Dr. J. Bruce J. Harrison

Professor, New Mexico Tech, Earth and Environmental Science Dept.
New Mexico Institute of Mining and Technology, Socorro, NM 87801
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http://nmt.edu/academics/ees/faculty/bharrison.php

Education/Qualifications:

Lincoln College, Canterbury, New Zealand	Agricultural Science	B.S.1973
Lincoln College, Canterbury, New Zealand	Agricultural Science	M.S.1982
University of New Mexico	Geology	Ph.D.1992

Employment History:

2019-present Professor. Chair: Earth and Environmental Science Department. NM Tech
1999-2019 Associate Professor, Earth and Environmental Science Dept, NM Tech
1994-1999 Assistant Professor, Geosciences Dept, New Mexico Tech
1991-1993 Golda Meir Post Doctoral Fellow, Institute of Earth Sciences, Hebrew University of Jerusalem, Israel
1989-1990 Teaching Assistant, University of New Mexico
1986-1989 Research Assistant, University of New Mexico
1984-1985 Soil Scientist, Forest Research Institute, Ilam, New Zealand
1982-1983 Travel, United States, Europe, Israel
1979-1982 Soil Scientist, Water and Soils Division, Ministry of Works, Christchurch, New Zealand
1977-1978 Masters Study, Lincoln College
1976 Soil Conservator, Ministry of Works, Head Office, Wellington, New Zealand
1974-1976 Soil Conservator, Ministry of Works, Christchurch, New Zealand

Citizenship: US

Publications:

Litt, G, Ogden, F, Mojica, A, Kempema, P, Hendrickx, J.M.H., Gardner B, Bretfield, Regina, M., **Harrison, J.B.J**., Cheng, Y. ,Lyons, B. Land Cover Effects on Soil Infiltration Measured Using Plot Scale Rainfall Simulation in Steep Tropical Lowlands of Central Panama. Hydrological Processes. S1 Latin America 2019;1–20.

G. Axen, J.Van Wijk, F Phillips, **B. Harrison**, Brad Sion, S. Yao, D. Love. **2019.** The Socorro Magma Body. New Mexico Earth Matters Publication of the New Mexico Bureau of Geology.

Frisbee, E.E., **Harrison, J.B.J.,** Hendrickx, J.M.H., and Borchers, B., **2014,** Remote sensing for soil map unit boundary detection. in Harmon, R.S., Baker, S.E., and McDonald, E.V., eds., Military Geosciences in the Twenty-First Century: Geological Society of America Reviews in Engineering Geology, v. XXII, p. XXX–XXX, doi:10.1130/2014.4122(12).

HA Gutiérrez□Jurado, ER Vivoni, C Cikoski, **JBJ Harrison,** RL Bras, **2013.** On the observed ecohydrologic dynamics of a semiarid basin with aspect□delimited ecosystems. Water Resources Research 49 (12), 8263-8284.

I. A. Khosh, M. Rezavi, J.B.J. Harrison, M.Tartis, **2011.** Standards of Tire Bale Erosion Control & Bank Stabilization Projects- Engineering Validation of existing procedures Phase I. Final Report NM DOT**.**

McCalpin, J.P., **Harrison, J.B.J.,** Berger, G.W., Tobin, H.C. **2011**. Paleoseismicity of a low-slip-rate normal fault in the Rio Grande rift, USA: The Calabacillas fault, Albuquerque, New Mexico. Special Paper of the Geological Society of America Special Publication 479.

Jan M. H. Hendrickx, **J. Bruce J. Harrison**, Brian Borchers, Julie R. Kelley, Stacy Howington, Jerry Ballard, **2011**. High-resolution soil moisture mapping in Afghanistan Proceedings Volume 8017: Detection and Sensing of Mines, Explosive Objects, and Obscured Targets XVI.

E.M. Engle, **J.B.J. Harrison,** J.M.H. Hendrickx, and B. Borchers. **2010.** Digital Soil Boundary Detection Using Quantitative Hydrologic Remote Sensing J.L. Boettinger et al. (eds.), Digital Soil Mapping, Progress in Soil Science 2, DOI 10.1007/978-90-481-8863-5_11 C Springer Science+Business.

Jan M.H. Hendrickx1, **J. Bruce J. Harrison**, Brian Borchers, Graciela Rodríguez-Marín, Stacy Howington and Jerry Ballard, **2010**. High Resolution Soil Moisture Mapping using Operational Satellite Imagery, Proc. SPIE 7664, Detection and Sensing of Mines, Explosive Objects, and Obscured Targets XV.

Jan M. H. Hendrickx, **Bruce J. Harrison,** Brian Borchers, Graciela Rodríguez-Marín, Stacy Howington, Jerrell Ballard. **2010.** High-resolution soil moisture mapping using operational optical satellite imagery Proceedings Volume 7664: Detection and Sensing of Mines, Explosive Objects, and Obscured Targets XV.

Jan M. H. Hendrickx,; Bernard Rabus, Diana C. Romero,; Hans Wehn,; **J. Bruce J. Harrison**, Sung-ho Hong, Brian Borchers. **2009.** Preliminary validation of RADARSAT-2 surface soil moisture estimates. Proceedings Volume 7303: Detection and Sensing of Mines, Explosive Objects, and Obscured Targets XIV.

Remke L. van Dam, Jan M. H. Hendrickx, **J. Bruce J. Harrison**, Russell S. Harmon, **2008** Toward a model for predicting magnetic susceptibility of bedrock regolith and soils. Published in Proceedings Volume 6953: Detection and Sensing of Mines, Explosive Objects, and Obscured Targets XIII.

J. M. H. Hendrickx, H. Xie, **J. B. J. Harrison,** B. Borchers, J. Simunek, **2008.** Global prediction of thermal soil regimes**.** Proceedings Volume 6953: Detection and Sensing of Mines, Explosive Objects, and Obscured Targets XIII.

R Van Dam, **J.B.J Harrison,** D.A. Hirschfield, T.M. Meglich, Y.Li, R.E. North **2008**. Mineralogy and Magnetic Properties of Basaltic Substrate Soils: Kaho'olawe and Big Island, Hawaii, SSSAJ: Volume 72: Number 1 • January–February 2008.

Gutiérrez-Jurado, H.A., Vivoni, E.R., **Harrison, J.B.J.** and Guan, H. **2006.** Ecohydrology of root-zone water fluxes and soil development in complex semiarid rangelands. Hydrological Processes. 20(15): 3289-3316.

JP McCalpin, SS Olig, **JBJ Harrison,** G.W. Berger **2006.** Quaternary faulting and soil formation on the County Dump fault, Albuquerque, New Mexico- New Mexico. Bureau of Geology Circular 212.

Remke L. van Dam, J. Bruce J. Harrison, Carson L. Rittel; Jan M.H. Hendrickx, Brian Borchers, **2006**. Magnetic soil properties at two arid to semi-arid sites in the western United States. Proceedings Volume 6217: Detection and Remediation Technologies for Mines and Minelike Targets XI.

Remke L. van Dam, **J. Bruce J. Harrison**, Jan M. H. Hendrickx, Brian Borchers,; Ryan E. North, Janet E. Simms, Chris Jasper, Christopher W. Smith, Yaoguo Li, **2005** Variability of magnetic soil properties in Hawaii. Proceedings Volume 5794: Detection and Remediation Technologies for Mines and Minelike Targets X.

Remke L. van Dam, Jan M. H. Hendrickx, J. Bruce J. Harrison, Brian Borchers. **2005**. Conceptual model for prediction of magnetic properties in tropical soils. Proceedings Volume 5794: Detection and Remediation Technologies for Mines and Minelike Targets X.

Jan Hendrickx, FM Phillips, **JBJ Harrison 2005.** Water flow processes in arid and semi arid vadose zones in- Understanding Water in a Dry Environment. IAH International Contributions to Hydrogeology 23.

J. Bruce J Harrison, Jan Hendrickx, David Vega, Lucas Calvo-Gobbetti . **2005**. Soils of the Upper Chagres Basin, Panama. Soil Character and Variability in two first order drainages. in the Rio Chagres Panama, a multidisciplinary Profile of a Tropical Watershed. Ed R. Harmon.

Jan Hendrickx , David Vega **J.Bruce J Harrison**, Lucas Calvo-Gobbetti, Pedro Rojas, Tim Miller. **2005.** Hydrology of Hillslope Soils in the upper Chagres Watershed. in the Rio Chagres Panama, a multidisciplinary Profile of a Tropical Watershed. Ed R. Harmon.

Jan M. H. Hendrickx, **J. Bruce J. Harrison,** Remke L. van Dam, Brian Borchers, David I. Norman, Christian D. Dedzoe, B. O. Antwi, R. D. Asiamah, Charles Rodgers, Paul Vlek, Jan Friesen. **2005**. Magnetic soil properties in Ghana. SPIE Proceedings Volume 5794: Detection and Remediation Technologies for Mines and Minelike Targets X.

Remke L. van Dam, Jan M. Hendrickx, **Bruce Harrison**, Brian Borchers, David I. Norman, Samuel Ndur,; Chris Jasper, Patrick Niemeyer, National Robert Nartey; David N. Vega, Lucas Calvo, Janet E. Simms **2004.** Spatial variability of magnetic soil properties**.** Published in Proceedings Volume 5415: Detection and Remediation Technologies for Mines and Minelike Targets IX.

Phillips, F., Ayarbe, J.P., **Harrison, J.B.J**. **2003**. Dating rupture events on alluvial fault scarps using cosmogenic nuclides and scarp morphology. Earth and Planetary Science Letters, 215:203-218.

Niemi, T.M., Zhang, H Atallah, M.,**Harrison, J.B.J. 2001**. Late Pleistocene and Holocene slip rate of the northern Wadi Araba fault, Dead Sea transform, Journal of Seismology 5: 449-474.

JP McCalpin, **JBJ Harrison -** New Mexico: US, **2000**. Paleoseismicity of Quaternary faults near Albuquerque, Final Technical Report, NEHRP program U.S. Geological Survey.

M. C. Eppes **J. B. J. Harrison. 1999**. Spatial variability of soils developing on basalt flows in the Potrillo volcanic field, southern New Mexico: prelude to a chronosequence study.. Earth Surface Processes and Landforms.

JMH Hendrickx, **JBJ Harrison**, J Beekma **1999.** Salinity management in the Rio Grande Bosque - USDA Forest Service Proceedings RMRS-P-7.

Paleoseismology of the Tijeras fault near Golden, New Mexico. **1999**. KI Kelson, CS Hitchcock, **JBJ Harrison in** Albuquerque Geology, Pazzaglia, F. J.; Lucas, S. G.; [eds.], New Mexico. Geological Society 50th Annual Fall Field Conference Guidebook, 448 p.

JBJ Harrison, A Yair – **1998.** Late Pleistocene Aeolian and fluvial interactions in the development of the Nizzana dune field, Negev desert Israel- Sedimentology, v. 45. p. 507-518.

Enzel, Y., Amit, R., Porat, N., Zilberman, E., **Harrison J.B.J**. **1996**. Estimating the ages of fault scarps in the Arava, Israel. *Tectonophysics* 253, 305-317.

Amit, R. **Harrison, J.B.J**., Enzel, Y., Porat, N. **1996**. Soils as a tool for estimating ages of Quaternary fault scarps in a hyperarid environment-the southern Arava valley, the Dead Sea Rift, Israel. CATENA, 28, p. 21-45.

Amit, R., **Harrison, J.B.J**., and Enzel, Y. **1995** Use of soils and colluvial deposits in analyzing tectonic events, southern Arava Rift, Israel. Geomorphology, 12, 91-107.

Amit, R. and **Harrison, J.B.J**., **1995.** Biogenic Calcic Horizon Development Under Extremely Arid Conditions, Nizzana Sand Dunes, Israel. Advances in GeoEcology, 28, 65-88.

Enzel, Y., Amit, R., **Harrison, J.B.J**., and Porat, N., **1994.** Morphologic Dating of Fault Scarps and Terrace Risers in the Southern Arava, Israel: Comparison to Other Age-Dating Techniques and Implications for Paleoseismicity. Isr. J. Earth Sci.; 43: 91-103.

R Amit, **JBJ Harrison**, Y Enzel, N Porat, Israel. **1994.** Paleoseismology in the southern Arava Rift - US Geol. Surv. Open File Rep.

Harrison, J.B.J., McFadden, L.D., and Weldon, R.J., **1993**. The influence of colluvial deposition on rates of soil development in Cajon Pass, Southern California. Israel Journal of Earth Sciences, 41, 139-154.

JBJ Harrison, DH Yaalon **1992.** Functions are not what they appear to be: A comment on Soils developed in Late Pleistocene Till, Medicine Bow Mountains, Wyoming. Soil Science, v 154, p 250-252.

JBJ Harrison, LD McFadden, RJ Weldon III **1990.** Spatial soil variability in the Cajon Pass chronosequence: implications for the use of soils as a geochronological tool- Geomorphology, 3, 399-416.

B. Rose · **J. B. J. Harrison** · K. H. Platt **1988.** Alpine tussockland communities and vegetation-landform-soil relationships, Wapiti Lake, Fiordland, New Zealand. · New Zealand Journal of Botany v. 26, p 525-540.

G. H. Stewart · **J. B. J. Harrison** . **1987**. Plant communities, landforms, and soils of a geomorphically active drainage basin, Southern Alps, New Zealand. New Zealand Journal of Botany.

G. H. Stewart **J. B. J. Harrison 1987**. Physical influences on forest types and deer habitat, northern Fiordland, New Zealand. NZ Journal of Ecology. Vol 10.

JBJ Harrison , **1985**. Steepland recent soils of the Camp creek catchment, Westland - New Zealand Soil News.

Meeting Abstracts (2008-2019):

Tropical Soil and Regolith Properties and Their Influence on Rainfall/Runoff Processes in a Lowland Watershed, Agua Salud, Panama. **Harrison, J.B.J**., Hendrickx, J.M. H., Ogden, F.L. GSA Annual Meeting Indianapolis 2018.

Effects of regional climate differences on rates of soil development: Insights from well-dated chronosequences in the Rio Grande Rift Brad Sion, **Bruce Harrison,** Fred Phillips, and Gary Axen Department of Earth and Environmental Science, New Mexico Tech NMGS April 2018.

Soil Chronosequence Study of Long Valley, Northern New Mexico: Insights into the Development of Soils on Catenas in Post-Glacial Landscape Anthony Feldman **Bruce Harrison** April 2018.

Drivers of Spatial Soil Variability on Hillslopes. **J.B. J Harrison**. EGU Vienna. May 2017.

Use of Soils as a dating tool in Quaternary **J.B.J.Harrison**. 2017. Studies Presentation to Lettis Consultants International**,** Walnut Creek California**.**

The New Mexico Tech STEP Program. Presentation to White House Rural Council Member Chad Maisel. **J.B.J. Harrison** 2016.

Smoothing the Transition of Students from Two Year to Four Year Institutions. **Harrison, J. Bruce J.,** Barham, Titia and Tartis, Michaelann, GSA 2016.

Use of a Soil Chronofunction developed for Volcanic Soils to Date and Evaluate Hillslope Dynamics on rates of Soil Development. E. McDonald, **J.B.J.Harrison** QUASAP Pedogenesis Workshop: The Route of Humbolt in Mexico Mexico City 2016.

Soils and Geomorphic Surfaces. QUASAP Pedogenesis Workshop: The Route of Humbolt in Mexico. Mexico City 2016.

On the observed ecohydrologic dynamics of a semiarid basin with aspect-delimited ecosystems. Hugo A. Gutierrez-Jurado, Enrique R. Vivoni, Colin Cikoski, **J. Bruce J. Harrison,** Rafael L. Bras, and Erkan Istanbulluo AGU San Francisco 2016.

How do Flora and Fauna affect Hydraulic Properties along Hilllslopes in the Agua Salud watershed? Karla Mariel AVILES SAMANIEGO, UTP Intern, Dr. Jan M.H. Hendrickx, UWYo/NMT Mentor Dr. Alexis Baules, UTP Mentor **Dr. J. Bruce J. Harrison**, UWYo/NMT Mentor Simthsonian Tropical Research Institute 2016 **Invited Presentation.**

Influence of Pedogenic Carbonate on the Physical and Hydrologic Properties of a Semi-arid Soil .Vyoma Nenuji, **Bruce Harrison**, and Peter Mozley. NMGS Spring Meeting 2015 Pitfalls of using soils for dating Quaternary deposits.

J.B.J.Harrison. INQUA Fall Field Conference Mojave Desert October 2015**.** The Effect of Pedogenic Calcium Carbonate on Hydrological Properties of Arid Soils, Sevilleta National Wild Life Refuge, Central New Mexico. Whit, M., **Harrison, J.B.J.,** NMGS Spring meeting 2014.

The effect of soil texture on the precipitation of pedogenic carbonate in semi-arid soils. Nenuji, V, **Harrison J.B.** Hendrickx, J. 2014 NMGS Spring Meeting.

Runoff and Sediment Yield in Contrasting Vegetated Hillslopes of a First Order Basin in Central New Mexico. Carlos F. Ramirez[1], **Bruce Harrison[1]**, Hugo Gutierrez[1] and Colin Cikoski[1]. NMGS Spring Meeting 2013.

The Hydrologic Impact of Bioturbated Soils Found in Animal Mounds, Sevilleta Wild Life Refuge, New Mexico GSA **JBJ Harrison**, V. Nenuji, JMH Hendrickx. GSA Annual Meeting 2013.

Characterization of physical and hydraulic properties of soils in Sevilleta Wildlife National Refuge: Implications for pedogenic carbonate accumulations on water movement. GSA Annual Meeting 2013.
V. Nenuji, **B. Harrison**, JMH Hendrickx.

Using Quaternary fluvial terraces as structural indicators of magma body-related uplift, Socorro, NM. AGU Annual Meeting San Francisco 2013. B. D. Sion, F. M. Phillips, G. J. Axen, **J. B. Harrison.**

Runoff and Sediment Yield in Contrasting Vegetated Hillslopes of a First Order Basin in Central New Mexico. Carlos F. Ramirez, **Bruce Harrison**, Hugo Gutierrez and Colin Cikoski NMGS Spring Meeting 2012.

Remote Sensing of Soil Properties in Semi-arid Rangeland Areas, Sevilleta WLR, New Mexico. **JBJ Harrison,** JM Hendrickx, B, Borchers, GSA Denver Nov 2010.

Influence of pedogenic carbonate on hydrologic properties of semi-.arid soils Vyoma Nenuji, **JBJ Harrison.** AGU San Francisco, Dec 2010.

Soil Moisture Mapping in Afghanistan and New Mexico: Integration of Operational Algorithms. Jan M.H. Hendrickx, Matthias Falk, Amir AghaKouchak, Todd Umstot, **Bruce Harrison**, Brian Borchers, Soroosh Sorooshian, John Eylander, Erick McDonald and Fred Ogden. SPIE Meeting Florida 2010.

High Resolution Soil Moisture Mapping in Afghanistan. Jan M.H. Hendrickx, **J. Bruce J. Harrison** and Brian Borchers New Mexico Tech, Socorro, NM 87801 Julie R. Kelley, Stacy Howington and Jerry Ballard Coastal and Hydraulics Laboratory, Engineer Research and Development Center Army Corps of EngineersVicksburg, MS 39180-6199 2010.

Soil boundary detection in semi-arid New Mexico using remotely sensed root zone soil moisture. B. Borchers, Jan M.H. Hendrickx, Emily Engle, **J. Bruce J. Harrison**, Diana C. Romero, Sung-ho Hong, and J. Slater SPIE Meeting Orlando Fl March 2009.

On the Observed Ecohydrologic Dynamics of a Semiarid Catchment with Topographic Induced Microclimatic Controls. Hugo A. Gutiérrez-Jurado, Enrique R. Vivoni, Rafael L. Bras, Colin Cikoski, **J.Bruce J. Harrison**, and Erkan Istanbulluoglu AGU San Francisco, Dec 2009.

Preliminary Validation of Radarsat-2 for Estimating Surface Soil Moisture. Diana C Romero, Jan M H Hendrickx**, J Bruce J Harrison**, Brian Borchers, Bernhard Rabus AGU San Francisco Dec 2009.

Downscaling soil maps from arid and semi arid regions for landmine detection. Emily Engle, **Bruce Harrison**, Jan Hendrickx, Sung Ho Hong. National Geospatial Agency Meeting on Landmine detection Washington Jan 2009.

Correlation and Relative Dating of Fan Surfaces in Death Valley Using Soil Properties. **Harrison**, **Bruce,** Buck, Brenda , Merkler, Doug, and Lato, Leon , GSA Portland October 2009.

Remote Sensing of Soil Properties, Sevilleta LTER. **Bruce Harrison,** Jan Hendrickx, Emily Engle, Sung-Ho Hong. National Resource Conservation Service seminar. Las Cruces Oct 2009.

Invited Key Note Speaker: Reflections on Chronosequences and Chronofunctions. J.B.J.Harrison. RAISIN Conference Rates of Soil Forming Processes Charlotte, NC 2008.

Validation of Remote Sensed Soil Map Unit Boundaries, Sevilleta LTER, New Mexico. **J.B.J. Harrison**, J.M.H. Hendrickx, B.Borchers, M. Whitt. Soil Science Society of America, Annual Meeting, Houston, 2008.

Downscaling Landsat ET and Soil Moisturee Maps to the Meter Scale. Jan M.H. Hendrickx, **J. Bruce J. Harrison** and Brian Borchers Julie R. Kelley, Stacy E. Howington and Jerry Ballard. Soil Science Society of America, Annual Meeting, Houston, 2008.

Soil Unit Delineation Using Remotely Sensed Data. Emily M Engle, **Bruce Harrison**, Jan Hendrickx. 2008 Houston GSA.

(Invited) The Hydropedology of Hillslopes. **J.B.J. Harrison.** Cordilleran GSA, Las Vegas 2008.

Digtal Soil Boundary Detection using Quantitative Hydrologic Remote Sensing. E.Engle, J. Hendrickx, **B. Harrison**, B. Borchers. Digital Soil Mapping Conference, Ogden Utah 2008.

Vegetation-Soil-Aspect Modulated Hydrologic Dynamics on Semiarid Hillslopes of Central New Mexico, **Bruce J. Harrison**, Jan Hendrickx, Dennis McMahon GSA Houston, 2008.

Mapping of Spatio-Temporally Variable Semi-Arid Soils Using Optical Imagery Hugo A. Gutierrez-Jurado, **J. Bruce J. Harrison**, Enrique R. Vivoni GSA Houston, 2008.

The Hydrologic Implications of Soil Variability within a Small, First Order Semi-Arid Drainage Basin, Sevilleta LTER, New Mexico. Jan M.H. Hendrickx, Emily Engle, J. Bruce J. Harrison, Brian Borchers, Sung-ho Hong, Kathy Fleming, GSA Houston 2008.

Integrating Different Conceptual Models In Studies of Topography-Soil Relations: The Importance of Chronosequence-Based Studies Leslie McFadden, Grant Meyer, Lyman Persico, Peter Birkeland, Martha Eppes, **Bruce Harrison**, Eric McDonald, Amy Ellwein, Jedediah Frechette and R.M. Burke, GSA Houston 2008.

GSA Annual Meeting, 2008. Organizers, Technical Session Soil Hydrology:. J.B.J. Harrison, B. Wilcox, E. McDonald, M. Young.

Research Grants:

The New Mexico STEM Transfer Coalition: Improving the Success and Matriculation Rates of Two-Year College STEM Students from Small Minority Serving Colleges in Northern NM
PI B. Harrison
$1,434,682 NSF

5 years (2012-2018) (one year extension)

The Socorro Magma Body: Surface Uplift History and Crustal Dynamics
PI- G. Axen
Co-PI F. Phillips
Co-PI B. Harrison
Co-Pi J. Van Wijk
$300,000 NSF
3 yrs (2015-2018)

WSC Collaborative Research: Planning and Land Management in Ecosystem Services (PALM TREES). A supplementary proposal to existing proposal run by U of Wyoming and the Smithsonian Tropical Research Institute.
Co-PI B. Harrison, J.M.H. Hendrickx
$350,000 NSF
2 years (2015-2017)

Age of the Socorro Magma Body: Surface uplift history from river terrace correlation and 36Cl cosmochronology
PI- G. Axen
Co-PI F. Phillips
Co-PI B. Harrison
$102,767 NSF
1 yr (2013)

On Topographic Imprint of Vegetation:Deciphering the Influence of Climate-Soil Vegetation Dynamics on Landforms in Central New Mexico
PI. J. Hendrickx
Co-PI B. Harrison
$366,120 NSF
3 yrs (2007-2010)

Standards for Tire-Bale Erosion Control and Bank Stabilization Projects: Engineering Validation of Existing Practice and Implementation. NM DOT
PI A Khosh
Co-PI B.Harrison
Co-PI M. Rezavi
Co-PI C. Wilson
$35,000
2 yrs (2008-2010)

Global Prediction of Dielectric and Thermal Soil Properties. NGA (National Geospatial Agency).
PI. J. Hendrickx
Co-PI B. Harrison
$300,000 NSF
2 yrs, (2007-2009)

Teaching Acitvities
I have regularly taught:
ERTH 101 Physical Geology (4 credits)

ERTH 189. LLC Watersheds 2013-2018 (1 Credit)
ERTH 202 Surficial Processes (4 credits)
ERTH 405/GEOL503 Introduction to Soils (3 Credits)
ERTH 480 Field Camp (6 Credits)
ERTH 483 Quaternary Section Field Camp (2 Credits)
ENVS 472 Environmental Science Seminar (1 Credit)

MS Students
M Eppes, D McMahon, R. McLin, E. Engle, L. Majkowski, V Neuji, K. Henry, A Feldman. C. Rameriz-Torres. Tina (Yitian) Li , Colin Ciscoski , Anthony Feldman

MST Students
G.LLanes, D. Martinez, S Larson, D. Beyers L. Borren, Lee Eversole, Kerri Lathrop, Elizabeth Quicksall, Dave Million, Valarie Salas, Olga Vazquez, Stephanie Mitchell, Theresa Apodaca, Susan Berry, Leigh Hedderman

Service
Departmental
Associate Chair 2015-2019
Field Camp Director since Fall 2012
Alumni Czar 2016-2019
Undergraduate Recruitment and outreach Coordinator:
Freshman Advisor for all incoming freshmen for the dept plus several undecided students
Currently have 30 undergraduate advisees
Member of curriculum committee
Institutional
Tenure committees:
Steve Simpson (Humanities), Elizabeth Simpson (Humanties), Yolante van Wijk (EES), Jesus Gomez-Valez (EES), Kierran Maher (EES), Chloe Bonamici (EES), Deqiang Mao (EES), Ryan Leary (EES), Yanyan He (Math), Tie Wei (Mechanical engineering), Mahinda Ranasinghe (Chemistry)
Search Committee member, Registrar
Chair Faculty Search Committee Sedimentology, 2017
Chair of Faculty Senate Benefits Committee 2012-2018
Chair Environmental Science Advisory Board 2006 -2018
Member of the MST advisory board 2010-2019
Member faculty senate nominating committee
Member special committee to oversee Yangtze student progress
Member Instituition Strategic plan sub-committee Growth Task Force

Professional
Editorial Board Journal CATENA
Journal Reviews: Regularly review papers for CATENA, Quaternary Research, Earth Surface Processes, American Journal of Science, Journal of Hydrology, Geophysical Letters