his academic research focuses on debris flow evaluation from a geomorphic process feedback and response standpoint; he also has interests in faulting and seismic issues, landslides, and site investigation methods. He is advancing the use of sUAV's (drones) in engineering geologic analyses along with the new mobile LiDAR units (both handheld and drone-mounted) for student and professional use. Kerry has been an AEG member for 38 years. He was a founding member of the AEG Inland Empire Chapter and has served as the Chair. He has been the Treasurer and President of the AEG Foundation.

Rory Robinson - Prevention and Recording of a Large Landslide Event Using Ground-Based Interferometric Radar at Roberts Mountain, Oregon and US Highway 20, Between Pioneer Mountain and Eddyville, Oregon: The Observational Design Approach, Now Post-Construction



Rory "Tony" Robinson is currently a geotechnical engineer for Region 2, of the Oregon Department of Transportation (ODOT). Dr. Robinson is a highly experienced geotechnical designer with over 35 years of demonstrated work history on complex multidisciplinary projects in both private sector development and public sector transportation.

Yonathan Admassu - Lessons Learnt From the Use of Google Earth/Google Street View for Rockfall Hazard Rating



- BS in Geology from Addis Ababa University, Ethiopia
- MS in Geology from University of Akron, Ohio
- PhD in Applied Geology, Kent State University, Ohio
- Assistant Professor of Geology, Kent State University (2010 2013)
- Assistant Professor of Geology, James Madison University (2013 2019)
- Associate Professor of Geology, James Madison University (2019 present)

Luke Weidner - Automated Rock Slope Monitoring: Lessons from the Colorado Rockies



Luke is a PhD candidate in Geological Engineering at the Colorado School of Mines, with a study emphasis on machine learning and remote sensing.

Vishnu Chakrapani Lekha – Improving Satellite-Based Precipitation Using Rain Gauge Observations for Landslide Prediction in a Data Sparse Region



Vishnu Chakrapani Lekha, is a PhD student in Geological Engineering in Michigan Technological University, with interests in remote sensing and machine learning applications.

Jennifer Bauer - Landslide Features on the WNC Blue Ridge Escarpment – It's a Composite Issue



Jennifer Bauer, L.G is a principal geologist and co-owner of Appalachian Landslide Consultants, PLLC in Asheville, NC. She started ALC in December of 2011, after working with the North Carolina Geological Survey's Landslide Hazard Mapping team since 2005. Prior to working for the state, Jennifer worked with the geotechnical engineering department and construction materials testing lab at MACTEC Engineering & Consulting (now Wood) in Raleigh, NC, after getting her B.S. in Geology with Highest Honors from UNC-Chapel Hill in 2001. She is also Past President of the Association of Environmental & Engineering Geologists, an international professional organization dedicated to applied geology. Jennifer has over 19 years of engineering geology experience and is passionate about applying that experience to help protect lives, property, and infrastructure.

Trent Hubbard - Debris Flow Inventory and Hazard Assessment in Sitka, Alaska

- Ph. D. 2002, University of North Dakota, Grand Forks; Geology
- M.S., 1997, University of North Dakota, Grand Forks; Geology



• B.S., 1994, St. Lawrence University, Canton, NY; Geology

I am a program manager with the Alaska Division of Geological & Geophysical Survey's (DGGS) Surficial Geologic Mapping and Corridor Studies Program (https://dggs.alaska.gov/enggeo/surficial.html). My work includes surficial geologic mapping, and geologic hazards evaluation, helping understand the distribution and character of Alaska's surficial geologic material resources and potential geologic

hazards. Additionally, I am involved with construction materials resource assessments, including a multi-year project on Alaska's North Slope where construction materials are in short-supply (https://dgs.alaska.gov/enggeo/materials.html)

My current projects include:

- Terrain unit mapping, sand and gravel resource assessment and identification of geohazards on Alaska's North Slope
- Evaluating potential landslide hazards in regions of unstable slopes near Sitka, Alaska,
- Geologic mapping, Alaska Highway corridor, Delta Junction to the Canada border
- Geologic mapping in the northeast Tanacross Quadrangle, Alaska

Larry D. Gurrola – Flood History and Landslide Dam Hazards of the Montecito Watersheds, Santa Barbara County, California



Dr. Larry Gurrola obtained his B.S. and M.S. in Geology from San Diego State University where he studied paleo earthquakes of a splay of the San Andreas fault in southern California. His Ph.D. research at U.C. Santa Barbara was on the active tectonics and Quaternary geology of the Santa Barbara coastal plain. His publications include establishing the Quaternary chronology and uplift rates of the Santa Barbara coastal plain, fault activity, and landslide hazards. A registered Professional Geologist and Certified Engineering Geologist, Dr. Gurrola has provided consulting services in southern and northern California, and leads the debris flow mitigation study for the community of Montecito, California, funded by The Partnership for Resilient Communities.

Dr. Gurrola has served as an officer in the local Coast Geologic Society in Ventura, and has presented numerous talks on hazards to local educational, governmental and other agencies, first responders, and regional geologic societies. He has participated as a member of the 2018 Technical Advisory Board for the American Institute of Architects for the Montecito Debris Flow Recovery Committee. He is a member of the Association of Environmental and Engineering Geologists, Geologic Society of America, American Society of Civil Engineers, Pacific Section Society of Sedimentary Geology, and Coast Geologic Society, Ventura Chapter.

Andrew Mitchell - Effect of Multi-stage Failures on Rock Avalanche Mobility: Joffre Peak Case Study



Mr. Mitchell has a background in geotechnical engineering, with a focus on slope stability and geohazards. He has experience in performing desktop and on-the-ground geohazard assessments, applying remote sensing technologies such as LiDAR and photogrammetry, as well as computer modelling of the dynamics of flow-like landslides and rock falls. He is currently pursuing a Ph.D. at the University of British Columbia focusing on probabilistic runout assessment for flow-like landslides using empirical and numerical methods.