

Richard Matthew Medina

Department of Geography
University of Utah
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Salt Lake City, UT 84112
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Areas of Specialization

Hate and bias, culture, anthropogenic hazards, complex systems, GIS/GISc, human geography.

Present Employment

2019 Associate Professor, Department of Geography, University of Utah, Salt Lake City, UT.
Director – Hate, Aggression, Terror, Extremism, and Violence Research (HATER) Lab.

Previous Academic/Research Appointments

2014-2019 Assistant Professor, Department of Geography, University of Utah, Salt Lake City, UT.
2014-2015 Graduate Faculty, Department of Geography and GeoInformation Science, George Mason University, Fairfax, VA.
2011-2014 Assistant Professor, Department of Geography and GeoInformation Science, George Mason University, Fairfax, VA.
2010-2011 Research Scientist, Oak Ridge National Laboratory, Oak Ridge, TN.
2009-2010 Postdoctoral Research Associate, Oak Ridge National Laboratory, Oak Ridge, TN.
2006-2007 Research Assistant, Southwest Consortium for Environmental Research & Policy (SCERP), University of Utah.
2005-2009 Teaching Assistant, Department of Geography, University of Utah.
2003 Teaching Assistant, Department of Geography and Urban Analysis, California State University, Los Angeles.
2001-2002 Research Assistant, Center for Environmental Analysis – Centers of Research Excellence in Science and Technology (CEA-CREST), California State University, Los Angeles.

Visiting and Temporary Appointments

2013-2015 Associated Researcher, Network Science Center, United States Military Academy, West Point, New York.
2012-2013 Graduate Course Instructor, Army Geospatial Center, Springfield, VA.

2008-2009 Visiting Scholar, International Centre for Political Violence and Terrorism Research (ICPVTR), Institute of Defense and Strategic Studies, Nanyang Technological University, Singapore.

Courses Taught

Radical Geographies
Culture, Power, and Dissonance
Hate, Place, and Culture
Geographic Thought and Inquiry
Geospatial Intelligence and Security
Methods in GIS
Population Dimensions of Global Change
Geography of Terrorism and Homeland Security
Human Terrain Analysis
Human Geography
Earth Environments and Global Change
World Regional Geography
Physical Geography
Spatial Data Structures
Spatial Modeling with GIS (Lab)
Spatial Database Design for GIS
Methods in Geospatial Intelligence

Education

2009 Ph.D. (Geography), University of Utah, Salt Lake City, UT; Doctoral Dissertation – *Use of Complexity Theory to Understand the Geographical Dynamics of Terrorist Networks*.

2004 M.A. (Geography), California State University, Los Angeles, CA; Master's Thesis – *Solid Waste Generation: A California Case Study*.

2002 B.A. (Geography) & Minor (Mathematics), California State University, Los Angeles, CA.

2000 A.A./A.S. Pasadena City College, Pasadena, CA.

Publications and Presentations

Peer Reviewed/Refereed Journal Articles

In Progress Allain ML, Bhattarai A, Medina RM, Brewer S, Linke A, and McNeally, P. Stopping the Steal: The Radical Ecology of the (Perceived) Conflict State in the United States.

In Progress Madsen S and Medina R. (I Am Man, Hear Me Roar) Masculinity, Extremism, and Violence in the United States.

In Review Tharp D, Kious B, Bakian A, Brewer S, Langenecker SA, Schreiner MW, Coon H, Welsh RC, and Medina R. Adolescent Mental Health Crisis Contacts Increased with Rising Covid-19 Pandemic Infection Rates. *Journal Adolescent Health*.

- In Review Riyadh AM, Cova TJ, Collins TW, and Medina RM. Comparing GIS-Based Flood Resilience Models in a Developing Nation: A Case Study in Bangladesh. *Natural Hazards Review*.
- In Review Hohl A, Choi M, Medina R, Wan N, and Wen M. Understanding Adverse Population Sentiment Towards the Spread of COVID-19 in the United States. *medRxiv*.
<https://www.medrxiv.org/content/10.1101/2021.07.15.21260543v1>.
- In Press Medina RM, Brewer S, Linke A, Nicolosi EA, Allain ML, and Tharp, D. The Sociospatial Ecology of Deaths During Police Interactions in the United States, 2016-2020. *Political Geography*.
- 2022 Hohl A, Choi M, Yellowhorse AJ, Medina RM, Wan N, and Wen M. Spatial Distribution of Hateful Tweets Against Asians and Asian Americans During the COVID-19 Pandemic, November 2019 to May 2020. *American Journal of Public Health* 112(4): 646-649.
- 2021 Das S, Medina RM, Nicolosi EA, Agopian A, Kuo I, Opoku J, Allston A, and Kharfen M. Networks of Heterosexual Contacts and their Implications on HIV Infection. *PLOS One* July.
- 2021 Medina RM, Nicolosi EA, Brewer S, and Moore EA. Geographical Analysis of Socioeconomic and Ideological Drivers of Hate Crime in the United States. *International Journal of Applied Geospatial Research* 12(2), 39-56.
- 2021 Medina RM, Nicolosi EA, Riley C, and McNeally P. Reflections on Responses to Geographical Research on Hate in the United States. *Public Understanding of Science* 30(6), 797-806.
- 2020 Nicolosi EA, Medina RM, Riley C, and McNeally P. Crowdsourcing Sensitive VGI: Constructing the Hate Incident Reporting System. *Digital Geography and Society*. 1, 100003.
- 2020 Fuhriman C, Medina RM, and Brewer S. Introducing a Dataset of Multi-Scale Geographies of ISIS Ideology from ISIS Sources. *Terrorism and Political Violence*. DOI: 10.1080/09546553.2020.1742707.
- 2020 Medina RM, Byrne K, Brewer S, and Nicolosi E. Housing Inequalities: Eviction Patterns in Salt Lake County, Utah. *Cities* 104(102804).
- 2020 Nicolosi EA, French J, and Medina RM. Add to the Map! Evaluating Digitally-Mediated Participatory Mapping for Grassroots Sustainabilities. *The Geographical Journal* 186(2), 142-155.
- 2019 Wei YD, Xiao W, Medina RM, and Tian G. Departures and Destinations of Walking Behavior: Effects of Neighborhood Amenity, Safety, and Urban Environment. *Urban Geography*. DOI: 10.1080/02723638.2019.1699731 (Early Online Publication).
- 2019 Call D, Medina RM, and Black A. Causes of Weather-Related Crashes in Salt Lake County, Utah. *The Professional Geographer* 71(2), 253-264.

- 2018 Medina RM, Nicolosi E, Brewer S, and Linke A. Geographies of Organized Hate in America: A Regional Analysis. *Annals of the American Association of Geographers* 108(4), 1006-1021.
- 2018 Nicolosi E, Medina R., and Feola G. Grassroots Innovations for Sustainability in the United States: A Spatial Analysis. *Applied Geography* 91, 55-69.
- 2018 Pulver A and Medina RM. A Review of Security and Privacy Concerns in Digital Intelligence Collection. *Intelligence and National Security* 33(2), 241-256.
- 2017 Fuhrman C, Medina RM, and Brewer S. A Point Process Analysis of Terror Attacks in Afghanistan, 2002-2013. *Middle States Geographer* 50, 50-63.
- 2017 Medina RM, Cervone G, and Waters N. Characterizing and Predicting Traffic Accidents in Extreme Weather Environments. *The Professional Geographer* 69(1), 126-137.
- 2016 Lee A, Medina RM, and Bolton F. Breaking Down the Fundamental Challenges in Effective Operational Assessments. *Campaigning* Fall, 13-22.
- 2016 Medina RM. From Anthropology to Human Geography: Human Terrain and the Evolution of Operational Sociocultural Understanding. *Intelligence and National Security* 31(2), 137-153.
- 2014 Medina RM. Social Network Analysis of the Islamist Terrorist Network. *Security Journal* 27(1), 97-121.
- 2013 Bahgat K and Medina RM. An Overview of Geographical Perspectives and Approaches in Terrorism Research. *Perspectives on Terrorism* 7(1), 38-72.
- 2011 Medina RM, Siebeneck LK, and Hepner GF. A Geographic Information Systems (GIS) Analysis of Spatiotemporal Patterns of Terrorist Incidents in Iraq 2004-2009. *Studies in Conflict and Terrorism* 34, 862-882.
- 2011 Medina RM and Hepner GF. Advancing the Understanding of Sociospatial Dependencies in Terrorist Networks. *Transactions in GIS* 15(5), 577-597.
- 2011 Kobayashi T, Medina RM, and Cova TJ. Visualizing Diurnal Population Change in Urban Areas for Emergency Management. *The Professional Geographer* 63(1), 113-130.
- 2009 Siebeneck LK, Medina RM, Yamada I, and Hepner GF. Spatial and Temporal Analyses of Terrorist Incidents in Iraq, 2004-2006. *Studies in Conflict and Terrorism* 32(7), 591-610.
- 2008 Modello C, Hepner GF, and Medina RM. ASPRS 10-Year Industry Forecast: Phase V. *Photogrammetric Engineering & Remote Sensing* 74 (11), 1297-1305.

2007 LaDochy S, Medina R, and Patzert W. Recent California Climate Variability: Spatial and Temporal Patterns in Temperature Trends. *Climate Research* 33(2), 159-169.

Refereed Conference Proceedings

2013 Hannigan J, Hernandez G, Medina RM, Roos P, and Shakarian P. Mining for Spatially-Near Communities in Geo-Located Social Networks. Association for the Advancement of Artificial Intelligence - Social Networks and Social Contagion: Web Analytics and Computational Social Science, Arlington, VA. November 15-17.

Books

2013 Medina RM and Hepner GF. *The Geography of International Terrorism: An Introduction to Spaces and Places of Violent Non-State Groups*. Boca Raton: Taylor & Francis/CRC Press.

Book Chapters

2021 Medina R and Waters N. Social Network Analysis. In (eds.) MM Fischer and P Nijkamp, *Handbook of Regional Science*, 2nd edition. Berlin: Springer.

2008 Medina R and Hepner GF. Geospatial Analysis of Dynamic Terrorist Networks. In (eds.) I Karawan, W McCormack, and SE Reynolds, *Values and Violence: Intangible Aspects of Terrorism*. Berlin: Springer.

Other Publications

2015 Hepner GF and Medina RM. Industry Insights: Considering the State of Geography and Geospatial Intelligence Research. *Earth Imaging Journal* 12(3), 10-11.

2015 Medina RM and Hepner GF. A Note of the State of Geography and Geospatial Intelligence Research. *NGA Pathfinder* 13(1), 8-9.

2014 Rice MT, Paez FI, Rice RM, Ong EW, Qin H, Seitz CR, Fayne JV, Curtin KC, Fuhrmann S, Pfoser D, Medina RM. Quality Assessment and Accessibility Applications of Crowdsourced Geospatial Data: A Report on the Development and Extension of the George Mason University Geocrowdsourcing Testbed. US Army Engineer Research and Development Center (ERDC).

2013 Medina RM. Commentary on the Boston Marathon Attacks. The Geosocial Gauge, George Mason University, April 19. Available from: <http://geosocial.gmu.edu/2013/04/live-reactions-to-the-boston-marathon-bombs/>.

2012 Hepner GF and Medina RM. Understanding the Geography of Terrorism. *Earth Imaging Journal* 9(5), 24-25.

Invited Presentations

- 2020 *Housing Inequalities and Eviction Patterns in Salt Lake County*. 24th Annual Utah Housing Matters Virtual Conference, Online, September 2.
- 2019 *Hate and Extremism in the US*. Utah Council for the Social Studies (UCSS) Annual Conference, South Jordan, UT, November 2.
- 2019 *Activities of the University of Utah Geospatial Intelligence Research Lab (GIRL)*. MAPPS Summer Conference, Park City, UT, July 14-17.
- 2018 *Hate: A Research Agenda*. Division of Public Health Grand Rounds, University of Utah, Salt Lake City, UT, November 6.
- 2018 Faculty Panel, Diversity Scholars Class. University of Utah, Salt Lake City, UT, February 27.
- 2017 *Community Voices for Housing Equality*. Department of Social Work Grand Rounds, University of Utah, Salt Lake City, UT, October 4.
- 2017 *How do We Hate?* Center for Research on Migration and Refugee Integration meeting, University of Utah, Salt Lake City, UT, January 6.
- 2016 *Considerations for the Terrorist Threat in America*. Peace and Conflict Studies Speed Lectures, University of Utah, Salt Lake City, UT, April 7.
- 2014 *The Evolution of the Global Jihad and the Role of Geography in Counterterrorism*. Geography Awareness Week, Brown Bag Lecture, University of Utah, Salt Lake City, UT, November 18.
- 2014 *Keynote Address*. GTU Induction Ceremony, George Mason University, Fairfax, VA, May 9.
- 2013 *The Geography of Terrorism*. Terrorism, Transnational Crime and Corruption Center (TraCCC), George Mason University, Arlington, VA, May 17.
- 2011 *The Geographic Spread of Terrorist Organizations*. L3 Communications, Conference on International Terrorism: The Arab World and Beyond. Annapolis Junction, MD, November 30.
- 2011 *Geospatial and Temporal Characterization of Human Terrain in the Context of Terrorism Research*. National Geospatial-Intelligence Agency, Reston, VA, January 25.
- 2010 *Sociospatial Analysis of the Islamist Terrorist Network*. The University of South Carolina, Geography Department Colloquium. Columbia, SC, January 29.
- 2008 *Social Network Analysis and GIS for Terrorism Research*. The International Centre for Political Violence and Terrorism Research (ICPVTR), Nanyang Technological University, Singapore, June 18.

Conference Presentations

- 2022 Medina RM, Brewer S, Linke A, Nicolosi EA, Allain ML, and Tharp D. "The Sociospatial Ecology of Deaths During Police Interactions in the United States, 2016-2020." Annual Meeting of the American Association of Geographers (AAG), New York, NY. (Online), February 25-March 1.

- 2018 Medina RM, Byrne K, Nicolosi E, and Brewer S. "Housing Inequality: Eviction Rates in Salt Lake County, or the Business of Eviction" Annual Meeting of the American Association of Geographers (AAG), New Orleans, LA., April 10-14.
- 2017 Medina RM and Nicolosi E. "Hate in the US: A Geographical Analysis of Movements and Activities" Annual Meeting of the American Association of Geographers (AAG), Boston, MA., April 5-9.
- 2014 Medina R and Holby T. "The Geography of American Radicalization" Annual Meeting of the American Association of Geographers (AAG), Tampa, FL., April 8-12.
- 2011 Medina R and Omitaomu O. "The Complexity of Terrorism in Nigeria." Annual Meeting of the American Association of Geographers (AAG), Seattle, WA., April 12-16.
- 2010 Medina R, Siebeneck LK, Yamada I, and Hepner GF. "Spatial and Temporal Analysis of Terrorist Incidents in Iraq, 2004-2009." Annual Meeting of the American Association of Geographers (AAG), Washington D. C., April 14-18.
- 2009 Medina R. "Sociospatial Analysis of the al-Qaeda Terrorist Network." Annual Meeting of the American Association of Geographers (AAG), Las Vegas, NV., March 22-27.
- 2008 Modello C, Hepner GF, and Medina RM. "ASPRS 10-Year Industry Forecast: Phase V." Annual Meeting of the American Society for Photogrammetry and Remote Sensing (ASPRS), Portland, OR., April 27-May 2.
- 2008 Medina R. "Use of Complexity Theory to Understand the Geographical Dynamics of Terrorist Networks." Annual Meeting of the American Association of Geographers (AAG), Boston, MA., April 15-19.
- 2007 Kobayashi T, Medina R, and Cova TJ. "Visualization of Continuous Diurnal Average Population: A Case Study in Salt Lake County, Utah." Annual Meeting of the American Association of Geographers (AAG), San Francisco, CA., April 17-21.
- 2007 Medina R and Hepner GF. "Terrorist Networks in Social and Geographic Space." *Values and Violence: Intangible Aspects of Terrorism*. Salt Lake City, UT., March 2-3.
- 2005 Medina R, Gongora G, LaDochy S, and Patzert W. "Recent California Climate Variability: Spatial and Temporal Temperature Trend Patterns." Annual Meeting of the American Meteorological Society, San Diego, CA., January 9-13.
- 2004 Medina R. "Waste and Sustainability: A Prediction and Analysis of Tomorrow's Waste and the Turmoil it May Bring." Annual Meeting of the American Association of Geographers (AAG), Philadelphia, PA., March 14-19.

2004 Medina R and Gongora G. "California Climate, 1950-2000: Is There a Need for Concern?" Annual Conference of the California Geographical Society, Long Beach, CA., April 22-24.

Funded Research

2020 PI – Spatio-Temporal Analysis of SafeUT Application Effectiveness in Reducing Suicidal Behaviors in Utah. University of Utah, Health Sciences, SafeUT Research and Quality Improvement Program (ReQuIP) (\$39,711).

2020 Co-I – A Geospatial Big Data Platform for Understanding Population Sentiment Toward the Spread of COVID-19 in the United States. University of Utah, Office of the Vice President for Research (\$25,000).

2020 Co-I - Visualizing Gender-Based Violence. University of Utah, Office of the Vice President for Research (\$50,000).

2020 Co-I – Gender-Based Violence Consortium. University of Utah, 1U4U Innovation Funding (\$30,000).

2020 PI – Social Media Mining Capability in CSBS and Studies of Conspiracy Theories. University of Utah, VPR/CSBS Research Incentive Seed Grant Program (\$20,000).

2019 PI – Support for the Hate Incident Reporting System (HIRS) Research. University of Utah, iNterdisciplinary Exchange for Utah Science (NEXUS) Seed Grant (\$15,000).

2017 Co-I – Analyzing Evictions and Housing Stability for Low-Income Renters. University of Utah, URC Faculty Research & Creative Grant (\$5,963).

2013-2014 Co-I – Assessing the Value of Neo-Geographic Information. Army Geospatial Center / ERDC Contracting Office /Army Topographic Engineering Center (\$142,548/1 yr from \$545,922/5 yr total award, option year 3 of 4) Award dates: 9/24/2013 - 9/23/2014.

2013-2015 Co-PI – Understanding Network Socio-Geographic Dynamics: Using Smartphones to Locate, Track, and Study Goal Directed-Team Behaviors. Army Research Institute (\$337,566/2 yrs).

2013-2014 PI – Monitoring Post-Fire Vegetation Recovery Five to Twenty Years after a Fire Event in Winnemucca District, NV. United States Bureau of Land Management (\$20,000/5 mo).

2013-2014 PI – Toward a Unified Understanding of International Terrorism: The Geography of a Definition. Center for Global Studies, George Mason University (\$2,500).

2011-2012 Co-PI – Modeling Long Term Population Resettlement under Climate Change Scenarios. LDRD Internal Grant, Department of Energy (\$780,000/2 yrs).

2011-2011 Co-PI – Sociocultural and Demographic Characterization of the Pakistan/Afghanistan Border Region. United States Strategic Command (\$280,000).

Honors and Awards

2016 Poster competition, 3rd Place – Weber, C. and Medina, R. Terrorism in Nigeria: The Cultural and Ideological Context of Radical Violence. United States Geospatial Intelligence Foundation, GEOINT Symposium, May 15-18, Orlando, Florida.

2015-2016 Outstanding Mentor/Advisor Award, Department of Geography, University of Utah, presented April 29, 2016

2013 United States Geospatial Intelligence Foundation Research Achievement Award (<http://usgif.org/community/usgifAwards>)

2008 United States Geospatial Intelligence Foundation Graduate Scholarship (\$5,000)

2008 Institute of Public and International Affairs, University of Utah Travel Grant (\$4,000)

2005 Martin Harris Hiatt Memorial Graduate Scholarship (\$5,000)

2004 Thomas McKnight Professional Paper Award (\$125)

2004 G. Etzel Percy Memorial Scholarship (\$600)

2004 Excellence in Graduate Programs Initiative (\$3,200)

Graduate Student Supervision (Chair of Committee in Bold)

Ph.D. Degree

In Progress Meitong Liu (University of Utah) - The regional disparity of the effect of urban expansion and its impact on sustainable urban development.

In Progress Marco Lorenzo Allain (University of Utah)

In Progress Aaron Flores (University of Utah) – Geographical Assessment of Flood Risk Inequities in the Conterminous United States

In Progress Andre Coleman (University of Utah) – *Multimodal Data Fusion for Rapid Disaster Response*.

In Progress **Doug Tharp** (University of Utah)

In Progress Susana Velasquez Franco (University of Utah)

In Progress Weiye Xiao (University of Utah) – Housing and Spatial Mismatch in Urban China: A Study of Shanghai and Nanjing.

In Progress Rebecca Steed (University of Utah)

2020 Yangyi Wu (University of Utah) – *Spatial Analysis of Uneven Metropolitan Development in the Context of Big-Data*.

2019 **Emily Nicolosi** (University of Utah) – *Drivers and Limits in the Diffusion of Grassroots Innovations for Sustainability*.

- 2017 **Christopher Fuhriman** (University of Utah) – *Reimagined Territory: a New Theory of Terrorist Geographies.*
- 2015 Alec Barker (George Mason University) – *Understanding Network Socio-Geographic Dynamics: Using Smartphones to Locate, Track, and Study Goad-Directed Team Behaviors.*
- 2014 Bianica Pint (George Mason University) – *When People Rebel: A Computational Approach to the Study of Violent Collective Action.*
- 2013 Emily Schnebele (George Mason University) – *Volunteered Geospatial Data Fusion for Improved Flood Disaster and Transportation Network Assessment.*
- 2013 Carter Christopher (George Mason University) – *Migration and the Migrant in Major U.S. Metropolitan Areas during America’s ‘Great Recession.’*
- 2013 Chris Oxendine (George Mason University) – *Multi-Objective, Multi-Criteria Dynamic Routing of Evacuees Using Volunteered and Ambient Geographic Information.*
- Master’s Degree
- In Progress **Serena Madsen** (University of Utah)
- In Progress Ahmad Riyadh (University of Utah) - *Analyzing the Flood Resilience of Dhaka City.*
- 2020 Zixuan Huang (University of Utah) – *A GIS-based Approach for Modeling Autonomous Shuttle Station Siting and Hurricane Evacuation Routes in Lee County, FL.*
- 2020 Steve Lizotte (University of Utah) – *The Geography of Crime in Salt Lake County Utah: An Empirical Test of Socioeconomic Theories of Criminal Behavior.*
- 2020 Brett Ruether (University of Utah) – *Cropland in Conflict: Rebel Governance, Climate Variability, and Agriculture in the Syrian Civil War.*
- 2019 Armita Kar (University of Utah) – *Vehicular Route Modelling for Safe Evacuation during Hurricanes and Flooding.*
- 2017 Calah Worthen (University of Utah) – *Evaluating the Effectiveness of a Watershed Restoration Plan.*
- 2017 Chante’ Lundskog (University of Utah) – *The Assessment of Moose Habitat in Southern Utah.*
- 2017 **Claire Weber** (University of Utah) – *Terrorism in Nigeria: The Cultural and Ideological Context of Radical Violence.*
- 2016 Aaron Pulver (University of Utah) – *Locating AED Enabled Medical Drones to Reduce Response Times to Out-of-Hospital Cardiac Arrests.*
- 2015 Ryan Hile (University of Utah) – *Thinking inside the Black Box: Enhancing the Social Vulnerability Index with Artificial Neural Networks.*

- 2014 Thomas Holby (George Mason University) - *#Indyref: A Geographical Comparison of Tweets Related to the Scottish Independence Referendum of 2014.*
- 2014 Aubrey Larsen (George Mason University) – *Spatial Analysis of Reported Kidnapping Events in Nigeria Using Moran’s I.*
- 2014 **Christine Dougherty** (George Mason University) – *Long-Term Monitoring of Post-Fire Vegetation Recovery: A Case Study in Winnemucca District, Nevada.*
- 2013 **Maria Cabassa** (George Mason University) – Comprehensive exams.
- 2013 Jimmy Bryant (George Mason University) – *Finding the Optimal Locations for Bike Sharing Stations: A Case Study within the City of Richmond, Virginia.*
- 2013 **Christa Goldsborough** (George Mason University) – Comprehensive exams.
- 2013 Elizabeth Hull (George Mason University) – Comprehensive exams.
- 2012 John Cooke (George Mason University) – *A Linear Referencing Analysis of Traffic Incidents and Land Use Changes: A Case Study from Culpepper, Spotsylvania, and Orange Counties, Virginia.*
- 2012 Aisling Chapin (George Mason University) – *Implementing a Co-Location Model in Network Space.*
- 2011 Thomas Zumbado (University of Utah) – *Investigation of the Philosophical Changes of the Abu Sayyaf Group Using Geospatial Analysis.*

Master of Science in Geographic Information Systems (MSGIS)

- 2020 Melissa Gfeller (University of Utah)
- 2020 Spencer Roddan (University of Utah)
- 2020 Hallie Johnson (University of Utah)
- 2017 Sarah Rivera (University of Utah)
- 2017 Mitch Ottesen - (University of Utah)

Other Mentoring

- 2019-2020 Serena Madsen – Undergraduate Research Opportunities Program (UROP), University of Utah. Project title: *Masculinity, Extremism, and Violence in the United States.*
- 2015 McKenna Bearnson – Undergraduate Research Opportunities Program (UROP), University of Utah. Project title: *Spatial Analysis of Terrorist Incidents: ISIS Attacks, Recruitment and Resources.*
- 2014 Alexander Sanchez – Honors Thesis Project, University of Utah. Project title: *Reexamining Global Drug Eradication Policies: A Systemic Analysis*

of their Ecological and Societal Effects in Mexico, Columbia, and Afghanistan.

- 2013 Matthew McCarthy – Bachelor of Individualized Study (BIS) in *Geographic Information Systems in Human Geography*. Project title: Native American Population Decline during the Nineteenth Century. George Mason University
- 2011 (Summer) John Buerhaus – Student Undergraduate Laboratory Internship (SULI) at ORNL

Service

University/College/Departmental Service

- 2022 University of Utah, Senate Task Force on the Presidential Selection Process.
- 2022 University of Utah, Department of World Languages & Cultures Graduate Council Review Committee Member
- 2022 University of Utah, College of Social and Behavioral Sciences, Dean Search Committee
- 2021- University of Utah, Department of Geography, EDI Director.
- 2020- University of Utah, Executive Committee Member – Gender Based Violence Consortium (GBVC)
- Feb. 2020 University of Utah, Department of Geography, Acting Chair.
- 2019- University of Utah, College of Social and Behavioral Science, Equity, Diversity, and Inclusion Committee Co-Chair
- 2019-2020 University of Utah, Department of Geography, Colloquium Committee Chair
- 2018 University of Utah, Department of Geography, Faculty Position Search Chair
- 2017-2019 United States Geospatial Intelligence Foundation (USGIF) Utah Certificate Director
- 2017-2018 National Geospatial-Intelligence Agency / U.S. Geological Survey Center of Academic Excellence Director
- 2014- University of Utah, Department of Geography, Geography Club / GTU Faculty Advisor
- 2014-2019 University of Utah, Department of Geography, Graduate Committee
- 2014-2017 University of Utah, Department of Geography, Undergraduate Committee
- 2013-2014 GMU, Department of Geography and GeoInformation Science Associate Undergraduate Advisor
- 2012-2013 GMU, College of Science Nominations Committee
- 2012-2013 GMU, Department of Geography and GeoInformation Science Infrastructure Committee

- 2012-2014 GMU, Department of Geography and GeoInformation Science
Admissions Committee (Chair of committee 2013-2014)
- 2012/2013 GMU Department of Geography and GeoInformation Science GIS Day
Poster Competition Committee

Professional Development

- 2017/2018 Advanced Placement High School Exam Reader, Cincinnati, OH, June.
- 2015/2016 Advanced Placement High School Exam Reader, Cincinnati, OH, June.

Manuscript Reviewer (Journal Articles, Books, and Book Chapters)

IEEE Transactions on Computational Social Systems; Geography Compass; Terrorism and Political Violence; International Journal of Geographic Information Science; Water Resources Research; Security Journal; Oxford University Press; McGraw-Hill; Cartographica; Professional Geographer; American Journal of Sociology; Narrative and Conflict: Explorations in Theory and Practice; Applied Mathematics and Information Sciences; Crime, Law, and Social Change; Politics; Transactions in GIS; Cartography and Geographic Information Science; Elsevier; Political Geography; Geography Compass; Conflict Management and Peace Studies; PLOS One; Computers, Environment, and Urban Systems; Journal of Peace Research; Geoforum; The Geographical Journal; Gender, Place, and Culture; Statistics, Politics, and Policy; GeoJournal; Crime, Law, and Social Change.

Grant Proposal Reviewer

National Science Foundation
US Army Corps of Engineers' Engineer Research Development Center (ERDC)

Media Outreach

- 2019 Watson, P. J. New App Encourages Americans to Report 'Offensive' Speech. First Amendment? What First Amendment? Infowars.com, May 10. <https://www.infowars.com/new-app-encourages-americans-to-report-offensive-speech/#inline-comments>.
- 2019 Harkins, P. University of Utah Researchers, 'Shocked' by Bad Data on Hate Crimes, Develop an App to Help Track Them. Salt Lake Tribune, April 25. <https://www.sltrib.com/news/2019/04/25/university-utah/>.
- 2019 Bennet, L. University of Utah Launches App Designed to Gain More Insight on Hate Crime. Deseret News, April 20. <https://www.deseretnews.com/article/900066826/university-of-utah-hate-crime-app.html>.
- 2019 Rigley, N. Need to Report a Hate Crime? There's an App for that Now. KSL, April 11. <https://www.ksl.com/article/46530039/need-to-report-a-hate-crime-theres-an-app-for-that-now>.

- 2019 Hegyi, N. New App Lets People Anonymously Report Hate Crimes and Speech. KUER, NPR Utah, April 9. <https://www.kuer.org/post/new-app-lets-people-anonymously-report-hate-crimes-and-speech#stream/0>.
- 2019 UNEWS. Hate Incidents are Notoriously Underreported. Now, there's an App for That. University of Utah, April 8. <https://unews.utah.edu/hate-incident-app/>.
- 2019 Hegyi, N. White Nationalist Groups Increase Recruiting and Propaganda Across the West. National Public Radio, March 19. <https://www.npr.org/2019/03/19/704586335/white-nationalist-groups-increase-recruiting-and-propaganda-across-the-west>.
- 2019 Hoeven, E. The Rise of White Nationalism is Creeping onto Utah Campuses. What You Need to Know. Deseret News, March 15. <https://www.deseretnews.com/article/900060738/the-rise-of-white-nationalism-is-creeping-onto-utah-campuses-what-you-need-to-know.html>.
- 2019 Hegyi, N. White Nationalist Groups Rising On College Campuses In Mountain West. Utah Public Radio (KUER), March 1. <https://www.kuer.org/post/white-nationalist-groups-rising-college-campuses-mountain-west#stream/0>.
- 2018 Public News Service. University of Utah Study Maps Hate in America by Region. February 28. <https://www.publicnewsservice.org/2018-02-12/immigrant-issues/university-of-utah-study-maps-hate-in-america-by-region/a61391-1>.
- 2018 National Geographic ...Geography May Influence the Types of Fears that Fuel U.S. Crimes. 11 Things we learned this week. Education Blog. <https://blog.education.nationalgeographic.org/2018/02/16/11-things-we-learned-this-week-75/>.
- 2018 Florida, R. Where Hate Groups are Concentrated in the U.S. CityLab, March 15. <https://www.citylab.com/equity/2018/03/where-hate-groups-are-concentrated-in-the-us/555689/>.
- 2018 Perry, S. Geography Influences the Types of Fears that Fuel U.S. Hate Crimes, Study Suggests. MinnPost, February 14. <https://www.minnpost.com/second-opinion/2018/02/geography-influences-types-fears-fuel-us-hate-crimes-study-suggests>.
- 2018 Williams, T. The Regional Differences of Hate with Richard Medina & Emily Nicolosi On Wednesday's Access Utah. Utah Public Radio (KUER). February 14. <http://upr.org/post/regional-differences-hate-richard-medina-emily-nicolosi-wednesdays-access-utah>.
- 2018 Penrod, S. Geography Plays Role in Spreading, Fueling Hate, U. Study Says. KSL News, February 9. <https://www.ksl.com/?sid=46257785&nid=148>.
- 2018 Wood, B. Hate Has Regional Roots in Poverty and Lack of Education, Say University of Utah Researchers. Salt Lake Tribune, February 9.

- <https://www.sltrib.com/news/education/2018/02/09/hate-has-regional-roots-in-poverty-and-lack-of-education-say-university-of-utah-researchers/>.
- 2018 UNEWS. Drivers of Hate in the U.S. Have Distinct Regional Differences. University of Utah, February 9. <https://unews.utah.edu/drivers-of-hate-in-the-u-s-have-distinct-regional-differences/>.
- 2017 Hate in America (Interview). @THEU, University of Utah, September 14. <https://attheu.utah.edu/facultystaff/hate-in-america/>.
- 2016 Harris, D. H. Let it Snow: Local Professor Conducts Traffic Study to Improve Winter Storm Preparedness. Salt Lake City Weekly, December 14. <https://www.cityweekly.net/utah/let-it-snow/Content?oid=3553943>.
- 2016 Cobabe, A. Where are the Accident Spots when a Storm Comes through Utah? Asks One Researcher. Utah Public Radio, Dec. 5. <http://upr.org/post/where-are-accident-spots-when-storm-comes-through-utah-asks-one-researcher>.
- 2016 Boyd, R. U of U scientist hopes to save lives by analyzing winter car crashes in Salt Lake Co. FOX 13, Salt Lake City, November 28. <http://fox13now.com/2016/11/28/u-of-u-scientist-hopes-to-save-lives-by-analyzing-winter-car-crashes-in-salt-lake-co/>.
- 2016 Driving in a Winter Wonderland. UNEWS, November 18. <https://unews.utah.edu/context-from-campus/driving-in-a-winter-wonderland/>.
- 2013 Interview: Hagan, K. The Terrain of Terrorism: Academics from Two USGIF-Accredited Universities Collaborate on New Textbook. Trajectory Magazine. United States Geospatial Intelligence Foundation (USGIF), Issue 2, April 24. <http://trajectorymagazine.com/the-terrain-of-terrorism/>.

Related non-Academic Positions

- 2007-2009 GIS Analyst, Digitally Integrated Geographic Information Technologies (DIGIT) Lab, University of Utah, Salt Lake City, UT.
- 2005 Cartographic Technician, Los Angeles Unified School District, Los Angeles, CA.
- 2003-2005 GIS Specialist, Property ID, Los Angeles, CA.

Appointments and Membership in Centers and Research Study Groups

- 2021- Board of Studies – International Relations Department, National Defense University, Pakistan.
- 2017- Affiliated Faculty – Global Change & Sustainability Center, University of Utah.
- 2015- Director – Geospatial Intelligence Research Lab, University of Utah.
- 2012-2014 World Wide Human Geography Data Working Group.

- 2011-2014 Faculty - Center for Geospatial Intelligence (CGEOINT), George Mason University, Fairfax, VA.
- 2005-2009 Terrorism Working Group, Institute of Public and International Affairs (IPIA), University of Utah, Salt Lake City, UT.
- 2006-2009 Center for Natural and Technological Hazards (C^{nth}), Department of Geography, University of Utah.

Certificates and Other Training

- 2002 Geographic Information Systems Certificate, California State University, Los Angeles.

Membership in Professional Organizations

- 2006-2014 American Society of Photogrammetry and Remote Sensing (ASPRS), President of student chapter 2006-2008.
- 2005- Gamma Theta Upsilon (GTU)
- 2004- Association of American Geographers (AAG)
- 2004-2010 California Geographic Society (CGS)

TS Clearance 2010, DOE/DOD