

Curriculum Vitae Tommy Rock

Personal Data

Contact Information: [REDACTED] email: [REDACTED]
Home Address: [REDACTED]
Monument Valley, Utah 84536

Education

- August 2012-December 15, 2017 Northern Arizona University, Flagstaff, Arizona
- Ph.D. in the School of Earth Science and Environmental Sustainability Program
 - Emphasis on Climate and Landscape Change
- January 2006- 2008, Northern Arizona University, Flagstaff, Arizona
- Master of Art in Sustainable Community
 - Emphasis on abandoned uranium mines on the Navajo Reservation.
- August 1998-2002, Arizona State University, Tempe, Arizona
- Bachelor of Interdisciplinary Studies
 - Environmental Geography/ Recreational Management

Professional Experience

July 2018 to June , Rocky Mountain Center for Occupational and Environmental Health,
University of Utah, Salt Lake City, Utah

Post Doctorate Research Associate, Rocky Mountain Center for Occupational and
Environmental Health

- Write a research proposal related to exposure science.
- Work with established researchers in the Division of Occupational and Environmental Health.
- Mentor graduate students that are in the program.
- Work with tribes on environmental exposures.

December 2017 to Present, Dine' Uranium Remediation Advisory Commission
Navajo Nation, Window Rock, Arizona
Community At-Large Member

- Work with the United States Environmental Protection Agency Region 9 about abandoned uranium clean-up on the Navajo Nation.
- Work with Navajo Nation departments that are working on abandoned uranium mines clean-up.
- Come up with policies for the abandoned uranium clean-up.
- Engage with the community that is impacted by previous uranium mining activities.

January 2013- May 2018, Northern Arizona University, Flagstaff, Arizona

Graduate Research Assistant, Co-PI, Northern Arizona University

- Attend Navajo Nation chapter meetings to gain approvals and report results from environmental health studies.
- Attend community meetings to disseminate research and findings.
- Attend regional and national scientific conferences to present findings.
- Mentor undergraduates, so they can gain experience conducting research on Navajo Nation.
- Translate our findings in Navajo to the communities and to elders.
- Present to middle and high school students to show how science and research are conducted.
- Work with a grassroots organization in water sampling and Traditional Indigenous Food contamination.
- Network with Navajo Nation Government and United States Environmental Protection Agency region 9.

August 2014- December 2015, Tolani Lake Enterprise, Tolani Lake, Arizona
Project Co-Manager/ Water Quality Specialist

- Oversee water sampling for the project.
- Gather well data along the study area for mapping the well along Puerco River and the Little Colorado River.
- Identify the lab to do the radionuclides that are certified by US EPA.
- Train Community Coordinators on water quality
- Review the lab results and use the Safe Drinking Water Act to address public health concerns in water quality results.
- Make and distribute maps for the chapters involved in the study.
- Prepare public outreach and education materials.
- Train the Community Coordinators in giving report backs to the chapters in Navajo.
- Make the Quality Assurance Plan for the project that is signed off by the US EPA Region 9 Quality Assurance Office and the Navajo Nation EPA.

July 2012- December 2012, Utah Navajo Health System, Montezuma Creek, Utah
Environment of Care Consultant

- Write policies related to Environment of Care in compliance with the Joint Commission accreditation.
- Amend policies in the Environment of Care that is in compliance with the Joint Commission.
- Visit the four community health clinic under the Utah Navajo Health System, Inc., and talk with the maintenance person about the monthly safety walk through.
- Update the Utah Navajo Health System, Inc. Environment of Care department head on what they are lacking and where training is needed.

April 2010- May 2012, Navajo Nation Environmental Protection Agency, Public Water Systems Supervision Program, Window Rock, Arizona
Environmental Specialist, NNEPA, Public Water Systems Supervision Program

- Develop and implement program policies like technical, managerial, and financial capacity building around water infrastructure on the Navajo Nation.
- Develop enforcement documents like bilateral compliance agreements.
- Participate in public educational opportunities.
- Conduct water sampling collection/ technical assistance as needed.
- Work in a team environment to develop a qualitative pilot study looking at cistern tank.
- Work in a team environment to develop curriculum regarding regulated, unregulated, anthropogenic, and natural contaminants for kindergarden to 12 grade students on the Navajo Nation.

October 2008- June 2010, University of New Mexico, Albuquerque, New Mexico
Research Scientist I, University of New Mexico

- Research work that I look at the qualitative evaluation of factors that influence decision-making in five individual chapters in five different agencies within the Navajo Reservation, with respect to potable water.
- Provide a geospatial analysis of research area pertaining to participants, water, and abandoned uranium mines.
- Make maps of the research area pertaining to water, participants, and abandoned uranium mines.
- Assist field staff to conduct surveys on the Eastern Navajo Reservation revealing past uranium exposure of the public.
- Collect the location of wells that were identified in surveys.

January 2006- September 2008, Northern Arizona University, Flagstaff, Arizona
Graduate Research Assistant, Co-PI, Northern Arizona University

- Conduct surveys on the Navajo Reservation revealing past uranium exposure of the public in Cameron, Blackfalls, and Leupp.
- Collect water data from Cameron, Blackfalls, and Leupp.
- Collect a water sample from the research area for water chemistry analyzing uranium and arsenic levels.
- Record Global Position Satellite locations for public health surveys and location of artesian wells
- Used Geographic Information System 9.1 and 9.2 map locations of public health surveys, including data collected from artesian wells.
- Present research findings at a public meeting in Cameron and Leupp, updating the communities on relevant information.
- Collaborate with the University of New Mexico in public health surveys.
- Present finding at the conference varies in regional and nationally.

Awards

- National Institute of Health administrative supplement grant award. (\$59,994 July 2008- June 2009)
- US EPA Environmental Justice Grant. (\$120,000 July 2014-December 2015)

- CAIR Grant (Center for American Indian Resilience) (\$5,000 August 2014-May 2015)
- Colorado Plateau Foundation Grant award. (\$25,000 December 2017- December 2018)
- Health Studies Fund (\$5,000 July 2018- July 2019)
- Colorado State University (\$25,000 October 2018- July 2019)

Teaching

Fall 2013

- Political Science 303- Social Science Research: The course catalog states, “Basic techniques of research design, data collection and analysis; contemporary methodologies such as survey design; computer applications.” I intend to focus on the practical side of things, but ideology will undoubtedly play a major role. Alternatives to typical “research” will be explored and students will often be pushed beyond their comfort zone. The goal is to be more open minded about what constitutes research in the 21st century.

Training

- Puerco River- Little Colorado River Uranium Water Quality Assessment- Mapping and Water Quality Sampling Training, Lupton Chapter April 22-23, 2015.
- NARCH Training, Summer Research Training Institute for American Indian and Alaska Native Health Professionals, Portland, Oregon, June 16- July 2, 2014.

Publications

- “Health effects and environmental justice concerns of exposure to uranium in drinking water” Laura Corlin, **Tommy Rock**, Jamie Cordova, Mark Woodin, John L. Durant, David M. Gute, Jani Ingram, and Doug Brugge, *Current Environmental Health Report*, (2016) December, volume 3 issue 4, 434-442.
- “Development of risk maps to minimize uranium exposures in the Navajo Churchrock mining district.” Jamie L. deLemos, Doug Brugge, Mirando Cajero, Mallery Downs, John L. Durant, Christine M. George, Sarah Henio-Adeky, Tedddy Nez, Thomas Manning, **Tommy Rock**, Bess Seschillie, Chris Shuey, and Johnnye Lewis, *Environmental Health*, (2009) July, volume 8, 29-43.
- “Rapid Dissolution of Soluble Uranyl Phases in Arid, Mine-Impacted Catchments near Church Rock, NM.” Jamie L. deLemos, Benjamin C. Bostick, Andrew N. Quicksall, Joshua D. Landis, Christine C. George, Naomi L. Slagowski, **Tommy Rock**, Doug Brugge, Johnnye Lewis, and John L. Durant, *Environmental Science and Technology*, (2008) June 1 volume 42 issue 11, 3951-3957.
- “Lessons from the Navajo: Assistance with Environmental Data Collection Ensures Cultural Humility.” Jamie L. deLemos, **Tommy Rock**, Doug Brugge, Naomi Slagowski, Thomas Manning, Johnnye Lewis, *Progress in Community*

Health Partnership Research, Education, and Action, (2007) Winter volume 1.4
321-326.

Approved Quality Assurance Plan

- Approved by US EPA Region 9 Quality Assurance Office- Quality Assurance Plan for the Puerco River- Little Colorado River Uranium Water Quality Assessment

Invited Presentations

- Oregon State University- 3rd Tribal Environmental Health Summit “Sustaining Long Term Partnerships and Projects with Native American Communities” June 25 and 26, 2018
- Shiprock, New Mexico “Cancer Risk from Uranium Exposure on the Navajo Nation” April 19, 2017.
- Havasupai Nation- Supai “Exposure to Uranium Health Affects” April 8, 2017.
- Northwestern University Law School “The Navajo Rock Talk and Video Show” March 9, 2017.
- Northwestern University “The Navajo Rock Talk and Video Show” March 8, 2017.
- University of Wisconsin- Madison “The Navajo Rock Talk and Video Show” March 7, 2017.
- Dartmouth University “Water is Life” April 29, 2016
- Mayo Clinic “Environmental Health: Contamination Issues on the Navajo Nation” February 1, 2016.
- The United States Environmental Protection Agency Region 9 Webinar “Environmental Justice Collaborative Problem Solving Grant,” October 15, 2015.
- Coconino Community College “Contaminated Traditional Indigenous Food,” on April 10, 2015.
- The University of Oklahoma “Environmental Justice dealing with abandoned uranium mines on the Navajo Nation” June 13, 2014
- Brown University “Environmental Justice” on October 29, 2013.

Conference Presentations

1. Oral Presentation entitled “Sanders Public Water Contamination” April 1, 2017.
2. Oral Presentation entitled “Cancer Risk from Uranium Exposure on the Navajo Nation” Tommy Rock, M.S., Native Research Network Conference, Cherokee, North Carolina, June 7 and 8, 2016
3. Oral Presentation entitled “Puerco-Little Colorado River Watershed Navajo Community-Based Uranium Water Quality Assessment Project” Tommy Rock, M.S., Navajo Nation Human Research Review Board Conference, Window Rock, Arizona. October 21 and 22, 2015.
4. Oral Presentation entitled “Uranium Exposure on Navajo Nation” Tommy Rock, M.S., Jani Ingram, Ph.D. Native Research Network Conference in Phoenix, Arizona, June 2014

5. Oral Presentation entitled "Participation in development of policy in regard to uranium contamination on the Navajo Reservation" Johnnye Lewis, PhD, Tommy Rock, M.S. Navajo Nation Human Research Review Board Conference, Window Rock, Arizona, November 15 and 16, 2011.
6. Poster Presentation entitled "Participation in development of policy in regards to uranium contamination on the Navajo Reservation" Johnnye Lewis, Ph.D., Tommy Rock, M.S. Native Health Research Conference, Rapid City, South Dakota, July 27-30, 2010.
7. Poster Presentation entitled "DiNEH Project Water Quality Program", Dr. Johnnye Lewis, Mallery Downs, Miranda Cajero, Bernadette Pacheco, Chris Shuey, Sarah Henio-Adeky, Teddy Nez, Tommy Rock, Jeremy DeGroat, and Glen Starch, Uranium Education and Outreach Conference, Shiprock, New Mexico, November 8, 2008
8. Oral presentation entitled "Health and water affect in a native community," Tommy Rock and Dr. Jani C. Ingram, 5th annual Navajo Nation Drinking Water Conference, June 16-20, 2008.
9. Oral presentation entitled "Health and water affect in a native community," Tommy Rock and Dr. Jani C. Ingram, 52nd annual meeting, Arizona Nevada Academy of Science, Southwest College, Phoenix, Arizona, April 10, 2008.
10. Oral presentation entitled "Health and water affect in a native community," Tommy Rock and Dr. Jani C. Ingram, 2007 Society for Advancement of Chicanos and Native Americans in Science, Kansas City, MO October 12, 2007.
11. Oral presentation entitled "Water issues in southwestern Navajo Reservation," Tommy Rock and Dr. Jani C. Ingram, Navajo Nation Drinking Water Conference 2007, Gallup, NM, July 31, 2007
12. Oral presentation entitled "Water and Health affect in a Native Community," Tommy Rock, Ronda Francis, and Dr. Jani C. Ingram, Navajo Nation Drinking Water Conference 2007, Gallup, NM, July 31, 2007.
13. Poster presentation entitled "Chemical Characterization of Well Water on the Navajo Reservation," Ronda Francis, Tommy Rock, Dr. Jani C. Ingram, 2007 NAU College of Engineering and Natural Sciences Celebration of Research and Design Day, April 27, 2007.
14. Poster presentation entitled "Chemical Characterization of Well Water on the Navajo Reservation," Ronda Francis, Tommy Rock, Dr. Jani C. Ingram, National Symposium of the Society for Advancement of Chicanos and Native Americans in Science, Tampa Bay, FL, October 28, 2006.

Skills and Qualification

- Microsoft Office
- Illustrator
- Mapviewer
- ArcMap , 10.1 and 10.2
- Fluent in Navajo
- Modflow

