

David R. Abernathy, PhD

Department of Global Studies
Warren Wilson College
PO Box 9000
Asheville, NC 28815

EDUCATION

- Doctor of Philosophy Department of Geography, University of Washington, 2000.
- Master of Arts Department of Geography, University of North Carolina at Charlotte,
1995.
- Bachelor of Arts School of Journalism, University of North Carolina at Chapel Hill, 1990.

POSITIONS HELD

- Chair, Department of Global Studies, Warren Wilson College, July 2004-June 2016.
- Professor, Department of Global Studies, Warren Wilson College, July 2003-present.
- Director of Educational Technology, Warren Wilson College, July 2013-June 2016.
- Assistant Director of Development, The Graduate School, University of Washington, February 2002-June 2003.
- Lecturer, Department of Geography, University of Washington, June 2000-August 2001.
- GIS Consultant, Health Services Research and Development, Department of Veterans Affairs Medical Center, May 1999-December 2000.
- Instructor, Department of Geography, University of Washington, January-March 1998, Summers 1997-1999.
- Teaching Assistant, Department of Geography, University of Washington 1996-1999.
- Teaching Assistant, School of Public Health, University of Washington, January-March 1997.
- Consultant, Center for Social Science Computation and Research, University of Washington, September-December 1995, June-September 1996, September-December 1999.
- Teaching Assistant, Department of Geography, University of North Carolina at Charlotte, January-May 1995.
- Research Assistant, ACCRA Community Profiles Project, University of North Carolina at Charlotte, August 1993-December 1994.
- Media Relations and Health Promotion Specialist, Blue Cross and Blue Shield of North Carolina, January 1991-May 1993.

PUBLICATIONS

- Abernathy, D. (2016). *Using Geodata and Geolocation in the Social Sciences: Mapping Our Connected World*. SAGE.

Abernathy, D. (2012). "Hand-Held Devices." Anheier, H. K., & Juergensmeyer, M. (Eds.). (2012). *Encyclopedia of global studies*. Sage Publications.

Abernathy, D. (2011). "Teaching the geoweb: interdisciplinary undergraduate research in wireless sensor networks, web mapping and geospatial data management." *Journal of Geography*, 110(1): 27-31.

Abernathy, D. (2010). Global studies abroad: toward a more integrated and meaningful study abroad experience. *global-e journal*, vol.4(2). Accessible at <http://global-ejournal.org/>

Thomas, N., Dobson, G., Dezendorf, P., Cantrell, M., & Abernathy, D. (2009). Development of a parcel-based density analysis tool to evaluate growth patterns in Western North Carolina. *Journal of Conservation Planning*, vol. 5.

Abernathy, D. (2005). Think Glocally, Act Nobly: Justice and the Politics of Place in the Environmental Movement. *Heartstone* 6(2), 8-13.

Book Review of World Health and Disease, in *Social Science and Medicine* 40(2), pp. 276-277, 1995.

PRESENTATIONS

"The Promise and Perils of Using OSGEO-Live in the Classroom." North Carolina GIS Conference, Raleigh, NC, 2017.

"Collaborative Asset Mapping for Regional Food Security: ODK & Google Fusion Tables." Southeastern Region of the Association of American Geographers Meeting, Asheville, NC, 2012.

"Building the 'Bridge of Life,' or burning it? The construction and constriction of biodiversity on the isthmus of Panama." Colloquium Series presentation for the Department of Global Studies, Warren Wilson College, 2011.

"Ecologies of Scale: Using a Wireless Sensor Network for Ecological Monitoring in Panama." Invited presentation, Department of Geography and Planning, Appalachian State University, 2008.

"The Culture of Data Visualization and Understanding: Visualizing Local GIS Data." Invited panel presentation, AppliedVis Symposium, 2006.

"A novel problem': Territoriality, public health and the preservation of order in the Panama Canal Zone." European Social Science History Conference, 2004.

"The war on malaria: political ecology and disease eradication in the Panama Canal Zone." Invited lecture, UW Program on the Environment course, 2001.

"The political-ecological landscape of Panama." Invited guest lecture, Mary Washington College, 1999.

"Canal cartographies: disease, territoriality and scientific evidence in the Panama-Nicaragua route dispute." History of Science Society Conference, 1999.

"Imperialism and the politics of malaria in Panama." Association of American Geographers, 1999.

“The biomilitarism of U.S. colonialism: tropical medicine and the discourse of disease eradication in Panama.” Third Annual Western Geography Graduate Student Conference, 1999.

“People, places, patterns...and pathogens? Disease ecology in a globalizing world.” Geography Awareness Week presentation at Seattle Central Community College, 1998.

“Globalization as disease causation? Revisiting the geography of resurgent malaria.” Association of American Geographers, 1998.

“Pro Mundi Beneficio: trade, tourism and the political ecology of emerging diseases in Panama.” Association of American Geographers, 1997.

“Geographical and ecological factors impacting the emergence of dengue and dengue hemorrhagic fever.” Association of American Geographers, 1996.

“Access or excess: the diffusion of cardiac technology and its impact on heart disease Mortality in North Carolina.” Association of American Geographers, 1995.

“The Carolinas’ tuberculosis context: AIDS, poverty, crowding and race.” Presented with Dr. Gerald Pyle at the 6th Annual International Medical Geography Symposium, 1994.

GIS RESEARCH PROJECTS

Farm to tablet: Enhancing sustainable agriculture with local data analysis and visualization. Funded by the Work Colleges Consortium Work-Learning Grant. The goal is to install a weather station on the WWC College Farm and collect local weather data for use by the Farm Manager and crew. Additional sensors are being developed by students in the library’s Tech Laboratory that can be deployed on the farm to measure soil moisture and temperature. This data will then be used by students in courses on statistics and geographic information systems. September, 2016 to May, 2017.

Biodiversity mapping and sensor network project conducted for a conservation nonprofit in Panama (CREA – Conservation through Research, Education and Action). Funded by a \$100,000 grant from the Panamanian Secretaría Nacional de Ciencia, Tecnología e Innovación, this project focused on the development of a comprehensive GIS database for the collection, monitoring and mapping of biodiversity on the 1000-acre Cocobolo Nature Reserve in Central Panama. August, 2007 to July, 2010.

Watershed indexing project in conjunction with the Warren Wilson College Environmental Leadership Center, U.S. Fish and Wildlife Service, and Resource Data, Inc. Data on NC watersheds being collected and analyzed as a tool for tracking and monitoring development at the watershed level, performing cost-benefit analyses of species/habitat management options, and conducting growth models. September, 2003 to May, 2008.

Open source and participatory GIS at Warren Wilson College. Research on the use of open source spatial technologies and participatory research practices in order to apply GIS to regional social justice and environmental conservation issues. Pilot studies include the development of a migrant housing database for a local health clinic, as well as a web mapping application for an environmental study being conducted in the Great Smoky Mountains National Park. September, 2004 to August, 2005.

Spatial analyses for projects on geographic access to health care and on the geographic distribution of diabetes and amputation among the US veteran population, conducted for the Health Services Research and Development department of the Veterans Affairs Medical Center in Seattle. May, 1999 to September, 2000.

Location analysis for potential satellite campus for the University of North Carolina at Charlotte. Created a GIS-based demographic analysis of Mecklenburg County for optimum location of a potential satellite campus site. Project undertaken by Department Chair at request of Chancellor. Involved creating a user interface for quick analyses using Census tract and drive time zone data. Presented to Chancellor in October, 1994.

Spatial analysis of teen pregnancy and domestic violence in Gaston County, NC. Involved address-matching data on teen pregnancy and domestic violence and cross-tabulating with socioeconomic variables to create ZIP code maps of areas in possible need of public health intervention. Presented to Gaston County Board of Health by Gerald Pyle, September 1994.

GRANTS AND AWARDS

WWC Academic Affairs Office sabbatical granted for Spring, 2017.

“Farm to tablet: Enhancing sustainable agriculture with local data analysis and visualization.” Work Colleges Consortium Work-Learning Grant, 2016. \$3000.

“Mote/Remote: Distributed Environmental Data Collection at Warren Wilson College.” WWC Faculty Innovation Grant, 2013. \$1,500.

Appalachian College Association Faculty Fellowship to support sabbatical research, 2009-2010. \$23,800.

WWC Faculty Development Grant, 2008. \$4500.

Conservation Grant, Environmental Systems Research Institute, 2007. Approximately \$7500 in in-kind geographic information systems software, books and training.

“Monitoring and Managing Natural Resources in Panama using GIS” (co-authored with Michael Roy, executive director of CREA – *Conservation through Research, Education and Action*). Panamanian Secretaria Nacional de Ciencia, Tecnologia e Innovacion (SENACYT), 2006. \$100,000.

“Global Information, Mobile Communication and Citizen Media.” Fussler Fund Research Grant, 2006. \$1200.

“GIS and Justice: Open Source and Participatory Geographic Information Systems at Warren Wilson College.” Fussler Fund Research Grant, 2005. \$2200.

Appalachian College Association Travel Grant, 2003. \$500.

Jacques May Dissertation Prize, Medical Geography Specialty Group of the AAG, 2001.

History of Science Society/National Science Foundation travel grant, 1999.

Department of Geography Dissertation Fellowship, 1999.

CSDE Mellon Grant for fieldwork in Panama, 1997.

Ronald W. Taylor Award for Geographic Excellence, Department of Geography, University of North Carolina at Charlotte, 1994.

Outstanding Employee Award, Blue Cross and Blue Shield of North Carolina, 1992.

SERVICE

International & Intercultural Programs Committee, Warren Wilson College, September 2003-present.

Davidson Grant Selection Committee, Fall 2012-present.

Chair of the VPAF Search, Spring 2014.

Faculty Forum Member, Warren Wilson College. September 2011-May 2013.

Chair, Faculty Development and Sabbatical Committee, Warren Wilson College. August 2011-May 2013.

Academic Policies and Planning Committee, Warren Wilson College. August 2007-2010.

Co-convener of the Faculty Body, Warren Wilson College, May 2006-May 2007.

Long Range Land Use Planning Committee, Warren Wilson College, August 2005-2011.

Campus Greening Committee, Warren Wilson College, May 2005-January 2006.

Chairs Committee, Warren Wilson College, August 2004-2016.

Academic Programs Committee, Warren Wilson College, August 2004-May 2006.

Graduate student representative on ten-year review committee, Department of Geography, University of Washington, 1996.

Co-coordinator of weekly colloquium series, Department of Geography, University of Washington, 1996-1997.

Member, University of Washington Working Group on Emerging and Resurging Infectious Diseases, 1995-1998.

MEMBERSHIPS

WWC GIS lab now included as one of 108 ICA-OSGeo labs worldwide focusing on teaching and research in open source GIS.

Delegate, Asheville-Buncombe Food Policy Council, March 2012-August 2013.

Board member, World Affairs Council of Western North Carolina, May 2006-April 2007.

Member, Technology Team of the HUB Economic Development Program for Buncombe County, August 2006-2008.

Member, Association of American Geographers.

Member, Society for Conservation GIS.