

**Carmala N. Garzione**  
Curriculum Vitae – March 2018

**PRESENT POSITION**

Professor, Department of Earth and Environmental Sciences, University of Rochester  
Director, UR Center for Energy & Environment

**PERSONAL INFORMATION**

Citizenship: U.S. Citizen  
Address: Department of Earth and Environmental Sciences, University of Rochester, Rochester, NY  
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**RESEARCH INTERESTS**

Sedimentary basin evolution and tectonic history of mountain belts  
Interaction between climate and tectonics  
Stable isotopes in terrestrial paleoenvironmental studies  
Geochemical and petrologic provenance studies of siliciclastic sedimentary rocks

**EDUCATION**

2000 Ph.D. in Geoscience, University of Arizona, Tucson, AZ  
1996 M.S. in Geoscience, University of Arizona, Tucson, AZ  
1994 B.S. in Geology, University of Maryland, College Park, MD

**APPOINTMENTS**

2014 – present Director, Center for Energy and Environment, University of Rochester  
2013 – present Professor, Department of Earth and Environmental Sciences, University of Rochester  
2010 – 2016 Chair, Department of Earth and Environmental Sciences, University of Rochester  
2006 – 2013 Associate Professor, Department of Earth and Environmental Sciences, University of Rochester  
2000 – 2006 Assistant Professor, Department of Earth and Environmental Sciences, University of Rochester  
2003 – 2004 Visiting Research Associate, CIRES, University of Colorado, Boulder  
1999 Chevron Internship, Asian Business Unit, Chevron Overseas Petroleum Inc., San Ramón, CA  
1998 Chevron Internship, South Texas Production Team, Houston, TX

**SELECT PROFESSIONAL SERVICES**

2017-present Ad Hoc Committee on Professional Ethics, Geological Society of America  
2017-present Geological Society of America Council  
2017 External reviewer, Lehigh University Earth and Environmental Sciences graduate program  
2017 NSF-GEO PIRE preproposal panel  
2014-2017 Donath Medal Committee, Geological Society of America  
2014-15 NSF EAR – Integrated Earth Systems panel  
2013 NSF EAR - Tectonics panel  
2012 Co-convenor (with Lara Wagner and Chris Poulsen) of session at American Geophysical Union: The Geodynamics of High Topography: Exploring the Interactions Between Solid Earth, Hydrosphere, and Atmosphere  
2011 NSF EAR - Tectonics panel  
2009-2011 Editorial Board, Basin Research  
2010 NSF EAR - Continental Dynamics panel

2008	Co-convener (with Eric Kirby and Page Chamberlain at American Geophysical Union National Fall Meeting: Growth of the Tibetan Plateau and its influence on climate: Insights from integrated structural, stratigraphic, geomorphic, and isotopic studies
2006	Co-convener (with Peter Clift) of session at American Geophysical Union Fall Meeting: Sedimentary Records of Plateau Uplift and Climate Change
2006	NSF EAR - Tectonics panel (early career panelist)
2005	Co-convener (with Andreas Mulch and Page Chamberlain) of session at American Geophysical Union Fall Meeting: Coupled Topographic and Climatic Evolution of Cenozoic Mountain Belts
2001	Chair of session at Geological Society of America National Meeting: Clastic Sediments: New Insights into Fluvial, Deltaic, and Shallow Marine Sedimentation

#### SELECT UNIVERSITY SERVICES

2017-present	Co-director of the M.S. Sustainability program
2014-2016	Serve on the Center for Energy and the Environment Graduate Education Committee
2015	Served on search committee for Vice President of Communications
2014-2015	Serve on the Center for Energy and the Environment Structure Committee
2014	Served on panel for <i>Conversations in Academic Leadership</i>
2013-2016	Serve on University-wide Strategic Planning Activation Review Committee (SPARC)
2013-2014	Served on Data Sciences faculty search committee
2013-2014	Led effort, with support from Advancement, to establish endowed Asish Basu Fund; goal reached in 2014
2013	Served on Data Sciences undergraduate degree committee
2013	Participated in the University-wide research strategic planning committee. Chaired the sub-committee on Energy and the Environment and led the writing of our report.
2013, 2016	Worked with Advancement to develop a Case Statement brochure for support of Earth and Environmental Sciences
2012-2013	Served on the Middlestates Assessment committee as member of Working Group 4 (Faculty)
2012-2014	Trained as Faculty Ambassador for Advancement Efforts (see Synergistic Activities for list of solons/alumni outreach events)
2012	Participated in Mentoring Workshop and panel for Future Faculty Series for grad. students and postdocs
2012	Worked with Alumni Relations to co-host (with other programs) Donald Winter and Howdy Pratt
2012	Spoke at Workshop on: <i>Preparing for an Academic Job</i> as part of the Future Faculty Series for grad. students and postdocs
2012	Took the lead on first draft of proposal concept for the new Science and Engineering building (collaboration with Chem. Eng. and Comp. Sci.)
2012	Worked with Advancement to draft a letter for the Deans' Fund for Earth and Environmental Sciences
2012	Worked with Advancement to draft a flier for the Parents Fund to support research and international opportunities
2012	Led UR Year One Teaching Workshop on: <i>Organizing for dialogue in lecture hall settings</i>
2011-2012	Led 'science' tours of labs in the EES department for the summer ECO program
2011	Chaired Interdisciplinary Sustainability Minor Proposal committee, proposal accepted
2011	Gave <i>Discover</i> Speech at the Meliora Campaign kick-off event
2010-2015	Standard Promotions Committee
2010-2014	Elected to and served on Faculty Senate Executive Committee
2010	Take 5 Proposal Review Panel
2009-2015	Elected to and served on Faculty Senate
2009	Participant in Media Training

2009	Participant in Faculty Development and Diversity Mentoring Workshop
2009	Enrollment Advisory Group (Phase 2)
2008-2009	Workshop Task Force for undergraduate peer-led workshops
2008	Participant in the Faculty Development and Diversity Listening Tour
2008-2009	Enrollment Advisory Committee
2007-2016	Renaissance Scholars Interviews
2007, 2012	In collaboration with admissions, called admitted undergraduates to talk about UR
2007	Energy Sciences Working Group; we produced a proposal for the deans' office
2007	Chaired Global Studies Center committee, part of the Global Studies Cluster; we produced a report for the deans' office
2006,2011	Udall Scholarship University selection committee
2006	Enrollment Working Group, Chair of the Interdisciplinary Programs sub-group and lead author for sub-group's report
2003	Faculty Advisor to student Grassroots Coalition
2001-2003	Interdepartmental Studies Proposal Review Committee
2000-2003	Faculty advisor to Outings Club (UROC)
2000-2003	Faculty Council Representative

#### HONORS AND AWARDS

2016	Named Helen F. and Fred H. Gowen Professor, University of Rochester
2010	Goergen Award for Excellence in Undergraduate Teaching
2009	Blavatnik Award for Young Scientists, New York Academy of Sciences
2008-2009	AAPG Distinguished Lecturer
2008	Geological Society of America Fellow
2007	Donath Medal, Geological Society of America Young Scientist Award
2007	University of Maryland Geology Alumni Award
2007	University of Arizona Geosciences Alumni Achievement Award
2003	CIRES Fellowship, University of Colorado, Boulder
1999	GeoDaze Symposium, Oral Presentation Award, University of Arizona
1999	Chevron Fellowship Award, Department of Geosciences, University of Arizona
1997	Wakonse Education Symposium Fellow
1997	Outstanding Teaching Assistant Award, Department of Geosciences, University of Arizona
1993	Phi Beta Kappa

#### SYNERGISTIC ACTIVITIES (SCIENCE EDUCATION AND OUTREACH)

2017	Ask a Climate Scientist table at Rochester Fringe Festival event
2016-17	Pittsford Sutherland High School Science Olympiad Coach in Dynamic Planet Event
2016	lecture for the Rochester Academy of Science Mineral Division; The Rise of Large Mountain Belts and the Fall in Global Surface Temperatures: Why We Live in a Glacial World
2016	Keynote Lecture in Earth Sciences at the Science Teachers Associations of New York annual conference; The Rise of Large Mountain Belts and the Fall in Global Surface Temperatures: Why We Live in a Glacial World
2015	University of Rochester Salon in San Ramon, CA; discussions of interdisciplinary energy, environmental, and public health research and educational initiatives at the U of R
2014-15	Calkins Road Middle School Science Olympiad Coach in Dynamic Planet Event (team placed 2 <sup>nd</sup> in the New York State competition)
2014	University of Rochester Salons in Baton Rouge and Houston; discussions of Energy and Environmental research and education at the U of R
2014	Men in Transition talk and Q & A, Brighton New York; The Rise of Mountains and the Fall in Global Temperatures: Why we Live in a Low CO <sub>2</sub> World

- 2012 University of Rochester Salon in San Francisco, CA; discussions of Sustainability and Global Change research and education at the U of R
- 2011 Science Café, Barnes and Noble, Rochester; The Rise of Large Mountain Belts and the Fall in Global Surface Temperatures: Why We Live in a Glacial World
- 2011 Featured scientist for local 4<sup>th</sup> grade project on science careers
- 2011 IOWA Juvenile Home for Girls; discussion on careers in Geology
- 2011 University of Rochester Salons in Ann Arbor, Mi; Norfolk, VA; and Richmond, Va; discussions of Sustainability and Global research and education at the U of R; Rochester Forum Alumni Event: lecture on Global Sustainability: Understanding Climate Change in the Context of Geologic History
- 2010-14 EES Department commencement presentation on “Geosciences in Today’s World”
- 2010 Seeds of Science/Roots of Reading Middle School Curriculum (NSF funded); helped develop units on my research in the Andes
- 2009 University of Rochester Salon on Mountains and Their Profound Influence on Global Climate, Denver, CO
- 2009 Interactive discussion at Jefferson Road Elementary School Kindergarten about fossils and evolution
- 2009 NSF Highlight on Andes Research
- 2008 NE Tibet research featured in 20 minute film for high school science students: *Upward and Outward: Scientific Inquiry on the Tibetan Plateau*
- 2007-2008 Guest lecture on careers in geology at a Rochester inner city school, School Without Walls (sponsored by the Boy Scouts), give a yearly presentation
- 2007-08 EES Department commencement presentation on “Geologists and Environmental Scientists in Today’s World”
- 2006 Lecture for prospective undergraduates and parents at the Research Rochester fair: Plate Tectonics and Mountain Building
- 2006 Feature Article: Did Andes ‘Pop Up’ in Current Science (April 7, 2006), Weekly Reader’s middle and high school science journal
- 2005-2014 SIREAL lab hosts 1-2 high school summer interns
- 2001 Guest lecture to Brighton boy scout troop - an interactive discussion on NY state geology
- 2000 Geology and Earth Science Through Inquiry, taught 15-hour class for 4th-8th grade teachers in Tucson Unified School District
- 2000 Tucson Unified School District special lecturer: *The Scientific Process: How Does a Scientist Do It?* talk received at SAMEC teachers conference in Benson, AZ and Middle school Science and Math teachers conference in Tucson AZ, and the University of Arizona
- 1999-2000 Science Advisor to Tucson Unified School District D.E.S.E.R.T. Project

#### PROFESSIONAL AFFILIATIONS

American Geophysical Union  
Geological Society of America

#### PUBLICATIONS (JOURNALS AND BOOKS)

\*student authored papers

##### Articles in review/revision

\*Li Lin, **Garzione, C.N.**, Fan Majie, Li Xiaowei, Li Xiangzhong, Jurassic sedimentation in the south-central Qiangtang terrane reveals successive terrane collisions in central Tibet: Tectonophysics, in review.

Cheng Feng., **Garzione, C.N.**, Jolivet, M., Guo Zhaojie, Zhang Daowei, Zhang Changhao, in review, Quantifying the Cenozoic sediment-accumulation of the Qaidam basin and denudation of the surrounding mountain ranges, northern Tibetan Plateau: implications for the depositional age of

the Cenozoic strata in the Qaidam basin: *Journal of Geophysical Research, Earth Surface*, in review.

- Nie Junsheng, Ruetenik, G., Gallagher, K., Hoke, G., **Garzione, C.N.**, Wang Weitao, Stockli, D., Stevens, T., Danisik, M., Hu Xiaofei, Wang Ying, Wang Zhao, Liu Shanpin, in review, Middle Miocene climate optimum results in rapid down-cutting of the Mekong River: *Nature Geosciences*, in review.
- Heermance, R.V., Pearson, J., Moe, Annelisa, Liu Langtao, Xu Jianhong, Chen Jie, Richter, F., **Garzione, C.N.**, Nie Junsheng, Bogue, S., in review, 12.2 Ma development of the ancestral Taklimakan desert, western China: *Geology*, in revision.
- \*Kar, N., Carlotto, V., **Garzione, C.N.**, Smith, S., Pullen, A., Retroforeland basin evolution of the north central Andes and stable isotope constraints on the magnitude of surface uplift of the proto-Andean Plateau, Peru: *Tectonics*, in review.
- \*Wu Jing, Zhang Kexin, Xu Yadong, Cao, Kai, Wang Guocan, **Garzione, C.N.**, Eiler, J., Leloup, P.H. Sorrel, P., Mahéo, G. High paleoelevations in the Jianchuan Basin of the southeastern Tibetan Plateau based on analyses of stable isotopes and palynomorphs: *Palaeogeography, Palaeoclimatology, Palaeoecology*, in review.

#### Articles and books

- \*Luo Zeng, Su Qingda, Wang Zhao, Heermance, R.V., **Garzione, C.**, Li Man, Ren Xueping, Song Yougui, Nie Junsheng, 2018, Orbital forcing of Plio-Pleistocene climate variation in a Qaidam Basin lake based on paleomagnetic and evaporite mineralogic analysis: *Palaeogeography, Palaeoclimatology, Palaeoecology*, in press.
- \*Li Lin, **Garzione, C.N.**, Pullen, A., Lin Yun, Zhang Peng, 2018, Late Cretaceous-Oligocene basin evolution and topographic growth of the Hoh Xil basin, central Tibetan Plateau: *Geological Society of America Bulletin*, in press.
- Nie Junsheng, Pullen, A., **Garzione C.N.**, Peng Wang, Wang Zhao, 2018, Decoupling between Asian aridification and high dust accumulation rates in the Chinese Loess Plateau and North Pacific Ocean: *Science Advances*, v. 4, p. eaao6977.
- Garzione, C.N.**, McQuarrie, N., Perez, N.D., Ehlers T.A., Beck, S.L., Kar, N., Eichelberger, N., Chapman, A.D., Ward, K.M., Ducea, M.N, Lease, R.O., Poulsen, C.J., Wagner, L.S., Saylor, J.E., Zandt, G., Horton, B.K., 2017, The tectonic evolution of the Central Andean Plateau and geodynamic implications for the growth of plateaus (INVITED): *Annual Reviews of Earth and Planetary Sciences*, v. 45, doi: 10.1146/annurev-earth-063016-121612.
- Nie Junsheng, **Garzione, C.**, Su Qingda, Liu Qingsong, Zhang Rui, Heslop, D., Necula, C., Zhang Shilong, Song Yougui, Zeng Luo, 2017, Dominant 100,000-year precipitation cyclicity in a late Miocene lake from northern Tibet: *Science Advances*, v. 3, p. e1600762.
- \*Wang Chaoran, Hren, M.T., Hoke, G.D., Liu-Zeng Jing, **Garzione, C.N.**, 2017, Soil n-alkane  $\delta D$  and Glycerol Dialkyl Glycerol Tetraether (GDGTs) distributions along an altitudinal transect from Southwest China: Evaluating organic molecular proxies for paleoclimate and paleoelevation: *Organic Geochemistry*, v. 107, p. 21-32.
- \*Li Lin, **Garzione, C.N.**, 2017, Spatial distribution and controlling factors of stable isotopes in meteoric waters on the Tibetan Plateau: implications for paleoelevation reconstructions: *Earth and Planetary Science Letters*, v. 460, p. 302-314.
- \*Wissink, G., Hoke, G.D., **Garzione, C.N.**, Jing Liu-Zeng, 2016, Temporal and spatial patterns of sediment routing across the southeast margin of the Tibetan Plateau: Insights from detrital zircon: *Tectonics*, 35, doi:10.1002/2016TC004252.
- \*Bershaw, J., Saylor, J., **Garzione, C.N.**, Leier, A., Sundell, K., 2016 Stable isotope variations ( $\delta^{18}O$  and  $\delta D$ ) in modern waters across the Andean Plateau: *Geochimica et Cosmochimica Acta*, v. 194, p. 310-324.
- \*Li Lin, **Garzione, C.N.**, Pullen, A., Chang Hong, 2016, Early-middle Miocene topographic growth of the northern Tibetan Plateau: stable isotope and sedimentation evidence from the southwestern Qaidam basin: *Palaeogeography, Palaeoclimatology, Palaeoecology*, v. 461, p. 201-213.

- \*Wei Yi, Zhang Kexin, **Garzione, C.N.**, Xu Yadong, Song Bowen, Ji Junliang, 2016, Low palaeoelevation of the northern Lhasa terrane during the late Eocene: Fossil foraminifera and stable isotope evidence from the Gerze Basin: *Scientific Reports*, doi:10.1038/srep27508.
- \*Kar, N., **Garzione, C.N.**, Jaramillo, C., Shanahan, T., Carlotto, V., Pullen, A., Moreno, F., Anderson, V., Moreno, E., Eiler, J., 2016, Rapid regional surface uplift of the northern Altiplano plateau revealed by multiproxy paleoclimate reconstruction: *Earth and Planetary Science Letters*, v. 447, p. 33-47.
- \*Ghosh, N., Basu, A.R., Bhargava, O.N., Shukla, U.K., Ghatak, A., **Garzione, C.N.**, Ahluwalia, A.D., 2016, Catastrophic environmental transition at the Permian-Triassic Neo-Tethyan margin of Gondwanaland: Geochemical, isotopic and sedimentological evidence in the Spiti Valley, India: *Gondwana Research*, doi: 10.1016/j.gr.2015.04.006.
- Wang Weitao, Zhang Peizhen, Pang Jianzhang, **Garzione, C.N.**, Zhang Huiping, Liu Caicai, Zheng Dewen, Zheng, Wenjun, Yu Jingxing, 2016, The Cenozoic growth of the Qilian Shan in the northeastern Tibetan Plateau: A sedimentary archive from the Jiuxi basin: *Journal of Geophysical Research: Solid Earth*, doi: 10.1002/2015JB012689.
- Roe, G.H., Ding, Qinghua, Battisti, D.S. Clark, M., Molnar, P., **Garzione, C.N.**, 2016, A modeling study of the response of Asian summertime climate to the largest geologic forcings of the past 50 Ma: *Journal of Geophysical Research: Atmospheres*, doi: 10.1002/2015JD024370.
- Chang Hong, Li Leyi, Qiang, Xiaoke, **Garzione, C.N.**, Pullen, A., An Zhisheng, 2015, Magnetostratigraphy of Cenozoic deposits in the western Qaidam Basin and its implication for surface uplift of the northeastern margin of the Tibetan Plateau: *Earth and Planetary Science Letters*, v. 430, p. 271-283.
- Hoke, G.D., Gambiagi, L.B., **Garzione, C.N.**, Mahoney, J.B., Strecker, M.R., 2014, Neogene paleoelevation of intermontane basins in a narrow compressional mountain range, southern central Andes of Argentina: *Earth and Planetary Science Letters*, v. 406, p. 153-164.
- \*Hough, B.G., **Garzione, C.N.**, Wang, Z., Lease, R.O., 2014, Timing and spatial pattern of basin segmentation and climate change in NE Tibet: *Geological Society of America Special Paper 507*, SPE507-07.
- Baker, P.A., Fritz, S.C., Dick, C.W., Eckert, A.J., Horton, B.K., Manzoni, S., Ribas, C.C., **Garzione, C.N.**, Battisti, D.S., 2014, The emerging field of *geogenomics*: constraining geologic problems with genetic data: *Earth Science Reviews*, v.145, p. 38-47
- \*Li Lin, Meng Qingren, Pullen, A., **Garzione, C.N.**, Wu,Guoli, Wang Yanling, Ma Shouxian, Duan Liang, 2014, Late Permian-early Middle Triassic back-arc basin development in West Qinling, China: *Journal of Asian Earth Sciences*, v. 87, p. 116-129.
- Hoke, G.D., Liu Jing, Hren, M., Wissink, G., and **Garzione, C.N.**, 2014, Stable isotopes reveal high southeast Tibetan Plateau margin since the Paleogene: *Earth and Planetary Science Letters*, v. 394, p. 270-278.
- Garzione, C.N.**, Auerbach, D., Smith, J.-S., Passey, B., Eiler, J., Rosario, J, and Jordan, T., 2014 Clumped isotope evidence for diachronous surface cooling of the Altiplano and pulsed surface uplift of the Central Andes: *Earth and Planetary Science Letters*, v. 393, p 173-181.
- Dao-Yang Yuan, Wei-Peng Ge, Zhen-Wei Chen, Chuan-You Li, Zhi-Cai Wang, Hui-Ping Zhang, Pei-Zhen Zhang, De-Wen Zheng, Wen-Jun Zheng, Craddock, W.H., Dayem, K.E., Duvall, A.R., Hough, B.G., Lease, R.O., Champagnac, J.D., Burbank, D.W., Clark, M.K., Farley, K.A., **Garzione, C.N.**, Kirby, E., Molnar, P., and Roe, G.H., 2013, The growth of northeastern Tibet and its relevance to large-scale continental geodynamics: A review of recent studies: *Tectonics*, v. 32, p. 1358-1370.
- Leier, A.L., McQuarrie, N., **Garzione, C.N.**, and Eiler, J.M., 2013, Stable isotope evidence for multiple pulses of rapid surface uplift in the Central Andes, Bolivia: *Earth and Planetary Science Letters*, v. 371-172, p., 49-58.
- Heermance, R.V., Pullen, A., Kapp, P., **Garzione, C.N.**, Bogue, S., Lin Ding, Peiping Song, 2013, Climatic and tectonic controls on sedimentation and erosion during the Pliocene-Quaternary in the Qaidam Basin (China): *Geological Society of America Bulletin*, v. 125, p. 833-856, doi:10.1130/B30748.1.

- \*Bershaw, J., Penny, S.M., and **Garzione, C.N.**, 2012, Stable isotopes of modern water across the Himalaya and Tibetan Plateau: Implications for estimates of paleoelevation and paleoclimate, *Journal of Geophysical Research, Atmospheres*, doi:10.1029/2011JD016132.
- \*Bershaw, J., **Garzione, C.N.**, Schoenbohm, L., Gehrels, G., and Li Tao, 2012, Cenozoic evolution of the Pamir plateau based on stratigraphy, zircon provenance, and stable isotopes of foreland basin sediments at Oytay (Wuyitake) in the Tarim Basin (west China): *Journal of Asian Earth Sciences*, v. 44, p. 136-148.
- Wang Zhicai, Zhang Peizhen, **Garzione, C.N.**, Lease, R.O., Zhang Guangliang, Zheng Dewen, Hough, B., Yuan Daoyang, Li Chuanyou, Liu Jianhui, and Wu Qinglong, 2012, Magnetostratigraphy and depositional history of the Miocene Wushan basin on the NE Tibetan plateau, China: Implications for middle Miocene tectonics of the West Qinling fault zone: *Journal of Asian Earth Sciences*, v. 44, p. 189-202.
- Nie Junsheng, Horton, B.K., Saylor, J.E., Mora, A., Mange, M., **Garzione, C.N.**, Basu, A., 2012 Caballero, V., Moreno, C.J., Parra, M., 2012, Integrated provenance analysis of a convergent retroarc foreland system: U-Pb ages, heavy minerals, and Nd isotopes, and sandstone compositions of the Magdalena Valley basin, northern Andes, Colombia: *Earth Science Reviews*, v. 110, p. 111-126.
- Pullen, A., Kapp, P., McAllister, A., Hong Chang, Gehrels, G.E., **Garzione, C.N.**, Heermance, R., and Lin Ding, 2011, Qaidam Basin and northern Tibetan Plateau as dust sources for the Chinese Loess Plateau and paleoclimate implications: *Geology*, v. 39, P. 1031-1034, doi:10.1130/G32296.1.
- \*Hough, B., **Garzione, C.N.**, Zhicai Wang, Lease, R.O., Burbank, D.W. and Yuan Daoyang, 2011, Stable isotope evidence for topographic growth and basin segmentation: Implications for the evolution of the NE Tibetan plateau: *Geological Society of America Bulletin*, v. 123, p. 168-185, doi: 10.1130/B30090.1.
- \*Giovanni, M.K., Horton, B.K., **Garzione, C.N.**, McNulty, B., and Grove, M., 2010, Extensional Basin Evolution in the Cordillera Blanca, Peru: Stratigraphic and isotopic records of detachment faulting and orogenic collapse in the Andean hinterland: *Tectonics*, v. 29: doi:10.1029/2010TC002666.
- \*Bershaw, J., **Garzione, C.N.**, Higgins, P., MacFadden, B.J., Anaya, F., and Alveringa, H., 2010, Spatial-temporal changes in Altiplano climate and elevation from stable isotopes of mammal teeth: *Earth and Planetary Science Letters*, v. 289, p. 530-538.
- Hoke, G.D., **Garzione, C.N.**, Araneo, D.C., Latorre, C., Strecker, M.R. and Williams, K.J., 2009, The stable isotope altimeter: Do Quaternary pedogenic carbonates predict modern elevations?: *Geology* v. 37, p. 1015-1018.
- Croft, D.A., Anaya, F., Auerbach, D., **Garzione, C.**, and MacFadden, B.J., 2009, An early to middle Miocene mammal fauna from Cerdas, Bolivia: *Journal of Mammalian Evolution*, DOI 10.1007/s10914-009-9115-0.
- Garzione, C.N.**, 2008, Surface uplift of Tibet and Cenozoic global cooling: *Geology*, v. 36, p. 1003-1004.
- Hoke, G.D., and **Garzione, C.N.**, 2008, Paleosurfaces, paleoelevation, and the mechanisms for the late Miocene topographic development of the Altiplano plateau: *Earth and Planetary Science Letters*, v.271, p. 192-201.
- Garzione, C.N.**, Hoke, G.D., Libarkin, J.C., Withers, S., MacFadden, B.J., Eiler, J.M., Ghosh, P., Mulch, A., 2008, Rise of the Andes: *Science*, v. 320, p. 1304-1307.
- Quade, J., **Garzione, C.N.**, and Eiler, J., 2007, Paleoelevation reconstructions using paleosol carbonates: *Reviews in Mineralogy and Geochemistry*, v. 66, p. 53-87.
- Garzione, C.N.**, Molnar, P., Libarkin, J.C., MacFadden, B., 2007, Reply to comment on "Rapid late Miocene rise of the Andean plateau: evidence for removal of mantle lithosphere" by Garzione et al. (2006), *Earth Planet. Sci. Lett.* 241 (2006) 543-556, *Earth and Planetary Science Letters*, v. 259, p. 630-633.
- Rowley, D.B. and **Garzione, C.N.** (INVITED), 2007, Stable isotope-based paleoaltimetry: *Annual Review of Earth and Planetary Sciences*, v. 35, p. 463-508.

- Molnar, P. and **Garzione, C.N.**, 2007, Bounds on the viscosity coefficient of continental lithosphere from removal of mantle lithosphere beneath the Altiplano and Eastern Cordillera: *Tectonics*, v. 26, doi:10.1029/2006TC001964.
- \*Fan Majie, Dettman, D.L., Song Chunhui, Fang Xiaomin, and **Garzione, C.N.**, 2007, Climatic variation on the Linxia basin, NE Tibetan Plateau, from 13.1 to 4.3 Ma: The stable isotope record: *Palaeogeography, Palaeoclimatology, Palaeoecology*, v. 247, p. 313-328.
- Eiler, J., **Garzione, C.**, and Ghosh, P., 2006, Reply to Comment on "Rapid Uplift of the Altiplano Revealed Through  $^{13}\text{C}$ - $^{18}\text{O}$  Bonds in Paleosol Carbonates": *Science*, v. 314, p. 760c.
- Garzione, C.N.**, Molnar, P., Libarkin, J.C., MacFadden, B., 2006, Rapid late Miocene rise of the Andean plateau: evidence for removal of mantle lithosphere: *Earth and Planetary Science Letters*, v. 241, p. 543-556.
- Ghosh, P., **Garzione, C.N.**, and Eiler, J., 2006, Paleothermometry of Altiplano paleosols: Implications for Late Miocene surface uplift of the Andean plateau: *Science*, v. 311, p. 511-515.
- Garzione, C.N.**, Ikari, M., and Basu, A., 2005, Source of Oligocene to Pliocene sedimentary rocks in the Linxia Basin in NE Tibet from Nd Isotopes: Implications for tectonic forcing of climate: *Geological Society of America Bulletin*, v. 117, p. 1156-1166.
- Garzione, C.N.**, Dettman, D.L., and Horton, B.K., 2004, Carbonate oxygen isotope paleoaltimetry: evaluating the effect of diagenesis on estimates of paleoelevation in Tibetan plateau basins: *Palaeogeography, Palaeoclimatology, Palaeoecology*, v. 212, p. 219-240.
- \*Saha, A., Basu, A.R., **Garzione, C.N.**, Bandyopadhyay, P.K., and Chakrabarti, A., 2004, Geochemical and petrological evidence for subduction-accretion processes in the Archean Eastern Indian Craton: *Earth and Planetary Science Letters*, v. 220, p. 91-106.
- Dettman, D.L., Fang Xiaomin, **Garzione, C.N.**, Li Jijun, 2003, Uplift-driven climate change at 12 Ma: a long  $\delta^{18}\text{O}$  record from the NE margin of the Tibetan plateau: *Earth and Planetary Science Letters*, v. 214, p. 267-277.
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- Garzione, C.N.**, 2000, Tectonic and paleoelevation history of the Thakkhola graben and implications for the evolution of the southern Tibetan Plateau [Ph.D. dissertation], University of Arizona, Tucson, 146 p.

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- Wylie, A.G., Skinner, H.C.W., Marsh, J., Snyder, H., **Garzione, C.**, Hodkinson, D., Winters, R., and Mossman, B.T., 1997, Mineralogical features associated with cytotoxic and proliferative effects of fibrous talc and asbestos on rodent tracheal epithelial and pleural mesothelial cells: *Toxicology and Applied Pharmacology*, v. 147, p. 143-150.
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#### Invited lectures

- 2018 Deserts, Dust, and Iron Fertilization of the North Pacific Ocean: Cause or Consequence of Global Cooling? **Phelps Colloquium, University of Rochester**
- 2017 The Tectonic Evolution of the Central Andean Plateau (CAP) and Geodynamic Implications for the Growth of Plateau; **Geological Society of America**
- 2017 **Two talks:** The tectonic evolution of the Central Andean Plateau and geodynamic implications for the growth of plateaus; A review of stable isotope paleoaltimetry methods in Earth surface environments; **Arizona State University**
- 2017 **Lanzhou University, Lanzhou, China**
- 2017 **Two Talks:** Spatial-temporal evolution of topography of the central Andean plateau and geodynamic implications for the growth of plateaus; A Review of Stable Isotope Paleoaltimetry Methods and their Application to Understanding the Growth of Mountain Belts; **Tupper seminar & Paleo group seminar, Smithsonian Tropical Research Institute**
- 2017 The tectonic evolution of the central Andean plateau and geodynamic implications for the growth of plateaus: **Columbia University, Lamont-Doherty Earth Observatory**
- 2016 The Rise of Mountains and the Fall in Global Temperature: Why We Live in a Glacial World, **Rochester Academy of Sciences Mineral Division meeting**
- 2016 The Rise of Mountains and the Fall in Global Temperature: Why We Live in a Glacial World: **Keynote talk at Science Teachers Association of New York annual meeting**
- 2016 Surface Uplift of the Northern Lhasa Terrane between 35 and 26 Ma: Implications for Processes that have Raised the Tibetan Plateau: **China University of Geosciences, Beijing, China**
- 2016 Surface Uplift of the Northern Lhasa Terrane between 35 and 26 Ma: Implications for Processes that have Raised the Tibetan Plateau: **China Earthquake Administration, Beijing, China**
- 2016 Spatial-temporal evolution of topography of the central Andean plateau and geodynamic implications for the growth of plateaus: **Rice University**
- 2016 **Two talks:** A review of stable isotope paleoaltimetry methods in Earth surface environments; Spatial-temporal evolution of topography of the central Andean plateau and geodynamic implications for the growth of plateaus: **University of Wisconsin, Madison**
- 2015 The rise of Tibet and the fall in global temperatures: Is there a relationship **University of Texas, Austin**
- 2015 Spatial-temporal evolution of topography of the central Andean plateau and geodynamic implications for the growth of plateaus **University of California, Santa Barbara**

- 2015 Spatial-temporal evolution of topography of the central Andean plateau and geodynamic implications for the growth of plateaus **University of Texas, Austin**
- 2015 The spatial-temporal evolution of topography of the central Andean plateau and geodynamic implications for the growth of plateaus **Brown University**
- 2015 The spatial-temporal evolution of topography of the central Andean plateau and geodynamic implications for the growth of plateaus **California Institute of Technology**
- 2014 Spatial-temporal evolution of topography of the central Andean plateau: implications for deep tectonic processes, **Case Western Reserve**
- 2014 Paleoclimate records of the spatial-temporal evolution of topography of the central Andean plateau: implications for deep tectonic processes, **University of New Hampshire**
- 2013 Spatial-temporal evolution of topography of the central Andes and implications for deep tectonic processes, **AGU Fall meeting**
- 2013 Spatial-temporal evolution of topography of the central Andean plateau: implications for deep tectonic processes, **University of Toronto, Mississauga**
- 2012  $\delta^{18}\text{O}$  and Clumped-Isotope Results from Northern Tibet and Implications for Paleoelevation: **China Earthquake Admin., Chinese Academy of Sciences, Beijing**
- 2012 The Rise of Mountains and the Fall in Global Temperatures: Why We live in a Glacial World, **Laser Energetics Science and Technology Seminar, University of Rochester**
- 2011 Rising Seas and Impacts on Barrier Island Systems, **Alumni Salon talk in Norfolk, VA**
- 2011 The Rise of Large Mountain Belts and the Fall in Global Surface Temperatures: Why We Live in a Glacial World: **Science Café at Pittsford Barnes and Noble, Rochester**
- 2011 Global Sustainability: Understanding Climate Change in the Context of Geologic History: **Rochester Forum Alumni Event**
- 2011 Pulsed Surface Uplift of the Andes: Geodynamic Implications for the topographic growth of mountain belts, Seminar speaker at the **University of Calgary**
- 2010 Spatial-temporal evolution of sedimentary basin segmentation in NE Tibet: Implications for outward growth of the plateau margin, **AGU Fall meeting**
- 2010 Rise of the Andes and the Geodynamics of Orogenic Plateaus, **special speaker at GEOTOP seminar series, McGill University**
- 2010 Making Mountains out of Mole Hills: The Humble Origins of Big Mountain Belts, **Provost Phelps Colloquium Series, University of Rochester**
- 2010 Rise of the Andes and the Geodynamics of Orogenic Plateaus, Seminar speaker at **Lehigh University**
- 2010 Diachronous Surface Uplift and Climate Change in the Bolivian Altiplano, **EOS lecture series, Duke University**
- 2009 Climate history in the Altiplano basin: A reflection of surface uplift or climate change?, Invited talk at **GSA Annual meeting**
- 2009 Diachronous Surface Uplift and Climate Change in the Bolivian Altiplano, **Cornell, INSTOC Workshop at Cornell University**
- 2009 Mountains and Their Profound Influence on Global Climate, **Buffalo State University, NY, Women in Science Speaker Series**
- 2009 Mountains and Their Profound Influence on Global Climate, **University of Rochester Salon, Denver, CO**
- 2009 Greenhouse Gas Emissions and Global Change, guest lecture in **Green Engineering, University of Rochester**
- 2009 Rise of the Andes and the Geodynamics of Orogenic Plateaus, **AAPG Distinguished Lecturer, Kansas State University**
- 2009 Modern Rainfall and Climate Across NE Tibet: Climate Consequences of the Growth of the Tibetan Plateau, **AAPG Distinguished Lecturer, Purdue University**
- 2009 Modern Rainfall and Climate Across NE Tibet: Climate Consequences of the Growth of the Tibetan Plateau, **AAPG Distinguished Lecturer, Michigan State University**

- 2009 Rise of the Andes and the Geodynamics of Orogenic Plateaus, **AAPG Distinguished Lecturer, Memorial University, Newfoundland**
- 2009 Rise of the Andes and the Geodynamics of Orogenic Plateaus, **AAPG Distinguished Lecturer, Dalhousie University, Nova Scotia**
- 2008 Climate Change: Past Variations, Recent Observations, and Future Projections, **University of Rochester Two Schools, One Mission Symposium**
- 2008 Environmental Sustainability: Understanding Modern Climate Change in the Context of Geologic History, **University of Rochester Sustainability Lecture Series**
- 2008 Long-term records of latitudinal climate gradients in the central Andes from stable isotopes in fossil and sedimentary carbonates, Keynote Speaker at **EGU AVH4 meeting, Santiago, Chile**
- 2008 Rise of the Andes and the Geodynamics of Orogenic Plateaus, **AAPG Distinguished Lecturer, Montana State University**
- 2008 Modern Rainfall and Climate Across NE Tibet: Climate Consequences of the Growth of the Tibetan Plateau, **AAPG Distinguished Lecturer, Northern California Geological Society**
- 2008 Rise of the Andes and the Geodynamics of Orogenic Plateaus, **AAPG Distinguished Lecturer, Rocky Mountain Section of SEPM**
- 2008 Modern Rainfall and Paleoclimate across NE Tibet: Climate Consequences of the Growth of the Tibetan Plateau, Seminar speaker at **Stanford University**
- 2008 Global Climate Change from 650 kyr before present to 100 years into the future, Invited speaker at **Focus the Nation event, organized by the UR Grassroots Coalition**
- 2007 Rise of the Andes: Punctuated Surface Uplift of Orogenic Plateaus, Seminar speaker at **Boise State University**
- 2007 Late Miocene Plateau-Wide Surface Uplift of the Central Andes and the Growth of Orogenic Plateaus, Invited talk at **AGS Ores and Orogenesis meeting in honor of Bill Dickinson, Tucson, AZ**
- 2007 Resolving the Uplift History of the Andes, **INSTOC Workshop at Cornell University**
- 2007 The Rise of the Andes: Pulsed Surface Uplift of Orogenic Plateaus, Seminar speaker at **Syracuse University**
- 2007 Surface Uplift History of the Central Andes: Implications for the Growth of Orogenic Plateaus at **Spring AGU Meeting, Acapulco, Mexico**
- 2007 **Two talks:** Paleoelevation and Geomorphic Constraints on the Late Miocene Rise of the Andes: Implications for the Growth of Orogenic Plateaus; Stable Isotope-based Paleoaltimetry at **Yale University**
- 2007 Sediment Accumulation and Surface Uplift in the Altiplano Basin: Geodynamic Implications for the Growth of Orogenic Plateaus, Keynote speaker at **GeoDaze Symposium, University of Arizona**
- 2007 Paleoelevation and Geomorphic Constraints on the Late Miocene Rise of the Andes: Implications for the Growth of Orogenic Plateaus, Seminar speaker at **University of Aberdeen**
- 2007 Paleoelevation and Geomorphic Constraints on the Late Miocene Rise of the Andes: Implications for the Growth of Orogenic Plateaus **Oxford University**
- 2007 The Rapid Rise of the Andes: Implications for Plate Tectonic Processes: Laboratory for Laser Energetics Science and Technology Seminar, **University of Rochester**
- 2007 Paleoelevation and Paleoclimate of Tibet and Surrounding Regions: Invited talk at the **Workshop on Evolution of Asian monsoon and desertification and growth of the Tibetan Plateau, Sanya, China**
- 2006 Sediment Accumulation and Surface Uplift in the Altiplano Basin: **Chevron Energy Technology Company, San Ramon, CA**
- 2006 Paleocology and Paleoenvironment Inferred from Stable Isotopes of Ancient Soils and Fossil Teeth: Ecology and Evolutionary Biology Seminar, **University of Rochester**

- 2006 Sediment Accumulation and Surface Uplift in the Altiplano Basin: Invited talk at **GSA Annual meeting**
- 2006 Late Miocene Rise of the Andean Plateau: Geodynamic Implications for the Construction of Orogenic Plateaus, Seminar speaker at **University of Maryland**
- 2006 Paleoelevation and Geomorphic Constraints on the Late Miocene Rise of the Andes: Geodynamic Implications for the Growth of Orogenic Plateaus: Invited keynote talk at **16<sup>th</sup> Annual Goldschmidt Conference, Melbourne, Australia**
- 2006 Growth of Northeastern Tibet and Associated Climate Change, Invited talk at the **Workshop on Climate-Tectonic drilling in SE Asia for planning IODP drilling in the Gulf of Tonkin and Xisha Trough, Kochi, Japan.**
- 2006 Late Miocene Rise of the Andean Plateau: Geodynamic Implications for the Construction of Orogenic Plateaus, Seminar speaker at **University of Michigan**
- 2006 Oligocene-Miocene Rise of the Andean Plateau: Geodynamic Implications for the Construction of Orogenic Plateaus, Seminar speaker at **University of Florida**
- 2006 Oligocene-Miocene Rise of the Andean Plateau: Geodynamic Implications for the Construction of Orogenic Plateaus, Seminar speaker at **Florida State University**
- 2006 Late Miocene Rise of the Bolivia Altiplano: Implications for the Growth of Orogenic Plateaus, Seminar speaker at **University of Massachusetts, Amherst**
- 2006 Surface Uplift of the Andean Plateau: Implications for Andean Lithospheric Evolution, Seminar speaker at **Penn State University**
- 2005 Oligocene-Miocene Rise of the Andean Plateau: Geodynamic Implications for the Construction of Orogenic Plateaus, Seminar speaker at **University of Chicago**
- 2005 Oxygen isotope paleoaltimetry from paleosol carbonates: an example from the northern Altiplano, Bolivia: Invited talk at **Paleoelevation workshop, Lehigh University**
- 2005 Surface Uplift History of the Bolivian Altiplano: Implications for Uplift Processes in the Andean Plateau, Seminar speaker at **Princeton University**
- 2005 Oligocene-Miocene Uplift of the Altiplano Basin: Geodynamic Implications for the Construction of Orogenic Plateaus, Seminar speaker at **Colorado State University**
- 2005 Surface Uplift History of the Bolivian Altiplano: Implications for Uplift Processes in the Andean Plateau: Seminar speaker at **Cornell University**
- 2005 Oligocene-Miocene Uplift and Climate Change in the Bolivian Altiplano: Geodynamic Implications for the Construction of Orogenic Plateaus: Department of Geology and Geophysics distinguished lecturer series, **University of Wyoming**
- 2005 Estimating the Elevation of Ancient Mountain Belts: Examples from Tibet and the Bolivian Altiplano: Laboratory for Laser Energetics Science and Technology Seminar, **University of Rochester**
- 2004 Oxygen Isotope Paleoaltimetry: Applications in the Tibetan Plateau and Bolivian Altiplano: G.A. Cooper lecture series at the **Colgate University**
- 2004 The effect of altitude on the isotopic composition of paleosols: examples from southern Tibet and the Bolivian Altiplano: Invited talk at **GSA Annual meeting**
- 2004 How did the Largest Plateaus on Earth Form?: Oxygen Isotope Records of the Uplift of Tibet and the Bolivian Altiplano: Science Today lecture series, **SUNY, Owego**
- 2004 Oxygen Isotope Paleoaltimetry: Applications in the Tibetan Plateau and Bolivian Altiplano: Seminar speaker at the **University of Colorado**
- 2002 The Paleoclimate and Tectonic History of Linxia Basin, NE Tibet: Seminar speaker at the **University of Minnesota, Duluth**
- 2001 Paleoelevation of the Southern Tibetan Plateau Inferred from the Sedimentology and Isotope Paleohydrology of the Thakkhola graben, Nepal: Seminar speaker at **SUNY, Buffalo**
- 2000 Surface Uplift of the Tibetan Plateau: What Can We Learn from Oxygen Isotopes of Modern and Paleo-meteoric Water?: Seminar speaker at **University of Syracuse**

- 2000 The Scientific Process: How Does a Scientist Do It?: Tucson Unified School District special lecturer, talk received at **SAMEC conference** in Benson, AZ; **Middle School Science and Math conference** in Tucson AZ; and **University of Arizona**
- 1999 **Two talks:** Paleoelevation and tectonic evolution of the Thakkhola graben in the southern Tibetan plateau; Provenance of sedimentary rocks in the Canadian Cordilleran miogeocline from Nd isotopes: Seminar speaker at **University of Rochester**

## RESEARCH GRANTS

- 2015-2021 PIRE: DUST PIRE: Dust stimulated drawdown of atmospheric CO<sub>2</sub> as a trigger for Northern Hemisphere Glaciation, NSF Partnership in International Research and Education, \$4,242,259 (P.I., Garziona, C.N., co-P.I.s, Anderson, R., Breecker, Dutkiewicz, S., Follows, M, Herbert. T., Kapp, P., Molnar, P., Pullen, A., Tarduno, J., Winckler, G.)
- 2014-2018 RUI/Collaborative Research: Plio-Quaternary history of basin evolution, climate change, and fold-growth in the Qaidam basin-Investigating wind-enhance climate-tectonic feedback relationships, NSF Tectonics, \$367,538, UR budget – \$179,645 (P.I. Heermance, R., co-P.I. Garziona, C.N.)
- 2013-2018 FESD Type 1: The Dynamics of Mountains, Climate, and Landscape in the Distribution and Generation of Biodiversity of the Amazon/Andean Forest, NSF Frontiers in Earth System Dynamics, \$4,430,000, UR Budget = \$287,700 (P.I. Baker, P., co-P.I.s Battisti, D., Bush, M., Dick, C., Fritz, S., Garziona, C., Horton, B., Kay, R., Latrubesse, E., Manzoni, S., Porporato, A., Rigsby, C., Silman, M., Smith, S.)
- 2013-2017 Collaborative Research: Growth of the Tibetan Plateau and Eastern Asia Climate: Clues to Understanding the Hydrological Cycle (Phase 2), NSF-EAR Continental Dynamics, \$2,500,000, UR budget = \$328,738 (P.I. Molnar, P., co-P.I.s Battisti, D.S., Beck, J.W., Clark, M.K., Edwards, R.L., Fung, I., Garziona, C.N., Hai Cheng, Kutzbach, J.E., Zhengyu Liu, Niemi, N.A., Roe, G )
- 2011-2016 Collaborative Research: Hypothesis testing of a Mediterranean-style closure of the Paleo-Tethys ocean, NSF-EAR Tectonics \$457,346, UR budget = \$232,489 (P.I. Pullen, A., co-P.I.s Basu, A., Garziona, C.N., and Weislogel, A.)
- 2009-2015 Collaborative Research: CAUGHT: Central Andean Uplift and the Geodynamics of High Topography, NSF-EAR Continental Dynamics, \$2,545,967, UR budget = \$291,616 (P.I. Garziona, C.N., co-P.I.s Beck, S.L., Ducea, M.N., Ehlers, T.A., Horton, B.K., McQuarrie, N., Poulsen, C.J., Quade, J., Wagner, L.S., Zandt, G.)
- 2010-2014 Collaborative Research: Basin evolution and elevation history of the SE margin of the Tibetan Plateau: constraints on the timing and mechanisms of surface uplift, NSF-EAR Tectonics, \$427,011, UR Budget = \$61,826 (P.I. Hoke, G.D., co-P.I. Garziona, C.N.)
- 2009-2013 Collaborative Research: Growth of the Tibetan Plateau and Eastern Asia Climate: Clues to Understanding the Hydrological Cycle (Phase 1), NSF-EAR Continental Dynamics \$3,000,000, UR budget = \$171,899 (P.I. Molnar, P., co-P.I.s Battisti, D.S., Beck, J.W., Clark, M.K., Edwards, R.L., Eiler, J.M., Fung, I., Garziona, C.N., Hai Cheng, Kutzbach, J.E., Zhengyu Liu, Niemi, N.A., Roe, G.)
- 2008-2010 Genetics and the Environment: How Do Plants Adapt to Dry Climate Conditions?, U of R Provost's Multidisciplinary Award, \$45,000 (P.I. Ramsey, J.M., co-P.I. Garziona, C.N.)
- 2008-2009 Peer-Led Laboratory Workshops: A New Approach to Learning in a Laboratory Setting, University of Rochester Center for Workshop Education, \$6,000 (P.I. Garziona, C.N.)
- 2007-2010 Collaborative Research: Surface Uplift and Climate Change in the Southern Altiplano: Evaluating Mechanisms for Surface Rise and the Effects of Tectonics on Climate, NSF-EAR Tectonics, \$429,675, UR budget = \$185,905 (P.I. Garziona, C.N., and co-P.I. Jordan, T.E)
- 2005-2010 Collaborative Research: Upward and Outward: Tibetan Plateau Growth and Climate Consequences, NSF-EAR Continental Dynamics, \$2,918,942, UR budget = \$279,000

- (P.I. Molnar, P., co-P.I.s Burbank, D., Clark, M., Farley, K., Garzione, C., Kirby, E., Roe, G., and Zhang, P.)
- 2004-2005 Supplemental Funding: Acquisition of a Gas Source Isotope Ratio Mass Spectrometer for the Department of Earth and Environmental Sciences at the University of Rochester, NSF-EAR Instrumentation and Facilities, \$14,442 (P.I. Garzione, C.N., co-P.I.s Fehn, U. and Poreda, R.J.)
- 2004-2007 Supplemental Funding: Miocene-Pliocene Paleoelevation of the Bolivian Altiplano: NSF-EAR Tectonics, \$13,873 (P.I. Garzione, C.N.)
- 2003-2005 Acquisition of a Gas Source Isotope Ratio Mass Spectrometer for the Department of Earth and Environmental Sciences at the University of Rochester, NSF-EAR Instrumentation and Facilities, \$158,714 (P.I. Garzione, C.N., co-P.I.s Fehn, U., and Poreda, R.J.)
- 2003-2007 Collaborative Research: Miocene-Pliocene Paleoelevation of the Bolivian Altiplano: NSF-EAR Tectonics, \$186,077 (P.I. Garzione, C.N., and co-P.I. Libarkin, J.C.)
- 2002-2003 SGER: Oxygen and cosmogenic isotope approaches to paleoaltimetry of the Bolivian Altiplano, NSF-EAR Tectonics, \$9,300 (P.I. Garzione, C.N., and co-P.I. Libarkin, J.C.)
- 1999-2000 NASA Space Grant Fellowship for Science Education Outreach, \$19,350
- 1997-1998 Recent history of thrust faults in the Himalaya determined from foreland basin deposits in India: National Security Education Program Graduate Fellowship, \$20,000

#### GRADUATE STUDENTS

Matthew Ikari, M.S. 2002; Research Scientist, Center for Marine Environmental Sciences, U. of Bremen

Yue Ziming, M.S. 2003; Geological Survey of Alabama

David Auerbach, M.S., 2009; PhD candidate – Yale University

Johanna Smith, M.S., 2009; Geologist - Quantum Reservoir Impacts, Houston, Texas

Brian Hough, Ph.D., 2010; Assistant Professor – SUNY Oswego

John Bershaw, Ph.D., 2010; Assistant Professor – Portland State University

Yangling Wang, M.S. 2014 (co-advised with Asish Basu); PhD student – University of Rochester

Nandini Kar, Ph.D., 2015; Assistant Professor – SUNY Brockport

Nilotpal Ghosh, Ph.D., 2015, (co-advised with Asish Basu); Laboratory Manager, Boston University

Wei Yi, Ph.D. 2016, (U.S. advisor with Zhang Kexin at China University of Geosciences, Wuhan)

Li Lin, Ph.D., 2016; Postdoctoral Research Associate at UT Arlington

Wu Jing, Ph.D., 2018 (U.S. advisor with Zhang Kexin at China University of Geosciences, Wuhan)

Federico Moreno, Ph.D., expected 2019

Fabiana Richter, Ph.D., expected 2019

#### POSTDOCTORAL ADVISEES

Gregory Hoke, 2005-2008; Associate Professor – Syracuse University

Alex Pullen, 2010-2013; Assistant Professor – Clemson University

Nie Junsheng, 2014-2016; Professor – Lanzhou University, China

Cheng Feng, 2016-present

#### UNDERGRADUATE SENIOR THESES

Katherine Donhauser, 2001

Stephen Duszlak, 2003

Johanna Smith, 2008

Kendra Williams, 2008

Sheila Tripathy, 2009

Hannah McDonough, 2010

Mary Dzaugis, 2011

Sarah Smith, 2013

Jessica Ende, 2014

LANGUAGES

Italian, Spanish, Nepali