

**YOLANDA J. MCDONALD, Ph.D.**

*Department of Human & Organizational Development  
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**CURRENT APPOINTMENT:**

Aug 2017                      Assistant Professor, Human & Organizational Development, Peabody College,  
Vanderbilt University  
Affiliated Faculty Vanderbilt Institute for Energy and Environment

**AREAS OF SPECIALIZATION:**

Health Geography; Drinking Water; Environmental Justice, Health Disparities; HealthGIS; Spatial Epidemiology

**EDUCATION:**

2017                              **Ph.D. Texas A&M University, College Station, Texas, Geography**  
Dissertation: *An Intersectionality Approach to Assessing the Landscape Across the Cervical Cancer Continuum of Cancer: Geographic and Sociodemographic Inequalities in New Mexico* (Advisor: Daniel W. Goldberg)

2012                              **M.A. The University of Texas at El Paso, El Paso, Texas, Sociology**  
Thesis: *Lacking a connection to a community water system: Water quality and human health impacts in El Paso colonias* (Advisor: Sara E. Grineski)

2009                              **B.A. The University of Texas at El Paso, El Paso, Texas, Multidisciplinary Studies**

**PROFESSIONAL EXPERIENCE:**

July – Aug 2016              Lecturer, Department of Sociology & Anthropology, The University of Texas at El Paso

Jan – Aug 2015                Research Assistant, Department of Geography, Texas A&M University

Aug – Dec 2014                Lab Instructor, Department of Geography, Texas A&M University

Jan – Aug 2014                Research Assistant, Department of Geography, Texas A&M University

Aug – Dec 2013                Lab Instructor, Department of Geography, Texas A&M University

June – July 2013              Visiting Scholar, Department of Sociology & Anthropology, The University of Texas at El Paso

May – June 2013                Research Assistant, Department of Geography, Texas A&M University

Jan – May 2013                Teaching Assistant/Field Workshop Coordinator, Department of Geography, Texas A&M University

Aug – Dec 2012                Lab Instructor & Teaching Assistant, Department of Geography, Texas A&M University

June 2011 – Aug 2012                      Research Assistant, Department of Sociology & Anthropology, The University of Texas at El Paso

Jan – Dec 2011                Research Consultant, Pan American Health Organization/World Health Organization's *Colonias Initiatives Program*

**HONORS:**

Health Disparities Research Institute Scholar, National Institutes of Health (NIH) National Institute on Minority Health and Health Disparities (2018)

Junior Faculty Teaching Fellowship, Vanderbilt University (2018-2019)

Southeastern Conference (SEC) Faculty Travel Grant. \$1,800. (2018-2019).

Ford Foundation Dissertation Fellowship Award (2016 – 2017)

American Association of University Women Dissertation Fellowship Award (*Declined*) (2016 – 2017)

Alliance for Graduate Education and the Professoriate Ambassador Award, Office of Graduate and Professional Studies, Texas A&M University (2016)

University of New Mexico Cancer Center Graduate Fellowship Award, University of New Mexico (sponsor), National Institutes of Health (prime sponsor) (2015 – 2016)

Doctoral Graduate Diversity Fellowship Award, College of Geosciences, Texas A&M University (2012 – 2015)

Outstanding Graduate Student in Sociology, The University of Texas at El Paso Honors Convocation Award (2011-2012)

**Certifications**

Center for the Integration of Research, Teaching, and Learning of the College Classroom Teaching: Integration of Research, Teaching and Learning Course. Office of Graduate and Professional Studies, Texas A&M University, College Station, TX. (2016)

**AFFILIATIONS:**

**Membership in Professional Societies**

AcademyHealth (2018 - present)

American Association for the Advancement of Science (2016 - present)

American Association of Geographers (2011 - present)

American Public Health Association (2013 - present)

American Water Works Association (2011 - present)

Council of State and Territorial Epidemiologists (2013 - present)

Gamma Theta Upsilon (2015 - present)

North American Association of Central Cancer Registries (2013 - present)

**PUBLICATIONS:****Book Chapters**

Lachica, J., Castenada, E., and **Y.J. McDonald**. (2013). Poverty, place, and health along the US-Mexico Border. In K. Fitzpatrick (Ed.) *Poverty and health: crisis among America's Most Vulnerable*, (pp. 87-104). Goleta, CA: ABC-CLIO.

Velázquez-Angulo, G., Aldouri, R., Collins, T.W., Grineski, S.E., Romo, L., M., Aboargob, F., Eldeb, A., **McDonald, Y.J.**, and F. Poblano-Amparán. (2012). Characterizing climate change risks and informing adaptation strategies in the Ciudad Juárez-El Paso metropolitan region based on spatial analyses of extreme heat–vegetation abundance–population vulnerability relationships. In E. Sánchez Flores and R.E. Díaz Caravantes (Eds.) *Dinámicas locales del cambio ambiental global: Aplicaciones de percepción remota y análisis espacial en la evaluación del territorio* (pp. 155-178). Ciudad Juárez, Chihuahua, México: Universidad Autónoma de Ciudad Juárez Press.

**Articles in Refereed Journal**

Landy, R., Sasieni, P.D., Matthews, C., Wiggins, C.L., C., Robertson, M., **McDonald, Y.J.**, Goldberg, D.W., Scarinci, I.C., Cuzick, J., and Wheeler, C.M. for the New Mexico HPV Pap Registry Steering Committee (2019). Impact of screening on cervical cancer incidence. A population-based case-control study in the United States. *International Journal of Cancer*. DOI:10.1002/ijc.32826

**McDonald, Y.J.** and Jones, N.E. (2018). Drinking water violations and environmental justice in the United States, 2011-2015. *American Journal of Public Health* 108(10), 1401-1407.

**McDonald, Y.J.**, Schwind, M., Goldberg, D.W., Lamplé, A., and Wheeler, C.M. (2017). An Analysis of the Process and Results of Manual Geocode Correction. *Geospatial Health: Health Applications in Geospatial Science* 12 (526), 84-89.

**McDonald, Y.J.**, Goldberg, D.W., Scarinci, I.C., Castle, P.E., Cuzick, J., Robertson, M., and Wheeler, C.M. on behalf of the New Mexico HPV Pap Registry Steering Committee. (2017). Health service accessibility and risk in cervical cancer prevention: Comparing rural versus non-rural residence in New Mexico. *The Journal of Rural Health* 33 (4), 382-392.

**McDonald, Y.J.**, Grineski, S.E., Collins, T.W., and Kim, Y.A. (2015). A scalable climate health justice assessment model. *Social Science & Medicine* 133, 242-252.

Grineski, S.E., Collins, T.W., **McDonald, Y.J.**, Aldouri, R., Aboargob, F., Eldeb, A., Romo, L., and Velázquez-Angulo, G. (2015). Double exposure and the climate gap: Changing demographics and extreme heat in Ciudad Juárez, Mexico. *Local Environment: The International Journal of Justice and Sustainability* 20 (2), 180-201.

Grineski, S.E., Chakraborty, J., Collins, T. W. and **McDonald, Y.J.** (2013). Environmental health injustice: Exposure to air toxics and children's respiratory hospital admissions. *The Professional Geographer* 65 (1), 31-46.

**McDonald, Y.J.** and Grineski, S.E. (2012). Disparities in access to residential plumbing: A bi-national comparison of environmental injustice in El Paso and Ciudad Juárez. *Population and Environment* 32 (4), 376-387.

Collins, T.W., Grineski, S.E, Chakraborty, J., and **McDonald, Y.J.** (2011). Understanding environmental health inequalities through comparative intracategorical analysis: Racial/ethnic disparities in cancer risks from air toxics in El Paso County, Texas. *Health & Place* 17 (1), 335-344.

Grineski, S.E and **McDonald, Y.J.** (2011). Mapping the uninsured using secondary data: An environmental justice application in Dallas. *Population and Environment* 32 (4), 376-387.

### SELECTED CONFERENCE PRESENTATIONS:

- \*2019 **McDonald, Y.J.** and Anderson, K.M.<sup>3</sup> *A Community-Based Participatory Research Approach: Collaborating with Key Tennessee Drinking Water Stakeholders to Understand Community Water Systems* (oral: co-presenter), Applied Geography Annual Conference, Charlotte, NC.
- 2019 **McDonald, Y.J.** *Tennessee Community Water Systems Operators Insights on the Infrastructure Challenges of Ensuring a Safe Drinking Water Supply*, (oral: presenter), Section on Doing Critical Community Geography to Inform Policy: Approaches and Outcomes, American Association of Geographers Annual Conference, Washington D.C.
- \*2018 **McDonald, Y.J.** and Jones, N.E. *Environmental justice: Drinking water violations in the US, 2011-2015*, (poster presenter), AcademyHealth, Seattle, WA.
- 2018 **McDonald, Y.J.** and Jones, N.E. *Drinking water violations and environmental justice in the United States, 2011-2015*, (oral: invited presenter), Conference of Ford Foundation Fellows, Washington DC.
- 2018 **McDonald, Y.J.** and Jones, N.E. *An environmental justice review of drinking water quality in the United States, 2011-2015*, (oral: invited presenter), Section on Environmental Racism, American Association of Geographers Annual Conference, New Orleans, LA.
- 2016 **McDonald, Y.J.**, Goldberg, D.W., Scarinci, I., Castle, P.E., Cuzik, J., Powell, A., Roberston, M., and Wheeler, C.M. *Health service accessibility and risk in cervical cancer prevention: Comparing rural versus non-rural residence in New Mexico*, (oral: presenter), Section on Accessibility to Health Services, National Institutes of Health/National Cancer Institute Conference on Geospatial Approaches to Cancer Control and Population Sciences, Bethesda, MD.

- 2015 **McDonald, Y.J.**, Schwind, M., Goldberg, D.W., Scarinci, I., Castle, P., Cuzik, J., Powell, A., Roberston, M., and Wheeler, C.M. *Landscape of cervical cancer screening, diagnosis and pre-cancerous treatment services in New Mexico, USA*, (oral: presenter), Section on Health Disparities: Contemporary and Emerging Methods (co-organizer of session), American Association of Geographers Annual Conference, Chicago, IL.
- 2014 **McDonald, Y.J.**, Grineski, S.E., Collins, T., and Kim, Y.A. *A scalable climate health justice assessment model*, (oral: presenter), Section on Environmental Justice Research: Contemporary Issues and Emerging Topics II, American Association of Geographers Annual Conference, Tampa, FL.
- 2013 **McDonald, Y.J.**, Grineski, S.E., Collins, T., and Kim, Y.A. *The incidence of diseases associated with climate change in Texas, 2008-2010: An examination of economic impacts and socio-spatial disparities*, (oral: presenter), XVth International Medical Geography Symposium, East Lansing, MI.
- 2013 **McDonald, Y.J.** *Lacking a Connection to a Community Water System: Water Quality and Human Health Impacts in El Paso Colonias*, (oral: presenter), Section on Environmental Justice Research: Contemporary Issues and Emerging Topics II, American Association of Geographers Annual Conference, Los Angeles, CA.
- 2012 **McDonald, Y.J.** *Lacking a connection to a municipal water supply: A case study of an environmental and health hazards in El Paso County Colonias*, (oral), Section on Jeanne X. Kasperson Hazards Specialty Group session, American Association of Geographers Annual Conference, New York, NY.
- 2011 **McDonald, Y.J.** and Grineski, S.E. *Lack of plumbing: A bi-national comparison of environmental injustice in El Paso and Ciudad Juárez* (poster: presenter), BienESTAR: Building a Research Agenda on Water, Sanitation, Toxic Chemicals, and Public Health in the *Colonias* Conference, El Paso, TX.
- 2011 **McDonald, Y.J.** and Grineski, S.E. *Social determinants of health risk due to lack of plumbing: The case of El Paso-Ciudad Juárez*, (oral: presenter), Section on Geospatial and Environmental Health session, American Association of Geographers Annual Conference, Seattle, WA.

\*Peer-reviewed, <sup>3</sup>M.Ed. at Vanderbilt University

### Invited Presentations:

- 2019 **McDonald, Y.J.** *Measuring Space and Place, Geographic Information Systems and Water as the Exposure*. EPI 8331: Quantitative Methods & Measurement, Institute for Medicine and Public Health, School of Medicine, Vanderbilt University Medical Center, Nashville, TN.
- 2019 **McDonald, Y.J.** *Environmental Justice*. HOD 8130 Public Policy and Advocacy, Peabody College, Vanderbilt University, Nashville, TN.
- 2019 **McDonald, Y.J.** *Geographic Information Systems (GIS) and Public Health*. IDIS 5614: Community Healthcare: Patients, Populations, and Systems, School of Medicine, Vanderbilt University Medical Center, Nashville, TN.

- 2019 **McDonald, Y.J.** *Geographic Information Systems (GIS) and Public Health*. IDIS 5614: Community Healthcare: Patients, Populations, and Systems, School of Medicine, Vanderbilt University, Nashville, TN.
- 2018 **McDonald, Y.J.** *Applications of Geographic Information Systems (GIS) in Health Research*. HOD 8810 Community Inquiry, Peabody College, Vanderbilt University, Nashville, TN.
- 2018 **McDonald, Y.J.** *My Professional Journey: Graduate Student to Junior Faculty*. HOD 8000 Community Research and Action Proseminar, Peabody College, Vanderbilt University, Nashville, TN.
- 2018 **McDonald, Y.J.** *Health & Place: Applications of Geographic Information Systems in Climate Change, Drinking Water, and Accessibility to Healthcare Services*. HOD 7400 Community Intervention and Change, Peabody College, Vanderbilt University, Nashville, TN.
- 2017 Hotez, P.J., **McDonald, Y.J.**, Parker, G.W., Tesh, R.T., and Wooton, S.H. *Neglected Infections Emerging in the Epoch of the Anthropocene* (panel), The Academy of Medicine, Engineering and Science of Texas Annual Conference, San Antonio, TX.
- 2015 **McDonald, Y.J.** *How Spatial Epidemiology Influenced My Research: A Geographer's Perspective*. Graduate course in Spatial Epidemiology, Texas A&M School of Public Health, College Station, TX.

#### Interviews:

- 2018 Reuters Health (Shereen Lehman). Commentary on “Drinking water violations and environmental justice in the United States, 2011-2015” article published in the *American Journal of Public Health*.

#### RESEARCH GRANTS:

##### External Grants

Sub-award on Award Number P20MD002287-05 from The Hispanic Health Disparities Research Center (HHDRC) funded by the National Institutes of Health/National Institute on Minority Health and Health Disparities, The University of Texas at El Paso and The University of Texas, Health Science Center at Houston, School of Public Health. “*The Impacts of Lack of Plumbing on Water Quality and Self-Reported Health in El Paso Colonias.*” Role: Co-Principal Investigator: **McDonald, Y.J.** (PI: Sara E. Grineski.advisor). Graduate Student Research Grant. \$5,000. (2011 – 2012)

Sub-award on Award Number P20MD002287-04 from The HHDRC, funded by the National Institutes of Health/National Institute on Minority Health and Health Disparities, The University of Texas at El Paso and The University of Texas, Health Science Center at Houston, School of Public Health. Role: Co-Principal Investigator: **McDonald, Y.J.** (PI: Sara E. Grineski/advisor). “*Socio-spatial and Temporal Disparities: Water-borne Diseases and Risk in El Paso and Juárez.*” Graduate Student Research Grant. \$5,000. (2010 – 2011)

Funded through Purchase Order

CDC Safe Water for Community Health awarded to Tennessee Department of Health. “*Environmental Health Services Support for Public Health Drinking Water Programs to Reduce Drinking Water Exposures.*” PI: Mary-Margaret Fill. Role: Collaborative Partner: **McDonald, Y.J.** PO# 34301-0000185855 \$7,296 to support technical assistant (Dmitry Semenov<sup>4</sup> supervised by McDonald, Y.J.). (2019 - 2020), \$3,648 to support technical assistant (Dmitry Semenov<sup>4</sup> supervised by McDonald, Y.J.). (2018 - 2019)

<sup>4</sup>Undergraduate student at Vanderbilt University (HOD)

Under Review

National Institutes of Health Investigator-Initiated Application (R01). “*Birth Outcomes and Contaminant Mixtures in Community Water Systems.*” Lead PI: Hill, E.L., University of Rochester Medical Center (URMC). Vanderbilt University (VU) Role: Site PI: **McDonald, Y.J.** Co-Is: Tanzy Love (URMC), George Hornberger (VU), Jonathan Gilligan (VU), and William Hawkins (VUMC). Consultants: Chris Gennings (Mount Sinai) and James Salzman (UCLA and University of Santa Barbara). \$1,928,655. (Submitted October 5, 2019; Infectious Disease, Reproductive Health, and Asthma/Pulmonary Conditions (IRAP) study section on 02/27/-28/2020)

**Intramural Grants**

Interdisciplinary Discovery Grant. “*Water, water everywhere: what drops are safe to drink?*” Lead Faculty: George Hornberger, Role: Co-lead Faculty: **McDonald, Y.J.**, and Faculty Collaborators: Jonathan Gilligan, William Hawkins, Patrick Greiner, Doug Fisher, Michelle Marcus, and Janey Camp. \$98,374. (2019 – 2021)

Meharry-Vanderbilt Community Engaged Research Core and the Mini-Grant. Center for Advancing Translational Sciences (CTSA) award number UL1TR000445 from the National Center for Advancing Translational Sciences. “*Behind the Pipes: Tennessee Public Water Systems Operators Insights on the Challenges of Ensuring a Safe Drinking Water Supply.*” Role: Faculty PI: **McDonald, Y.J.** Community partner: Bob Freudenthal, Tennessee Utility Education Corporation (TUEC). \$10,000 (2019-2020).

Schwab Faculty Development & Support Award. National Institutes of Health (NIH) Environmental Health Matters Initiative (EHMI) workshop: Quality Water from Every Tap. \$795. (2019)

Schwab Faculty Development & Support Award. National Institutes of Health (NIH) Regional Seminar on Program Funding & Grants Administration. \$1,000. (2019)

Schwab Faculty Development & Support Award. ICPSR “R:Learning by Example” workshop. \$1,000. (2018)

Center for Environmental Research and Management Seed Research Grant, The University of Texas at El Paso. \$500. (2010)

**Scholarships**

Office of Graduate and Professional Studies, Texas A&M University. \$4,200. (2016- 2017)

Unocal Graduate Scholarship in Geoscience. College of Geosciences Scholarship Committee, Texas A&M University. \$1,500. (2016 – 2017)

Cary N Smith '34 Memorial Scholarship, Academic Excellence Award. University Scholarship Committee, Texas A&M University. \$1,000 (*Declined*). (2016-2017)

Diversity Scholarship in Geoscience. College of Geosciences Scholarship Committee, Texas A&M University. \$1,500. (2015- 2016)

Desert Mountain Chapter, American Water Works Association Scholarship. \$1,500. (2013 – 2014)

Desert Mountain Chapter, American Water Works Association Scholarship. \$1,500. (2011-2012)

Texas Section, American Water Works Association Scholarship. \$2,000. (2011-2012)

Allien and Paul C. Davidson Graduate Student Scholarship, The University of Texas at El Paso Graduate School. \$2,000. (2011-2012)

Enterprising and Professional Women Paso del Norte Scholarship. \$1,000. (2010-2011)

**TEACHING:**

Position	Course Title	Course #	Semester(s)	# of Students	University
Assistant Professor	HOD Capstone	HOD 4950/4951/ 4592/4953	Fall 2019	11	Vanderbilt University
Assistant Professor	Environmental Health	HOD 3650	Spring 2019	20	Vanderbilt University
Assistant Professor	HOD Capstone	HOD 4950/4951/ 4592/4953	Spring 2019	11	Vanderbilt University
Assistant Professor	Special Topics: Systematic Literature Review	HOD 7500 02	Fall 2018	6	Vanderbilt University
Assistant Professor	HOD Capstone	HOD 4950/4951/ 4592/4953	Fall 2018	11	Vanderbilt University
Assistant Professor	HOD Capstone	HOD 4950/4951/ 4592/4953	Spring 2018	10	Vanderbilt University
Lecturer	Cultural Geography	ANTH/GEOG/ SOCI 1310	Summer 2016	16	The University of Texas at El Paso

**MENTORING/ADISING:**

**M.Ed. Student Committees:**

Kayla Anderson: Thesis Title: *“Understanding the Impact of Technical, Financial, and Managerial Challenges as Expressed by Public Water Operators on Monitoring and Reporting Violations in the State of Tennessee.”* Role: Chair (2018 cohort)

Katherine Allison: Thesis Project Title: *“Sumner County Climate Resiliency.”* Role: Chair (2018 cohort)

**Research Assistant Student Supervision:**

Drinking Water Justice Lab. I lead and mentor 13 students actively engaged in the research lab: three Ph.D. candidates (two civil & environmental engineering and one sociology); two M.Ed. students (CDA); one MS student (data science); and seven undergraduate students (four HOD, two MHS, one civil & environmental engineering). (2017 – present)



Renal Replacement Therapy Project. I mentor three members: two M.Ed. and one undergraduate political science major. All of the students graduated May 2019. I am still working with undergraduate student to complete projects for co-authorship. (2017 – present)

### **Honors Thesis**

Catherine Paxton. Research topic: Workforce issues in rural and small community water systems, what happens when knowledge dries up? (2019 – 2020)

Natalie Singer. Research topic: A geospatial temporal approach to fatal and non-fatal opioid overdoses in Massachusetts. (2018-2019)

**Current M.Ed. Student Advising:** Three M.Ed. CDA program advisees (Katherine Allison and Krishanna J. Prince (2018 cohort) and Devin Irish (2019 cohort)

**Current Undergraduate Student Advising:** 26 students.

### **SERVICE:**

#### **Professional Service**

Student Representative for Spatial Analysis and Modeling Specialty Group of the American Association of Geographers. (2014 – 2017)

#### **Journal Reviewer**

Exceptional Reviewer for *The Journal of Rural Health* (2016-2017)

*Environmental Justice; Healthcare; International Journal of Environmental Research and Public Health; Journal of Health Care for the Poor and Underserved; Journal of Hydrology; Journal of Medical Systems; PLOS ONE; Social Science & Medicine; Society and Natural Resources; Sustainability; Systematic Reviews; The Journal of Rural Health*

#### **Community Service**

Tennessee Drinking Water Key Stakeholders. Role: Chair. Monthly meeting to prioritize and monitor progress of collaborative drinking water research agenda. Group members comprise representatives from Tennessee Department of Health (TDH), Tennessee Department of Environment & Conservation (TDEC), Tennessee Association of Utility Districts (TAUD), Vanderbilt University, and community water systems operators. (2018 – present)

#### **University Service**

- Sustainability Advisory Council member (2020- 2022)
- Dr. Bob Bullard Day: Raising Awareness of Environmental and Climate Justice (2019)
- Vanderbilt Initiative for Interdisciplinary Geospatial Research, Advisory Committee (2018 – 2020)
- Vanderbilt Research IT, Faculty Advisory Committee (2018 – 2020)
- GIS Day(s) Planning Committee (2018): Keynote speaker coordinator: Mei-Po Kwan
- Judge for 3MT Competition (2018)
- Data Science Champion for Department of Human & Organizational Development to support Data Science Visions Working Group (2017 – present)

- Vanderbilt Initiative for Smart City Operations Research (VISOR) Trans-Institutional Initiative. Planning Committee for Gentrification/Equitable Development Workshop (2017 – 2018)

**College**

- Using Geographic Information Systems to Improve Decision-Making: A Peabody Research Methods and Strategies Seminar (invited panelists, 2020)
- Peabody Faculty Research Presentation (oral). The Campaign Cabinet for Vanderbilt, Peabody College, Vanderbilt University, Nashville, TN (2018)

**Department**

- Co- Chair, CRA Recruitment Committee (2018 - 2019)
- Member, HOD Strategic Planning Committee (2019)
- Teaching Observations for tenure review (2019)
- First Year Student Advisor (2018)
- Member, CRA Ad Hoc CRA Health Track Committee on Curriculum/Program Studies (2017 – present)
- Chair, CRA Recruitment Committee (2017)
- Co-organizer HOD schedule for Ph.D. Pre-VU Recruitment Event (2017)