

# JOHN P. WILSON

## BIOGRAPHICAL SKETCH



**Dr. John P. Wilson** is Professor of Sociology and Spatial Sciences in the Dana and David Dornsife College of Letters, Arts and Sciences at the University of Southern California (USC) where he directs the Spatial Sciences Institute as well as the Geographic Information Science & Technology (GIST) Graduate Programs and GIS Research Laboratory, and also holds adjunct appointments as Professor in the School of Architecture and in the Viterbi School of Engineering's Departments of Computer Science and Civil & Environmental Engineering.

From 1998 to 2001 and 2007 to 2010 he was Chair of the Department of Geography at USC, and from 1992 to 1997 he was Professor of Geography in the Department of Earth Sciences, Adjunct Professor in the Department of Plant & Soil Science, and Director of the Geographic Information and Analysis Center (GIAC) at Montana State University (MSU). His early career was as Assistant Professor (1984-1990) and then Associate Professor of Geography (1990-1994) with corresponding adjunct appointments in Plant & Soil Science at MSU. He founded GIAC at MSU in 1989 and the GIS Research Laboratory, GIST Graduate Programs, and Spatial Sciences Institute at USC in 1997, 2007 and 2010, respectively. He has held several visiting appointments in environmental studies, geography, and planning at the Australian National University, University of Canterbury, University of Utrecht, University of Waikato, and most recently, in the Institute of Geographical Sciences and Natural Resources Research at the Chinese Academy of Sciences.

He founded the journal *Transactions in GIS* (Wiley-Blackwell) in 1996 and has served as Editor-in-Chief since its inception. He currently serves on the editorial board of the *Journal of Geo-Spatial Information Science* (2011-2020), and the *Annals of the Association of American Geographers Review of Books* (2013-2020), and has previously served on the editorial boards of *Applied Geography* (1992-2001) and the *Annals of the Association of American Geographers* (2006-2009). He has chaired the Applied Geography Specialty Group of the Association of American Geographers (1989-1991) and the Research Committee of the University Consortium for Geographic Information Science (UCGIS) (2002-2005). He also served on the Board of Directors (2003-2006) and as President of UCGIS from 2006 to 2007. He currently serves as Editor-in-Chief for the UCGIS GIST Body of Knowledge 2.0 project and is an active participant in the UNIGIS International Network, a worldwide consortium of 10+ institutions that develops and delivers online geographic information science academic programs.

His research is focused on the modeling of human and environmental systems and makes extensive use of GIS tools, spatial analysis, and computer models. He has published numerous books and articles on these topics, including two edited volumes, *Terrain Analysis: Principles and Applications* (Wiley, 2000) and the *Handbook of Geographic Information Science* (Blackwell, 2008). Much of this work is collaborative and cross-disciplinary in character with the general goal of improving our knowledge and understanding of the factors linking people, their environments, and their health. The work of his group can be seen on the website <http://spatial.usc.edu/>. He has received numerous honors for his research and teaching, the most recent being recognized as a Fellow of the University Consortium for Geographic Information Science (2014) and his receipt of a Lifetime Achievement Award by the International Association of Chinese Professionals in Geographic Information Science (2016). He also received a Mellon Award for Excellence in Mentoring from the Center for Excellence in Teaching at USC (2005) and the Albert S. Raubenheimer Outstanding Faculty Award for his research, teaching, and service contributions in Dornsife College at USC (2004).

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## CURRICULUM VITAE

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### CURRENT APPOINTMENTS

#### University of Southern California

- 2014- GIS Unit Leader, Spatial and Exposure Analytics Facility Core, Southern California Environmental Health Sciences Center
- 2011- Professor, Department of Sociology
- 2010- Director, Spatial Sciences Institute
- 2010- Adjunct Professor, School of Architecture
- 2006- Director, Geographic Information Science and Technology Graduate Programs
- 2006- Adjunct Professor, Department of Computer Science
- 2006- Adjunct Professor, Department of Civil and Environmental Engineering
- 1997- Director, GIS Research Laboratory

#### Chinese Academy of Sciences

- 2014- Visiting Professor (Thousand Talents Program), Institute of Geographical Sciences and Natural Resources Research

#### Blackwell-Wiley

- 1996- Editor-in-Chief, Transactions in GIS

#### University Consortium for Geographic Information Science

- 2015- Editor-in-Chief, Geographic Information Science & Technology Body of Knowledge Project

### EDUCATION

- 1986 Ph.D., Geography, University of Toronto, Canada  
Dissertation Title: *The Use of Statistical Models to Document Environmental Change in the Lake Simcoe Basin*
- 1979 M.Sc. (with Distinction), Geography, University of Canterbury, New Zealand  
Thesis Title: *Internal Migration in the Gilbert and Ellice Islands Colony: An Analysis of the 1973 Census Data*
- 1978 B.Sc. Honors (1<sup>st</sup> Class), Geography, University of Canterbury, New Zealand
- 1976 L.L.B. Honors (2<sup>nd</sup> Class, 2<sup>nd</sup> Division), Law, University of Canterbury, New Zealand

## PROFESSIONAL EXPERIENCE

Chinese Academy of Sciences

2010-2014 Visiting Professor, Institute of Geographical Sciences and Natural Resources Research

University of Southern California, Los Angeles, California

2008-2014 GIS Unit Leader, Integrative Health Sciences Facility Core, California Environmental Health Sciences Center

2007-2010 Chair, Department of Geography

1998-2001 Chair, Department of Geography

1997-2010 Professor, Department of Geography

1996-1997 Visiting Professor, Department of Geography

1995-1996 Visiting Professor, Department of Geography and School of Urban Planning and Development

University of Utrecht, Utrecht, Netherlands

1998 Visiting Belle van Zuylen Chair, Department of Physical Geography

GeoInformation International

1995-1997 Editor-in-Chief, Transactions in GIS

Australian National University, Canberra, Australia

1994 Visiting Fellow, Centre for Resource and Environmental Studies

University of Waikato, Hamilton, New Zealand

1990 Visiting Lecturer, Department of Geography

Montana State University, Bozeman, Montana

1994-1997 Professor, Department of Earth Sciences

1994-1997 Adjunct Professor, Department of Plant and Soil Science

1990-1994 Associate Professor, Department of Earth Sciences

1990-1994 Adjunct Associate Professor, Department of Plant and Soil Science

1989-1996 Director, Geographic Information and Analysis Center

1984-1990 Assistant Professor, Department of Earth Sciences

University of Toronto, Toronto, Canada

1983-1984 Instructor, Department of Geography

1979-1983 Graduate Teaching Assistant, Department of Geography

University of Canterbury, Christchurch, New Zealand

2013 Visiting Erskine Fellow, Department of Geography

1978-1979 Laboratory Demonstrator, Department of Geography

## HONORS AND AWARDS

### Professional

2016 Lifetime Achievement Award, International Association of Chinese Professionals in Geographic Information Science

2015 Best Professional Paper, *Journal of Spatial Science* (Kim, K., & Wilson, J. P. 2015. Planning and visualising 3D routes for indoor and outdoor spaces using CityEngine. *Journal of Spatial Science*, 60, 179-193)

- 2014 Fellow, University Consortium for Geographic Information Science
- 2008 Special Achievement in GIS Award for Leadership with Geospatial Technology, Esri International User Conference
- 2006 Special Achievement in GIS Award for Leadership in Geospatial Teaching, Esri International User Conference
- 2005 Best Practices Gold Award for Distance Learning Programming, U.S. Distance Learning Association
- 2005 Mellon Award for Excellence in Mentoring, Center for Excellence in Teaching, University of Southern California
- 2005 Webby Worthy Selection, Ninth Annual Webby Awards
- 2004 Albert S. Raubenheimer Outstanding Faculty Award, Dana and David Dornsife College of Letters, Arts and Sciences, University of Southern California
- 2003 Outstanding Teaching Award, Latter-Day Saints Student Association, University of Southern California

### **Graduate**

- 1983 Ph.D. Student Essay Prize, Ontario Division, Canadian Association of Geographers
- 1982-1983 Kenneth E. Grant Graduate Research Scholarship, Soil Conservation Society of America
- 1980-1984 Province of Ontario Graduate Scholarship
- 1979-1980 Connaught Scholarship, University of Toronto
- 1979 George Jobberns Prize in Geography, University of Canterbury
- 1979 Charles Cook, Warwick House Memorial Scholarship, University of Canterbury

### **Undergraduate**

- 1973-1975 Longsdale Scholarship, University of Canterbury
- 1973 New Zealand Geographical Society Annual Prize

### **PUBLICATIONS**

#### **Books**

- 2008 **Wilson, J.P.**, & Fotheringham, A.S. (Eds.), *Handbook of geographic information science*. Oxford, UK: Blackwell.
- 2000 **Wilson, J.P.**, & Gallant, J.C. (Eds.), *Terrain analysis: Principles and applications*. New York, NY: John Wiley and Sons.

#### **Book Chapters**

- 2014 **Wilson, J.P.**, Towards geodesign: Building new education programs and audiences. In D. Lee, E. Dias, & H. Scholten (Eds.), *Geodesign by integrating design and geospatial sciences* (pp. 357-369). Berlin, Germany: Springer.
- 2013 **Wilson, J.P.**, & Bishop, M.P., Geomorphometry. In J.F. Shroder (Ed.), *Treatise in geomorphology: Volume 3, Remote sensing and GIScience in geomorphology* (pp. 162-186). San Diego, CA: Academic Press.

- 2012 **Wilson, J.P.**, & Goodchild, M.F., Rethinking spatial sciences education programs. In T. Jekel, A. Car, J. Strobl, & G. Griesebner (Eds.), *Geoinformatics Forum 2012: Geovisualization, society and learning conference proceedings* (pp. 242-245). Berlin, Germany: Wichmann.
- 2012 Wolch, J., Longcore, T.R., & **Wilson, J.P.**, Unpaving paradise: The Green Visions Plan for southern California. In D. Sloane (Ed.), *Planning Los Angeles* (pp. 230-239). Los Angeles, CA: APA Planners Press.
- 2008 **Wilson, J.P.**, Aggett, G.R., Deng, Y.X., & Lam, C.S., Water in the landscape: A review of contemporary flow routing algorithms. In Q. Zhou, B.G. Lees, & G.A. Tang (Eds.), *Advances in digital terrain analysis* (pp. 213-236). Berlin, Germany: Springer Lecture Notes in Geoinformation and Cartography.
- 2008 Goldberg, D.W., **Wilson, J.P.**, & Knoblock, C.A., Exploring the use of gazetteers and geocoders for the analysis and interpretation of a dynamically changing world. In K.S. Hornsby, & M. Yuan (Eds.), *Understanding the dynamics of geographic domains*. (pp. 51-74). Boca Raton, FL: CRC Publishers.
- 2008 **Wilson, J.P.**, & Deng, Y.X., Terrain analysis. In K.K. Kemp (Ed.), *Encyclopedia of geographic information science* (pp. 465-467). Thousand Oaks, CA: Sage Publications.
- 2008 Fotheringham, A.S., & **Wilson, J.P.**, Geographic information science: An introduction. In **J.P. Wilson**, & A.S. Fotheringham (Eds.), *Handbook of geographic information science* (pp. 1-10). Oxford, UK: Blackwell.
- 2008 Deng, Y.X., **Wilson, J.P.**, & Gallant, J.C., Terrain analysis. In **J.P. Wilson**, & A.S. Fotheringham (Eds.), *Handbook of geographic information science* (pp. 417-435). Oxford, UK: Blackwell.
- 2004 Ryan, C.M., **Wilson, J.P.**, B. Fulton, Living on the edge: Growth policy choices for Ventura County. In J. Wolch, M. Pastor, & P. Dreier (Eds.), *Up against the sprawl: Public policy and the making of 21<sup>st</sup> century Los Angeles* (pp. 309-341). Minneapolis, MN: University of Minnesota Press.
- 2000 **Wilson, J.P.**, & Gallant, J.C., Digital terrain analysis. In **J.P. Wilson**, & J.C. Gallant (Eds.), *Terrain analysis: Principles and applications* (pp. 1-27). New York, NY: John Wiley and Sons.
- 2000 Gallant, J.C., **Wilson, J.P.**, Primary topographic attributes. In **J.P. Wilson**, & J.C. Gallant (Eds.), *Terrain analysis: Principles and applications* (pp. 51-85). New York, NY: John Wiley and Sons.
- 2000 **Wilson, J.P.**, & Gallant, J.C., Secondary topographic attributes. In **J.P. Wilson**, & J.C. Gallant (Eds.), *Terrain analysis: Principles and applications* (pp. 87-131). New York, NY: John Wiley and Sons.
- 2000 **Wilson, J.P.**, Repetto, P.L., & Snyder, R.D., Effect of data source, grid resolution, and flow routing method on computed topographic attributes. In **J.P. Wilson**, & J.C. Gallant (Eds.), *Terrain analysis: Principles and applications* (pp. 133-161). New York, NY: John Wiley and Sons.
- 2000 Wheatley, J.M., **Wilson, J.P.**, Ma, Z., Redmond, R.L., & DiBenedetto, J., Automated land cover mapping using LANDSAT TM images and topographic attributes. In **J.P. Wilson**, &

- J.C. Gallant (Eds.), *Terrain analysis: Principles and applications* (pp. 355-389). New York, NY: John Wiley and Sons.
- 2000 Gallant, J.C., Hutchinson, M.F., & **Wilson, J.P.**, Future directions for terrain analysis. In **J.P. Wilson**, & J.C. Gallant (Eds.), *Terrain analysis: Principles and applications* (pp. 423-427). New York, NY: John Wiley and Sons.
- 1999 **Wilson, J.P.**, & Lorang, M.S., Spatial models of soil erosion and GIS. In A.S. Fotheringham, & M. Wegener (Eds.), *Spatial models and GIS: New potential and new models*. (pp. 83-108). London, UK: Taylor and Francis.
- 1999 **Wilson, J.P.**, Local, national, and global applications of GIS in agriculture. In P.A. Longley, D.J. Maguire, M.F. Goodchild, & D.W. Rhind (Eds.), *Geographical information systems: Volume 2, Management issues and applications* (pp. 981-998). New York, NY: John Wiley and Sons (Reprinted in Second, Abridged Edition, 2005).
- 1999 **Wilson, J.P.**, Current and future trends in the development of integrated methodologies for assessing non-point source pollutants. In D.L. Corwin, K. Loague, & T.R. Ellsworth (Eds.), *Advanced information technologies for assessing nonpoint source pollution in the vadose zone* (pp. 343-361). Washington, D.C.: American Geophysical Union.
- 1998 **Wilson, J.P.**, & Gallant, J.C., Terrain-based approaches to environmental resource evaluation. In S.N. Lane, K.S. Richards, & J.H. Chandler (Eds.), *Landform monitoring, modeling and analysis* (pp. 219-240). London, UK: John Wiley and Sons.
- 1995 Spangrud, D.J., **Wilson, J.P.**, Jacobsen, J.S., Nielsen, G.A., & Tyler, D.A., Sensitivity of computed terrain attributes to the number and pattern of GPS-derived elevation data. In P.C. Robert, & R.H. Rust (Eds.), *Site-specific management for agricultural systems* (pp. 285-301). Madison, WI: American Society of Agronomy.
- 1993 Moore, I.D., Turner, A.K., **Wilson, J.P.**, Jenson, S.K., & Band, L.E., GIS and land surface-subsurface process modeling. In M.F. Goodchild, B.O. Parks, & L.T. Steyaert (eds.), *Environmental modeling with GIS* (pp. 197-230). New York, NY: Oxford University Press.
- 1990 Moore, I.D., Grayson, R.B., & **Wilson, J.P.**, Runoff modeling in complex three-dimensional terrain. In H. Lang, & A. Musy (Eds.), *Hydrology in mountainous regions: Hydrological measurements, the water cycle* (pp. 591-598). Wallingford, UK: International Association of Hydrological Sciences Publication No. 193.
- 1988 **Wilson, J.P.**, The management of soil and water resources: Information requirements and models. In R.D. Bedford (Ed.), *Geography: A celebration* (pp. 84-109). Christchurch, New Zealand: University of Canterbury.
- 1981 Pushchak, R., & **Wilson, J.P.**, Environmental impact assessment for urban natural areas. In W.A. Andrews, & J.L. Cramner-Byng (Eds.), *Urban natural areas: Ecology and preservation* (pp. 73-90). Toronto, Ontario, Canada: Institute for Environmental Studies Environmental Monograph No. 2.
- 1981 Lea, A.C., & **Wilson, J.P.**, Subsystems studies: Socio-economic factors. In W.A. Andrews, & J.L. Cramner-Byng (Eds.), *Urban natural areas: Ecology and preservation* (pp. 175-198). Toronto, Ontario, Canada: Institute for Environmental Studies Environmental Monograph No. 2.

## Refereed Journal Articles

- 2017 Lee, S.J., Rich, C., Longcore, T.R., & **Wilson, J.P.**, Increased home size and hardscape decreases urban forest cover in Los Angeles County's single-family residential neighborhoods. *Urban Forestry & Urban Greening*, 23, in press.
- 2017 Lue, E., & **Wilson, J.P.**, Mapping fires and Red Cross aid with demographic indicators of vulnerability. *Disasters*, 41, 409-426.
- 2016 Zhang, L.L., Yue, T.X., **Wilson, J.P.**, Wang, D.Y., Liu, Y., Zhao, N., Liu, D.D., Du, Z.P., Wang, Y.F., & Lin, C., Modelling of XCO<sub>2</sub> surface based on flight test of TanSat instruments. *Sensors*, 16, 1818.
- 2016 Yue, T.X., Zhang, L.L., Zhao, M.W., Wang, Y.F., & **Wilson, J.P.**, Space- and ground-based CO<sub>2</sub> measurements: A review. *Science China – Earth Sciences*, 56, 2089.
- 2016 Yue, T.X., Zhao, N., Fan, Z.M., Li, J., Chen, C.F., Lu, Y.M., Wang, C.L., Xu, B., & **Wilson, J.P.**, CMIP5 downscaling and its uncertainty in China. *Global & Planetary Change*, 146, 130-137.
- 2016 Yue, T.X., Wang, Y.F., Du, Z.P., Zhao, M.W., Zhang, L.L., Zhao, N., Lu, M., Larocque, G.R., & **Wilson, J.P.**, Analyzing the uncertainty of estimating forest carbon stocks in China. *Biogeosciences*, 13, 3991-4004.
- 2016 Chen, Z., Salam, M.T., Toledo-Corral, C., Watanabe, R.M., Xiang, A.H., Buchanan, T.A., Habre, R., Bastain, T.M., Lurmann, F., **Wilson, J.P.**, Trigo, E., & Gilliland, F.D., Ambient air pollutants have adverse effects on insulin and glucose homeostasis in Mexican Americans. *Diabetes Care*, 39, 547-554.
- 2016 Ghosh, R., Lurmann, F., Perez, L., Penfold, B., Brandt, S., **Wilson, J.P.**, Millet, M., Kunzli, N., & McConnell, R.S., Near roadway air pollution and coronary heart disease: Burden of disease and potential impact of greenhouse gas reduction. *Environmental Health Perspectives*, 124, 193-200.
- 2015 Lin, H., Batty, M., Jorgensen, S.E., Fu, B., Konecny, M., Voinov, A., Torrens, P., Lu, G., Zhu, A.X., **Wilson, J.P.**, Gong, J., Kolditz, O., Bandrova, T., & Chen, M., Virtual environments begin to embrace process-based geographic analysis. *Transactions in GIS*, 19, 493-498.
- 2015 Yue, T.X., Zhao, M.W., Zhao, N., Chen, C.F., Du, Z.P., Song, D.J., Fan, Z.M., Shi, W.J., Wang, S.H., Yan C.Q., Li, Q.Q., Sun, X.F., Yang, H., **Wilson, J.P.**, & Xu, B., A review of recent developments in HASM. *Environmental Earth Sciences*, 74, 6541-6549.
- 2015 VoPham, T.M., **Wilson, J.P.**, Ruddell, D., Rashed, T., Brooks, M.A., Yuan, J.M., Talbott, E.O., Chang, C.C.H., & Weissfeld, J.L., Linking pesticides and human health: A geographic information system (GIS) and Landsat remote sensing method to estimate agricultural pesticide exposure. *Applied Geography*, 62, 171-181.
- 2015 Chen, Z., Salam, M.T., Karim, R., Toledo-Corral, C.M., Watanabe, R.M., Xiang, A.H., Buchanan, T.A., Habre, R., Bastain, T.M., Lurmann, F., Taher, M., **Wilson, J.P.**, Trigo, E., & Gilliland, F.D., Living near a freeway is associated with lower bone mineral density among Mexican Americans. *Osteoporosis International*, 26, 1713-1721.
- 2015 Wang, Q., Liu, X., Yue, T.X., Wang, C., & **Wilson, J.P.**, Using models and spatial analysis to analyze spatio-temporal variations of food provision and food potential across China's agro-ecosystems. *Ecological Modeling*, 306, 152-159.



- 2015 Kim, K., & **Wilson, J.P.**, Planning and visualizing 3D routes for indoor and outdoor spaces in CityEngine. *Journal of Spatial Science*, 60, 179-193.
- 2015 Cederbaum, J.A., Petering, R., Hutchinson, M.K., He, A.S., **Wilson, J.P.**, Jemmott, J.B., & Jemmott, L.S., Alcohol outlet density and related use within an urban population in Philadelphia public housing communities. *Health & Place*, 31, 31-38.
- 2014 Brandt, S.J., Perez, L., Künzli, N., Lurmann, F., **Wilson, J.P.**, Pastor, M., & McConnell, R., Near-roadway air pollution and the cost of childhood asthma exacerbations in Los Angeles County. *Journal of Allergy & Clinical Immunology*, 134, 1028-1035.
- 2014 Lue, E., **Wilson, J.P.**, & Curtis, A., Conducting disaster damage assessments with spatial video, experts and the inexperienced public. *Applied Geography*, 52, 46-54.
- 2014 Chen, Y., Zhou, Q., Li, S., Meng, F., Bi, X., **Wilson, J.P.**, Xing, Z., & Qi, J., The simulation of surface flow dynamics using a flow path network model. *International Journal of Geographical Information Science*, 28, 2242-2260.
- 2014 Shahabi, K., & **Wilson, J.P.**, CASPER: Intelligent capacity-aware urban routing. *Computers, Environment and Urban Systems*, 46, 12-24.
- 2014 Ghaemi, P., Shahabi, K., **Wilson, J.P.**, & Banaei-Kashani, F., A comparative study of two approaches for supporting optimal network location queries. *Geoinformatica*, 18, 229-251.
- 2014 Hricko, A., Rowland, G., Eckel, S., Logan, A., Taher, M., & **Wilson, J.P.**, Global trade, local impacts: Lessons from California on health impacts related and environmental justice concerns for residents living near freight rail yards. *International Journal of Environmental Research & Public Health*, 11, 1914-1941.
- 2014 Dueker, D., Taher, M., **Wilson, J.P.**, & McConnell, R.S., Evaluating children's locations using a personal GPS logging instrument: Limitations and lessons learned. *Journal of Exposure Science and Environmental Epidemiology*, 24, 244-252.
- 2012 Perez, L., Lurmann, F., **Wilson, J.P.**, Pastor, M., Brandt, S.J., Künzli, N., McConnell, R.S., Near-roadway pollution and childhood asthma: Implications for developing "win-win" compact urban development and clean vehicle strategies. *Environmental Health Perspectives*, 120, 1619-1626.
- 2012 Chen, Y., **Wilson, J.P.**, Zhu, Q., & Zhou, Q., Comparison of drainage-constrained methods for DEM generalization. *Computers & Geosciences*, 48, 41-49.
- 2012 Swift, J.N., **Wilson, J.P.**, & Nguyen, T., Estimated temporal variation of losses due to a recurrence of the 1933 Long Beach earthquake. *Earthquake Spectra*, 28, 347-365.
- 2012 **Wilson, J.P.**, Digital terrain modeling. *Geomorphology*, 137, 107-121.
- 2010 Longcore, T.R., Kobernus, P., Lam, C.S., Polk, E., & **Wilson, J.P.**, Extracting useful data from imperfect monitoring schemes: Endangered butterflies at San Bruno Mountain, San Mateo County, California (1982-2000) and implications for habitat management. *Journal of Insect Conservation*, 14, 335-346.
- 2010 Lee, S.J., Longcore, T., & **Wilson, J.P.**, Identification of municipal policies that influence the distribution of green cover across metropolitan regions. *International Archives of Photogrammetry, Remote Sensing, and Spatial Information Sciences*, 38, Part II, 513-518.

- 2010 Sister, C.E., Wolch, J., & **Wilson, J.P.**, Got green? Addressing environmental justice in park provision. *GeoJournal*, 75, 229-248.
- 2009 Aggett, G.R., & **Wilson, J.P.**, Creating and coupling a high-resolution LiDAR-based DTM with a 1-D hydraulic model in a GIS for scenario-based assessment of avulsion hazard in a gravel bed river. *Geomorphology*, 113, 21-34.
- 2009 Ghaemi, P., Swift, J.N., Sister, C.E., **Wilson, J.P.**, & Wolch, J., Design and implementation of a Web-based platform to support interactive environmental planning. *Computers, Environment & Urban Systems*, 33, 482-491.
- 2009 Goldberg, D.W., **Wilson, J.P.**, & Knoblock, C.A., Extracting geographic features from the Internet to automatically build detailed regional gazetteers. *International Journal of Geographical Information Science*, 23, 93-128.
- 2009 Sheng, J., **Wilson, J.P.**, & Lee, S.J., Comparison of land surface temperature (LST) modeled with a spatially distributed solar radiation model (SRAD) and remote sensing data. *Environmental Modeling & Software*, 24, 436-443.
- 2009 Sheng, J., & **Wilson, J.P.**, Watershed urbanization and changing flood behavior across the Los Angeles metropolitan region. *Natural Hazards*, 48, 41-57.
- 2008 Deng, Y.X., & **Wilson, J.P.**, Multi-scale and multi-criteria mapping of mountain peaks as fuzzy entities. *International Journal of Geographical Information Science*, 22, 205-218.
- 2008 Goldberg, D.W., **Wilson, J.P.**, Knoblock, C.A., Ritz, B., & Cockburn, M.G., An effective and efficient approach for manually improving geocoded data. *International Journal of Health Geographics*, 7, 60.
- 2007 Shankardass, K., McConnell, R.S., Milam, J., Berhane, K., Tatalovich, Z., **Wilson, J.P.**, & Jerrett, M., The association between contextual socioeconomic factors and prevalent asthma in a cohort of southern California school children. *Social Science & Medicine*, 65, 1792-1806.
- 2007 Bou Kheir, R., **Wilson, J.P.**, & Deng, Y.X., Use of terrain variables for mapping gully erosion susceptibility in Lebanon. *Earth Surface Processes & Landforms*, 32, 1770-1782.
- 2007 Deng, Y.X., Chen, X., Chuvieco, E., Warner, T.A., & **Wilson, J.P.**, Multi-scale linkages between topographic attributes and vegetation indices in a mountainous landscape. *Remote Sensing of Environment*, 111, 122-134.
- 2007 Sheng, J., **Wilson, J.P.**, Chen, N., Sayre, J.M., & Devanny, J.S., Evaluating the quality of the National Hydrography Dataset for watershed assessments in metropolitan regions. *GIScience & Remote Sensing*, 44, 1-22.
- 2007 **Wilson, J.P.**, Lam, C.S., & Deng, Y.X., Comparison of the performance of flow routing algorithms used in GIS-based hydrologic analysis. *Hydrological Processes*, 21, 1026-1044.
- 2007 Goldberg, D.W., Knoblock, C.A., & **Wilson, J.P.**, From text to geographic coordinates: The current state of geocoding. *Journal of the Urban & Regional Information Systems Association*, 19, 2, 33-46.
- 2007 Deng, Y.X., **Wilson, J.P.**, & Bauer, B.O., DEM resolution dependencies of terrain attributes across a landscape. *International Journal of Geographical Information Science*, 21, 187-213.

- 2006 Tatalovich, Z., **Wilson, J.P.**, McConnell, R., Milam, J., & Jerrett, M., Competing definitions of activity spaces and neighborhoods. *International Journal of Health Geographics*, 5, 55.
- 2006 Tatalovich, Z., **Wilson, J.P.**, & Cockburn, M.G., A comparison of Thiessen polygon, kriging, and spline models of potential UV exposure. *Cartography & Geographic Information Science*, 33, 217-237.
- 2006 Deng, Y.X., **Wilson, J.P.**, & Sheng, J., Effects of variable attribute weights on landform classification. *Earth Surface Processes & Landforms*, 31, 1452-1462.
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- 1988 **Wilson, J.P.**, Farmland at risk: The geography of soil erosion. *Western Wildlands* 14(2): 6-11.

#### Manuscripts Submitted or Under Construction

Brandt, S.J., Dickinson, B., Ghosh, R., Perez, L., Lurmann, F., Penfold, B., **Wilson, J.P.**, Millet, M., Künzli, N., & McConnell, R., Costs of coronary heart disease and mortality associated with near-roadway air pollution. *Science of the Total Environment* (submitted 2/17; returned for revisions 3/17).

Chen, Y., Wu, Q., **Wilson, J.P.**, Ba, Q., Yang, J., & Zhang, X., A parallel method for DEM generalization based on CUDA. *Computers & Geosciences* (submitted 3/17).

Chen, Y., Zhou, J., **Wilson, J.P.**, Wu, J., Wu, Q., & Yang, J., A dynamic classification pattern of spatial statistical services using formal concept analysis. *Geographical Analysis* (submitted 2/17).

Shahabi, K., & **Wilson, J.P.**, Scalable evacuation routing in a dynamic environment. *Computers, Environment, and Urban Systems* (resubmitted 12/16; returned for revisions 2/17).

**Wilson, J.P.**, *Digital terrain modeling*. Oxford, UK: John Wiley and Sons (submitted 3/17).

Yue, T.X., Zhao, N., Fan, Z.M., Li, J., Chen, C.F., Lu, Y.M., Wang, C.L., **Wilson, J.P.**, Gao, J., & Xu, B., Modeling climate scenarios in China, with improved accuracy. *Global & Planetary Change* (submitted 10/16).

Zhang, L.L., Yue, T.X., **Wilson, J.P.**, Zhao, N., Du, Z.P., & Liu, X., A comparison of satellite observations with the XCO<sub>2</sub> surface obtained by fusing YCCON measurements and GEOS-Chem model outputs. *Science of the Total Environment* (submitted 3/17).

## PRESENTATIONS

### Conferences and Workshops

- 2017 **Wilson, J.P.**, *Meet the editors: GIScience journals (Panel discussion)*, Annual Meeting of the American Association of Geographers, Boston, Massachusetts.
- 2017 Mitchell, I., Brazil, N., MacDonald, B., Franke, R., Ngo, L., Qian, Y., Schoonover, K., Windisch, R., & **Wilson, J.P.**, *A spatial analysis of street-level crime trends in Los Angeles*, Seventh Annual Los Angeles Geospatial Summit, Los Angeles, California.
- 2016 **Wilson, J.P.**, *Geodesign as a multiscale global enterprise*. Geodesign Europe Summit, Delft, The Netherlands.
- 2016 **Wilson, J.P.**, *Connecting population, health and place (with geospatial tools and data)*. Geospatial Approaches to Cancer Control and Population Sciences Conference, Bethesda, Maryland.
- 2016 **Wilson, J.P.**, *Reactions to the keynote address by Margaret Leinen, Director of the Scripps Institution of Oceanography, current president of the American Geophysical Union, and a US State Department Science Envoy (Panel discussion)*. Esri International User Conference, San Diego, California.
- 2016 Escobedo, L.A., Cockburn, M.G., & **Wilson, J.P.**, *Spatial disparities in adherences to colorectal cancer screening among the elderly*. Fourth Epidemiology Conference of the Americas, Miami, Florida.
- 2016 **Wilson, J.P.**, *Community health mapping in a world awash with geographic data and tools*. Community Health Mapping Workshop, Bethesda, Maryland.
- 2016 Escobedo, L.A., Cockburn, M.G., & **Wilson, J.P.**, *Improving the reliability of the American Community Survey with an application to targeted melanoma control and prevention*. Annual Meeting of the American Association of Geographers, San Francisco, California.
- 2016 **Wilson, J.P.**, *The challenges and opportunities accompanying geospatial big data*. International Workshop on Big Data: Challenges and Opportunities for Disaster Recovery, Shonan, Japan.
- 2016 **Wilson, J.P.**, *Establishing a B.S. in GeoDesign to foster interdisciplinary collaboration*. Seventh Annual Geodesign Summit, Redlands, California.
- 2015 **Wilson, J.P.**, *GIS&T BoK project update*, University Consortium for Geographic Information Science, Washington, DC.
- 2015 **Wilson, J.P.**, *UCGIS 20<sup>th</sup> anniversary retrospective (Panel discussion)*, University Consortium for Geographic Information Science Symposium, Washington, DC.
- 2015 **Wilson, J.P.**, *Commercial and open source software: Geographic information systems (Panel discussion)*. Workshop on Academic Computing at USC, University of Southern California, Los Angeles, California.

- 2014 **Wilson, J.P.**, *Bridging geo-process modeling and virtual worlds naturally in research (Panel discussion)*. International Conference on Geo-Process Modeling in VGE: Managing and Sharing Geographic Knowledge, Hong Kong.
- 2014 Zhao, M.W., Yue, T.X., Zhao, N., Chen, C.F., Du, Z.P., Dong, D.J., Fan, Z.M., Shi, W.J., Wang, S.H., Wang, C.L., Yan, C.Q., Li, Q.Q., Sun, X.F., Yang, H., Xu, B., & **Wilson, J.P.**, *A review of HASM*. International Conference on Geo-Process Modeling in VGE: Managing and Sharing Geographic Knowledge, Hong Kong.
- 2014 **Wilson, J.P.**, *Cancer surveillance: The case for an enduring spatial science base*. Opportunities for Integrating Spatial Science into Cancer Surveillance Workshop, National Cancer Institute, Rockville, Maryland.
- 2014 **Wilson, J.P.**, *Building a vibrant and enduring spatial science*. Ninth International Workshop on Geographical Information Science (IWGIS 2014: Major Emerging GIScience Research Challenges), Beijing, China.
- 2014 **Wilson, J.P.**, *UCGIS Geographic Information Science & Technology Body of Knowledge 2.0 project*. Geographic Information: Need to Know (GI-N2K) Project Workshop, Castellón, Spain.
- 2014 **Wilson, J.P.**, *The case for an enduring spatial science*. Seventeenth AGILE Conference on Geographic Information Science, Castellón, Spain.
- 2014 **Wilson, J.P.**, *GIScience master's and certificate programs: Improving practice and sharing experiences (Panel discussion)*. University Consortium for Geographic Information Science Pre-Symposium Workshop, Pasadena, California.
- 2014 **Wilson, J.P.**, *The science of where: Maps, models, and storytelling*. Annual Teaching with Technology Conference on Digital Knowledge across the Curriculum, University of Southern California, Los Angeles, California.
- 2014 **Wilson, J.P.**, *Geospatial education online (Panel discussion)*. Annual Center for Geographic Analysis Conference, Harvard University, Cambridge, Massachusetts.
- 2014 VoPham, T.M., **Wilson, J.P.**, Ruddell, D., Rashed, T., & Weisfeld, J.L., *A Landsat remote sensing method to estimate agricultural pesticide exposure in California*. Annual Meeting of the Association of American Geographers, Tampa Bay, Florida.
- 2014 **Wilson, J.P.**, *Spatiotemporal thinking, computing, and applications: Working session towards a research agenda (Panel discussion)*. Annual Meeting of the Association of American Geographer, Tampa Bay, Florida.
- 2014 **Wilson, J.P.**, *Symposium on synergistic advances in cyberGIS and geography: CyberGIS body of knowledge (Panel discussion)*. Annual Meeting of the Association of American Geographer, Tampa Bay, Florida.
- 2013 **Wilson, J.P.**, *Creating a spatially enabled campus*. Advancing the Spatially Enabled Smart Campus Specialist Meeting, Center for Spatial Studies, University of California, Santa Barbara, California.
- 2013 **Wilson, J.P.**, *The geography-environment nexus: Spatially-explicit environmental analysis and modeling*. International Conference on Geography and Environment, Mexico City, Mexico.

- 2013 **Wilson, J.P.**, *Towards geodesign: Building new education programs and audiences*. Geodesign Europe Summit, Leerdam, The Netherlands.
- 2013 **Wilson, J.P.**, *Here, there & everywhere: Recasting the spatial sciences to serve a spatializing world*. UNIGIS-Amsterdam 20<sup>th</sup> Anniversary Symposium, Leerdam, the Netherlands.
- 2013 Kim, K., & **Wilson, J.P.**, *Using CityEngine to plan and visualize routes in indoor and outdoor spaces*. Annual Esri International Education User Conference, San Diego, California.
- 2013 **Wilson, J.P.**, *Cultivating spatial intelligence in bite-sized chunks*. Annual Meeting of the Association of American Geographers, Los Angeles, California.
- 2013 **Wilson, J.P.**, *Scholastic pioneers: Emerging best practices in geodesign education (Panel discussion)*. Fourth Annual Geodesign Summit, Redlands, California.
- 2012 **Wilson, J.P.**, *Cultivating spatial intelligence*. Spatial Thinking across the College Curriculum Specialist Meeting, Center for Spatial Studies, University of California, Santa Barbara, California.
- 2012 **Wilson, J.P.**, *Measuring people in place: Synthesis of Day 1 (Panel discussion)*. Measuring People in Place Workshop, Boulder, Colorado.
- 2012 **Wilson, J.P.**, & Goodchild, M.F., *How should GIS education be reshaped to serve future needs?* Sixth Annual GI Forum, Salzburg, Austria
- 2012 **Wilson, J.P.**, *Rethinking and repositioning geographic information science*. Annual Meeting of the University Consortium of Geographic Information Science, Washington, D.C.
- 2012 **Wilson, J.P.**, *Professional online GIS degree programs: A panel discussion*. Annual Meeting of the American Society of Photogrammetry and Remote Sensing, Sacramento, California.
- 2012 **Wilson, J.P.**, *Making journal articles 'live': Turning academic writing into scientific dialog (Panel discussion)*. Annual Meeting of the Association of American Geographers, New York, New York.
- 2012 **Wilson, J.P.**, *Future of academic GIS centers: Opportunities and challenges (Panel discussion)*. Annual Meeting of the Association of American Geographers, New York, New York.
- 2012 **Wilson, J.P.**, Murphy, A., & Sloane, D., *Creating a B.S. in geodesign at the University of Southern California*. Third Annual Geodesign Summit, Redlands, California.
- 2012 **Wilson, J.P.**, *Geodesign education: Where are we and where are we going? (Panel discussion)*. Third Annual Geodesign Summit, Redlands, California.
- 2011 Lee, S.J., Longcore, T.R., & **Wilson, J.P.**, *Monitoring urban land cover change using GIS & remote sensing: A Los Angeles County case study*. Thirty-first International Esri User Conference, San Diego, California.
- 2011 Lee, S.J., Longcore, T.R., & **Wilson, J.P.**, *Modeling the ecological impacts of mansionization in metropolitan regions*. Annual Meeting of the Association of American Geographers, Seattle, Washington.

- 2010 **Wilson, J.P.**, *Modeling surface runoff & contaminants in large metropolitan regions*. University of Southern California, Dornsife College of Letters, Arts and Sciences Southern California Bight Climate Change Workshop, Los Angeles, California.
- 2010 **Wilson, J.P.**, *Geography & our digital futures (Panel discussion)*. Joint Meeting & Biennial Conference of the New Zealand Geographical Society and Australian Institute of Geographers, Christchurch, New Zealand.
- 2010 **Wilson, J.P.**, *Geography & GIS as middleware*. Joint Meeting & Biennial Conference of the New Zealand Geographical Society and Australian Institute of Geographers, Christchurch, New Zealand.
- 2010 **Wilson, J.P.**, *Professional GIS degree programs (Panel discussion)*. Summer Assembly of the University Consortium of Geographic Information Science, Hilton Head Island, South Carolina.
- 2010 Lee, S.J., Longcore, T.R., & **Wilson, J.P.**, *Identification of municipal policies that influence the distribution of green cover across metropolitan regions*. Joint International Conference on Theory, Data Handling and Modeling in Geospatial Information Science, Hong Kong.
- 2010 **Wilson, J.P.**, *Modeling surface runoff and contaminants in large metropolitan regions*. University of Southern California Water Retreat, Los Angeles, California.
- 2010 Lue, E., **Wilson, J.P.**, & Longcore, T.R., *Assessing fuzzy k-means landscape classification as a complement to GPS collar data in determining Catalina Island fox habitat preferences*. Annual Meeting of the Association of American Geographers, Washington, D.C.
- 2010 **Wilson, J.P.**, *Community of professional graduate programs in GIS&T (Panel discussion)*. Annual Meeting of the Association of American Geographers, Washington, D.C.
- 2010 Lee, S.J., Longcore, T.R., & **Wilson, J.P.**, *Modeling the ecological impacts of mansionization in metropolitan regions*. Annual Meeting of the Association of American Geographers, Washington, D.C.
- 2009 **Wilson, J.P.**, *GIS master's programs: A panel discussion*. Annual Meeting of the Association of Pacific Coast Geographers, San Diego, California.
- 2009 **Wilson, J.P.**, *Role of geocomputation in the hydrological sciences*. First International Symposium on Geo-Computation and Analysis, Wuhan, China.
- 2009 Jerrett, M., Berhane, K., Chang, C.-C., Wolch, J., Reynolds, K., **Wilson, J.P.**, ..., & McConnell, R., *Food access around the home and the development of obesity in a prospective cohort study of children aged 10-18 years*. Annual Conference of the International Society for Environmental Epidemiology, Dublin, Ireland.
- 2009 Tatalovich, Z., **Wilson, J.P.**, & Cockburn, M.G., *Modeling potential UV exposure for objective assessment of melanoma risk*. Annual CDC Conference on the Future of Environmental Public Health, Washington, D.C.
- 2008 **Wilson, J.P.**, *Building science-based spatial decision support tools to promote environmental sustainability*. International Conference on Geoinformatics for Spatial Infrastructure Development in the Earth and Allied Sciences, Hanoi, Vietnam.



- 2008 **Wilson, J.P.**, *GIScience journal editors: A panel discussion*. International Conference on Geographic Information Science (GIScience 2008), Park City, Utah.
- 2008 Goldberg, D.W., Cockburn, M.G., & **Wilson, J.P.**, *Open source web tools for manual geocode correction*. Annual Meeting and Workshops of the North American Association of Central Cancer Registries, Denver, Colorado.
- 2008 Tatalovich, Z., **Wilson, J.P.**, & Avol, E., *Estimation of traffic volumes on local road networks to support assessment of traffic-related exposure to pollutants*. Annual Meeting of the Association of American Geographers, Boston, Massachusetts
- 2008 Sheng, J., & **Wilson, J.P.**, *Effects of watershed aggregation on a water quality model in an urban landscape*. Annual Meeting of the Association of American Geographers, Boston, Massachusetts.
- 2008 Goldberg, D.W., **Wilson, J.P.**, & Knoblock, C.A., *Enabling dynamic tools for modeling, analyzing, and integrating data in a dynamically changing world and data environment*. Annual Meeting of the Association of American Geographers, Boston, Massachusetts.
- 2008 Sister, C.E., Boone, C.G., **Wilson, J.P.**, & Wolch, J., *Park access and equity in Los Angeles, Phoenix and Baltimore*. Annual Meeting of the Association of American Geographers, Boston, Massachusetts.
- 2007 Swift J N, Ghaemi P, Longcore T R, **Wilson J P**, Wolch J, *Decision-support web tools for the Green Visions Plan for twenty-first century southern California*. Annual Meeting of the Association of American Geographers, San Francisco, California.
- 2007 **Wilson, J.P.**, *GIScience and disaster management: Research prospects and challenges*. Annual Meeting of the Association of American Geographers, San Francisco, California.
- 2007 **Wilson, J.P.**, *Distance learning and GIScience*. Annual Meeting of the Association of American Geographers, San Francisco, California.
- 2007 **Wilson, J.P.**, *Using GIS and environmental modeling to build sustainable communities*. International Association of Science and Technology for Development International Conference on Environmental Modeling & Simulation, Honolulu, Hawaii.
- 2006 **Wilson, J.P.**, Lam, C.S., Deng, Y.-X., & Aggett, G.A., *From precipitation to streamflow: Simulating the movement of water within landscapes*. International Symposium on Terrain Analysis & Digital Terrain Modelling, Nanjing, China.
- 2006 **Wilson, J.P.**, *Geospatial preparedness from the non-governmental organization perspective*. Joint Meeting of the U.S. Geological Survey & U.S. Department of Homeland Security on Geospatial Preparedness for Natural Disasters, Reston, Virginia.
- 2006 **Wilson, J.P.**, Swift, J.N., & Tatalovich, Z., *Place-based decision support for spatial and temporal transference of risk and hazards*. National Science Foundation Human and Social Dynamics Program Principal Investigator Meeting, Washington, D.C.
- 2006 Shankardass, K., McConnell, R., Milam, J., Tatalovich, Z., **Wilson, J.P.**, & Jerrett, M., *The association between contextual socio-economic factors and prevalent asthma in a cohort of southern California school children*. Annual Meeting of the American Thoracic Society, San Diego, California.

- 2006 Tatalovich, Z., & **Wilson, J.P.**, *Reconstructing spatio-temporal patterns of social vulnerability, Los Angeles County, 1940-2000*. Annual Meeting of the Association of American Geographers, Chicago, Illinois.
- 2006 Sister, C.E., Linder, A., Seymour, M., Byrne, J., **Wilson, J.P.**, & Wolch, J., *Park and open space resources in southern California*. Annual Meeting of the Association of American Geographers, Chicago, Illinois.
- 2006 Sayre, J., Sheng, J., **Wilson, J.P.**, & Deviny, J., *Prospects for stream and watershed restoration in rapidly urbanizing landscapes*. Annual Meeting of the Association of American Geographers, Chicago, Illinois.
- 2006 Sheng, J., Chen, N., Sayre, J., **Wilson, J.P.**, & Deviny, J., *Evaluating the quality of the National Hydrology Dataset for watershed assessments in southern California*. Annual Meeting of the Association of American Geographers, Chicago, Illinois.
- 2006 **Wilson, J.P.**, *The Green Visions Plan for 21<sup>st</sup> century southern California*. Annual Meeting of the Association of American Geographers, Chicago, Illinois.
- 2006 **Wilson, J.P.** *Geospatial information science and technology: An integrating force in disaster preparedness, Mitigation and Recovery*. University Consortium for Geographic Information Science Winter Meeting, Washington, D.C.
- 2005 **Wilson, J.P.**, *Role of interpolation in GIS-based climate impact studies*. National Center for Atmospheric Research (NCAR) GIS in Weather, Climate & Impacts Workshop, Boulder, Colorado.
- 2005 **Wilson, J.P.**, *GIS in the city: A GISer's guide to advancing policy and practice*. University Consortium for Geographic Information Science Summer Assembly, Jackson Hole, Wyoming.
- 2005 Goldberg, D.W., Knoblock, C.A., & **Wilson, J.P.**, *Extracting geographic features from the Internet to automatically build detailed regional gazetteers*. Second Annual Electronic Cultural Atlas Initiative Congress, Shanghai, China.
- 2005 Sheng, J., Deng, Y.X., & **Wilson, J.P.**, *Landform characteristics of household sites in mountainous areas*. Annual Meeting of the Association of American Geographers, Denver, Colorado.
- 2005 Tatalovich, Z., **Wilson, J.P.**, & Cockburn, M.G., *GIS analysis of average cumulative sun exposure and melanoma risk*. Annual Meeting of the Association of American Geographers, Denver, Colorado
- 2005 Lam, C.S., Longcore, T.R., & **Wilson, J.P.**, *Analysis of butterfly survey data and methodology from San Bruno Mountain Habitat Conservation Plan (1982-2000)*. Annual Meeting of the Association of American Geographers, Denver, Colorado.
- 2005 Chen, N., & **Wilson, J.P.**, *Evaluation of two GIS-based models for estimating the energy savings associated with shade trees*. Annual Meeting of the Association of American Geographers, Denver, Colorado.
- 2005 Sister, C.E., & **Wilson, J.P.**, *Impacts of land use on reef health*. Annual Meeting of the Association of American Geographers, Denver, Colorado.

- 2005 Deng, Y.X., **Wilson, J.P.**, Chabukswar, R., & Romstad, B., *Multi-scale delineation of mountain peaks as fuzzy spatial objects*. Annual Meeting of the Association of American Geographers, Denver, Colorado.
- 2004 **Wilson, J.P.**, Knoblock, C.A., & Shahabi, C., *Rapid data integration in response to unexpected events*. University Consortium for Geographic Information Science Winter Meeting, Washington, D.C.
- 2004 Deng, Y.X., & **Wilson, J.P.**, *Effects of attribute selection on fuzzy k-means landform classifications*. Annual Meeting of the Association of American Geographers, Philadelphia, Pennsylvania.
- 2004 Lam, C.S., Deng, Y.X., & **Wilson, J.P.**, *Comparison of flow routing algorithms used in geographic information systems*. Annual Meeting of the Association of American Geographers, Philadelphia, Pennsylvania.
- 2004 Tatalovich, Z., **Wilson, J.P.**, McConnell, R., & Milam, J., *Impact of definitional issues on estimates of community variables in epidemiological research*. Annual Meeting of the Association of American Geographers, Philadelphia, Pennsylvania.
- 2004 Sister, C.E., & **Wilson, J.P.**, *Predicting coral reef health: Does distance matter?* Annual Meeting of the Association of American Geographers, Philadelphia, Pennsylvania.
- 2003 Bauer, B., Lorang, M., Sherman, D., Ellis, J., McDermott, J., & **Wilson, J.P.**, *Delta levee erosion: Long-term monitoring and shoreline processes*. CALFED Science Conference, Sacramento, California.
- 2003 **Wilson, J.P.**, *Delineating landscapes using terrain analysis and fuzzy classification methods*. Ian Moore Terrain Analysis Symposium, Australian National University, Canberra, Australia.
- 2003 **Wilson, J.P.**, *Faculty incentive and institutional support leading to curricula transformation*. Sixth Annual Conference on Teaching, Learning, & Technology, University of Southern California, Los Angeles, California.
- 2003 Lam, C.S., **Wilson, J.P.**, Holmes-Wong, D., & Shoaf, W., *Building a geospatial browser and gazetteer for the Los Angeles Digital Archive*. Annual Meeting of the Association of American Geographers, New Orleans, Louisiana.
- 2003 Li, C., Longcore, T.R., & **Wilson, J.P.**, *Quantifying the benefits of nature's services in a dense urban area*. Annual Meeting of the Association of American Geographers, New Orleans, Louisiana.
- 2002 **Wilson, J.P.**, *Terrain analysis tools for routing flow and calculating upslope catchment areas*. Symposium on Terrain Analysis for Water Resource Applications, Austin, Texas.
- 2002 **Wilson, J.P.**, *The growth visioning exercise results*. Annual Urban Land Institute-Los Angeles & University of Southern California Lusk Center for Real Estate Summit, Los Angeles, California.
- 2002 **Wilson, J.P.**, *Where can the growth go?* Annual Urban Land Institute-Los Angeles & University of Southern California Lusk Center for Real Estate Summit, Los Angeles, California.

- 2002 Lam, C.S., **Wilson, J.P.**, & Holmes-Wong, D., *Building a neighborhood-specific gazetteer for a digital archive*. Twenty-second International Esri User Conference, San Diego, California.
- 2002 **Wilson, J.P.**, *Terrain-based descriptions of earth surface and atmospheric processes*. Intergraph Geospatial World User Community Conference, Atlanta, Georgia.
- 2002 **Wilson, J.P.**, *GIS capabilities and epidemiological applications*. University of Southern California GIS & Spatial Statistics in Epidemiology Workshop, Pasadena, California.
- 2002 Longcore, T.R., & **Wilson J.P.**, *Applicability of CITYgreen urban ecosystem analysis software to a dense urban neighborhood*. Annual Meeting of the Association of American Geographers, Los Angeles, California.
- 2002 **Wilson, J.P.**, *Digital terrain modeling: Future research issues*. Ordnance Survey Height Workshop, Loughborough, United Kingdom.
- 2000 **Wilson, J.P.**, *The Information System for Los Angeles Project*. Annual Conference and Joint Meetings of Pacific Neighborhood Consortium, University of California, Berkeley, California.
- 1999 **Wilson, J.P.**, Burrough, P.A., van Gaans, P., & Hansen, A.J., *Fuzzy k-means classification of digital elevation models as an aid to biodiversity assessments*. Annual Meeting of the Association of American Geographers, Honolulu, Hawaii.
- 1999 **Wilson, J.P.**, *Water resource applications of GIS*. University Consortium for Geographic Information Science Summer Assembly, Minneapolis-St. Paul, Minnesota.
- 1998 Hunt, L., **Wilson, J.P.**, & Roseman, C., *ISLA: An integrated digital archive for southern California*. Annual Meeting of the Association of American Geographers, Boston, Massachusetts.
- 1997 Stillman, S.T., **Wilson, J.P.**, Daly, C., Hutchinson, M.F., & Thornton, P., *Evaluating GIS-based simulations of precipitation: Methods, problems & performance*. Joint Meeting of Institute of the Australian Geographers and New Zealand Geographical Society, Hobart, Australia.
- 1997 Stillman, S.T., **Wilson, J.P.**, Daly, C., Hutchinson, M.F., & Thornton, P., *Evaluating GIS-based simulations of precipitation: Methods, problems & performance*. Second Australian Workshop in Environmental Applications of GIS, Kiola, Australia.
- 1997 **Wilson, J.P.**, *Current and future trends in the development of integrated technologies for assessing non-point source pollution*. Joint American Geophysical Union Chapman-Soil Science Society of America Outreach Conference on Application of GIS, Remote Sensing, Geostatistics, & Solute Transport Modeling to the Assessment of Non-point Source Pollution in the Vadose Zone, Riverside, California.
- 1997 **Wilson, J.P.**, *Decision support systems for precision agriculture*. Remote Sensing for Precision Agriculture Symposium, Annual Meeting of the Soil Science Society of America, Anaheim, California.
- 1996 **Wilson, J.P.**, *Role & scope of the National Spatial Data Infrastructure: The local government perspective*. Ninth Annual Montana GIS Conference, Missoula, Montana.
- 1996 **Wilson, J.P.**, & Petch, J., *UNIGIS distance learning diploma, Technology and user needs*. Second International Conference on GIS and Higher Education, Baltimore, Maryland.

- 1996 Stillman, S.T., **Wilson, J.P.**, Daly, C., Hutchinson, M.F., & Thornton, P., *Comparison of ANUSPLIN, MTCLIM-3D, and PRISM precipitation estimates*. Third International Conference Integrating GIS and Environmental Modeling, Santa Fe, New Mexico.
- 1996 **Wilson, J.P.**, *GIS-based land surface/subsurface modeling: New potential for new models?* Third International Conference Integrating GIS & Environmental Modeling, Santa Fe, New Mexico.
- 1996 Stillman, S.T., & **Wilson, J.P.**, *Comparison of ANUSPLIN, MTCLIM-3D and PRISM models for estimating mean annual and monthly precipitation*. Ninth Annual Montana GIS Conference, Missoula, Montana.
- 1995 **Wilson, J.P.**, *The role of GIS software and personnel in automating local government operations*. United Nations & Organization of Islamic Capital Cities Conference on GIS, Sustainability, & the Environment, Cairo, Egypt.
- 1995 **Wilson, J.P.**, & Gallant, J.C., *Terrain-based approaches to environmental resource evaluation*. Annual Meeting of the British Geomorphology Research Group, Cambridge, United Kingdom.
- 1995 **Wilson, J.P.**, *Terrain-based methods for predicting climatic, hydrologic & biological indices*. Consortium for Study of North Temperate Montane Ecosystems Workshop on Biodiversity in Montane Ecosystems: Identifying Sources & Designing Exchange Protocols, Bozeman, Montana.
- 1995 **Wilson, J.P.**, *Spatial models of land use patterns and soil erosion: The role of GIS*. GISDATA Specialist Meeting on GIS & Spatial Modeling: New Potential for New Models, Stockholm, Sweden.
- 1995 Inskeep, W.P., Wraith, J., **Wilson, J.P.**, Snyder, R.D., & Macur, R., *Input parameter and model resolution effects on solute transport predictions*. ASA-CSSA-SSSA Bouyoucos Conference, Riverside, California.
- 1995 **Wilson, J.P.**, Inskeep, W.P., Wraith, J., & Snyder, R.D., *GIS-based solute transport modeling applications: Scale effects & estimation methods*. ASA-CSSA-SSSA Bouyoucos Conference, Riverside, California.
- 1995 Stillman, S.T., & **Wilson, J.P.**, *Comparison of ANUSPLIN precipitation surfaces & hand-contoured maps in southwestern Montana and Wyoming*. Eighth Annual Montana GIS Conference, Helena, Montana.
- 1995 Wheatley, J.M., **Wilson, J.P.**, & Nielsen, G.A., *Using terrain attributes to improve the accuracy of Landsat remote sensing vegetation maps*. Eighth Annual Montana GIS Conference, Helena, Montana.
- 1995 Magnant, J., Beland, D., & **Wilson, J.P.**, *Use of GIS for critical lands strategic planning in Bozeman*. Eighth Annual Montana GIS Conference, Helena, Montana.
- 1995 **Wilson, J.P.**, *GIS-based solute transport modeling applications: Scale effects & estimation methods*. Eighth Annual Montana GIS Conference, Helena, Montana.
- 1995 Repetto, P.L., & **Wilson, J.P.**, *Sensitivity of RUSLE outputs to GIS methods used to calculate topographic inputs*. Eighth Annual Montana GIS Conference, Helena, Montana.

- 1995 Gillett, L.E., **Wilson, J.P.**, & Kemp, W.P., *Spatial variability of grassland NDVI values by ecoregion and land cover type in the northern Great Plains*. Eighth Annual Montana GIS Conference, Helena, Montana.
- 1995 **Wilson, J.P.**, Custer, S.G., Farnes, P., Landenburger, L.A., & Snyder, R.D., *Comparison of hand-contoured and computer-splined precipitation estimates in Montana*. Annual Meeting of the Association of American Geographers, Chicago, Illinois.
- 1994 **Wilson, J.P.**, *Tips for writing successful National Science Foundation Instrumentation and Laboratory Improvement Program Grant proposals*. Annual Meeting of Association of American Geographers, San Francisco, California.
- 1994 **Wilson, J.P.**, *Mapping soil and terrain attributes for site-specific farm management*. Montana Interagency Soil Survey Conference, Bozeman, Montana.
- 1994 Custer, S.G., Snyder, R.D., Farnes, P., & **Wilson, J.P.**, *Updated mean annual precipitation data (1961-90) for the Bozeman and Billings 1x2° topographic quadrangles: A comparison of hand- and computer-contoured results*. Annual Meeting of the Montana Division, American Water Resources Association, Bozeman, Montana.
- 1994 **Wilson, J.P.**, & Inskip, W.P., *Using the Arc/Info GIS and CMLS solute transport model for predicting pesticide movement into ground water*. Annual Meeting of the Montana Division, American Water Resources Association, Bozeman, Montana.
- 1994 **Wilson, J.P.**, Spangrud, D.J., Landon, M., Jacobsen, J.S., & Nielsen, G.A., *Mapping Soil attributes for site-specific management of a Montana field*. Society for Photo-Optical Instrumentation Engineers International Symposium on Photonics for Industrial Applications, Boston, Massachusetts.
- 1994 Landon, M., Jacobsen, J.S., **Wilson, J.P.**, & Nielsen, G.A., *Soil and terrain attributes for evaluation of field-scale nutrient leaching potentials*. Annual Meeting of the American Society of Agronomy, Seattle, Washington.
- 1994 Custer, S.G., Farnes, P., & **Wilson, J.P.**, *Comparison of hand-contoured and computer-splined precipitation estimates in the mountains & plains of Montana*. Annual Meeting of the Montana Division, American Water Resources Association, Missoula, Montana.
- 1994 **Wilson, J.P.**, *New spatial interpolation methods*. Sixth Annual Montana GIS Conference, Kalispell, Montana.
- 1994 **Wilson, J.P.**, *The expanding role of GIS in undergraduate education at Montana State University*. Annual Meeting of the Association of American Geographers, San Francisco, California.
- 1994 **Wilson, J.P.**, Spangrud, D.J., Jacobsen, J.S., Nielsen, G.A., & Tyler, D., *Sensitivity of computed terrain attributes to the number & pattern of GPS-derived elevation data*. Second International Conference on Site-Specific Management for Agricultural Systems, Minneapolis-St. Paul, Minnesota.
- 1993 **Wilson, J.P.**, Shovic, H.W., Moore, I.D., Landenburger, L.A., & Snyder, R.D., *Modeling landforms & soils in Yellowstone National Park*. Thirteenth International Esri User Conference, Palm Springs, California.
- 1993 **Wilson J P**, Forer P, *Taking Instruction beyond the GIS Laboratory*. Thirteenth International Esri User Conference, Palm Springs, California.

- 1993 Lorbeer, S., Jacobsen, J.S., **Wilson, J.P.**, & Nielsen, G.A., *Using a soil-crop yield database to evaluate a productivity index model for small grains in Montana*. Great Plains Soil Fertility Conference, Denver, Colorado.
- 1992 **Wilson, J.P.**, *Outer space technology for down-to-earth cities: An overview of GIS/GPS applications*. Annual Meeting of the Montana League of Cities and Towns, Lewistown, Montana.
- 1992 Lorbeer, S., Jacobsen, J.S., **Wilson, J.P.**, & Nielsen, G.A., *A soil productivity index model for small grains in Montana*. Annual Meeting of the American Society of Agronomy, Minneapolis-St. Paul, Minnesota
- 1992 Jersey, J.K., Jacobsen, J.S., Moore, I.D., **Wilson, J.P.**, & Nielsen, G.A., *Evaluation of a DEM-based topographic attribute model for a semi-arid, mountainous catchment*. Annual Meeting of American Society of Agronomy, Minneapolis-St. Paul, Minnesota.
- 1992 Moore, I.D., Clesiolka, C.A., & **Wilson, J.P.**, *Soil erosion prediction & GIS: Linking theory and practice*. International Conference on Application of Geographic Information Systems to Soil Erosion Management, Taiyuan, China.
- 1992 **Wilson, J.P.**, Inskeep, W.P., Rubright, P., Jacobsen, J.S., Snyder, R.D., & Cooksey, D., *Coupling geographic information systems & models for county-scale ground water pollution assessments*. Annual Meeting of the Association of American Geographers, San Diego, California.
- 1992 **Wilson, J.P.**, Snyder, R.D., Ryan, C.M., Inskeep, W.P., Jacobsen, J.S., & Rubright, P., *Coupling geographic information systems & models for county-scale ground water pollution assessments*. Twelfth International Esri User Conference, Palm Springs, California.
- 1992 **Wilson, J.P.**, *GIS education & training opportunities at Montana State University*. Twelfth International Esri User Conference, Palm Springs, California.
- 1992 **Wilson, J.P.**, *Terrain-based models for the distributed hydrological & erosional modeling of landscapes*. Montana Interagency Soil Survey Conference, Bozeman, Montana.
- 1992 **Wilson, J.P.**, Inskeep, W.P., Rubright, P., Cooksey, D., Jacobsen, J.S., & Snyder, R.D., *Coupling geographic information systems & models for weed control and ground water protection*. Annual Meeting of the Weed Science Society of America, Orlando, Florida.
- 1992 McEachern, K., Jacobsen, J.S., Nielsen, G.A., & **Wilson, J.P.**, *Use of soil and terrain attributes for predicting soil fertility*. Great Plains Soil Fertility Conference, Denver, Colorado.
- 1991 **Wilson, J.P.**, *When is a GIS Needed?* Fourth Annual Montana GIS Conference, Bozeman, Montana.
- 1991 McEachern, K., Jacobsen, J.S., Nielsen, G.A., & **Wilson, J.P.**, *Digital elevation model attributes for predicting soil fertility*. Annual Meeting of the American Society of Agronomy, Denver, Colorado.
- 1991 Rubright, P., Jacobsen, J.S., Inskeep, W.P., Nielsen, G.A., & **Wilson, J.P.**, *GIS-based evaluations of pesticide ground water contamination potential*. Annual Meeting of the American Society of Agronomy, Denver, Colorado.

- 1991 Moore, I.D., Turner, K., **Wilson, J.P.**, Jenson, S., & Band, L.E., *GIS & land surface-subsurface process modeling*. International Conference/Workshop on Integrating Geographic Information Systems and Environmental Modeling, Boulder, Colorado.
- 1991 **Wilson, J.P.**, *Environmental change in the Lake Simcoe Basin, 1800-1990*. Lake Simcoe Conference and Festival, Baldwin, Ontario.
- 1991 **Wilson, J.P.**, Ladson, A.R., & Moore, I.D., *Comparison of grid, TIN, and contour-based digital elevation models for terrain analysis*. Annual Meeting of the Association of American Geographers, Miami, Florida.
- 1990 **Wilson, J.P.**, *Contribution of soil survey to soil erosion & crop productivity models*. Montana Interagency Soil Survey Conference, Bozeman, Montana.
- 1990 **Wilson, J.P.**, *GIS education opportunities at Montana State University*. Third Annual Montana GIS Conference, Missoula, Montana.
- 1990 **Wilson, J.P.**, *GIS research projects at Montana State University*. Third Annual Montana GIS Conference, Missoula, Montana.
- 1990 **Wilson, J.P.**, Jacobsen, J.S., & Nielsen, G.A., *Agricultural applications of GIS*. Annual Meeting of Montana Agricultural Experiment Station and Extension Service, Bozeman, Montana.
- 1990 **Wilson, J.P.**, & Jacobsen, J.S., *Agricultural applications of GIS*. Annual Meeting of Montana Wheat and Barley Growers Association, Great Falls, Montana.
- 1990 Seney, J., & **Wilson, J.P.**, *Erosional impact of hikers, horses, off-road bicyclists, & motorcycles on mountain trails*. Annual Meeting of the Association of American Geographers, Toronto, Ontario.
- 1990 Moore, I.D., Grayson, R.D., & **Wilson, J.P.**, *Runoff modeling in complex three-dimensional terrain*. International Conference on Water Resources in Mountainous Regions & Thirty-second Congress of International Association of Hydrogeologists, Lausanne, Switzerland.
- 1990 Ladson, A.R., Moore, I.D., & **Wilson, J.P.**, *Contour- & grid-based methods of terrain representation: Scale effects*. Fall Meeting of the American Geophysical Union, San Francisco, California.
- 1990 Ladson, A.R., & **Wilson, J.P.**, *Terrain modeling techniques*. Precision Farming in the 90's Workshop, Power, Montana.
- 1990 Ladson, A.R., **Wilson, J.P.**, & Moore, I.D., *Landscape analysis and modeling using digital terrain analysis*. Annual Meeting of the Association of American Geographers, Toronto, Ontario.
- 1990 **Wilson, J.P.**, *GIS applications combining soil surveys and simulation models*. Montana Interagency Soil Survey Conference, Bozeman, Montana.
- 1989 **Wilson, J.P.**, Sandor, S., Nielsen, G.A., & McConnell, S., *A productivity index model for Montana soils*. Annual Meeting of the Western Soil Science Society, Bozeman, Montana.
- 1989 Pings, J.C., & **Wilson, J.P.**, *Quantifying soil erosion and deposition using cesium-137 near Carter, Montana*. Annual Meeting of the Association of American Geographers, Baltimore, Maryland.



- 1988 **Wilson, J.P., & Nielsen G A**, *Quantifying the effects of erosion on soil productivity in Montana*. Annual Meeting of Association of American Geographers, Phoenix, Arizona.
- 1988 **Wilson, J.P., & Nielsen, G.A.**, *Quantifying the effects of erosion on soil productivity in Montana*. Twenty-sixth Congress of International Geographical Union, Sydney, Australia.
- 1988 **Wilson, J.P.**, *GIS Applications in city and county government*. Annual Meeting of Montana Association of Planners, Kalispell, Montana.
- 1988 **Wilson, J.P.**, *Modeling the impacts of erosion on crop productivity*. Montana Interagency Soil Survey Conference, Bozeman, Montana.
- 1988 **Wilson, J.P.**, *Agricultural applications of GIS*. First Annual Montana GIS Annual Conference, Helena, Montana.
- 1987 Gerhart, K.E.S., & **Wilson, J.P.**, *Using the Productivity Index (PI) model to generate county-wide soil erosion vulnerability maps in Montana*. Annual Meeting of the Great Plains-Rocky Mountain Division, Association of American Geographers and Prairie Division, Canadian Association of Geographers, Regina, Saskatchewan.
- 1987 Pings, J.C., & **Wilson, J.P.**, *Quantifying soil erosion and deposition in a small Montana watershed using cesium-137*. Annual Meeting of the Great Plains-Rocky Mountain Division, Association of American Geographers and Prairie Division, Canadian Association of Geographers, Regina, Saskatchewan.
- 1987 Ruth, J.H., & **Wilson, J.P.**, *Factors influencing streambank erosion and channel migration on the North Fork Flathead River*. Annual Meeting of the Great Plains-Rocky Mountain Division, Association of American Geographers and Prairie Division, Canadian Association of Geographers, Regina, Saskatchewan.
- 1986 Gerhart, K.E.S., & **Wilson, J.P.**, *Modeling the effects of erosion on soil productivity in Cascade County, Montana*. Annual Meeting of the Soil and Water Conservation Society of America, Billings, Montana.
- 1986 **Wilson, J.P.**, & Gerhart, K.E.S., *Information requirements for non-point source pollution management models*. Annual Meeting of the Soil and Water Conservation Society of America, Billings, Montana.
- 1986 **Wilson, J.P.**, *Soil productivity losses from erosion in Montana*. Annual Meeting of the Association of American Geographers, Portland, Oregon.
- 1986 Ruth, J.H., & **Wilson, J.P.**, *Streambank erosion and controls on the North Fork Flathead River*. Annual Meeting of the Montana Division, American Water Resources Association, Bozeman, Montana.
- 1986 **Wilson, J.P.** *Critique of regional soil loss assessments based on the universal soil loss equation*. Annual Meeting of the Association of American Geographers, Minneapolis-St. Paul, Minnesota.
- 1984 **Wilson, J.P.**, *Phosphorus loading trends in the Lake Simcoe-Couchiching Basin, Ontario, Canada, 1800-1980*. Annual Meeting of the Association of American Geographers, Washington, D.C.
- 1983 **Wilson, J.P.**, *Estimating the universal soil loss equation's topographic factor for watersheds*. Annual Meeting of the Ontario Division, Canadian Association of Geographers, Hamilton, Ontario.

- 1983 **Wilson, J.P.**, *Information requirements for environmental management where soil erosion contributes to the downstream pollution of rivers and lakes*. Annual Meeting of the Soil Conservation Society of America, Hartford, Connecticut.
- 1980 **Wilson, J.P.**, Liverman, D., & White, A.V., *The Mississauga evacuation: A study of public response and attitudes*. Annual Meeting of the Canadian Association of Geographer, Montreal, Quebec.

### Webinars and Videos

- 2016 **Wilson, J.P.**, & Ahlqvist, O., *All You Need to Know About UCGIS's New GIS&T Body of Knowledge* (Webinar). Directions Magazine.
- 2016 **Wilson, J.P.**, Summers, R., & Hitt, A.L., *Developing Geospatial Leaders* (Webinar). Geographic Information Science and Technology Programs, University of Southern California.
- 2016 **Wilson, J.P.**, *Ask the Director: USC GIST Student Webinar*. Geographic Information Science and technology Programs, University of Southern California.
- 2015 **Wilson, J.P.**, Escobedo, L.A., & VoPham, T., *Advancing Public Health with Geospatial Analysis* (Webinar). Geographic Information Science and Technology Graduate Programs, University of Southern California.
- 2014 **Wilson, J.P.**, *The Power of Maps, Connecting with USC Scholars* (Video and "Hands-On" Walkability Assignment). Center for Scholarly Technology, University of Southern California.
- 2014 Kumar, S., & **Wilson, J.P.**, *Introducing GeoHealth* (Webinar). Master of Public Health, Keck School of Medicine, University of Southern California.
- 2014 **Wilson, J.P.**, *An Introduction to the New Graduate Certificate Programs* (Webinar). Geographic Information Science and Technology Graduate Programs, University of Southern California.
- 2013 **Wilson, J.P.**, *Spatial Sciences* (Video). Dana and David Dornsife College of Letters, Arts and Sciences, University of Southern California.
- 2013 **Wilson, J.P.**, Ruddell, D., & Lee, S.J., *Spatial Sciences Institute* (Video). Dana and David Dornsife College of Letters, Arts and Sciences, University of Southern California.
- 2013 DiBiase, D., Foster, K., Manone, M., **Wilson, J.P.**, Miskowiak, D., & Phillips, C.G., *Exploring the Diversity of Opportunities in Geodesign Education* (Webinar). Directions Magazine.
- 2013 **Wilson, J.P.**, *Introducing the Spatial Sciences Institute* (Webinar). Geographic Information Science and Technology Graduate Programs, University of Southern California.
- 2012 **Wilson, J.P.**, Goodchild M F, Goldberg D W, Wittner E, Kemp K K, *Creating Enduring Spatial Skills that Lead to Job Opportunities* (Webinar). Directions Magazine.
- 2011 **Wilson, J.P.**, *General Information Session: GIST Programs* (Webinar). Geographic Information Science and Technology Graduate Programs, University of Southern California.

- 2010 **Wilson, J.P.**, *General Information Session: GIST Programs* (Webinar). Geographic Information Science and Technology Graduate Programs, University of Southern California.
- 2010 **Wilson, J.P.**, *Mapping on Catalina Island, California* (Video). Geographic Information Science and Technology Graduate Programs, University of Southern California.

#### Invited Lectures, Seminars, and Talks

- 2017 *Population, Health and Place*. USC Alumni Association Monthly Meeting, San Francisco, California.
- 2016 *Reactions to the keynote address by Jack Dangermond, President, Esri (Panel discussion)*. Institute for Geographical Sciences & Natural Resources Research, Beijing, China.
- 2016 *Conducting Place-based Research in a World Awash with Geospatial Data and Tools*. Earth Surface Modeling Workshop, Institute of Geographical Sciences & Natural Resources Research, Chinese Academy of Sciences, Beijing, China.
- 2016 *Dynamic Modeling, Geostatistics, and Fuzzy Classification: New Sneakers for a New Geography?* Department of Geography, University of Connecticut, Storrs, Connecticut.
- 2016 *Geography and the Spatial Sciences: Deploying the Spatial Sciences to Support Geographic Education and Discovery*. Department of Geography, University of Miami, Miami, Florida.
- 2016 *What Makes Spatial Special?* Department of Sociology, University of Southern California.
- 2015 *So You're Interested in the Spatial Sciences?* Dana and David Dornsife College of Letters, Arts and Sciences, University of Southern California.
- 2015 *The Science of Where: Maps, Models, and Storytelling in the 21<sup>st</sup> Century*. Admission Staff Training, University of Southern California.
- 2015 *Geographic Information Processing* (Panel Presentation and Discussion). Workshop on Academic Computing, University of Southern California.
- 2015 *Geospatial Health Research and Teaching*. Southern California Environmental Health Sciences Center, University of Southern California.
- 2014 *Placemaking, Maps, and Geodesign: Spatial @USC*. Urban Land Institute-Los Angeles Advisory Board Meeting.
- 2014 *The Science of Where: Maps, Models and Storytelling*, Parkside Arts and Humanities Residential College, University of Southern California.
- 2014 *Full-time Dornsife NTT Teaching Faculty: A Program to Mentor and Answer Your Questions* (Panel Presentation and Discussion), Dana and David Dornsife College of Letters, Arts and Sciences, University of Southern California
- 2014 *GIS, Spatial Analysis and Religion*, School of Religion, University of Southern California
- 2013 *Mapping and Classifying Biophysical Landscape Attributes*, Biodiversity and Environment Research Collaboration Group, University of Southern California
- 2013 *UCGIS Geographic Information Science & Technology Body of Knowledge 2.0 Project* (Short Presentation, Question & Answer Session), Esri GIS Education Community

- Advisory Board, Esri International User Conference/Education User Conference, San Diego, California
- 2013 *Geospatial Workforce Development* (Panel Presentation and Discussion), Center for Business GIS and Spatial Analysis, University of Redlands
- 2013 *Advice and Ascent: A Program to Mentor NTT Teaching Faculty* (Panel Presentation and Discussion), Dana and David Dornsife College of Letters, Arts and Sciences, University of Southern California
- 2013 *The Geospatial Revolution*, School of Surveying, University of Otago, New Zealand
- 2013 *GIS and Spatial Analysis*, Department of Geography, University of Canterbury, New Zealand
- 2013 *GIS, Spatial Analysis, and Religion*, School of Religion, University of Southern California
- 2012 *Place-Based Models of Instruction: Introduction to GIS @ USC and the Spatial Sciences Institute*, Faculty Forum, Center for Scholarly Technology, University of Southern California
- 2012 *GIS and Location Analytics*, Marshall School of Business, University of Southern California
- 2012 *Spatial 2.0: Spatial Literacy, Analysis, Modeling, and Visualization*, School of Architecture, University of Southern California
- 2012 *GIS and Environmental Applications*, Centre for GeoInformatics, School of Geography and Geosciences, University of St. Andrews, Scotland
- 2012 *How Can We Reshape GIS Education to Serve Future Needs?* Center for Spatial Studies, University of California, Santa Barbara
- 2011 *GeoDesign: Coupling GIS with Design Thinking to Identify and Evaluate Alternative Futures*, Laboratory for Information Engineering in Surveying, Mapping and Remote Sensing, Wuhan University, China
- 2011 *The Spatial Sciences: Connecting Society, Environment, and Health*. Department of Geography, University of Wisconsin, Milwaukee
- 2011 *The Spatial Sciences and Their Role in Environmental Studies*, Wrigley Institute of Environmental Studies Advisory Board Meeting
- 2011 *GeoDesign: Designing Our Future in an Anthropogenic World*, Institute of Geographical Sciences and Natural Resources Research, Chinese Academy of Sciences, Beijing, China
- 2010 *The Role of the Spatial Sciences in the Modern Research University*, Department of Sociology, University of Southern California
- 2010 *Surface Modeling: The Current State of the Art, Enduring Challenges, and New Opportunities*, Institute of Geographical Sciences and Natural Resources Research, Chinese Academy of Sciences, Beijing, China
- 2010 *GIS, Spatial Analysis, and Spatial Thinking: Essential Tools for the Modern Geoscientist's Toolbox*, Department of Earth Sciences, University of Southern California
- 2010 *Maps as Representations of the World*, USC Dana and David Dornsife College of Letters, Arts and Sciences and the Natural History Museum of Los Angeles County

- 2009 *Spatial Science @ USC*, Los Angeles County eGIS Working Group
- 2009 *Green Visions Plan Watershed Modeling and Analysis Tools*, Los Angeles District, Regional Water Quality Control Board
- 2009 *Green Visions Plan Spatial Decision Support Tools*, Los Angeles County Department of Public Works
- 2008 *Key Green Visions Planning Tools*, Greater Los Angeles County Region Integrated Regional Watershed Management Plan (IRWMP) Leadership Committee
- 2006 *Fusing Computer Science and Geography: Research Advances and Opportunities in Geographic Information Science*, Department of Computer Science, University of Southern California
- 2006 *Using GIS, Spatial Analysis, and Maps to Improve Urban Places and Spaces*, Institute for Quantitative Social Science, Harvard University
- 2005 *GIS, Spatial Analysis, and Maps: Essential Tools for the Modern Urban Scholar's Toolbox*, Department of Geography, University of South Carolina
- 2004 *The Green Visions Plan for 21<sup>st</sup> Century Southern California*, School of Architecture, University of Southern California
- 2004 *GIS, Spatial Analysis, and Maps: Essential Tools for the New Urban Scholar's Toolbox?*, Lusk Center for Real Estate, Marshall School of Business and School of Policy, Planning, and Development, University of Southern California
- 2002 *Parks and Park Funding in Los Angeles: An Equity Mapping Analysis*, Commission for Children, Youth, and Their Families, City of Los Angeles
- 2001 *Environmental Modeling with GIS*, School of Natural Resources and Environment, University of Michigan
- 2001 *Digital Terrain Analysis and Modeling*, School of Natural Resources and Environment, University of Michigan
- 2000 *The Integrated Digital Archive-Los Angeles Project*, Department of Anthropology, University of California, Berkeley
- 2000 *Spatial Extensions of Environmental Modeling*, Department of Geography, University of California, Los Angeles
- 2000 *From Outer Space to Personal Spaces*, Department of Biological Sciences, University of Southern California
- 1998 *Evaluating GIS-based Simulations of Precipitation: Methods, Problems and Performance*, Department of Geography, University of Auckland
- 1998 *Evaluating GIS-based Simulations of Precipitation: Methods, Problems and Performance*, Department of Geography, University of Waikato
- 1998 *Dynamic Modeling, Geostatistics, and Fuzzy Classification: New Sneakers for a New Geography?* Department of Geography, University of Auckland
- 1998 *Comparisons of Spatially Distributed Precipitation Models*, Department of Physical Geography, University of Utrecht

- 1997 *Simulating Water Quality Problems with GIS-based Land Surface/Subsurface Models*, Department of Geography, University of California, Santa Barbara
- 1996 *Development and Testing of Terrain-based Methods for Environmental Characterization and Modeling*, Department of Geography, Michigan State University
- 1995 *Terrain-based Methods for Conducting Environmental Resource Surveys*, Department of Geography, University of Southern California
- 1995 *Terrain-based Approaches to Environmental Resource Evaluation*, Greater Yellowstone Coordinating Committee, U.S. Department of Agriculture-Forest Service and U.S. Department of Interior-National Park Service
- 1995 *ArcView GIS Overview and Demonstration*, Bozeman City-County Planning Board
- 1995 *The Power of Geographic Information Systems*, Office of Extended Studies, Montana State University (seminar for technical professionals delivered via METNet 2-way interactive video network to studio audiences in eight Montana cities)
- 1994 *Building a Multidisciplinary GIS Research Center*, Department of Geography, University of Auckland
- 1994 *Geographic Information Technologies in the Great American Outback*, Department of Geography, University of Auckland
- 1994 *Natural Resource Management Applications of GIS*, Department of Animal and Range Sciences, Montana State University
- 1994 *The Expanding Role of GIS in Undergraduate Education at Montana State University*, Department of Geography, University of Lethbridge
- 1994 *Computer Simulation in the Earth Sciences*, Science and Technology Core Committee Computer Exposition, Montana State University
- 1994 *Development of a New Montana Precipitation Map Using the ANUSPLIN Model*, Montana Natural Resource Information System, Montana State Library
- 1993 *GIS Research in Support of Grasshopper and Locust Management*, U.S. Agency for International Development Site Visit, Montana State University
- 1992 *Geography, Geographic Information Systems, and Agriculture in the Great American Outback*, U.S. Department of Agriculture-Agricultural Research Service Fort Keough Experiment Station
- 1992 *Coupling Geographic Information Systems and Models for Groundwater Pollution Assessments*, Department of Plant and Soil Science, Montana State University
- 1991 *Computerized Methods of Terrain Analysis*, Center for High-Elevation Studies, Montana State University
- 1990 *Terrain-based Models for the Distributed Erosional Modeling of Landscapes*, Department of Geography, University of Auckland
- 1990 *Terrain Analysis and Soil Erosion Model Development*, Department of Earth Sciences, University of Waikato
- 1990 *Geography, Geographic Information Systems, and Agriculture in the Great American Outback*, Waikato Branch, New Zealand Geographical Society, Waikato Branch

- 1989 *Use of Geographic Information Systems and Models for Landscape Analysis*, National Science Foundation Congressional Site Visit, Montana State University
- 1987 *Soil Erosion/Crop Productivity Relationships*, Aokautere Soil Conservation Center, New Zealand Ministry of Works and Development
- 1987 *Soil Erosion/Crop Productivity Models and Their Data Requirements*, Soils Bureau, Division of Scientific and Industrial Research
- 1987 *Management of Soil and Water Resources: Information Requirements and Models*, Department of Geography, University of Otago
- 1987 *Management of Soil and Water Resources: Information Requirements and Models*, Department of Geography Jubilee Conference and Celebration, University of Canterbury
- 1984 *Modeling Soil Erosion and Phosphorus Loadings in the Lake Simcoe-Couchiching Basin, 1800-1981*, Department of Earth Sciences, Montana State University

## GRANTS AND CONTRACTS

- 2016-2021 *Southern California Clinical and Translational Science Institute: Clinical and Translational Science Award*  
National Center for Advancing Translational Sciences, National Institutes of Health; Co-I; T.A. Buchanan, Department of Medicine, University of Southern California, M.D. Kipke, Department of Pediatrics, Children's Hospital Los Angeles, and J.M. Samet, Department of Preventive Medicine, University of Southern California, PIs; \$36,600,000 (\$295,640, Wilson)
- 2016-2021 *Southern California Environmental Health Sciences Center: Environmental Exposures, Host Factors, and Human Disease*  
National Institute of Environmental Health Sciences; Co-I; F.D. Gilliland, Department of Preventive Medicine, University of Southern California, PI; \$4,996,728 (\$170,200, Wilson)
- 2016-2017 *Spatial Disparities in Adherence to Colorectal Cancer Screening among the Elderly*  
National Institute on Aging; Co-PI with L.A. Escobedo, Spatial Sciences Institute, University of Southern California; \$24,993.
- 2016-2017 *Visualizing a University Campus in Esri's CityEngine™*  
University of Southern California Undergraduate Research Associates Program; Co-PI with B. MacDonald, Spatial Sciences Institute, University of Southern California; \$5,000
- 2015-2016 *Geographic Analysis, Modeling, and Mapping Support for the Children's Data Network Project*  
University of Southern California, School of Social Work; Co-PI with B. MacDonald, Spatial Sciences Institute, University of Southern California; \$36,036
- 2014-2017 *Religious Competition and Creative Innovation: Los Angeles and Seoul, South Korea*  
John Templeton Foundation; Co-I; R. Flory & B. Loskota, Center for Religion and Civic Culture, University of Southern California, PIs; \$2,500,000 (\$105,000, Wilson)
- 2014-2015 *Visualizing a University Campus in Esri's CityEngine™*  
University of Southern California Undergraduate Research Associates Program; PI; \$3,000

- 2013-2018 *Adolescent Smoking: Vulnerability to Tobacco Use and Marketing across Life (P3 – Vulnerable Populations)*  
National Cancer Institute; Co-I, R. McConnell, Department of Preventive Medicine, University of Southern California, PI; funded as part of the "USC Tobacco Center of Regulatory Science (TCORS) for Vulnerable Populations" grant awarded to J. Samet & M. Pentz, Department of Preventive Medicine, University of Southern California; \$19,999,608 (\$34,858; Wilson)
- 2013-2018 *Maternal Stress and Children's Obesity Risk*  
National Heart, Blood, and Lung Institute, National Institutes of Health; Co-I, G.F. Dunton, Department of Preventive Medicine, University of Southern California, PI; \$4,117,478 (\$36,800, Wilson)
- 2013-2015 *Building Photorealistic 3-D Models of the University Park Campus Buildings and Landmarks*  
Facilities Management Services, University of Southern California; PI; \$110,000
- 2013-2014 *Developing Interactive Mapping Services for Immigrant Populations*  
Tomás Rivera Policy Institute, University of Southern California; Co-PI with R. Kornak, Spatial Sciences Institute, University of Southern California; \$10,000
- 2013-2014 *Map Story Support for the Multimedia Mapping Havana Project*  
Tomás Rivera Policy Institute, University of Southern California; PI; \$2,500
- 2013 *Historically Significant Buildings Multimedia Mapping Project*  
Real Estate and Asset Management Division, University of Southern California; PI; \$38,500
- 2012-2014 *New Tools for Maximizing Health and Economic Benefits of Air Pollution Regulation*  
South Coast Air Quality Management District; Co-I, R. McConnell, Department of Preventive Medicine, University of Southern California & S. Brandt, Department of Resource Economics, University of Massachusetts-Amherst, PIs; \$250,000 (\$25,520, Wilson)
- 2012-2016 *Southern California Environmental Health Sciences Center: Environmental Exposures, Host Factors, and Human Disease*  
National Institute of Environmental Health Sciences; Co-I; F.D. Gilliland, Department of Preventive Medicine, University of Southern California, PI; \$7,113,124 (\$102,704, Wilson)
- 2012-2013 *Mapping Support for a Business Creativity and Innovation Project*  
Gould School of Law, University of Southern California; PI; \$12,000
- 2010-2013 *Interdisciplinary Spatial Science*  
University of Southern California Collaboration Fund; Co-PI with M.G. Cockburn, Department of Preventive Medicine, University of Southern California; \$60,000
- 2010-2013 *Developing a 3-D Routing Service for USC's University Park Campus*  
Facilities Management Services, University of Southern California; Co-PI with D.W. Goldberg, Spatial Sciences Institute, University of Southern California; \$45,000
- 2010-2012 *GIS Support for Southern California American Red Cross Chapters*  
American Red Cross; PI; \$69,600



- 2010-2011 *Development of a Management System and Geographic Interface for Biological Resource Data*  
U.S. Department of Defense Legacy Program; Co-PI with T.R. Longcore & J.N. Swift, Spatial Sciences Institute, University of Southern California; \$100,000
- 2010-2011 *Building Multidisciplinary Spatial Science Learning Pathways*  
University of Southern California Fund for Innovative Undergraduate Teaching; PI; \$7,750
- 2009-2011 *New Approaches to Estimating the Cost and Burden of Traffic-related Air Pollution in Children*  
South Coast Air Quality Management District; Co-I, R. McConnell, Department of Preventive Medicine, University of Southern California and S. Brandt, Department of Resource Economics, University of Massachusetts-Amherst, PIs; \$350,000 (\$30,000, Wilson)
- 2009-2010 *Mapping Support for Las Virgenes-Malibu Council of Governments Multi-Jurisdictional Hazard Mitigation Plan*  
MLC & Associates, Inc., Costa Mesa, California; PI; \$6,500
- 2009-2010 *Provision of Batch and Manual Geocoding Services*  
California Cancer Registry; PI; \$20,000
- 2009-2010 *Impact of Vehicle Pollution on Children's Development in Los Angeles County*  
University of Southern California Undergraduate Research Program; Co-PI with J.N. Swift, Department of Geography, University of Southern California; \$6,000
- 2009-2010 *A Center for Regional Decadal Climate Predictions (CRDCP)*  
James H Zumberge Faculty Research and Innovation Fund; Co-PI with L. Stott, Department of Earth Sciences, University of Southern California; \$50,000
- 2009-2010 *Mapping Support for Riverside Urban Area Security Risk/Gap Analysis Project*  
MLC & Associates, Inc., Costa Mesa, California; PI; \$36,000
- 2009 *USC WebGIS Open Source Geocoder Platform Extension*  
National Cancer Institute, Co-PI with M.G. Cockburn, Department of Preventive Medicine, University of Southern California; \$93,500
- 2008-2009 *Impact of Vehicle Pollution on Children's Health in Southern California: Methods Development for a Spatially-based Assessment of Burden of Disease and Economic and Policy Consequences*  
James H Zumberge Faculty Research and Innovation Fund; Co-PI with R.S. McConnell, W.J. Gauderman, Department of Preventive Medicine, and J. Wolch, Department of Geography, University of Southern California; \$50,000
- 2008-2009 *Development and Testing of Geocoding Services for the Division of Cancer Prevention and Control*  
Northrop Grumman and Centers for Disease Control and Prevention; Co-PI with J.N. Swift, Department of Civil and Environmental Engineering, University of Southern California; \$90,000
- 2007-2010 *Shortest Network Paths: New Algorithms and Applications*  
North American Association of Central Cancer Registries and Susan G Komen Breast Cancer Foundation; PI; \$132,072

- 2007-2008 *Upper Los Angeles River Recommendations and Implementation Blueprint*  
Mountains Restoration Trust; PI; \$40,000
- 2007-2008 *Development of a Web-Based Hydrologic Information System*  
University of Southern California Undergraduate Research Program; Co-PI with J.N. Swift, Department of Civil and Environmental Engineering, University of Southern California; \$6,000
- 2006 *Upper Los Angeles River: Recharge Suitability Analysis*  
Mountains Restoration Trust; PI; \$80,000
- 2005-2011 *Influence of Built Environments on the Development of Obesity during Childhood*  
National Cancer Institute; Co-I with M. Jerrett, K.T. Berhane, F.D. Gilliland, R. McConnell, Department of Preventive Medicine, K. Reynolds, Institute for Prevention Research, & J. Wolch, Department of Geography, University of Southern California; funded as part of the "USC Center for Trans-disciplinary Research on Energetics and Cancer (C-TREC)" grant awarded to M. Goran, Institute for Prevention Research, Keck School of Medicine, University of Southern California; \$1,010,215 (\$70,000; Wilson)
- 2005-2006 *GIS-Based Analysis and Visualization of Hydrological and Ecological Patterns and Processes*  
San Gabriel and Lower Los Angeles Rivers and Mountains Conservancy; PI; \$9,998 (two awards)
- 2005-2006 *Development of a White Paper on GIS Modeling Opportunities for Regional Sediment Management in Ventura and San Diego Counties, California*  
Everest International Consultants, Long Beach, California and U.S. Army Corps of Engineers, Los Angeles District Office; PI; \$9,227
- 2005 *Characterizing Parkland and Recreational Open Space in the Los Angeles Metropolitan Region*  
University of Southern California Undergraduate Research Program; Co-PI with J. Wolch & T.R. Longcore, Department of Geography, University of Southern California; \$6,000
- 2004-2009 *Place-based Decision Support for Spatial and Temporal Transference of Risks and Hazards*  
National Science Foundation, Human and Social Dynamics Program; Co-PI with T.R. Jordan, Department of Earth Sciences, J.N. Swift, Department of Civil and Environmental Engineering, University of Southern California, & S.L. Cutter, Department of Geography, University of South Carolina; \$700,000 (\$300,000; University of Southern California)
- 2004-2007 *Student Interns: GIS Mapping and Planning Support*  
Southern California Association of Governments; PI; \$80,000 (multiple awards)
- 2004-2006 *An Integrated Watershed Management Plan for the Upper Los Angeles River*  
Mountains and Watershed Conservation Authority; Co-PI with J. Wolch, Department of Geography, University of Southern California; \$250,000
- 2004-2006 *An Investigation of the Scale Effects of DEM-based Fuzzy k-means Landform Classifications*  
National Science Foundation, Geography and Regional Science Doctoral Dissertation Research Program; Co-PI with Y.X. Deng, Department of Geography, University of Southern California; \$11,240

- 2004-2005 *Spatio-temporal Patterns of Suspended Sediment at a Tidal River Bifurcation*  
National Science Foundation, Geography and Regional Science Doctoral Dissertation  
Research Program; Co-PI with M. Lange, Department of Geography, University of South  
California & B.O. Bauer, Department of Earth Science, University of British Columbia at  
Okanagan; \$12,000
- 2004-2005 *GIS Boat Traffic and Levee Erosion Data Integration*  
California Department of Boating and Waterways; PI; Subcontract funded as part of  
"Sacramento-San Joaquin Delta Studies: Field Program to Measure Levee Erosion" grant  
awarded to B.O. Bauer, Department of Earth Science, University of British Columbia at  
Okanagan; \$55,549
- 2004-2005 *Competing Definitions of Activity Spaces and Neighborhoods*  
University of Southern California, Keck School of Medicine, Children's Health Study; Co-  
PI with R. McConnell, Department of Preventive Medicine, University of Southern  
California; \$25,000
- 2004-2005 *Building the International Metropolitan Observatory Project*  
University of Southern California Urban Initiative; Co-PI with J. Sellers, Department of  
Political Science, University of Southern California; \$10,000
- 2003-2009 *Framework for Integrating Geospatial and Online Data to Respond to Unexpected Events*  
National Science Foundation, Information Technology Research Program; Co-PI with C.A.  
Knoblock & C. Shahabi, Department of Computer Science, University of Southern  
California; \$1,186,000
- 003-2008 *Green Visions Plan for 21st Century Southern California: A Guide for Habitat, Watershed  
Management, and Recreational Open Space*  
San Gabriel and Lower Los Angeles Rivers and Mountains Conservancy, Baldwin Hills  
Conservancy, Coastal Conservancy, and Santa Monica Mountains Conservancy; Co-PI  
with T.R. Longcore & J. Wolch, Department of Geography, & J. Deviny, Department of  
Civil and Environmental Engineering, University of Southern California; \$816,500  
(multiple awards)
- 2003-2004 *Analysis of Butterfly Survey Data from San Bruno Mountain Habitat Conservation Plan  
(1982-1997)*  
Thomas Reid Associates, Palo Alto, California; Co-PI with T.R. Longcore, Department of  
Geography, University of Southern California; \$11,200
- 2003-2004 *Evaluating Dredging and Material Placement Options for Ventura Harbor, California*  
Everest International Consultants, Long Beach, California and U.S. Army Corps of  
Engineers, Los Angeles District Office; PI; \$50,000
- 2003 *California Regional Sediment Master Plan: GIS System Architecture and Database Design*  
Parsons, Brinckerhoff, Quade and Douglas and U.S. Army Corps of Engineers, Los  
Angeles District Office; PI; \$74,341
- 2002-2003 *Estimating the Spatial Distribution of Vegetation Cover in the Los Angeles Metropolitan  
Region*  
University of Southern California, Lusk Center for Real Estate; PI; \$7,500
- 2002-2003 *Development of a Series of Maps of the Los Angeles Metropolitan Region for Growth  
Visioning Workshops*

- Urban Land Institute-Los Angeles and USC Lusk Center for Real Estate; PI; \$24,500
- 2001-2006 *Development of Gazetteer Services and Databases for the Los Angeles Digital Archive*  
University of Southern California, Information Services Division; PI; \$160,000 (multiple awards)
- 2001-2003 *Development of Geographic Search and Query Tools for the USC Digital Archive*  
University of Southern California, Information Services Division; PI; \$33,000
- 2001-2002 *Development of New Methods to Characterize the Sun Exposure and Constitutional Risk Factors Associated with Malignant Melanomas*  
James H Zumberge Interdisciplinary Research Fund; Co-PI with T.M. Mack & M.G. Cockburn, Department of Preventive Medicine, University of Southern California; \$38,500
- 2001-2002 *Predicting Spatial Patterns of Population Growth and Habitat Change in Orange County*  
University of Southern California, Lusk Center for Real Estate; PI; \$5,000
- 2001-2002 *International Symposium on Spatial Statistics, Geographic Information Systems, and Environmental Health*  
James H Zumberge Interdisciplinary Research Fund; Co-PI with R. McConnell, Department of Preventive Medicine, University of Southern California; \$27,630
- 2000-2002 *Toward a Sustainable Los Angeles: A "Nature's Services" Approach*  
John Randolph and Dora Haynes Foundation; Co-PI with S.S. Pincetl and J. Wolch, Department of Geography, University of Southern California; \$379,998
- 1999-2003 *Preparation of Images and Metadata for 1939 Works and Progress Administration Household Survey Census Cards*  
University of Southern California, Information Services Division; PI; \$77,400 (multiple awards)
- 1999-2001 *Modeling Spatial Patterns of Population Growth and Habitat Change*  
James H. Zumberge Faculty Research and Innovation Fund; PI; \$24,987
- 1998-2005 *Modeling the Spatial Pattern and Magnitude of Recreational Boat Traffic in the Sacramento-San Joaquin Delta*  
California Department of Boating and Waterways; PI; \$321,580 (multiple awards)
- 1998-2001 *Student Interns: GIS Mapping Support*  
Southern California Association of Governments; PI; \$124,890 (multiple awards)
- 1998-2000 *Modeling the Impact of Different Land Use Policies on Urban Expansion in Southern California, 1986-2010*  
James H. Irvine Foundation; PI; Subcontract funded as part of "Creative Communities and Urban Futures Project" grant awarded to M.J. Dear, Department of Geography, University of Southern California; \$96,083
- 1998-1999 *Integrating Geographic Databases and Atmospheric Chemical Dispersion Models"*  
U.S. Department of Defense, Defense Advanced Research Projects Agency, Information Technology Office; PI; Subcontract funded as a part of "GeoWorlds Project" grant awarded to R.T. Neches, Information Sciences Institute, University of Southern California; \$75,000)

- 1997-2001 *Development and Evaluation of a Series of Student-centered, WWW-based GIS Teaching Units and Laboratory Exercises*  
U.S. Department of Education, Fund for the Improvement of Secondary and Higher Education; Co-PI with R.J. Aspinall, Geographic Information and Analysis Center, Montana State University, Bozeman, Montana & R.J. Eastman, Graduate School of Geography, Clark University, Worcester, Massachusetts; \$175,000
- 1997-1999 *Development of GIS Data Layers for the Integrated Digital Archive-Information System Los Angeles Project*  
University of Southern California, Information Services Division; PI; \$105,000
- 1997-1998 *Advancing Environmental GIS*  
Hewlett Foundation; PI; \$5,000
- 997-1998 *Preparation of Historical Census and Electoral Geography Data Layers for Los Angeles County*  
John Randolph and Dora Haynes Foundation; PI; Subcontract funded as part of "Race-Ethnicity, and Political Fragmentation in Los Angeles County, 1940-96" grant awarded to P.J. Ethington, Department of History, University of Southern California; \$30,000
- 1997 *Preparation of Selected Land Use and Employment Data Layers for South Bay Economic Region*  
Los Angeles Community Development Commission; PI; Subcontract funded as part of "South Bay Economic Adjustment Plan Project" grant awarded to D. Flaming & M. Drayse, Economic Roundtable, Los Angeles, California; \$21,000
- 1996-1999 *Cartographic Database and Modeling Support for the Southern California Atlas Project (Volumes 1-3)*  
University of Southern California, Southern California Studies Center; PI; \$135,000 (multiple awards)
- 1995-1998 *Distributed Modeling and Classification of Landscapes in the Greater Yellowstone Area*  
National Science Foundation EPSCoR Program; PI; Subcontract funded as part of "Determinants of Biodiversity, Social, and Economic Patterns in Montane Ecosystems" grant awarded to J.D. Stanford, Yellow Bay Biological Station, University of Montana & A.D. Barnosky, Mountain Research Center, Montana State University; \$130,000
- 1995-1996 *Formation of the Montana Local Government GIS Coalition*  
U.S. Geological Survey National Spatial Data Infrastructure Program; PI; \$24,780
- 1995-1996 *Preparation of Arc Macro Language Scripts for Generating and Checking Public Land Survey System and Land Ownership Data Layers*  
U.S. Department of Interior, Bureau of Indian Affairs; PI; \$8,500
- 1995-1996 *Preparation of GPS Road Survey and Selected GIS Data Layers for City of Bozeman and Gallatin County, Montana*  
Gallatin County and Bozeman City-County Planning Board; PI; \$36,500
- 1995-1996 *Preparation of DEM and Climate Data Layers for the Greater Yellowstone Area*  
U.S. Department of Agriculture, U.S. Department of Interior, and Greater Yellowstone Coordinating Committee; PI; \$30,000
- 1994-1998 *Use of Terrain Analysis to Quantify Landscape Patterns in the Greater Yellowstone Area*  
NASA EPSCoR Program; PI; Subcontract funded as part of "Land Use and Wildfire Effects

- on Landscape Patterns and Avian Diversity: A Comparison of the Greater Yellowstone Ecosystem and the Pacific Northwest" grant awarded to A.J. Hansen, Department of Biology, Montana State University; \$35,000
- 1994-1997 *Evaluation of Opportunities for Forecasting Senegalese Grasshopper Infestations*  
U.S. Agency for International Development; Co-PI with W.P. Kemp, U.S. Department of Agriculture-Rangeland Insect Laboratory, Bozeman, Montana and G.B. Popov, London, England; \$77,500
- 1994-1996 *Preparation of Digital Fisheries and Wildlife Databases and Maps*  
Montana Department of Fish, Wildlife and Parks; PI; \$35,000
- 1994-1995 *Development of Terrain Analysis Programs for the Environmental Sciences*  
M.J. Murdock Charitable Trust; PI; \$49,250
- 1994-1995 *Preparation of Digital Land Resource Data Layers for the City of Bozeman Critical Lands Project*  
City of Bozeman Planning Office; PI; \$9,995
- 1994 *Development of Greater Yellowstone Area GIS Teaching Materials: Post-Doctoral Support for Dr. C. Victor Wu*  
Burns Telecommunications Center, Office for Extended Studies and Office of the Vice-President for Research and Creative Activities, Montana State University; PI; \$24,000
- 1993-1995 *Evaluation of Temporal and Scale Effects in Solute Transport Models*  
U.S. Department of Agriculture-Cooperative States Research Service; Co-PI with W.P. Inskeep & J.M. Wraith, Department of Plant and Soil Science, Montana State University, \$149,363
- 1993-1994 *Preparation of Digital Soil and Land Cover Data Layers for Gallatin National Forest*  
U.S. Department of Agriculture-Forest Service; PI; \$8,000
- 1993 *Preparation of GIS Base Maps for Bozeman City-County Planning Area from Scanned Aerial Photography*  
City of Bozeman Engineering Department and Montana State University Local Government Center; PI; \$6,000
- 1992-1995 *Development and Testing of Satellite Vegetation Classification Methods in Custer National Forest*  
U.S. Department of Agriculture-Forest Service; Co-PI with G.A. Nielsen, Department of Plant and Soil Science, Montana State University; \$62,000
- 1992-1994 *Is Drought Following the Plow in Less Developed Countries?*  
U.S. Agency for International Development, Program for Science and Technology Cooperation; Co-PI with W.D. Swearingen, Entomology Research Laboratory, Montana State University and A. Bencherifa, Université Mohammed V, Rabat, Morocco; \$148,672
- 1992-1994 *Testing the Drought Follows the Plow Hypothesis in Morocco*  
National Science Foundation, Human Dimensions of Global Change Program; Co-PI with W.D. Swearingen, Entomology Research Laboratory, Montana State University and A. Bencherifa, Université Mohammed V, Rabat, Morocco; \$88,500
- 1992-1994 *Application of GIS and Geostatistical Modeling Techniques to Support the Sustained Control of Locusts and Grasshoppers in Africa*

- U.S. Agency for International Development; Co-PI with W.P. Kemp, U.S. Department of Agriculture-Rangeland Insect Laboratory, Bozeman, Montana; \$16,500
- 1992-1994 *Development of Quantitative Landform Descriptions and Soil Models for Yellowstone National Park*  
U.S. Department of Interior-National Park Service, Cooperative Park Studies Unit; Co-PI with H.W. Shovic, Yellowstone National Park, Mammoth, Wyoming; \$23,000
- 1992-1995 *Coupling GIS, Digital Terrain Analysis, and Hydrologic Models*  
Montana Agricultural Experiment Station; PI; \$7,250
- 1991-1994 *Impact of Cropping Systems on Non-point Source Groundwater Pollution*  
U.S. Department of Agriculture-Cooperative States Research Service; Co-PI with J.M. Antle, D. Griffith, J.B. Johnson, Department of Agricultural Economics; J.W. Bauder, & J.S. Jacobsen, Department of Plant and Soil Science, Montana State University; \$110,000
- 1991-1994 *Preparation of Hunting District GIS Data Layers and Maps*  
Montana Department of Fish, Wildlife and Parks; PI; \$14,500
- 1991-1994 *Development of a Land and Microclimate Information System for Groundwater Protection*  
U.S. Department of Agriculture-Cooperative States Research Service; Co-PI with J.S. Jacobsen & G.A. Nielsen, Department of Plant and Soil Science, Montana State University; \$188,523
- 1991-1992 *Hydrologic Characterization of Proposed Downhill Ski Area and Resort*  
Bridger Bowl Ski Area; Co-PI with J. Whittingham, Department of Earth Sciences, Montana State University; \$4,200
- 1991-1992 *Development of Computerized Viewshed Analysis Techniques for the Big Sky Resort Area*  
Ankeny Foundation; Co-PI with D.L. Wittren, Department of Earth Sciences, Montana State University; \$1,420
- 1990-1996 *Instructional Support for GIS*  
Montana State University Computer Fee Allocation Committee; PI; \$74,720 (multiple awards)
- 1990-1994 *GIS Equipment Acquisition in Support of the Geographic Information and Analysis Center at Montana State University*  
M J Murdock Charitable Trust; PI; \$240,000
- 1990-1994 *Classification of Remotely Sensed Imagery and Preparation of Natural Resource and Public Lands Survey System Data Layers and Maps for Selected Indian Reservations*  
U.S. Department of Interior, Bureau of Indian Affairs; PI; \$42,686
- 1990-1992 *Validation of Solute Transport Models for Predicting Pesticide Movement into Groundwater*  
Montana University System Water Resources Center; Co-PI with H. Ferguson, W.P. Inskeep, R.H. Lockerman, & G.A. Nielsen, Department of Plant and Soil Science, Montana State University; \$50,869
- 1990-1991 *Reconciliation of Digital Hydrography and Soil Maps for Valley County, Montana*  
U.S. Department of Interior, Bureau of Land Management; Co-PI with G.A. Nielsen, Department of Plant and Soil Science, Montana State University; \$2,500

- 1990-1991 *Evaluation of PC-based Methods of Terrain Analysis*  
Montana State University High Elevation Studies Program; Co-PI with A.R. Ladson, Department of Earth Sciences, Montana State University; \$1,000
- 1990-1991 *Development of GIS-based Methods for Weed Control and Groundwater Protection*  
Montana Noxious Weed Trust Fund; Co-PI with D. Cooksey, Entomology Research Laboratory; W.P. Inskeep, G.A. Nielsen, Department of Plant and Soil Science; & C.M. Ryan, Geographic Information and Analysis Center, Montana State University; \$13,000
- 1990-1991 *Development of Laboratory Teaching Materials for GIS Instruction*  
Montana State University Teaching/Learning Committee; PI; \$2,000
- 1989-1992 *Development and Testing of New Techniques for the 3-D Representation of Terrain, Soil, and Land Cover Characteristics*  
Montana Agricultural Experiment Station; PI; \$39,267
- 1989-1991 *Development of Topographic Analysis Techniques for the Distributed Hydrological and Erosional Modeling of Landscapes*  
National Science Foundation, Geography and Regional Science Program; Co-PI with I.D. Moore, Centre for Resource & Environmental Studies, Australian National University; \$52,777
- 1989-1991 *Montana STATSGO Database Project*  
U.S. Department of Agriculture-Soil Conservation Service, Extension Service, Rangeland Insect Laboratory, Montana Department of Agriculture and Montana Agricultural Experiment Station; Co-PI with G.A. Nielsen, Department of Plant and Soil Science, Montana State University; \$15,500
- 1989-1990 *Spatial Dimensions of Soil Erosion/Crop Productivity Interactions*  
Montana State University Research/Creativity Program; PI; \$3,000
- 1989-1990 *Erosional Impact of Hikers, Horses, Off-Road Bicycles, and Motorcycles on Mountain Trails*  
U.S. Department of Agriculture-Forest Service, Intermountain Research Station; Co-PI with J.P. Seney, Department of Earth Sciences, Montana State University; \$2,000
- 1988-1991 *GIS Equipment Acquisition to Support Undergraduate Instruction at Montana State University*  
National Science Foundation, Instrumentation and Laboratory Improvement Program; PI; \$74,990
- 1988-1989 *Preparation of Lone Mountain Range Ski Trail Maps*  
Lone Mountain Ranch; Co-PI with J.D. Starkey, Department of Computer Science, Montana State University; \$3,345
- 1987-1989 *Quantifying the Effects of Soil Erosion on Crop Production in the Northern Great Plains*  
National Science Foundation, Geography and Regional Science Program; Co-PI with G.A. Nielsen, Department of Plant and Soil Science, Montana State University; \$70,748
- 1987 *Quantifying Soil Erosion, Sediment Storage, and Sediment Yield in the Pefferlaw Brook Watershed, Ontario, Canada*  
Association of American Geographers; PI; \$250



- 1986-1987 *Computer Simulation Models for Earth Science Instruction*  
Montana State University Technology Core Curriculum Committee; PI; \$3,736
- 1986-1987 *Streambank Erosion and Controls on the North Fork Flathead River*  
Montana Bureau of Mines and Geology; Co-PI with J H Ruth, Department of Earth Sciences, Montana State University; \$6,565
- 1985 *Computer Simulation Models for Earth Science Instruction*  
Montana State University Teaching/Learning Committee; PI; \$1,281

## TEACHING

### Program and Curriculum Development

University of Southern California

- 2014 Established **M.S. in Spatial Informatics** with the Data Informatics Program in the Viterbi School of Engineering, drawing on a series of existing courses in Data Informatics as well as six existing GIS&T courses and two new ones focused on spatial computing and spatial internships specially created for this degree program.
- 2014 Established **Graduate Certificate in Spatial Analytics**, based on three new graduate seminars in Spatial Computing, Spatial Analysis and Spatial Modeling.
- 2013 Established **Ph.D. in Population, Health, and Place**, drawing on seven new seminars created specifically for the degree (five in Spatial Sciences, two in Sociology) and a series of existing courses offered by the Department of Preventive Medicine, Keck School of Medicine, and the Department of Sociology, Dornsife College of Letters, Arts and Sciences
- 2014 Established a **GeoHealth track**, based on a series of existing online courses in the Geographic Information Science & Technology Programs, in the Keck School of Medicine's newly established Online Masters in Public Health Program.
- 2014 Prepared Self-Study Report with Susan Kamei for the U.S. Geospatial Intelligence Foundation that led to the accreditation of the University of Southern California's **Graduate Certificate in Geospatial Intelligence**.
- 2013 Established **Graduate Certificate in Geospatial Intelligence**, drawing on one new online course created specifically for this certificate program (SSCI 579-Geospatial Intelligence Tradecraft) and a series of six existing online courses that are part of the Geographic Information Science & Technology Graduate Programs.
- 2013 Established **Graduate Certificate in Geospatial Leadership**, drawing on one new blended course created specifically for this certificate program (SSCI 578-The Practice of Geospatial Leadership) and a series of 11 existing online courses that are part of the Geographic Information Science & Technology Graduate Programs.
- 2012 Established **B.S. in GeoDesign**, drawing on seven new undergraduate classes created specifically for this degree (four in Spatial Sciences, three in Architecture) and a series of existing courses offered by the School of Architecture, Department of Sociology, Price School of Public Policy and Spatial Sciences Institute, among others.
- 2012 Established **Minor in Spatial Studies**, drawing on three new undergraduate GIS classes and a series of existing classes offered by multiple schools and departments.

- 2009 Prepared Substantive Change Report for Western Association of Schools and Colleges Accrediting Commission for the Senior Colleges and Universities that led to the accreditation of the University of Southern California's **M.S. in Geographic Information Science & Technology**.
- 2008 Established **M.S. in Geographic Information Science & Technology (GIST)**, drawing on five online classes specifically created for this purpose and four online classes that were originally created as a part of the Graduate Certificate in Geographic Information Science.
- 2008 Established **Graduate Certificate in Geographic Information Science & Technology (GIST)**, drawing on the nine online classes used to support the GIST M.S. Program.
- 1999 Established **Graduate Certificate in Geographic Information Science**, drawing on four online classes created specifically for this purpose (the courses were retained but the certificate program itself was revised and renamed in 2009).
- 1998 Established **Minor in Geographic Information Science** and four new undergraduate classes specifically for this purpose.

Montana State University

- 1990 Established **Minor in Geographic Information Science** and three new undergraduate classes specifically for this purpose.

**Current Courses Taught**

University of Southern California

- SSCI 265Lg: The Water Planet
- SSCI 578#: The Practice of Geospatial Leadership
- SSCI 579#: Geospatial Intelligence Tradecraft
- SSCI 585#: Geospatial Technology Project Management
- SSCI 587#: Spatial Data Acquisition
- SSCI 600: The Geography of Life and Death
- SSCI 683: Principles of Spatial Data Analysis

(Classes with the designations L, g, and # refer to lecture classes with an accompanying laboratory component, General Education classes and online classes, respectively)

University of the Chinese Academy of Sciences

- CAS 599: Special Topics: Scientific Reading & Writing

**Past Courses Taught**

University of Southern California

- ARCH 517: GeoDesign Practice
- GEOG 260Lg: Natural Hazards
- GEOG 265Lg: The Water Planet
- GEOG 281Lg: Environmental Applications of Geographic Information Systems
- GEOG 482L: Principles of Geographic Information Science
- GEOG 483ab: Applied GIS Internship

GEOG 485ab: Directed GIS Research

GEOG 497L: Computer Cartography and Geographic Information Systems

GEOG 501: Geographical Research Design

GEOG 587#: GIS/GPS Field Techniques

GEOG 681: Environmental Modeling with GIS

SSCI 588#: Remote Sensing for GIS

PLDV 526: Urban Information Systems

(Classes with the designations L, g, and # refer to lecture classes with an accompanying laboratory component, General Education classes and online classes, respectively)

#### Montana State University

ESCI 500: Research Design Seminar

ESCI 580: Images of Earth

GEOG 101N: Introduction to Physical Geography

GEOG 105S#: World Regional Geography

GEOG 202T#: Resource Geography

GEOG 305: Introduction to Geographic Information Systems

GEOG 330: Agricultural Geography

GEOG 400: Geography Colloquium

GEOG 402: Geographical Analysis

GEOG 407: Applied Geography

GEOG 411: Advanced Geographic Information Systems

GEOG 422: Environmental Hazards

GEOG 501: GIS and Environmental Modeling

(Classes with the designations N, S, T, and # refer to Natural Science, Social Issues, Technology, and Multicultural Issues General Education classes, respectively)

#### University of Waikato

16.432: Human Ecology of Natural Hazards

#### University of Toronto

GGY 100: The Human Environment

#### Post-Doctoral Fellows and Visiting Scholars Directed

2015-2017 Dr. Loraine A. Escobedo, Spatial Sciences Institute, University of Southern California, Los Angeles, California

2015-2017 Dr. Noli Brazil, Spatial Sciences Institute, University of Southern California, Los Angeles, California

2012-2015 Dr. KyoHyouk Kim, Spatial Sciences Institute, University of Southern California, Los Angeles, California

2011-2012 Dr. Yumin Chen, Spatial Sciences Institute, University of Southern California, Los Angeles, California (Visiting Scholar; Center for Remote Sensing, Wuhan University, Wuhan, China)

- 2007-2008 Dr. Jingfen Sheng, Department of Geography, University of Southern California, Los Angeles, California
- 2006-2007 Dr. Zaria Tatalovich, Department of Geography, University of Southern California, Los Angeles, California
- 2004-2005 Dr. Rania Bou Kheir, Department of Geography, University of Southern California, Los Angeles, California (Visiting Fulbright Scholar; Research Scientist, National Center for Remote Sensing, Lebanese National Council for Scientific Research, Beirut, Lebanon)
- 1992-1993 Dr. Victor Wu, Department of Earth Sciences, Montana State University, Bozeman, Montana

### Dissertations and Theses Directed

- XiaoZhe Yin, Ph.D., Geographical Sciences, Chinese Academy of Sciences  
Dissertation title: *Modeling carbon emissions in Beijing, Tianjin and Hebei Provinces*. (Co-advisor with T.X. Yue).
- 2017 Shannon Prescott, M.S., Geographic Information Science and Technology, University of Southern California  
Thesis title: *Using geospatial technology to establish marsh bird monitoring sites for a pilot study in Maine in accordance with the National Marsh Bird Monitoring Program*
- 2017 Charles M. Hall, M.S., Geographic Information Science and Technology, University of Southern California  
Thesis title: *Examining data sources and classification methods used in food access studies: Investigating volunteered geographic information as an adjunct to traditional data*.
- 2017 Steven Warner, M.S., Geographic Information Science and Technology, University of Southern California  
Thesis title: *A geographical assessment of the Santa Monica Mountains North Area Community Standards District Vineyard Ordinance*.
- 2017 Shanna Bressie, M.S., Geographic Information Science and Technology, University of Southern California  
Thesis title: *Spatial patterns of food accessibility across Lane County, Oregon in 2015-2016*.
- 2016 Christian Alvez, M.S., Geographic Information Science and Technology, University of Southern California  
Thesis title: *Modeling prehistoric paths in Bronze Age northeastern England*.
- 2016 Brendan Blee, M.S., Geographic Information Science and Technology, University of Southern California  
Thesis title: *Creating a geodatabase and web map application to visualize drone legislation in the State of Maryland*.
- 2016 Krista McPherson, M.S., Geographic Information Science and Technology, University of Southern California  
Thesis title: *Assessing the impact of a web-based GIS application to promote earthquake preparation on the University of Southern California University Park campus*.

- 2016 Bennett Gaumitz, M.S., Geographic Information Science and Technology, University of Southern California  
Thesis Title: *Precision agriculture and GIS: Evaluating the use of yield maps combined with LiDAR data*
- 2016 Alex Schild, M.S., Geographic Information Science and Technology, University of Southern California  
Thesis title: *Archaeological least cost path modeling: A behavioral study of Bronze age travel routes across the Amanus Mountains, Turkey.*
- 2016 Nathan Nowak, M.S., Geographic Information Science and Technology, University of Southern California  
Thesis title: *Species distribution modeling of sperm whale habitat within the central Gulf of Alaska utilizing passive acoustic modeling.*
- 2016 Brian McDonald, M.S., Geographic Information Science and Technology, University of Southern California  
Thesis title: *Dasymetric mapping of building stocks within HAZUS-FL.*
- 2016 Colin Mattison, M.S., Geographic Information Science and Technology, University of Southern California  
Thesis Title: *Does the Bay area have a social center? Delimiting the postmodern urban center of the San Francisco Bay area.*
- 2016 Joanne Seo, M.S., Geographic Information Science and Technology, University of Southern California  
Thesis Title: *An evaluation of Esri's Tapestry Segmentation product in three southern California communities: Manhattan Beach, Santa Monica, and Venice Beach.*
- 2015 Valerie Anderson, M.S., Geographic Information Science and Technology, University of Southern California  
Thesis title: *Historical ecology of the Split Oak forest in east central Florida.*
- 2015 Audra Smolek, M.S., Geographic Information Science and Technology, University of Southern California  
Thesis title: *Spatial distribution of the greater sage-grouse (*Centrocercus urophasianus*) in the Powder River basin, northeastern Wyoming.*
- 2015 Wayne Chien, M.S., Geographic Information Science and Technology, University of Southern California  
Thesis title: *Geospatial analysis of the Round Fire: Adapting the dNBR to the Sierra Nevada region of California.*
- 2015 David Staffel, M.S., Geographic Information Science and Technology, University of Southern California  
Thesis title: *Cartography for visualizing anthropogenic threats: A semiotic approach to communicating threat information in 3D spatial models.*
- 2015 Annabel Lee Enriquez, M.S., Geographic Information Science and Technology, University of Southern California  
Thesis Title: *A contributory web-based application for documenting historic places: French colonial era art deco architecture in Hanoi.*

- 2015 Kaveh Shahabi, Ph.D. Student, Computer Science, University of Southern California  
Dissertation Title: *Scalable evacuation routing in dynamic environments.*
- 2015 Kathy Ulloa, M.S., Geographic Information Science and Technology, University of Southern California  
Thesis Title: *Exploring the relationship between urban forests and ethnicity in West Covina using GIS and object-based image analysis.*
- 2015 Jenni Dorsey-Spitz, M.S., Geographic Information Science and Technology, University of Southern California  
Thesis Title: *Modeling contamination of groundwater on Mountain Home, Idaho using the DRASTIC method.*
- 2015 Charles Hanley, M.S., Geographic Information Science and Technology, University of Southern California  
Thesis Title: *Using VHR multispectral imagery and object-based extraction to discover vernal meadows through vegetative persistence at Fort Ord, California.*
- 2015 Reina Kahn, M.S., Geographic Information Science and Technology, University of Southern California  
Thesis Title: *Geospatial analysis of unintended casualties during combat training, Fort Drum, New York.*
- 2015 Chad Johnson, M.S., Geographic Information Science and Technology, University of Southern California  
Thesis Title: *Site location suitability analysis for a smart grid network.*
- 2014 Evan Lue, Ph.D., Geography, University of Southern California  
Dissertation Title: *Defining the geospatial needs of an ubiquitous disaster relief organization.*
- 2014 Jennifer Johnson, M.S., Geographic Information Science and Technology, University of Southern California  
Thesis Title: *Firing ranges and social capital: Spatial analysis of social capital in Houston, Texas.*
- 2014 Andrew Isner, M.S., Geographic Information Science and Technology, University of Southern California  
Thesis Title: *Habitat suitability modeling of Mexican Spotted Owl (*Strix occidentalis lucida*) in Gila National Forest, New Mexico.*
- 2014 Trinka Gillis, M.S., Geographic Information Science and Technology, University of Southern California  
Thesis Title: *Use of remotely sensed imagery to map sudden oak death (*Phytophthora Ramorum*) in the Santa Cruz Mountains.*
- 2014 Joshua Harrell, M.S., Geographic Information Science and Technology, University of Southern California  
Thesis Title: *An evaluation of soil sampling methods in support of precision agriculture in northeastern North Carolina.*
- 2014 Elisabeth Sedano, Ph.D., Geography, University of Southern California  
Dissertation Title: *Consuming landscape, consuming machine: State, capital, & outdoor advertising in Los Angeles.*

- 2014 Amanda Laur, M.S., Geographic Information Science and Technology, University of Southern California  
Thesis Title: *Modeling the spatiotemporal variability of solar radiation on buildings: A case study of Lewis Hall.*
- 2013 Amanda Gray, M.S., Geographic Information Science and Technology, University of Southern California  
Thesis Title: *Spatial delineation of market areas: A proposed approach.*
- 2013 Trang VoPham, M.S., Geographic Information Science and Technology, University of Southern California  
Thesis Title: *Integrating Landsat and California pesticide exposure estimation at aggregated spatial scales: Accuracy assessment of rurality.*
- 2012 Parisa Ghaemi, Ph.D., Computer Science, University of Southern California  
Dissertation Title: *Generalized optimal location planning.*
- 2012 Stephen Gervais, M.S., Geographic Information Science and Technology, University of Southern California  
Thesis Title: *Out-of-school suspensions by home neighborhood: A spatial analysis of student suspensions in the San Bernardino City Unified School District.*
- 2012 Jeffry Harrison, M.S., Geographic Information Science and Technology, University of Southern California  
Thesis Title: *Onshore wind power systems (ONSWPS): A GIS-based tool for preliminary site-suitability analysis.*
- 2012 Holly MacGillivray, M.S., Geographic Information Science and Technology, University of Southern California  
Thesis Title: *Spatiotemporal patterns of salt and nutrient contamination in Los Angeles County's groundwater basins.*
- 2012 Su Jin Lee, Ph.D., Geography, University of Southern California  
Dissertation Title: *Effects of home modifications and municipal policies on green cover in Los Angeles County.*
- 2011 Kevin Kelly, M.S., Geographic Information Science and Technology, University of Southern California  
Thesis Title: *Different geographic representations of Middle America.*
- 2011 Thao Nyugen, Ph.D., Geography, University of Southern California  
Dissertation Title: *Uncertainty in geomorphometry.*
- 2010 Teri L Mooney, M.S., Geographic Information Science and Technology, University of Southern California  
Thesis Title: *Predicting Hydromantes Shastae occurrences in Shasta County, California.*
- 2010 Daniel W Goldberg, Ph.D., Computer Science, University of Southern California  
Dissertation Title: *Spatial approaches to reducing error in geocoded data.*
- 2010 Christina Q Li, Ph.D., Geography, University of Southern California  
Dissertation Title: *Neighborhood green space's impact on residential property Values: Assessing the role of spatial effects.*

- 2007 Jingfen Sheng, Ph.D., Geography, University of Southern California  
Dissertation Title: *Evaluating hydro-climatic systems across large metropolitan regions.*
- 2007 Chona E Sister, Ph.D., Geography, University of Southern California  
Dissertation Title: *Park and open space resources in the Greater Los Angeles Metropolitan Region: Who gets what, where?*
- 2006 Zaria Tatalovich, Ph.D., Geography, University of Southern California  
Dissertation Title: *Spatio-temporal modeling of risk.*
- 2005 Graeme Aggett, Ph.D., Geography, University of Southern California  
Dissertation Title: *Advanced geospatial technologies applied to gravel bed river mapping & modeling.*
- 2005 Yongxin X. Deng, Ph.D., Geography, University of Southern California  
Dissertation Title: *Evaluating input data for DEM-based environmental analysis & classification.*
- 2004 Christine S. Lam, M.S., Geography, University of Southern California  
Thesis Title: *Comparison of Flow Routing Algorithms Used in Geographic Information Systems.*
- 2002 Julie R. Eurek, M.S., Geography, University of Southern California  
Thesis Title: *Modeling recreational boat traffic on the Sacramento-San Joaquin Delta.*
- 2001 Yan Xu, M.A., Geography, University of Southern California  
Thesis Title: *Spatial predictions of population growth and habitat change in the Santa Monica Mountains area, California.*
- 1999 Linda E. Gillett, M.S., Geography, Montana State University  
Thesis Title: *The use of NDVI to characterize drought in the Northern Great Plains, 1988-1993.*
- 1998 Ute Langner, M.S., Geography, Montana State University  
Thesis Title: *GIS-based crop yield and soil productivity modeling.*
- 1996 Jonathan M. Wheatley, M.S., Geography, Montana State University  
Thesis Title: *Using terrain attributes to assist remote sensing vegetation mapping of Northern Great Plains grasslands.*
- 1996 Sara T. Stillman, M.S., Geography, Montana State University  
Thesis Title: *A comparison of three automated precipitation simulation models: ANUSPLIN, MTCLIM-3D, and PRISM.*
- 1996 Philip L. Repetto, M.S., Geography, Montana State University  
Thesis Title: *Revised universal soil loss equation: Estimation at the landscape scale using GIS.*
- 1995 Damian J. Spangrud, M.S., Geography, Montana State University  
Thesis Title: *Sensitivity of selected soil and terrain attributes to variations in the number and pattern of input data.*
- 1994 Douglas L. Wittren, M.S., Geography, Montana State University  
Thesis Title: *A viewshed information system for mountain resort areas.*



- 1994 Wendi A. Urie, M.S., Geography, Montana State University  
Thesis Title: *Environmental factors influencing recreational trail condition.*
- 1993 Janelle K. Jersey, M.S., Soil Science, Montana State University  
Thesis Title: *Assessing the vegetation and hydrologic characteristics of a semi-arid environment using geographic information systems and terrain-based models (Co-Advisor with J.S. Jacobsen).*
- 1991 Joseph P. Seney, M.S., Geography, Montana State University  
Thesis Title: *Erosional Impact of Hikers, Horses, Off-Road Bicycles, and Motorcycles on Mountain Trails.*
- 1990 John C. Pings, M.S., Geography, Montana State University  
Thesis Title: *Spatial variability of soil redistribution processes in a small agricultural watershed.*
- 1989 Kristen E.S. Gerhart, M.S., Geography, Montana State University  
Thesis Title: *Evaluating the performance of the soil productivity index model in Cascade County, Montana.*
- 1988 John H. Ruth, MS, Geology, Montana State University  
Thesis Title: *An assessment of streambank erosion along the North Fork Flathead River.*

#### **External Ph.D. Examiner**

- 2016 Anand Sookun, Ph.D., Department of Mathematics, University of Mauritius  
Dissertation title: *A geostatistical and GIS-based approach to study the carbon budget and carbon footprint of Mauritius.*
- 2007 Janet Louise Stein, Ph.D., Centre for Resource & Environmental Studies, Australian National University  
Dissertation Title: *A continental scale landscape framework for systematic conservation planning for Australian rivers & streams.*
- 2006 John Dymond, D.Sc., Department of Geography, University of Canterbury  
Dissertation Title: *The role of remote sensing technologies & environmental monitoring in land resource management.*
- 2005 Daryl Mummery, Ph.D., School of Geography & Environmental Studies, University of Tasmania  
Dissertation Title: *The application of landscape, productivity, & environmental modeling to improve plantation site selection and yield prediction.*

#### **Short Courses and Workshops Taught**

- 2008 *Introduction to GIS & Spatial Analysis*  
Two-week short course offered as part of the Annenberg Summer Institute in Methods and Statistics, Annenberg School of Communications & Journalism, University of Southern California, Los Angeles, California.
- 2006 *Modeling & Spatial Simulation: Definitions, Calibrations, Visualizations, & Applications*  
Five-day short course offered with M. Batty as part of Fourth Annual Summer School on Geographic Information Science, Vespucci Initiative for the Advancement of Geographic Information Science; Florence, Italy.

- 2002-2005 *Terrain Analysis: Principles and Applications*  
Full-day workshop offered four times at Annual International Esri User Conference, San Diego, California.
- 2001 *Terrain Analysis: Principles and Applications*  
Half-day workshop offered at Annual International Esri User Conference, San Diego, California.
- 1996-2003 *Introduction to ArcView GIS*  
Two-day workshop offered seventeen times at University of Southern California, Los Angeles, California.
- 1996 *Terrain Analysis Methods for Environmental Characterization and Modeling*  
One-day workshop offered with J.C. Gallant at Third International Conference Integrating GIS and Environmental Modeling, Santa Fe, New Mexico.
- 1996 *Introduction to Arc/Info*  
Five-day workshop offered at Montana State University, Bozeman, Montana.
- 1996 *Introduction to ArcView GIS*  
Two-day workshop offered at Fort Lewis College, Durango, Colorado.
- 1995 *Reinventing Local Government with GIS*  
One-day workshop offered with J. Magnant at Seventh Annual Montana GIS Conference, Helena, Montana.
- 1995 *Introduction to ArcView GIS*  
Two-day workshop offered at Equitable Resources Inc., Billings, Montana.
- 1994-1997 *Introduction to ArcView GIS*  
Two-day workshop offered five times at Montana State University, Bozeman, Montana.
- 1994-1995 *Introduction to ArcCAD*  
Three-day workshop offered three times at Montana State University, Bozeman, Montana.
- 1994 *Local Government GIS Applications*  
One-day workshop offered with J. Magnant at Sixth Annual Montana GIS Conference, Kalispell, Montana.
- 1994 *Introduction to ArcCAD*  
Three-day workshop offered at City of Pocatello, Idaho.
- 1994 *Introduction to ArcCAD*  
Three-day workshop offered at Power Engineers, Boise, Idaho.
- 1993-1995 *Introduction to PC Arc/Info*  
Five-day workshop offered four times at Montana State University, Bozeman, Montana.
- 1993 *Geographic Information Systems for Weed Control and Groundwater Protection*  
Half-day workshop offered with D. Cooksey & W.P. Inskeep at Annual Meeting of Montana County Weed Supervisors, Bozeman, Montana.
- 1992-1995 *Precision Farming Applications of GIS*  
Two-hour workshop offered four times with D. Griffith as part of Montana State University Crop and Pest Management School, Bozeman, Montana.

- 1992 *Precision Farming Applications of GIS*  
Two-hour workshop offered with L.W. Carstensen & C.M. Ryan as part of Montana State University Crop and Pest Management School, Bozeman, Montana.
- 1992 *Terrain Analysis and Geographic Information Systems*  
Half-day workshop offered with M. Blongewicz, J.K. Jersey, & D.L. Wittren at Fifth Annual Montana GIS Conference, Butte, Montana.
- 1992 *Remote Sensing and Geographic Information Systems*  
Half-day workshop offered with C. Benkelman, R. Behrendt, & J.K. Jersey at Fifth Annual Montana GIS Conference, Butte, Montana.
- 1991-1995 *Introduction to PC Arc/Info*  
Three-day workshop offered seven times at Montana State University, Bozeman, Montana.
- 1991 *Teaching GIS*  
Half-day workshop offered with K.K. Kemp, G.L. Benwell, J. Strobl, & N. Waters at GIS/LIS '91 in Atlanta, Georgia.
- 1990 *Geographic Information Systems and Applications*  
Two-day workshop offered with D.J. Unwin at University of Waikato, Hamilton, New Zealand.
- 1990 *Introduction to GIS*  
Half-day workshop offered with D.J. Unwin at Waikato Regional Council, Hamilton, New Zealand.
- 1990 *Introduction to GIS*  
One-day workshop offered at Montana State University, Bozeman, Montana in conjunction with Western Planning Association Conference.

## PROFESSIONAL SERVICE

### International

- 2017 Member, Program Committee, Second International Conference on GIS and Remote Sensing, Munich, Germany
- 2016-2017 Member, Program Committee, Ninth International Conference on Advanced Geographic Information Systems, Applications, and Services, Nice, France
- 2015-2016 Member, Scientific Program Committee, Seventeenth International Symposium on Spatial Data Handling, Beijing, China
- 2015-2016 Member, Scientific Program Committee, Ninth International Conference on Geographic Information Science (GIScience 2016), Montreal, Quebec
- 2015-2016 Member, Program Committee, Eighth International Conference on Advanced Geographic Information Systems, Applications, and Services, Venice, Italy
- 2014-2015 Co-organizer and Chair, Educational Pre-Summit Forum, 2015 Geodesign Summit, Redlands, California
- 2014-2015 Member, Scientific Program Committee, Fifth International Geomorphometry Symposium, Poznan, Poland
- 2014-2015 Member, Scientific Program Committee, GIS Ostrava: Surface Models for Geosciences Conference, Ostrava, Czech Republic

- 2014-2015 Member, Scientific Advisory Committee, Thirteenth International Conference on Geo-Computation, Dallas-Fort Worth, Texas
- 2014 Member, Scientific Program Committee, Second International Conference on CyberGIS & Geodesign, Redlands, California
- 2014 Member, International Program Committee, IASTED International Conference on Environmental Management & Engineering, Banff, Canada
- 2014 Co-Chair, Scientific Steering Committee, International Conference of Geo-Process Modeling in Virtual Geographic Environments: Managing & Sharing Geographic Knowledge, Hong Kong
- 2013-2014 Member, Scientific Program Committee, Eighth International Conference on Geographic Information Science (GIScience 2014), Vienna, Austria
- 2012-2013 Member, Scientific Program Committee, Fourth International Geomorphometry Symposium, Nanjing, China
- 2012-2013 Co-organizer and Chair, Vespucci Workshop on Population, Health & Place, Boone Center for Environmental Leadership, Catalina Island, California
- 2012-2013 Member, Scientific Program Committee, Twelfth International Conference on Geo-Computation, Wuhan, China
- 2011-2020 Member, Editorial Board, *Journal of Geospatial Information Science* (Wuhan University/ Taylor and Francis)
- 2011-2012 Member, Program Committee, Seventh International Conference on Geographic Information Science (GIScience 2012), Columbus, Ohio
- 2011-2012 Member, Steering Committee, Surface Models for the Geosciences, Ostrava-Poruba, Czech Republic
- 2010-2011 Co-Organizer & Chair, Third International Geomorphometry Symposium, Redlands, California
- 2010-2011 Member, Steering Committee, Nineteenth International Conference on Geoinformatics, Shanghai, China
- 2009- Member, Advisory Board, International Collaborative Center for Geo-computation Studies (ICCGS), Wuhan University, Wuhan, China
- 2009-2010 Member, New Zealand Master's GIS Programme Advisory Board
- 2009-2010 Member, Steering Committee, Eighteenth International Conference on Geoinformatics, Beijing, China
- 2009-2010 Member, Program Committee, IASTED International Conference on Water Resources Management, Garbone, Botswana
- 2008-2009 Member, Scientific Committee, Second International Geomorphometry Conference, Zurich, Switzerland
- 2007-2008 Member, Program Committee, IASTED Environmentally Sound Technology in Water Resource Management Conference, Garbone, Botswana
- 2006-2010 Member, Board of Trustees, Centre for Geographic Information Systems, University of Benin, Benin City, Nigeria
- 2006-2007 Chair, IASTED International Conference on Water Resources Management, Honolulu, Hawaii
- 2006-2007 Chair, IASTED International Conference on Environmental Modeling & Simulation, Honolulu, Hawaii
- 2006 Organizer and Chair, UNIGIS International Network Annual Business Meeting, Los Angeles, California
- 2005-2006 Member, Program Committee, IASTED Environmental Modeling and Simulation Conference, St. Thomas, U.S. Virgin Islands

- 2005-2006 Member, Program Committee, International Symposium on Digital Terrain Analysis & Terrain Modeling, Nanjing, China
- 2005-2006 Member, Program Committee, IASTED Environmentally Sound Technology in Water Resource Management Conference, Garbone, Botswana
- 2004 Member, Program Committee, IASTED Environmental Modeling & Simulation Conference, St. Thomas, U.S. Virgin Islands
- 2004 Member, Program Committee, GIScience 2004 Conference, College Park, Maryland
- 2002-2006 Member, Editorial Board, "Mastering GIS: Technology, Applications, & Management" Book Series, John Wiley and Sons
- 2002 Member, Program Committee, Open Source GIS-GRASS User's Conference, Trento, Italy
- 1998 Member, Steering Committee, Status and Trends in Spatial Analysis Workshop, Santa Barbara, California
- 1996 Co-Organizer, Terrain Analysis Methods for Environmental Characterization & Modeling Workshop, Third International Conference Integrating GIS & Environmental Modeling, Santa Fe, New Mexico
- 1995-1996 Member, Program Committee, Third International Conference Integrating GIS & Environmental Modeling, Santa Fe, New Mexico
- 1995 Guest Editor, GIS and Environmental Modeling Special Issue (Vol. 9, Issue No. 4), *International Journal of Geographic Information Systems*
- 1992-2001 Member, Editorial Board, *Applied Geography*, Butterworth-Heinemann

### **National**

- 2016-2017 Organizer, Transactions in GIS Plenary, Annual Meeting of the Association of American Geographers, San Francisco, California (Jeremy Mennis, Temple University, featured speaker)
- 2015-2016 Organizer, Transactions in GIS Plenary, Annual Meeting of the Association of American Geographers, San Francisco, California (Amy Lobben, University of Oregon, featured speaker)
- 2015 Member, Program Committee, Second Workshop on Privacy in Geographic Information Collection and Analysis, Twenty-third Annual ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems, Seattle, Washington
- 2014-2015 Organizer, Transactions in GIS Plenary, Annual Meeting of the Association of American Geographers, Tampa Bay, Florida (Timothy Nyerges, University of Washington, featured speaker)
- 2014-2015 Member, Nominations Committee, University Consortium for Geographic Information Science
- 2014 Member, Program Committee, GeoPrivacy: The First Workshop on Privacy in Geographic Information Collection and Analysis, Twenty-second Annual ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems, Dallas, Texas
- 2013- Member, WorldMap Advisory Committee, Center for Geographic Analysis, Harvard University
- 2013-2020 Member, Editorial Board, *Association of American Geographers Review of Books*
- 2013-2015 Chair, Geographic Information Science & Technology Body of Knowledge 2.0 Task Force, University Consortium of Geographic Information Science
- 2013-2014 Organizer, Transactions in GIS Plenary, Annual Meeting of the Association of American Geographers, Tampa Bay, Florida, (Sean Ahearn, Hunter College, City University of New York, Brandon Plewe, Brigham Young University, & Andre Skupin, San Diego State University, featured speakers)

2013-2014 Member, GIScience, GIS, and Public Policy Organizing Committee, Annual Meeting of the Association of American Geographers, Tampa Bay, Florida

2013-2014 Co-Organizer (with Sarah Battersby, University of South Carolina), 2014 University Consortium for Geographic Information Science Symposium, Pasadena, California

2013 Member, Nominations Committee, University Consortium for Geographic Information Science

2012-2014 Member, Accreditation Task Force, University Consortium for Geographic Information Science

2012-2013 Organizer, Transactions in GIS Plenary, Annual Meeting of the Association of American Geographers, Los Angeles, California (Daniel Sui, Ohio State University, featured speaker)

2012-2014 Member, Geography and Spatial Sciences Senior Review Panel, National Science Foundation

2012-2013 Member, Local Organizing Committee, Annual Meeting of the Association of American Geographers, Los Angeles, California

2011-2012 Member, Accreditation Task Force, University Consortium for Geographic Information Science

2011-2012 Organizer, Transactions in GIS Plenary, Annual Meeting of the Association of American Geographers, New York, New York (Kathleen Stewart, University of Iowa, featured speaker)

2011 Ad-Hoc Member, Population Sciences and Epidemiology Integrated Review Group, Social Sciences and Population Studies Study Section

2010-2011 Member, Nominations Committee, University Consortium for Geographic Information Science

2007-2010 Treasurer, University Consortium for Geographic Information Science

2007-2008 Chair, Nominations Committee, University Consortium for Geographic Information Science

2007-2008 Past-President, University Consortium for Geographic Information Science

2006-2009 Member, External Advisory Board, Decision Center for a Desert City (DCDC), Arizona State University, Tempe, Arizona

2006-2009 Member, Editorial Board, *Annals of the Association of American Geographers*

2006-2007 Member, Committee on Research Priorities for the United States Geological Survey Center of Excellence for Geospatial Information Science, Mapping Science Committee, Board on Earth Sciences and Resources, National Research Council

2006-2007 President, University Consortium for Geographic Information Science

2006 Member, Education Award Subcommittee, University Consortium for Geographic Information Science

2006 Organizer, Green Visions Plan for 21<sup>st</sup> Century Southern California Sessions, Annual Meeting of the Association of American Geographers, Chicago, Illinois

2005-2006 President-Elect, University Consortium of Geographic Information Science

2004 Member, Executive Director Search Committee, University Consortium of Geographic Information Science

2003-2005 Member, Research Projects Committee, University Consortium for Geographic Information Science

2003 Organizer, University Consortium for Geographic Information Science Summer Assembly, Asilomar, California

2002-2005 Member, Board of Directors, University Consortium for Geographic Information Science

2002-2005 Chair, Research Committee, University Consortium for Geographic Information Science

- 1999-2000 Member, Instrumentation Program Panel, Division of Behavioral and Cognitive Sciences, National Science Foundation
- 1998 Judge, Student Poster Competition Sponsored by the Cartography, Geographic Information Systems and Remote Sensing Specialty Groups, Annual Meeting of the Association of American Geographers, Boston, Massachusetts
- 1996-1998 Member, Geographic Information Science Core Curriculum Editorial Committee, National Center for Geographic Information and Analysis, University of California at Santa Barbara
- 1996-1998 Secretary/Treasurer, Geographic Information Systems Specialty Group, Association of American Geographers
- 1995-1997 Member, Doctoral Dissertation Awards Panel, Geography and Regional Science Program, National Science Foundation
- 1993 Member, U.S. Department of Agriculture-Cooperative States Research Service Facility Review Team, College of Agriculture, New Mexico State University, Las Cruces, New Mexico
- 1990 Organizer, "Young Scholars in Applied Geography" Session, Annual Meeting of the Association of American Geographers, Toronto, Ontario
- 1989-1991 Member, Soil Resources Variability Workgroup, Workshop on Research and Development Issues in Soil Specific Crop Management, U.S. Department of Agriculture-Agricultural Research Service, Cooperative States Research Service and Soil Conservation Service, and the College of Agriculture, University of Minnesota, Bloomington, Minnesota
- 1989-1991 Chair, Applied Geography Specialty Group, Association of American Geographers
- 1990 Co-Organizer, Precision Farming in the 90's Workshop, Power, Montana
- 1989 Co-Organizer, Greater Yellowstone Ecosystem Modeling Workshop, Montana State University, Bozeman, Montana
- 1988-1990 Member, Phoenix Research Career Seminar, Association of American Geographers
- 1988-1989 Editor, Applied Geography Specialty Group Newsletter, Association of American Geographers
- 1986-1991 Chair, Nominations and Elections Committee, Applied Geography Specialty Group, Association of American Geographers
- 1986-1989 Member, Board of Directors, Applied Geography Specialty Group, Association of American Geographers
- 1985 Program Chair, Annual Meeting of the Great Plains/Rocky Mountain Division, Association of American Geographers, Bozeman, Montana

### **State / County**

- 2013-2014 Chair, Organizing Committee, Fourth Annual Los Angeles Geospatial Summit
- 2012-2013 Chair, Organizing Committee, Third Annual Los Angeles Geospatial Summit
- 2011-2012 Chair, Organizing Committee, Second Annual Los Angeles Geospatial Summit
- 2010-2011 Chair, Organizing Committee, First Annual Los Angeles Geospatial Summit
- 1996 Member, Montana Department of Administration Parcel Mapping Coordinator Search Committee
- 1996 Organizer, Reinventing Local Government with GIS Workshop, Eighth Annual Montana GIS Conference, Helena, Montana
- 1995 Organizer, Local Government GIS Applications Workshop, Seventh Annual Montana GIS Conference, Kalispell, Montana
- 1994 Guest Editor, Vol. 4, Issue No. 1, *Montana Policy Review* (Local Government Applications)

- 1991 of GIS, Special Issue)  
Organizer and Chair, Fourth Annual Montana GIS Conference Organizing Committee, Bozeman, Montana
- 1990-1996 Member, Montana Interagency GIS Management Steering Committee
- 1989 Organizer, "Geographic Information Systems: Innovative Applications and Diverse Capabilities" Session, Second Annual Montana GIS Conference, Billings, Montana
- 1988-1992 Member, Montana State Mapping Advisory Committee
- 1988-1989 Member, Montana Interagency GIS Technical Steering Committee

**University**

University of Southern California

- 2015-2016 Member, Joint Provost-Academic Senate Committee on Information Services
- 2015 Member, USC School of Pharmacy Online Program Review Committee
- 2013-2014 Member, Faculty Advisory Task Force on Opportunities for Place-Based Research Within USC Target Communities
- 2012-2013 Member, Multimedia Scholarship Advisory Committee
- 2012-2013 Chair, GeoDesign Academic Program Advisory Committee
- 2010-2013 Member, Research Committee
- 2009-2010 Member, Learning Environments Task Force
- 2009-2010 Chair, Spatial Sciences Faculty Advisory Committee
- 2006-2007 Member, Social Science Data Librarian Search Committee
- 2004- University Ambassador
- 2003-2004 Member, VKC Applied Social Sciences Library Redesign Task Force
- 2002-2004 Marshall, University of Southern California Commencement
- 2002-2003 Chair, Joint Provost-Academic Senate Distance and Distributed Learning Committee
- 2002-2003 Member, E-Mail Retention and Archiving Committee
- 2002-2003 Member, Lusk Real Estate Center Research Committee
- 2002 Member, Organizing Committee, GIS and Spatial Statistics in Environmental Epidemiology Workshop, Pasadena, California
- 2000-2002 Member, Joint Provost-Academic Senate Distance Education and Distributed Learning Committee
- 1998- Lead Delegate, University Consortium of Geographic Information Science
- 1998-2005 Faculty Affiliate, Lusk Real Estate Center
- 1998-2002 Member, Distance Education Curriculum Committee
- 1997- Lead Delegate, UNIGIS International Network
- 1997-1999 Member, Integrated Digital Archives/Information System Los Angeles Executive Committee
- 1997-1998 Member, Graduate and Professional Studies Curriculum Committee

USC Dana and David Dornsife College of Letters, Arts and Sciences

- 2016-2017 Member, Search Committee, Wrigley Institute for Environmental Studies Director
- 2014- Member, Environmental Studies Program Advisory Committee
- 2014- Member, Wrigley Marine Science Center Research Advisory Committee
- 2014- Member, Interdisciplinary Archaeology Program Advisory Committee
- 2013- Member, Population Research Center Internal Advisory Committee
- 2013-2015 Member, Environmental Sustainability Task Force
- 2011-2013 Member, Non-Tenure Track (NTT) Promotions and Appointments Committee
- 2010-2013 Member, Albert S. Raubenheimer Award Review Committee



2008-2010 Member, Wrigley Institute for Environmental Studies Strategic Planning Advisory Committee  
 2008-2010 Member, Wrigley Institute for Environmental Studies Oversight & Resources Committee  
 2006-2007 Member, Department of Earth Sciences Climate Faculty Search Committee  
 2005-2006 Chair, Social Sciences Personnel Committee  
 2004-2005 Member, General Education Program Review Committee  
 1998-2001 Member, Environmental Studies Program Advisory Board  
 1997-2001 Faculty Affiliate, Environmental Studies Program  
 1997-1998 Member, Academic Computing and Technology Committee

#### Department of Geography

2006-2007 Chair, Faculty Review Committee  
 2006-2007 Chair, Urban Environmental Faculty Search Committee  
 2005-2007 Director, Graduate Studies  
 2005-2006 Chair, Faculty Review Committee  
 2005-2006 Chair, GIS and Health Faculty Search Committee  
 2004-2005 Chair, Faculty Review Committee  
 2002-2003 Chair, Faculty Review Committee  
 1998 Member, Administrative Assistant II Search Committee  
 1997-1998 Chair, GIS Research Faculty Search Committee  
 1997-1998 Member, Faculty Review Committee

#### Department of Sociology

2017-2018 Chair, Promotion and Tenure Committee  
 2016-2017 Member, Sociology and Centers Integration Committee  
 2016-2017 Member, Website and Wiki Committee  
 2013-2014 Chair, Faculty Review Committee  
 2013-2014 Chair, Quantitative Social Demography Faculty Search Committee  
 2013-2014 Chair, Space Policy Committee  
 2013-2014 Member, Website Committee

#### School of International Relations

2015-2016 Member, Spatial Analysis/International Affairs Faculty Search Committee

#### Spatial Sciences Institute

2013 Chair, Assistant Professor (Research) Search Committee  
 2013 Chair, Project Manager Search Committee  
 2013 Chair, Associate Director Search Committee  
 2012 Chair, GIS Programmer I Search Committee  
 2012 Chair, Spatial Sciences Post-Doctoral Fellow Search Committee  
 2012 Chair, GIS Project Specialist Search Committee  
 2010-2017 Chair, GIS&T Faculty Search Committee  
 2010-2011 Member, Secretary II Search Committee

#### USC Keck School of Medicine, Department of Preventive Medicine

2014-2015 Member, Environmental Health Community Outreach & Engagement Faculty Search Committee  
 2011- Member, Southern California Environmental Health Sciences Center Executive Committee

## USC Price School of Public Policy

2017-            Member, Neighborhood Data for Social Change Initiative Steering Committee, Sol Price Center for Social Innovation

## USC School of Architecture

2014-2015      Member, Urban Spatial Ecology Faculty Search Committee

## Montana State University

1995-1999      Faculty Affiliate, Mountain Research Center

1995-1997      Member, Mountain Research Center Faculty Advisory Council

1993-1995      Member, University Computer Policy Committee

1985            Member, World Population Day Planning Committee

## MSU Department of Earth Sciences

1994-1995      Chair, Promotion and Tenure Committee

1993            Chair, Urban/Economic Geography Faculty Search Committee

1992            Member, Administrative Assistant Search Committee

1991-1993      Member, Promotion and Tenure Committee

1987-1993      Chair, Geography Graduate Program Committee

1986            Member, Cultural/Historical Geography Search Committee

## MSU Geographic Information and Analysis Center

1993            Chair, Post-Doctoral Fellow Search Committee

1993            Chair, Administrative Assistant Search Committee

1989-1996      Chair, Geographic Information and Analysis Center Advisory Board

## **ACADEMIC REVIEWS**

### **Academic Journal Reviews**

Air Quality, Atmosphere, and Health

American Entomologist

Annals of Epidemiology

Annals of the Association of American Geographers

Applied Geography

Building and Environment

Canadian Journal of Soil Science

Catena

Computers and Geosciences

Computers, Environment, and Urban Systems

Earth Science Informatics

Earth Surface Processes and Landforms

Ecohydrology

Environment and Planning A

Environmental Management

Environmental Modeling and Software

Environmental Monitoring and Assessment

Environmental Science and Technology

Geographical Analysis

Geography Compass

GeoJournal  
Hydrological Processes  
Hydrology and Earth System Sciences  
International Journal of Applied Earth Observation and Geoinformation  
International Journal of Geographical Information Science  
Journal of Environmental Management  
Journal of Environmental Quality  
Journal of Geographical Systems  
Journal of Hydraulic Engineering  
Journal of Hydrology  
Journal of the American Water Resources Association  
Journal of Soil and Water Conservation  
Mountain Research and Development  
Physical Geography  
Photogrammetric Engineering and Remote Sensing  
PLOS One  
Progress in Physical Geography  
Soil Science Society of America Journal  
Transactions on Spatial Algorithms and Systems  
Water Resources Bulletin  
Water Resources Research

#### **Academic Program Reviews**

2015	Master Program in Geographic Information Systems & Science & Geospatial Intelligence Certificate Program, Information Management School, Universidade NOVA de Lisboa
2015	School of Pharmacy, University of Southern California
2012	Center for Geographic Analysis, Harvard University
2007	Department of Geosciences, University of Texas at Dallas
2007	Applied Geosciences & GIS Master's Program, Department of Earth & Environmental Sciences & Department of Geography, Kuwait University, Kuwait City, Kuwait
2001	National Environmental Satellite, Data, & Information Service Science Programs, National Oceanic & Atmospheric Administration, Washington, D.C.

#### **Book Manuscripts and Proposals**

Blackwell Science  
British Society for Geomorphology  
Elsevier Science/Academic Press  
John Wiley and Sons  
McGraw-Hill Publishing  
Oxford University Press  
Routledge  
Sage Publications  
Saunders College Publishing  
Springer  
Taylor and Francis

## **Promotion and Tenure Reviews**

Arizona State University  
Australian National University  
Bowling Green State University  
Florida State University  
Hong Kong Baptist University  
Hunter College, City University of New York  
San Francisco State University  
State University of New York at Buffalo  
Temple University  
Texas A&M International University  
Texas A&M University, Corpus Christi  
Texas State University  
The Ohio State University  
University of California, Berkeley  
University of California, Santa Barbara  
University of Canberra (Australia)  
University of Colorado, Boulder  
University of Connecticut  
University of Georgia  
University of Idaho  
University of Maryland, College Park  
University of Oregon  
University of South Carolina  
University of South Florida  
University of Waterloo (Canada)  
University of Wisconsin, Madison  
University of Wisconsin, Milwaukee

## **Proposal Reviews**

American Association for the Advancement of Science  
King Abdulaziz Program for Science and Technology  
California State University Agricultural Research Institute  
Canada Foundation for Innovation  
Leaders Opportunity Fund  
CRDF Global  
Indo-US Science and Technology Forum  
Montana Agricultural Experiment Station  
National Geographic Society  
National Institutes of Health  
Social Sciences and Population Studies Study Section  
National Oceanic and Atmospheric Administration Science Advisory Board  
National Science Foundation  
Archaeology Program  
Career Awards Program

Conservation Biology Program  
 Division of Behavioral and Cognitive Sciences Instrumentation Program  
 Environmental Geochemistry and Biogeochemistry Program  
 Geography and Regional Science Program  
 Geography and Spatial Sciences Program  
 Geology and Paleontology Program  
 Human Dimensions to Global Change Program  
 Hydrologic Sciences Program  
 Instrumentation and Laboratory Improvement Program  
 Small Business Innovative Research Program

Natural Environment Research Council (UK)  
 New Investigator Scheme

Natural Sciences and Engineering Research Council of Canada  
 Discovery Grants Program

Royal Society of New Zealand  
 Marsden Fund

Singapore National Research Foundation  
 Competitive Research Program

South Carolina Space Grant Consortium  
 Research and Education Awards Program

University of Southern California  
 Center for Scholarly Technology Barn Raising, Curriculum Design, and Jumpstart Programs  
 James H. Zumberge Faculty Research and Innovation Fund  
 Southern California Environmental Health Sciences Center

University of Wisconsin-Milwaukee  
 Research Growth Initiative Program

U.S. Department Agriculture-Cooperative States Research Service  
 Fund for Rural America Program  
 Soils and Soil Biology Program  
 Water Processes and Water Resources Program

Wisconsin Sea Grant Program

## **PROFESSIONAL CERTIFICATIONS**

1994-2003	Certified ArcView Instructor, Esri, Inc., Redlands, California
1993-1998	Certified ArcCad Instructor, Esri, Inc., Redlands, California
1990-1998	Certified PC Arc/Info Instructor, Esri, Inc., Redlands, California

## **PROFESSIONAL SOCIETY MEMBERSHIPS**

Association of American Geographers  
 Association of Pacific Coast Geographers  
 Los Angeles Geographical Society  
 National Geographic Society

