# KYLE MURRAY

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## EDUCATION

**Cornell University** *Ithaca, NY [2015 – present]*
- PhD in geophysics (in progress)
- Advisory committee: Rowena Lohman, Katie Keranen, Todd Walter

**New Mexico Institute of Mining and Technology** *Socorro, NM [2013 – 2015]*
- M.S. in geophysics
- Thesis: GPS measurements of the Rio Grande rift
- Advisory committee: Mark Murray, Susan Bilek, Jolante van Wijk

**Montana State University** *Bozeman, MT [2006 – 2011]*
- B.S. in geology with honors
- Minor: Spanish language and Hispanic studies
- USP scholar (undergraduate scholar program)

**Universidad Politécnica De Valencia** *Valencia, Spain [2008 – 2009]*
- International Student Exchange Program (ISEP)
- Departamento de las ciencias de la tierra
- TANDEM language exchange volunteer

## RESEARCH EXPERIENCE

**Cornell University** *Ithaca, NY [2015 – present]*
- Research in geophysics (space-geodesy/active tectonics/hydrology)

**New Mexico Institute of Mining and Technology** *Socorro, NM [08/13 – 08/15]*
- Research in geophysics (focus on GPS geodesy/tectonics)

**Hawaiian Volcano Observatory Intern (Volunteer)** *HNP, Hawaii [12/12 - 04/13]*
- Compiled an updated velocity model for the seismic network using seismic tomography and reflection

**Montana State University** *Bozeman, MT [06/10 - 06/11]*
- Geology undergraduate research assistant in structural geology and metamorphic petrology

**Yellowstone Ecologic Research Center** *Bozeman, MT [09/10 – 06/11]*
- GIS technician; Assimilation, mapping, and statistical analysis of remote sensing and geospatial data

## ABSTRACTS

**Murray K.**, Murray M., Sheehan A., Nerem S., van Wijk, J., Axen, G. (2016). GPS measurements of d*eformation near the Rio Grande rift: Evidence for variations in the rate of extension*. 2016 UNAVCO Science Workshop

**Murray K.**, Murray M., Sheehan A., Nerem S., van Wijk, J., Axen, G. (2015). GPS measurements of d*eformation near the Rio Grande rift: Evidence for variations in the rate of extension*. 2015 Fall American Geophysical Union Conference.

**Murray, K.**, Dobbins, J., Murray, M., van Wijk, J., Axen, G. (2015). *The active Rio Grande rift: Summarizing our current understanding of present-day deformation from geodetic and stress measurements*. New Mexico Geological Society Annual Spring Meeting, P. 41.

Abera, A., Sion, B., van Wijk, J., Axen, G., Koning, D., Chamberlin, R., Gragg, E., **Murray, K.D.**, Dobbins, J. (2015). *Timing, geochemistry, and distribution of magmatism in the Rio Grande rift*. New Mexico Geological Society Annual Spring Meeting, P. 7.

Gragg, E., Koning D., van Wijk, J., Axen, G., Sion, B., Abera, R., **Murray, K.D.**, Dobbins, J., Murray, M., Chamberlin, R. (2015). *Changes in Rio Grande rift tectonism as inferred from subsidence curves*. New Mexico Geological Society Annual Spring Meeting, P. 21.

van Wijk, J., Axen, G., Sion, B., **Murray K.**, Gragg, E., Abera, R., Dobbins, J., Koning, D., Murray, M., Chamberlin, R., (in preparation). *The active Rio Grande rift*. For submission to Geosphere.

**Murray K.**, Murray M., Sheehan A., Nerem S. (2014). *Deformation along the Rio Grande rift: Investigating the spatial and temporal distribution of strain using GPS*. 2014 Fall American Geophysical Union Conference

**Murray, K.**, Shaw C. (2011). *Study of the Savage Peak Shear Zone*. Montana State University Student Research Celebration

## TEACHING EXPERIENCE

**YSE Education Center** *Kobe, Japan [04/13-08/13]*

- Science and mathematics teaching and curriculum development

**キンダーキッズ (KK International School)** *Osaka, Japan [11/11-09/12]*

- Taught a variety of subjects to a class of 18 students at a bilingual international school

## FIELD EXPERIENCE

**New Mexico Tech/PASSCAL** (New Mexico) *[2013 – 2015]*

- Assisted in various seismic instrument deployments

**Hawaiian Volcano Observatory** (Kilauea, Hawaii) *[12/12 - 04/13]*

- Seismology/geodetic network maintenance, gas geochemistry, flow field geological mapping

**Montana State Geology field course** (SW Montana and Wyoming) *[05/11 - 06/11]*

- Mapping and practical field methods in igneous, metamorphic, and sedimentary environments

**Undergraduate Research Project** (Central Colorado) *[06/10 – 07/10]*

- Structural measurements, mapping, and sample collection

## COMPUTER SKILLS

| | | |
|---|---|---|
| Matlab | ArcGIS/QGIS | GAMIT/GLOBK (GPS processing) |
| Python (Basic level) | Generic Mapping Tools (GMT) | ROI_PAC (InSAR processing) |
| HTML/CSS | Seismic Analysis Code (SAC) | GMTSAR (InSAR processing) |
| Linux/Unix | PDAL (LiDAR processing) | ISCE/GIAnT (InSAR processing) |

## EXTRACURRICULAR COURSES

- InSAR Processing & Theory with GMTSAR *[Scripps Institution of Oceanography, 2016]*
- Open source ALS and MLS processing tools *[UNAVCO, 2016]*
- Deform2015 thematic school *[Institut De Physique Du Globe De Paris, 2015]*
- Geophysical instrumentation short-course *[Iris Passcal, 2014]*
- Terrestrial Laser Scanning short-course *[UNAVCO, 2014]*

## RECENT GRANTS & FELLOWSHIPS

- McMullen Fellowship *[Cornell University, 2017]*
- New Mexico Geological Society grant *[NMGS, 2015]*
- Deform2015 thematic school grant *[Institut De Physique Du Globe De Paris, 2014]*
- Kay and Elise Brower Music Scholarship *[New Mexico Tech, 2014]*

## LANGUAGES

- English (Native Level)
- Spanish (Advanced Level)
- Japanese (Conversational Level)