



# Nathan Niemi

GRFP Recipient: 1994

*Undergraduate Institution:*  
B.A. 1994, Cornell University

*Graduate Institution:*  
Ph.D. 2001, California Institute  
of Technology

*Graduate Field of Study:*  
Neotectonics and Structural  
Geology

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*Current Position:*  
Assistant Professor,  
Department of Earth and  
Environmental Sciences,  
University of Michigan

## RESEARCH INTERESTS //

Nathan Niemi's interests are in tectonics, and in particular, understanding the processes that control the deformation of continental plate interiors at timescales ranging from years to tens of millions of years. Such deformation, observed in both modern and ancient orogens, departs from basic plate tectonic concepts.

## BROADER IMPACT OF MY WORK ON SOCIETY //

"My Ph.D. research focused on quantifying continental deformation across the central basin and range. I also had the opportunity as a Ph.D. student to participate in the installation of one of the first intra-continental, continuous GPS networks, with which the present day deformation field of the basin and range could be measured, almost in real time. Participation in this research project, as well as many other opportunities in graduate school, such as time on the R/V Ewing, was made possible by the intellectual freedom my GRF offered. As a result, I continue to work in the basin and range, with a new focus on isotope paleoaltimetry as a key constraint to discriminating between geodynamic models proposed for basin and range evolution, and I also have active research projects in the large-magnitude, intra-continental deformation of the Greater Caucasus Mountains and Tibet."

## AWARDS/ HONORS //

- CIRES Fellow, University of Colorado Boulder (2013)
- Faculty Early Career Development (CAREER) Award, National Science Foundation (2012)

## POSITION PROFILE //

- 2006-present - Assistant professor, University of Michigan, Ann Arbor
- 2004-05 - Member of the professional staff, California Institute of Technology
- 2003-04 - Assistant research scientist, University of California, Santa Barbara
- 2001-03 - Postdoctoral scholar, Massachusetts Institute of Technology

