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EDUCATION

1998	National Research Council Postdoctoral Associate. NOAA-NMFS Lab, Beaufort, NC
1996	Ph.D. Department of Geography. University of Colorado, Boulder, Colorado
1991	M.A. Department of Geography. University of North Carolina, Chapel Hill, North Carolina
1988	Cartography Certificate. California State University, Hayward, California
1988	B.A. Department of Geography, University of California, Berkeley, California
1986	Junior Year Abroad. Department of Geography, University of Wales, Aberystwyth

AREAS of RESEARCH and OUTREACH SPECIALIZATION

My academic background is in geography; I trained in geospatial technologies and natural-human system interactions. My technological expertise in GIScience includes remote sensing analysis, geospatial modeling, lidar analysis, participatory webGIS and citizen science and field-based monitoring. I often use a suite of these tools to address an environmental problem and engage with interested stakeholders. The geo-informatics field is evolving quickly, and I actively work to build a community interested in applied geospatial research and outreach locally at UC Berkeley and across the state. I am Faculty Director of the UCB Geospatial Innovation Facility, which is dedicated to creating cutting-edge mapping technology, training in geospatial information systems and remote sensing, and applied geospatial research.

APPOINTMENTS

2010-present	Professor in Residence and Specialist in Cooperative Extension. Ecosystem Sciences Division of the Department of Environmental Sciences, Policy and Management. University of California, Berkeley
2012-present	Director, ANR Statewide Program for Informatics and Geographic Information Systems (IGIS)
2003-2010	Associate Specialist in Cooperative Extension and Adjunct Associate Professor. Ecosystem Sciences Division of the Department of Environmental Sciences, Policy and Management. UC Berkeley
2005-present	Faculty Director. Geospatial Innovation Facility (GIF), College of Natural Resources, University of California, Berkeley. http://gif.berkeley.edu
1999-2003	Assistant Specialist in Cooperative Extension and Adjunct Assistant Professor. Department of Environmental Sciences, Policy and Management. University of California, Berkeley
1998-1999	Lecturer. Department of Geography. San Diego State University
1996-1999	Visiting Scholar. San Diego Supercomputer Center
1996-1998	NRC Postdoctoral Associate. NOAA-NMFS Southeast Fisheries Laboratory. Beaufort, NC
1996	Physical Scientist. National Geophysical Data Center, NOAA. Boulder, Colorado
1996	GIS Lab Manager and GIS facilitator. NOAA-NMFS Southeast Fisheries Laboratory. Beaufort, NC
1991-1995	Teaching Assistant and Research Assistant. Geography. University of Colorado, Boulder
1989-1991	Research Assistant and RS/GIS Laboratory Manager. Geography Department. UNC, Chapel Hill

PUBLICATIONS

Accepted or In Press

Jones-Smith, J. C., M. Wharton, M. Kelly, E. Kersten, A. Karter, N. Adler, D. Schillinger, H. Moffett, B. A. Laraia. Obesity and the food environment: income and ethnicity differences among people with diabetes, the Diabetes Study of Northern California (DISTANCE). Accepted in *Diabetes Care*

Ferranto, S., L. Huntsinger, C. Getz, W. Stewart, G. Nakamura, and M. Kelly. Management without borders? A survey of landowner practices and attitudes towards cross- boundary cooperation. Accepted in *Society and Natural Resources*

Published

Schile, L. K. Byrd, L. Windham-Meyers, and M. Kelly. **2013**. Accounting for plant litter in remote sensing based estimates of carbon flux in wetlands. *Remote Sensing Letters* 4:6, 542-551

- Jakubowski, M. Q. Guo, B. Collins, S. Stephens, and M. Kelly. **2013**. Prediction of fuel models and stand structure metrics using lidar and optical remote sensing in dense mixed conifer forest. In Press in *Photogrammetric Engineering and Remote Sensing* 79(1): 37-50
- Brown, G., M. Kelly and D. Whital. **2013**. Which “public”? Sampling effects in public participation GIS (PPGIS) and Volunteered Geographic Information (VGI) systems for public lands management. *Journal of Environmental Planning and Environment*. doi: <http://dx.doi.org/10.1080/09640568.2012.741045>
- Jakubowski, M. K., Q. Guo, and M. Kelly. **2013**. Tradeoffs between lidar pulse density and forest measurement accuracy. *Remote Sensing of Environment* 130: 245-253
- Connors, J., S. Lei and M. Kelly. **2012**. Citizen science in the age of neogeography: utilizing volunteered geographic information for environmental monitoring. *Annals of the Association of American Geographers* 102(6):1267-1289
- Zhao, F., Q. Guo, and M. Kelly. **2012**. Allometric equation choice impacts lidar-based forest biomass estimates: A case study from the Sierra National Forest, CA. *Agriculture and Forest Meteorology* 165: 64-72
- Kersten, E., B. Laraia, M. Kelly, K. Adler, I. Yen. **2012**. Do small food stores provide access to nutritious foods? Comparing database and store visit measures of the community nutrition environment. *Preventing Chronic Disease*, 9:120023. DOI: <http://dx.doi.org/10.5888/pcd9.120023>
- Plieninger, T., S. Ferranto, L. Huntsinger, M. Kelly, and C. Getz. **2012**. Appreciation, use, and management of biodiversity and ecosystem services in California’s working landscapes. *Environmental Management*. DOI: 10.1007/s00267-012-9900-z
- Zhao, F., A. R. Sweitzer, Q. Guo and M. Kelly. **2012**. Characterization of forest habitat for mammals with lidar: a case study of Pacific fisher denning trees in the Sierra National Forest, CA. *Forest Ecology and Management* 280: 112–119
- Kelly, M., S. Ferranto, K. Ueda, S. Lei and L. Huntsinger. **2012**. Expanding the table: the web as a tool for participatory adaptive management in California forests. *Journal of Environmental Management* 109:1-11
- Baldocchi, D., M. Detto, O. Sonnentag, Verfaillie, Y. Teh, W. Silver, and M. Kelly. **2012**. The challenges of measuring methane fluxes and concentrations over a peatland pasture. *Agricultural and Forest Meteorology* 153(1): 177-187
- Ferranto, S., L. Huntsinger, C. Getz, W. Stewart, G. Nakamura, and M. Kelly. **2012**. Consider the source: The impact of media and authority in outreach to California’s forest and rangeland owners. *Journal of Environmental Management* 97(1): 131-140
- Li, W., Q. Guo, M. Jakubowski and M. Kelly. **2012**. A new method for segmenting individual trees from the lidar point cloud. *Photogrammetric Engineering and Remote Sensing* 78(1): 75-84
- García-Feced, C., D. Temple, and M. Kelly. **2011**. LiDAR as a tool to characterize wildlife habitat: California Spotted Owl nesting habitat as an example. *Journal of Forestry* 108(8): 436-443
- Blanchard, S., M. Jakubowski, and M. Kelly. **2011**. Object-based image analysis of downed logs in a disturbed forest landscape using lidar. *Remote Sensing* 3(11), 2420-2439
- Stralberg, D., M. Brennan, J. C. Callaway, J. K. Wood, L. M. Schile, D. Jongsomjit, M. Kelly, V. T. Parker, and S. Crooks. **2011**. Evaluating tidal marsh sustainability in the face of sea-level rise: A hybrid modeling approach applied to San Francisco Bay tidal marshes will be threatened by increasing rates of sea-level rise (SLR) over the next century. *PLoS ONE* 6(11): e27388
- Kelly M., S. Blanchard, E. Kersten and K. Koy. **2011**. Terrestrial remotely sensed imagery in support of public health: New avenues of research using object-based image analysis. *Remote Sensing* 3(11): 2321-2345
- Ferranto, S., L. Huntsinger, C. Getz, G. Nakamura, W. Stewart, S. Drill, Y. Valacovich, M. DeLasaux, and M. Kelly. **2011**. Forest and rangeland owners value land for natural amenities and as financial investment. *California Agriculture* 65(4): 184-191
- Sonnentag O., R. Vargas, M. Detto, B. R. K. Runkle, Y. A. Teh, W. L. Silver, M. Kelly, and D. D. Baldocchi. **2011**. Tracking the structural and functional development of a perennial pepperweed (*Lepidium latifolium* L.) infestation using a

- multi-year archive of webcam imagery and eddy covariance measurements. *Agricultural Forest Meteorology* 151:916-926
- Leung, CH, BA Laraia, M Kelly, D Nickleach, NE Adler, LH Kushi, and IH Yen. **2011**. The influence of neighborhood food stores on change in young girls' body mass index. *American Journal of Preventative Medicine* 41(1): 43–51
- Koy, K., S. V. Wart, B. Galey, M. O'Connor, and M. Kelly. **2011**. Cal-Adapt: Bringing global climate change data to local application. 2011. *Photogrammetric Engineering and Remote Sensing* 77(6): 546-550
- Teh, Y. A., W. L. Silver, O. Sonnentag, M. Detto, M. Kelly, and D. D. Baldocchi. **2011**. Large greenhouse gas emissions from a temperate peatland pasture. *Ecosystems* 14: 311–325
- Sonnentag O, Detto M, Runkle BRK, Kelly M, Baldocchi D. D. **2011**. Carbon dioxide exchange of a pepperweed (*Lepidium latifolium* L.) infestation: how do flowering and mowing affect canopy photosynthesis and autotrophic respiration? *Journal of Geophysical Research – Biogeosciences*, 116, G01021, doi:10.1029/2010JG001522
- Tuxen, K., L. Schile, D. Stralberg, S. Siegel, V. T. Parker, M. Vasey, J. Callaway and M. Kelly. **2011**. Mapping changes in tidal wetland vegetation composition and pattern across a salinity gradient using high spatial resolution imagery. *Wetlands Ecology and Management* 19:141-157
- Kelly, M., Tuxen, K., and D. Stralberg. **2011**. Mapping changes to vegetation pattern in a restoring wetland: finding pattern metrics that are consistent across scale and time. *Ecological Indicators* 11: 263-273
- McPherson, B. M., D. L. Wood, S. Mori, M. Kelly, A. J. Storer, P. Svihra, and R. B. Standiford. **2010**. Survival of oaks and tanoaks after eight years of sudden oak death monitoring in coastal California. *Forest Ecology and Management* 259: 2248-2255
- De Chant, T., A. H. Gallego, J. V. Saornil and M. Kelly. **2010**. Urban influence on changes in linear forest edge structure. *Landscape and Urban Planning* 96: 12-18
- Stralberg, D., M. Herzog, N. Nur, K. Tuxen, S. Siegel and M. Kelly. **2010**. Predicting avian abundance within and across tidal marshes using fine-scale vegetation and geomorphic metrics. *Wetlands* 30: 475-487
- De Chant, T. and M. Kelly. **2009**. Individual object change detection for monitoring the impact of a forest pathogen on a hardwood forest. *Photogrammetric Engineering and Remote Sensing* 75(8): 1005-1013
- Zeledon, E. and M. Kelly. **2009**. Understanding large-scale deforestation in southern Jinotega, Nicaragua from 1978 to 1999 through the examination of changes in land use and land cover. *Journal of Environmental Management* 90: 2866-2872
- Collins, B., J. Miller, M. Kelly, J.W. van Wagtendonk, and S. L. Stephens. **2009**. Interactions among wildland fires in a long-established Sierra Nevada natural fire area. *Ecosystems* 12(1): 114-128
- Kelly, M., D. Liu, B. McPherson, D. Wood and R. Standiford. **2008**. Spatial pattern dynamics of oak mortality and associated disease symptoms in a California hardwood forest affected by sudden oak death. *Journal of Forest Research* 13:312-319
- Kelly, M., K. Ueda and B. Allen-Diaz. **2008**. Considerations for ecological reconstruction of historic vegetation: Analysis of the spatial uncertainties in the California Vegetation Type Map dataset. *Plant Ecology* 194 (1): 37-49
- Cleve, C., M. Kelly F. Kearns and M. Moritz. **2008**. Classification of urban environments for fire management support: A comparison of pixel- and object-based classifications using high-resolution aerial photography. *Computers, Environment and Urban Systems* 32: 317–326
- Rindfuss, R. R, B. Entwisle, S. J. Walsh, L. An, N. Badenoch, D.G. Brown, P. Deadman, T. P. Evans, J. Fox, J. Geoghegan, M. Gutmann, M. Kelly, M. Linderman, J. Liu, G. P. Malanson, C. F. Mena, J. P. Messina, E. F. Moran, D. C. Parker, W. Parton, P. Prasartkul, D. Robinson, Y. Sawangdee, L. K. VanWey, P. H. Verburg, and G. Zhong. **2008**. Land use change: complexities and comparisons. *Journal of Land Use Science* 3(1): 1-10
- Liu, Y., Q. Guo, and M. Kelly. **2008**. A framework of region-based spatial relationships for non-overlapping features and its application in object based image analysis. *ISPRS Journal of Photogrammetry and Remote Sensing* 63: 461–475
- Tuxen, K., L. Schile, M. Kelly, and S. Siegel. **2008**. Vegetation colonization in a restoring tidal marsh: A remote sensing approach. *Restoration Ecology* 16(2): 313-323

- Pu, R., M. Kelly, G. L. Anderson and P. Gong. **2008**. Spectroscopic determination of health levels of coast live oak (*Quercus agrifolia*) leaves. *GeoCarto International* 23 (1): 3-20
- Pu, R., M. Kelly, G. L. Anderson, and P. Gong. **2008**. Using CASI hyperspectral imagery to detect mortality and vegetation stress associated with a new hardwood forest disease. *Photogrammetric Engineering & Remote Sensing* 74(1): 65-75
- Lozano, F. J, S. Suárez-Seoane, M. Kelly, and E. Luis. **2008**. Multi-scale approach to fire occurrence probability in a Mediterranean region using satellite data and CART. *Remote Sensing of Environment* 112(3): 708-719
- Liu, D., M. Kelly, P. Gong and Q. Guo. **2007**. Characterizing spatial-temporal tree mortality patterns associated with a new forest disease. *Forest Ecology and Management* 253 (1-3): 220-231
- Kelly, M., Q. Guo, D. Liu and D. Shaari. **2007**. Modeling the risk of a new invasive forest disease in the United States: an evaluation of five environmental niche models. *Computers, Environment and Urban Systems* 31(6): 689-710
- Pederson, B., F. Kearns and M. Kelly. **2007**. Methods for facilitating web-based participatory research informatics. *Ecological Informatics* 2(1): 33-42
- Collins, B. M., M. Kelly, J. W. V. Wagendonk and S. L. Stephens. **2007**. Spatial patterns of large natural fires in Sierra Nevada wilderness areas. *Landscape Ecology* 22(4): 545-557
- Guo, Q. C., M. Kelly, P. Gong and D. Liu. **2007**. An object-based classification approach in mapping tree mortality using high spatial resolution imagery. *GIScience and Remote Sensing* 44(1): 24-47
- Byrd, K., M. Kelly and A. Merenlender. **2007**. Temporal relationships between watershed land use and salt marsh disturbance in a Pacific estuary. *Environmental Management* 39(1): 98-112
- Byrd, K. and M. Kelly. **2006**. Salt marsh vegetation response to edaphic and topographical changes from upland sedimentation in a Pacific estuary. *Wetlands* 26(3): 813-829
- Liu, D., P. Gong, Q. Guo, and M. Kelly. **2006**. Automatic registration of airborne images by combining area-based methods with local transformation methods. *Photogrammetric Engineering and Remote Sensing* 72(9): 1049-1059
- Chen, Q., D. Baldocchi, P. Gong, and M. Kelly. **2006**. Isolating individual trees in a savanna woodland using small footprint LIDAR data. *Photogrammetric Engineering and Remote Sensing* 72(8): 923-932
- Fisher, J., M. Kelly and J. Romm. **2006**. Scales of environmental justice: combining GIS and spatial analysis for air toxics in West Oakland, California. *Health and Place* 12: 701-714
- Yu, Q., P. Gong, N. Clinton, M. Kelly and D. Schirokauer. **2006**. Object-based detailed vegetation classification with airborne high resolution remote sensing imagery. *Photogrammetric Engineering and Remote Sensing* 72(7): 799-811
- Liu, D., M. Kelly, and P. Gong. **2006**. A Spatial-temporal approach for monitoring forest disease dynamics using multi-temporal high spatial resolution imagery. *Remote Sensing of Environment* 101(2): 167-180
- Opperman, J. J., K. Lohse, C. Brooks, N. M. Kelly and A. M. Merenlender. **2005**. Influence of watershed-scale land use on salmonid spawning habitat in a Mediterranean-climate basin, California. *Canadian Journal of Fisheries and Aquatic Science* 62: 2740-2751
- Kelly, M., B. Allen-Diaz, and N. Kobzina. **2005**. Digitization of a historic dataset: the Wieslander California vegetation type mapping project. *Madroño* 52(3):191-201
- Sun, W, M. Kelly, and P. Gong. **2005**. Separation of dead tree crowns from the oak woodland forest mosaic by integrating spatial information. *GeoCarto International* 20(2): 15-20
- McPherson, B. A. D. L. Wood, P. Švihra, A. J. Storer, N. M. Kelly and R. B. Standiford. **2005**. Sudden oak death in California: Disease progression in oaks and tanoaks. *Journal of Forest Ecology and Management* 213(1-3): 71-89
- Kearns, F. R., N. M. Kelly, J. L. Carter, and V. Resh. **2005**. A method for the use of landscape metrics in freshwater research and management. *Landscape Ecology* 20(1): 113-125
- Guo, Q., M. Kelly, and C. Graham. **2005**. Support vector machines for predicting distribution of Sudden Oak Death in California. *Ecological Modeling* 182(1):75-90

- Byrd, K. B., M. Kelly, and E. Van Dyke. **2004**. Decadal changes in a Pacific estuary: a multi-source remote sensing approach for historical ecology. *GIScience and Remote Sensing* 41(4): 347-370
- Kelly, M., D. Shaari, Q. Guo, and D. Liu. **2004**. A comparison of standard and hybrid classifier methods for mapping hardwood mortality in areas affected by sudden oak death. *Photogrammetric Engineering and Remote Sensing* 70(11): 1229-1239
- Guo, Q. C., and M. Kelly. **2004**. Interpretation of scale in paired quadrat variance methods. *Journal of Vegetation Science* 15: 763-770
- Švihra, P. and M. Kelly. **2004**. Importance of oak ambrosia beetles in predisposing coast live oak trees to wood decay. *Journal of Aboriculture* 30(6): 371-375
- Wacker, M. and N. M. Kelly. **2004**. Changes in vernal pool edaphic settings through mitigation at the project and landscape scale. *Wetlands Ecology and Management* 12(3): 165-178
- Kelly, M., K. A. Tuxen, and F. R. Kearns. **2004**. Geospatial informatics for management of a new forest disease: Sudden Oak Death. *Photogrammetric Engineering and Remote Sensing* 70(9): 1001-1004
- Wacker, M. and N. M. Kelly. **2004**. Ranchers vs. ranchettes in California's oak rangelands. *Rangelands* 26(1): 17-22
- Kelly, M. and D. Liu. **2004**. Mapping diseased oak trees using ADAR imagery. *Geocarto International* 19(1): 57-64
- Kearns, F. R., M. Kelly, and K. A. Tuxen. **2003**. Everything happens somewhere: using webGIS as a tool for sustainable natural resource management. *Frontiers in Ecology and the Environment* 1(10): 541-548
- Kelly, N. M., and K. Tuxen. **2003**. WebGIS for monitoring "sudden oak death" in coastal California. *Computers, Environment and Urban Systems* 27(5): 527-547
- Pu, R., S. Ge, N. M. Kelly, and P. Gong. **2003**. Spectral absorption features as indicators of water status in coast live oak (*Quercus agrifolia*) leaves. *International Journal of Remote Sensing* 24(9): 1799-1810
- Kelly, M., and R. Meentemeyer. **2002**. Landscape dynamics of the spread of Sudden Oak Death. *Photogrammetric Engineering and Remote Sensing* 68(10): 1001-1009
- Fonseca, M. S., P. E. Whitfield, N. M. Kelly, and S. S. Bell. **2002**. Statistical modeling of seagrass landscape pattern and associated ecological attributes in relation to hydrodynamic setting. *Ecological Applications* 12(1): 218-237
- McPherson, B. A., D. L. Wood, A. J. Storer, N. M. Kelly, and R. B. Standiford. **2001**. Sudden oak death, a new forest disease in California. *Integrated Pest Management Reviews* (3-4): 243-246
- Kelly, N. M., and B. A. McPherson. **2001**. Multi-scale approach taken to Sudden Oak Death monitoring. *California Agriculture*. January-February: 15-16
- Helly, J. H., N. M. Kelly, D. Sutton, and T. Elvins. **2001**. Collaborative management of natural resources in San Diego Bay. *Coastal Management* 29(2): 117- 132
- Kelly, N. M., M. Fonseca, and P. Whitfield. **2001**. Predictive mapping for management and conservation of seagrass beds in North Carolina. *Aquatic Conservation: Marine and Freshwater Ecosystems* 11(6): 437-451
- Kelly, N. M. **2001**. Changes to landscape pattern of coastal North Carolina wetlands under the Clean Water Act. *Landscape Ecology* 16(1): 3-16
- Kelly, N. M. **2000**. Spatial accuracy assessment of wetland permits. *Cartography and Geographic Information Systems* 27(2): 117-128

Book Chapters

- Kelly, M. and K. Tuxen. **2009**. Remote sensing support for tidal wetland vegetation research and management. Invited chapter in: *Remote Sensing and Geographic Information Systems for Coastal Ecosystem Assessment and Management: Principles and Applications*. Pp. 341-364. Xiaojun Yang (Editor). Springer-Verlag
- Tuxen, K. and M. Kelly. **2008**. Multi-scale functional mapping of tidal wetlands: an object-based approach. Chapter in *Object-based Image Analysis: Spatial concepts for knowledge driven remote sensing applications*. Pages 415-442. Thomas Blaschke, Stefan Lang and Geoffrey Hay (Editors). Springer Lecture Notes in Geoinformation and Cartography

- Kelly, M. and Q. Guo. **2007**. Integrated agricultural pest management through remote sensing and related technologies. Invited chapter in: *Integrated Management of Plant Pests and Disease*. Pages 191-226. Aurelio Ciancio and K. G. Mukerji (Editors). Kluwer
- Kelly, N. M., **2001**. Linking biogeography and environmental management in the wetland landscape of coastal North Carolina: the difference between nationwide and individual wetland permits. pp. 281-294 in *GIS and Remote Sensing Applications in Biogeography and Ecology*. A. Millington, S. Walsh and P. Osborne (Editors), Kluwer Academic Press, Boston MA
- Kelly, N. M., F. Cross, D. Field, and R. Emmett, **1999**. Remote sensing of forest clearing effects on essential fish habitat of Pacific salmon. pp. 252-267 in *Fish Habitat: Essential Fish Habitat and Habitat Rehabilitation*, L. Beneka (Editor), American Fisheries Society, Bethesda MD

Reports and Other Documents

- Stewart, W., Ferranto, S., Nakamura, G., Getz, C., Huntsinger, L., Kelly, M., **2012**. Subdivide or silviculture: Choices facing family forest owners in the redwood region. Pacific Southwest Research Station, Forest Service, U.S. Department of Agriculture, Albany, CA, pp. 617-626.
- Kelly, M., J. Connors, S. Lei. **2010**. OakMapper 2.0: Distributed Participatory Sensing for Monitoring and Management of Sudden Oak Death. *In* Frankel, S.J.; Kliejunas, J.T.; Palmieri, K.M., tech. cords. 2010. Proceedings of the Sudden Oak Death Fourth Science Symposium. Gen. Tech. Rep. PSW-GTR-229, Albany, CA: Pacific Southwest Research Station, Forest Service, U.S. Department of Agriculture. Pp. 334-337
- McPherson, B. A., D. L. Wood, M. Kelly, S. R. Mori, P. Svihra, A. J. Storer, and R. B. Standiford. **2010**. Impacts of *Phytophthora ramorum* on Oaks and Tanoaks in Marin County, California Forests Since 20001. Proceedings of the Sudden Oak Death Fourth Science Symposium. Gen. Tech. Rep. PSW-GTR-229, Albany, CA: Pacific Southwest Research Station, Forest Service, U.S. Department of Agriculture. Pp. 210-212
- Kelly, M., Connors, J. and S. Lei. **2008**. Migrating to new web-based geotechnologies for forest monitoring in the Bay Area. *The BAAMA Journal*. 2(2): 7-9
- Tuxen, K. and M. Kelly. **2008**. The OakMapper webGIS: Improved access to sudden oak death spatial data. Proceedings of the 2007 Sudden Oak Death Science Symposium. U.S. Department of Agriculture, Forest Service General Technical Report PSW-GTR-214
- McPherson, B., D. L. Wood, S. R. Mori, P. Svihra, R. B. Standiford, and M. Kelly. **2008**. Consequences of *Phytophthora ramorum* infection in coast live oaks. USDA Forest Service General Technical Report PSW-GTR-217. Albany CA: Pacific Southwest Research Station, Forest Service, U.S. Department of Agriculture: 199-208
- DeChant, T., M. Kelly and B. Allen-Diaz. **2008**. Gap dynamics in oak woodlands across a gradient of disturbance. USDA Forest Service General Technical Report PSW-GTR-217. Albany CA: Pacific Southwest Research Station, Forest Service, U.S. Department of Agriculture: 251-262
- Doherty, T., B. Allen-Diaz and M. Kelly. **2008**. Using Vegetation Type Mapping data to increase our understanding of long-term ecological change in the woodlands surrounding San Francisco bay. USDA Forest Service General Technical Report PSW-GTR-217. Albany CA: Pacific Southwest Research Station, Forest Service, U.S. Department of Agriculture: 617-624
- Kelly, M. D. Shaari, Q. Guo, and D. Liu. **2006**. Modeling risk for SOD Nationwide: What are the effects of model choice on risk prediction? USDA Forest Service General Technical Report PSW-GTR-196. Albany, CA: Pacific Southwest Research Station, Forest Service, U.S. Department of Agriculture: 333-344
- McPherson, B. A., S. R. Mori, D. L. Wood, A. J. Storer, P. Svihra, M. Kelly, and R. Standiford. **2006**. Sudden Oak Death disease progression in oaks and tanoaks. USDA Forest Service Gen. Tech. Rep. PSW-GTR-196. Albany, CA: Pacific Southwest Research Station, Forest Service, U.S. Department of Agriculture: 379-382
- Kelly, M. **2005**. Review of Costanza R. and A. Voinov (Editors): *Landscape Simulation Modeling: A Spatially Explicit, Dynamic Approach*. *Environment and Planning B: Planning and Design* 32(2): 311-313
- Liu, D., M. Kelly and P. Gong. **2005**. Classifying multi-temporal TM imagery using Markov Random Fields and Support Vector Machines. Proceedings of the IEEE Third International Workshop on the Analysis of Multi-temporal Remote Sensing Images. May 16-18, 2005.

- Kelly, N. M. **2002**. Monitoring Sudden Oak Death in California using high-resolution imagery. USDA Forest Service General Technical Report PSW-GTR-184, Albany CA: Pacific Southwest Research Station, Forest Service, U.S. Department of Agriculture: 799-810
- Harris, R. R., S. D. Kocher, J. Gerstein, F. Kearns, D. Lindquist, D. Lewis, J. Leblanc, W. Weaver, and N. M. Kelly. **2003**. Monitoring Fish Habitat Restoration Projects. Pages 1-213 in Barry Collins (Editor), Interim Restoration Effectiveness and Validation Monitoring Protocols, California Coastal Salmonid Restoration Monitoring and Evaluation Program. March 2003, 320 pp. California Department of Fish and Game, Fortuna, CA
- Guo, Q., M. Kelly, and C. Graham. **2003**. Predicting distribution of a new forest disease using one-class SVMs. Pages 719-722 in the Proceedings of the Third IEEE International Conference on Data Mining. Melbourne, FL. November 19 - 22, 2003
- Tuxen, K. and M. Kelly. **2003**. OakMapper webGIS tool for monitoring “sudden oak death” in coastal California. Pages 175-184 in Natural Resources Information Management Forum: Putting knowledge to work. T. Innes (Editor), FORREX–Forest Research Extension Partnership, Kamloops, B.C. FORREX Series No. 8
- McPherson, B. A., D. L. Wood, A. J. Storer, N. M. Kelly, and R. B. Standiford. **2002**. Sudden Oak Death: One year of field data. USDA Forest Service General Technical Report PSW-GTR-184, Albany CA: Pacific Southwest Research Station, Forest Service, U.S. Department of Agriculture: 751-763
- DiPietro, D., M. Kelly, S. Schoenig, D. Johnson and R. Yacoub, **2002**. California Weed Mapping Handbook. September 2002. Published by CDFA as a web document. 92 pp
- Kelly, N. M. **2001**. Spatial pattern of forest clearing and potential sediment delivery in watersheds containing essential fish habitat for Pacific salmon. Proceedings of the 1999 International Symposium on Geographic Information Systems (GIS) in Fishery Sciences, Seattle WA. pp. 281-294. Fishery GIS Research Group, Saitama, Japan
- McPherson, B. A., D. L. Wood, A. J. Storer, D. M. Rizzo, N. M. Kelly, and R. B. Standiford. **2000**. Oak mortality syndrome: Sudden Oak Death of oaks and tanoaks. *Tree Notes*. Number 26, August 2000. 6 pp

In Review

- O’Connell, J. L., K. B. Byrd, and M. Kelly. Remote-sensing estimates of plant N content and biomass allocation between roots and shoots in *Schoenoplectus acutus*. Submitted to *Ecological Applications*

Working Papers

- Jakubowski, M. J., W. Li, Q. Guo, and M. Kelly. Delineating individual trees from lidar data: a comparison of segmentation methods. To be submitted to *Remote Sensing*
- Schile, L. M., J. C. Callaway, and M. Kelly. Simulated sea-level rise alters above-ground and below-ground biomass and competitive interactions in tidal marsh species. To be submitted to *Ecology*
- Schile, L. M., J. C. Callaway, J. T. Morris, D. Stalberg, V. T. Parker, and M. Kelly. Modeling tidal wetland distribution with sea-level rise: evaluating the role of vegetation in marsh resiliency. To be submitted to *PLOS One*
- Ferranto, S., L. Huntsinger, C. Getz, and M. Kelly. Out of sight, out of mind? A comparison of absentee, local, and residential landowners in California’s Forest and Rangelands. To be submitted to *Land Use Policy*
- Ferranto, S., L. Huntsinger, and M. Kelly. Sustaining ecosystem services from private lands in California: the role of the landowner. To be submitted to *California Agriculture*
- Laraia, B., E. Kersten, I. Yen, J. Connors, and M. Kelly. Lessons learned in characterizing the relevant spatial attributes of neighborhoods for the investigation of health outcomes. To be submitted to *International Journal of Health Geographics*
- Alvarez, O., R.A. Sweitzer, M. Kelly, Q. Guo. Modelling the distribution of Pacific fisher with Lidar derived vegetation products. To be submitted to *Ecography*

AWARDS

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| 2008 | <i>Excellence in Education</i> award from the California Geographic Information Association for geospatial literacy training and web-based extension |
| 2008 | Inducted into the Berkeley High School Athletic Hall of Fame |

2007	Inducted into the University of California Athletic Hall of Fame
2006	Inducted into the United States Water Polo Hall of Fame
2002	NASA New Investigator Program Award
1996	Marine Science Fellowship. North Carolina State University Sea Grant Program
1994	Student Coach of the Year. University of Colorado, Boulder
1995	Lead Graduate Teacher. Department of Geography, CU-Boulder

CURRENT RESEARCH FUNDING

Spatial Components of Public Health

Neighborhood effects on weight change and diabetes risk factors. 2009-2014. PI: B. Laraia, UCSF. Co-I: M. Kelly. National Institutes of Health, Research Project Grant Program (R01): \$784,390

Adaptive Forest Management

Learning how to apply adaptive management in the Sierra Nevada Forest Plan Amendment. 2005-2014. PI: J. Battles, Co-PIs: R. C. Bales (UC Merced), M. Conklin (UCM), L. Huntsinger (UCB), M. Kelly (UCB), Q. Guo (UCM), R. J. Guitierrez (University of Minnesota), K. A. Rodrigues (UC Cooperative Extension), S. Stephens (UCB). USDA Forest Service: \$1,850,666

Climate Change and Landscape Dynamics

Advanced Remote Sensing to Quantify Temperate Peatland Capacity for Belowground Carbon Capture. 2011-2013. PI: K. Byrd. NASA: \$157,202
 Informatics Engine for understanding biotic responses to global change. 2012-2014. William M. Keck Foundation: \$1,500,000
 Understanding disturbance and vegetation dynamics in northern California oak woodlands. 2013-2015. PI: Y. Valachovic and R. Standiford. ANR Competitive Grants: \$249,617

Participatory webGIS & Data Delivery

Maintenance of web-based mapping tools for Sudden Oak Death (SOD) Management. 2008-2013. PI: M. Kelly. USDA Forest Service. \$50,000

GIF-Related Research

Advanced geospatial data delivery and visualization tools for communication about climate change and ecosystem adaptation. 2012-2013. PI: M Kelly. USGS: \$428,664

PAST RESEARCH FUNDING

West Coast Carbon Sequestration Partnership: GIS Support, Web Upgrade and Services: California Institute for Energy & Environment: \$24,175
 Visualizing Climate Change Risk and Adaptation Options for California: CalAdapt. 2010-2012. PI: M Kelly. California Energy Commission (CEC): \$499,976
 WebGIS Development for California Insect and Disease Atlas. 2010-2011. PI: M. Kelly. USDA Forest Service. \$22,620
 Mapping the Sudden Oak Death Infestation in Tilden Park and Assessing Future Developments. 2008-2012. PI: Greg Biging, Co-PI: Maggi Kelly. East Bay Regional Park District. \$100,000
 Advanced Tools for Consolidation of California's Groundwater Data. 2010-2011. PI: M. Kelly. CITRIS. \$34,560
 Climate change impacts to San Francisco Bay-Delta wetlands: Links to pelagic food webs and predictive responses based on landscape modeling. 2007-2011. PI: Tom Parker (SFSU), Co-PIs: M. Kelly, J. Callaway, D. Talley. CalFed: \$646,848
 Understanding the coupling of greenhouse gases (methane, carbon dioxide, water vapor) and energy fluxes and scaling them across a spectrum of time and space. 2006-2011. PI: Dennis Baldocchi, Co-PIs: M. Kelly, W. Silver. NSF. \$1,291,162
 Distributed participatory sensing for early detection, monitoring and management of Sudden Oak Death. 2008-2009. PI: M. Kelly. USDA CSREES. \$67,597
 Our Space: A neighborhood database project. 2007-2008. PI: Maggi Kelly. UC San Francisco. \$50,563
 Spatial-temporal investigation of change to forest structure and composition in hardwood forests affected by Sudden Oak Death. 2006-2008. PIs: M. Kelly and B. Allen-Diaz. USDA CSREES. \$90,574
 Development of historical ecological web databases: the Weislander VTM collection and Sierra Nevada meadow data sets. 2005-2008. PIs: M. Kelly and B. Allen-Diaz. USDA FS PSW. \$100,000

Web-based mapping tools for Sudden Oak Death management. 2007-2008. PI: Kelly. California Department of Forestry. \$79,793

Maintenance of web-based mapping tools for Sudden Oak Death (SOD) Management. 2007-2008. USDA Forest Service. \$15,915

“Coyotebytes” – An Educational Tool for Managing Urban and Suburban Coyote Problems. 2006-2007. PI R. Timm, Cooperator M. Kelly. UC Renewable Resources Extension Act: \$8,100

Advancing the geospatial toolkit for California’s natural resource managers. 2006-2007. PI: M. Kelly. UC Renewable Resources Extension Act: \$12,000

Sudden Oak Death disease progression monitoring and plotless monitoring of SOD at landscape scales. 2004-2006. PI: R. Standiford, Co-PI: M. Kelly. USDA: \$169,692

Sudden Oak Death in California: spatial analysis for testing of hypotheses of disease spread. 2002-2006. PI: N. M. Kelly. NASA New Investigator Program: \$196,667

Spatial Database Creation and Maintenance for PD/GWSS in California. 2003-2006. PI: M. Kelly. California Department of Food and Agriculture's Pierce's Disease and Glassy-winged Sharpshooter Board: \$63,515

A spatial database for Sudden Oak Death. 2004-2006. PI: M. Kelly. USDA-PSW: \$115,000

Effects on forest structure and gap dynamics in hardwood forest affected by Sudden Oak Death. 2005-2006. PIs: M. Kelly and B. Allen-Diaz. USDA CSREES. \$87,043

Geospatial informatics training for renewable resource management. 2005-2006. PI: M. Kelly (and K. Tuxen). UC Renewable Resources Extension Act: \$12,000

Developing the Fire Information Engine for California. 2005-2006. PIs: M. Moritz and M. Kelly. US Department of Homeland Security. \$933,389

Land cover classification using Machine Learning. 2003-2006. PI: M. Kelly (for Graduate Student D. Liu). NASA: \$72,000

Data entry of VTM plot data and associated location maps. 2003-2005. PIs: M. Kelly and B. Allen-Diaz. USDA-PSW: \$102,353

Monitoring Landscape variables in San Francisco Bay wetlands. 2003-2006: PI: N. M. Kelly. CalFed: \$101,588

The effects of precipitation changes on soil carbon dynamics in California annual grassland and wetlands. 2004-2006. PI: W. Silver, Co-PIs: B. Allen-Diaz and M. Kelly. The Kearney Foundation: \$120,000.

Development of a remote sensing platform for natural resource monitoring. 2004-2005. PIs: S. Ustin and M. Kelly. California Space Grant Consortium: \$20,000

Sudden Oak Death disease progression and effects on coast live oak stand structure. 2004-2005. PI: R. Standiford, Co-PIs: B. Allen Diaz and M. Kelly. USDA-FS: \$82,649

Disease progression monitoring and plotless evaluation of *Phytophthora ramorum* incidence in different forest types in Coastal California. 2003-2005. Co-PIs: R. Standiford and M. Kelly. UC Exotic Pest and Disease Program: \$47,565

Remote sensing and database development for Sudden Oak Death. 2002-2005. PI: N. M. Kelly. CDF: \$107,000

Modeling potential spread of *P. ramorum* in the conterminous United States: effects of different models on modeled risk. 2003-2004. PI: M. Kelly. USDA-Forest Service: \$30,734

Coordination of the California Oak Mortality Task Force. 2001-2004. PI: N. M. Kelly. CDF: \$72,891

Fire Ecology and Effects on Hardwood Rangelands-The effects of Sudden Oak Death on Fire Hazard and Fire Risk Grant for graduate student research. 2000-2004. Co-PIs: Scott Stephens and N. M. Kelly. IHRMP: \$100,000

Data entry of VTM plot data and associated location maps. 2003-2004. Co-PIs: B. Allen Diaz and M. Kelly. USDA Forest Service: \$43,252

Linking upland landcover change with wetland structure in Elkhorn Slough, CA. 2002-2004. PI: M. Kelly. University of California Center for Water Resources: \$56,000

Sudden Oak Death disease progression and effects on coast live oak stand structure. 2003-2004. PI: R. Standiford, Co-PIs: B. Allen Diaz and M. Kelly. USDA: \$92,872

WebGIS for wetland restoration management. 2003-2004. PI: M. Kelly (for graduate student K. Tuxen). UC RREA Mini-grant Program: \$12,000

Multi-scale, multi-source monitoring of landscape change. 2001-2003. PI: N. M. Kelly. DANR funds through the Monitoring Landscape Change Workgroup: \$58,000

OakMapper Website. 2001-2002. PI: N. M. Kelly. USDA Forest Service: \$44,500

Auto-detection of Perennial Pepperwood from Aerial imagery Using ERSAR Plant Canopy Analysis Software. 2001-2002. PI: M. Horney and Co-PI: M. Kelly. University of California, Center for Pest Management Research and Extension Center: \$7,000

Rangeland evaluation in Fresno County based on livestock carrying capacity. County of Fresno. 2000-2001. PI: N. M. Kelly. \$27,000

Monitoring Invasive Plants Using IKONOS Satellite Imagery. 2000-2001. Co-PIs: M. Horney and N. M. Kelly. Statewide Integrated Pest Management Project: \$6,000

Examining the relative influence of riparian and upland landcover and landuse on instream habitat: improved methods for the Russian River Basin. 2000-2002. PI: N. M. Kelly and Co-PI: A. Merenlender. University of California, Center for Water Resources: \$43,488

Monitoring Oak Decline in Marin County. 2000-2001. PI: M. Kelly. Monitoring Landscape Change Workgroup funds through DANR: \$25,500,

Change detection in north and south coast woodlands. 1999-2000. PI: M. Kelly. CDF/USFS: \$21,000

The influence of injury geometry on habitat recovery: application under NOAA's Habitat Equivalency Analysis. 1998. M. Fonseca, N. M. Kelly, D. Colby, W. J. Kenworthy, P. Whitfield and B. Julius. NOAA's Restoration Center: \$47,000

Evaluating the structural component dynamics and functional relationships of natural and restored coastal wetlands in the Neuse River watershed. 1996-1998. N. M. Kelly. National Research Council

GIS-based enhancement of seagrass mitigation decision protocols. 1995-1996. M. Fonseca, N. M. Kelly, P. Whitfield and D. Worthy. NOAA Habitat Restoration Center: \$7,000

TEACHING

Academic Courses

GIS for Environmental Science and Management. ESPM 233, UC Berkeley. Sp 2002, Fall 2003, 2005, 2007, 2009-2011

Applications of Remote Sensing. ESPM 290. UC Berkeley. Spring 2009

ELP: Environmental Science Case Studies (with others). ESPM 9. UC Berkeley. Spring 2008, 2009, 2010, 2012

Introduction to Geographical Information Systems (with M. Moritz). ESPM 72, UC Berkeley. Spring 2006

GIS Programming & Advanced Spatial Modeling (with Q. Guo). ESPM 290, UC Berkeley. Fall 2004

Urban Environmental Education. ESPM 190, UC Berkeley. Spring 2004

GIS for Natural Resource Systems. ESPM 290, UC Berkeley. Fall 2000

GIS & Environmental Management. Geography, San Diego State University. Spring 1999

Environmental & Natural Resources Conservation. Geography, SDSU. Fall 1998, Spring 1999

Environmental Conservation. Geography, SDSU. Fall 1998

Environmental Management & GIS. Geography, University of North Carolina, Chapel Hill

Geographic Information Systems. Geography, CU-Boulder

Mapping From Remotely Sensed Imagery. Geography, CU-Boulder

Introductory Cartography. Geography, CU-Boulder

Short Courses/Workshops Series

Lidar data and analysis for forestry. Half-day workshops for the GIF. With Marek Jakubowski. April 5, 2010

Intro to GPS/GIS. Full-day workshop for ESPM 107 (Moorea class), with Kevin Koy. August 29, 2008

Intro to GPS/GIS. Full-day workshop for ESPM 107 (Moorea class). August 31, 2007

Intro to GIS/GPS, Advanced GIS. Six full-day Renewable Resources Extension Act (RREA)-sponsored workshops for UCCE colleagues. GIIF, UC Berkeley. Summer 2007

GIIF Geospatial Workshops. GIIF UC Berkeley. Spring 2006, Fall 2006

Intro to GIS/GPS. Four RREA-sponsored workshops for UCCE colleagues. GIIF, UC Berkeley. Summer 2006

Introduction to GIS & GPS. Short courses. ESPM, UC Berkeley. Fall 2005

Introduction to ArcView & Arc/INFO. Duke University Marine Lab, Beaufort, NC. Fall 1997

Other Information

Graduate Teacher Program Certificate. 1995. Geography, CU-Boulder. 1995

Lead Graduate Teacher. Geography, CU-Boulder. 1992-1995

PRESENTATIONS

Invited Presentations/Colloquia/Workshops

Panelist on Measuring and Predicting Carbon Absorbed in Reforestation and Averted Forest Fires: Problems of communicating uncertainty about landscape change. Science & Justice, UCSC. February 2013

New frontiers in mapping for forest science: lidar data and analysis. UC Forestry Camp. June 6 2012.

Lidar in support of adaptive management in Sierra Nevada forests. USDA Forest Service, Vallejo CA. May 22 2012

California Native Plant Society Meeting, San Diego CA. Vegetation mapping with OBIA. January 2012

Berkeley Science Café: web mapping in the age of information. December 2011

Plenary Paper at the Sustainable Natural Ecosystems Strategic Initiative Conference: Managing, Valuing, and Monitoring Ecosystem Services from Working Landscapes, Sacramento CA. September 2011

University of Salzburg, Austria: Surviving and thriving at a large public university. May 20 2011

University of Heidelberg, Germany: Remote sensing of forest disturbance in California. May 10 2011

USGS Western Region Colloquium: Modeling forest structure with lidar in the Sierra. June 7 2010. Menlo Park, CA

Mapping social and spatial contexts using GIS. Human Resources Coord. Conference, June 24 2009. Emeryville, CA

Invited panelist on the "Eye in the Sky": Geographic Information Systems, Satellite Imagery and Data Security panel at the Soul of the New Machine Conference, Berkeley, May 4 2009

Big C Society Senior Athlete Banquet. Berkeley CA. April 14 2009

Goldman School of Public Policy. Berkeley CA. April 8 2008

Bay Area Automated Mapping Association/ASPRS Northern CA Region Education Sess'n. Oakland CA. March 27 2008

San Francisco Estuary Institute. March 19 2008

UC Berkeley Geography Department Tea. October 3 2007

University of Redlands GIS MS program at ESRI, Inc. July 23, 2007

University of Canterbury, Department of Geography, Christchurch, New Zealand. May 2007

GIS and Agriculture tract in CalGIS 2007, Oakland, CA. April 4 2007

Museum of Vertebrate Zoology Biodiversity Informatics Seminar series. February 13 2007

Plenary Speaker at the Bay Area Conservation Biology Symposium. February 10 2007

ESPM Department, University of California, Berkeley CA. October 16 2006

Geography Department, University of North Carolina, Chapel Hill NC. September 29 2006

UC ANR, Oakland CA. May 23 2006

East-West Center, Honolulu HI. May 17-19 2006

2005 State of the Estuary Conference. Oakland CA. October 4 2005

South SF Bay Salt Pond Restoration Project Charette. Tomales Bay CA. March 27 2005

Earth System Scholars Network Meeting, College Park MD. September 27 2004

Geography Department, University of North Carolina, Chapel Hill NC. October 31 2003

National Ocean Service Beaufort Laboratory Seminar Series. Beaufort, NC

ESPM Department, University of California, Berkeley CA. March 4 2002

Biology Department, Sonoma State University, Rohnert Park CA. November 20 2001

Science Program at San Francisco City College. San Francisco, CA. October 10 2000

University of California, Berkeley Geography Department Tea. Berkeley CA. October 11 2000

ESPM Conservation and Habitat Seminar Series. Berkeley, CA. September 8 2000

Duke University Research Seminar Series. Duke University Marine Laboratory. Beaufort NC. October 1997

Annual Ocean and Coastal Zone Program Manager's Meeting. Arlington VA. April 1997

Strategic Environmental Distributed Active Archive Resource (SEDAAR) Workshop. Fairbanks AL. Sept 1995

Conference Presentations

Sustainable ecosystems and the role of private landowners. 2012 Sustainable Natural Ecosystems Meeting, CA

Modeling historic oak distribution in California using the VTM dataset and Maxent. 2012 AAG Annual Meeting, NY

Mapping spotted owl habitat in the Sierra Nevada using lidar. 2010 AAG Annual Meeting. Washington DC

Lidar analysis in the context of forest adaptive management. 2009 AAG Annual Meeting. Las Vegas, NV

Participatory GIS in Sierra Nevada Forest Adaptive Management. 2008 AAG Annual Meeting. Boston, MA

Mapping the historic range of *Quercus* in CA using SVM and BIOCLIM models. 2007 AAG Meeting. San Francisco, CA

Object-based image analysis: methods and applications across ecosystems and sensors. 2007 AAG. San Francisco, CA

The OakMapper webGIS system: improved access to SOD data. 2006 SOD Science Symposium. Santa Rosa, CA

Integrating LiDAR and high spatial resolution imagery for mapping tidal wetlands. 1st International Conference on Object-based Image Analysis (OBIA 2006). Salzburg, Austria

Incorporation of LiDAR-derived elevation information in wetland classification. 2006 ASPRS Meeting. Reno, NV

Notes on error in historical ecological data digitization: the VTM Project. 2006 AAG Annual Meeting. Chicago, IL

Forest gap dynamics in a hardwood forest affected by SOD. 2005 AAG Annual Meeting. Denver, CO

Modeling risk for SOD nationwide. 2005 SOD Science Symposium. Monterey, CA

Modeling Sudden Oak Death across scales. International Geographical Union Conference. Glasgow, Scotland

Classification of 1-m ADAR imagery for mapping hardwood mortality. 2004 AAG Annual Meeting. Philadelphia, PA

Community Monitoring of Sudden Oak Death with OakMapper WebGIS. GIS Day 2003. Berkeley, CA

Terrain modeling and SOD in CA. 2003 ASPRS Terrain Data Conference. Charleston, SC

Landscape dynamics of Sudden Oak Death spread. 2003 AAG Annual Meeting. New Orleans, LA

Monitoring and mapping oak mortality in Marin County, CA. 2002 USFS Remote Sensing in Forestry. San Diego, CA

Monitoring Sudden Oak Death in Marin County, CA using ADAR imagery. 2002 AAG Annual Meeting. Los Angeles, CA
Mapping Sudden Oak Death using high-resolution imagery. 2001 Oak Symposium. San Diego, CA
Sudden Oak Death in CA: linkages between environment and human use of wildlands. 2001 AAG. New York, NY
Elevated mortality of tanoak and coast live oak trees in coastal California. 2000 AAG Annual Meeting Pittsburgh, PA
Nationwide and individual wetland permits in North Carolina. 1999 AAG Annual meeting. Honolulu, HI
Forest clearing in Pacific salmon watersheds. 1st International Symposium on GIS in Fishery Sciences. Seattle, WA.
Evaluation of wetland permit sites using remotely sensed data. 1998 ASPRS/RTI Annual Conference. Tampa, FL
Modeling seagrass response to wave exposure gradients: A GIS approach. 1998 AAG Annual Meeting. Boston MA
Geospatial data for coastal management: C-CAP's Columbia River Dataset. GIS/LIS 1997. Cincinnati, OH
The spatial effect of environmental mgmt policy. Coastal Change Analysis Program 1996 Meeting. Charleston, SC
Changes to the spatial structure of the wetland ecosystem of NC. GIS/LIS 1995 Meeting. Nashville, TN
Changes to wetland permit sites in NC. 1995 Coastal Change Analysis Program Annual Meeting. Charleston, SC
Functional health of wetlands in CA: A landscape approach. 1994 AAG Meeting. San Francisco, CA
Topography and treeline in Glacier National Park, Montana. 1992 AAG Annual Meeting. San Diego, CA
Treeline migration and terrain variability. 1991 Applied Geography Conference. Charlotte, NC

Moderated Sessions

Lidar in support of adaptive management in Sierra Nevada forests. Annual Meeting, ASPRS. Sacramento, CA
Social Media. 2011 UCANR Sustainable Food Systems Conference. Sacramento, CA
Ecological Impacts of Sudden Oak Death. 2009 SOD Science Symposium. Santa Cruz, CA
Monitoring Oak Woodlands. 2006 Oak Science Symposium. Rohnert Park, CA
Landscape Pathology. 2005 Annual Meeting of the Association of American Geographers. Denver, CO
Research and GIS. 2005 CaGIS Conference. Bakersfield CA
Sudden Oak Death. 2002 Annual Meeting of the Association of American Geographers. Los Angeles, CA
Modeling Population - Environment Interactions. 2001 Annual Meeting of the Association of American Geographers.
New York, NY
Spatial Analysis in Ecology and Biogeography. 1999 Annual Meeting of the AAG. Honolulu, HI.
Remote Sensing of Wetlands and Coastal Environments. 1994 Annual Meeting of the AAG. San Francisco, CA.
Geographic Information Processing. 1992 Great Plains/Rocky Mountain Division Meeting of the AAG. Boulder CO

Guest Lectures in University Courses

Our Public Forests: Who gets to make decisions about the public forest and how do those decisions get made? ESPM
11 (Huntsinger). February 16, 2010
Geospatial technologies and environmental sciences. Environmental Science 10 (Twiss). October 15, 2009
Geospatial technologies and environmental sciences. Environmental Science 10 (Kondolf). October 29, 2008
Introduction to all things spatial relating to plants. PMB 24 (Feldman). October 7, 2008
Introduction to Remote Sensing. Guest lectures at the University of Redlands, GIS MS Program. Jan-Feb, 2008
Geospatial technologies for environmental science. Environmental Science 10 (Kondolf). November 5, 2007
Geospatial technologies for environmental science. Environmental Sci (Mena). Geog Dept, UNC-CH, Sept 27, 2006
Sudden Oak Death and geospatial tools. GIS (Steve Walsh). Geog Dept, UNC-CH, Sept 26, 2006
Land use and land cover change in California: new tools. ES 10 (Kondolf). November 7, 2005
Remote sensing of environment. Dean's Round Table (Ludden). November 2, 2005
Geospatial technologies for research. Dean's Night Out (Allen-Diaz). October 6, 2005
GIS, Remote Sensing and GPS for understanding forest change. ESPM 10 (Fairfax). September 21, 2005
Modeling SOD risk in the US: How does model choice influence results? ESPM Conservation Wildlife seminar,
February 4, 2005
Geospatial Tools for Understanding Changes to California Landscapes. ES 10. November 17, 2004
CAMFER and geospatial technologies. Dean's Night Out. November 4, 2004
Geospatial Tools for Understanding Forest Change. ESPM 11. October 18, 2004
Geospatial research in the College of Natural Resources. Dean's Night Out. November 6, 2003
Geospatial Technologies for Environmental Science. ESPM 201c. April 28, 2003
GIS and Remote Sensing. Dean's Night Out. February 19, 2003
Sudden Oak Death in China Camp State Park. UC Berkeley, Integrative Biology 1B. October 20, 2001
GIS/RS for monitoring change in habitat. Landscape Ecology (Foschi), SFSU. Tiburon, CA. October 19, 2001
Dean's Night Out Freshman seminar with the College of Natural Resources (Malkin). October 11, 2001
Mapping and Monitoring SOD in Coastal California. ESPM Conservation and Habitat Seminar. Sept 8, 2000

Selected Extension Presentations & Workshops

Mapping for a changing California: Geoinformatics in support of extension. Presentation to the 2013 Redwood Region Forest Management and Market Opportunities. March 2013, Eureka, CA

Geographic object based multi-scale analysis: Developing a methodological framework for GIScience. Workshop with Thomas Blaschke. GIScience conference, September 2012, Columbus, Ohio

Introduction to GIS and webGIS. UC Forest Camp. June 6 and 7, 2012

Workshops on Lidar and Sierra Nevada forests: Oakhurst, and Forest Hill, CA. May 16,17, 2012

GeoGirls! Workshops at the 2012 Enhancing Your Horizons conference. Berkeley. Mar 3 2012

Lidar analysis in support of Adaptive Management. Presentation at the GIF Geolunch series. Feb 16 2012

Lidar data for forest management. SNAMP Spatial Team Workshops. June 3 and 4 2009.

SNAMP Public Meeting. Sacramento, CA. Spatial Analysis and the Public Participation Teams. Nov 5, 2008

2nd Quarterly Public Meeting of the Sierra Nevada Adaptive Management Project. Davis, CA. November 29, 2007

1st Quarterly SNAMP Public Meeting. Update from the Spatial Analysis Team. Davis, CA. August 20, 2007

Community GIS and SOD: your help is needed. 2007 SOD Science Symposium. Santa Rosa, CA. March 7, 2007

Workshop on geospatial technologies for UC Berkeley Moorea class. Berkeley, CA. September 7, 2006

Watershed Landscapes. Panel at the 2006 Natural Resources Coordinating Conference. Berkeley, CA. March 14, 2006

Introduction to GPS. Geospatial Imaging & Informatics Facility Workshop. November 4, 2005

GPS/GIS/WebGIS workshop. UC Berkeley Moorea class. Berkeley, CA. August 26, 27, 2005

Presentation and field day. UC Berkeley Beahrs Environmental Leadership Program (ELP). Berkeley, CA. July 13, 2005

Choosing a spatially reference risk model. 2005 CaGIS Conference. Bakersfield CA. March 15, 2005

GPS/GIS/WebGIS workshop. Workshop for CE personnel, UC faculty, and others. Berkeley, CA. August 26, 27, 2004

Presentation and field day. UC Berkeley Beahrs Environmental Leadership Program (ELP). Berkeley, CA. July 14, 2004

GIS for landscape level fire planning. DANR joint workgroups meeting. San Diego, CA. May 5, 2004

Geocaching: the ultimate treasure hunt. Cal Day, 2004. Berkeley, CA. April 17, 2004

Community Monitoring of SOD with OakMapper. CalGIS: The Golden State of GIS. San Jose, CA. February 18, 2004

Sudden Oak Death Update. Piedmont Gardeners' Club. Piedmont, CA. February 5, 2004

OakMapper webGIS. San Francisco ESRI User Group. San Francisco, CA. September 10, 2003

Spatial modeling of SOD in California. Point Reyes Bird Observatory. Pt. Reyes Station, CA. May 15, 2003

SOD in California. Seminar for Ranchers in San Benito, Monterey and Santa Cruz Cos. Hollister, CA. May 7, 2003

Remote sensing of hardwood forests. Oak Conservation Workgroup Monitoring Workshop. April 1, 2003

Monitoring SOD with remote sensing. UCB Coastal Forest Colloquium. Berkeley, CA. March 25-26, 2003

SOD Monitoring: 2002. National Forest Health Monitoring Program Annual Meeting. Monterey CA. January 28, 2003

Mapping stressed trees using remotely sensing. CA Oak Mortality Task Force. Monterey, CA. December 16, 2002.

Remote sensing of host species distribution. SOD Science Symposium. Monterey, CA. December 17, 2002.

GPS for SOD monitoring. Sudden Oak Death Training. Jack London State Park, CA. November 7, 2002

GIS in SOD monitoring. Pest Management in ANR Workgroup Conference. Sacramento CA. October 29, 2002

Monitoring SOD in California: Practical advice. SWARM membership. Fairfax, CA. September 25, 2002

GPS for SOD monitoring. Sudden Oak Death Training. China Camp State Park, CA. September 12, 2002

Monitoring SOD in California: the situation statewide and in the Sierra. El Dorado County. July 18, 2002

Collecting Location Information: GPS Protocol. 3rd in series of COMTF monitoring workshops. June 6, 2002.

Monitoring Sudden Oak Death. Workshop at the West County Watershed Day. Occidental, CA. May 18, 2002

SOD GPS Protocol. Diagnosis and Monitoring of Sudden Oak Death Workshop. CCSP, Marin Co. CA. March 13, 2002

USDA-FS/CDF Change Detection. 23rd Annual Forest Vegetation Management Conference. Redding, CA. 1-22-2002

ESRI sponsored "Geo-Spatial Technologies in Agriculture". Kearney Agricultural Center, Parlier, CA. 1/24-25/2002

GIS applications in monitoring Sudden Oak Death. Mendocino GIS Group Conference. Ukiah, CA. October 18, 2001

Monitoring Sudden Oak Death. WCISA Meeting. Napa Expo Center, Napa, CA. September 19, 2001

Monitoring Sudden Oak Death. Urban Forest Council Annual Meeting. Marin Center, San Rafael, CA. May 16, 2001

Monitoring SOD in California. Pesticide Applicators' Professional Association (PAPA). Hayward, CA. April 19, 2001

Monitoring and Confirmation of Sudden Oak Death. California Oak Mortality Task Force. Felton, CA. April 25, 2001

Monitoring Sudden Oak Death. Combating the SOD Phytophthora workshop. San Rafael, CA. March 9, 2001

Multi-Scale, Multi-Source Monitoring of SOD. 2001 DANR Odyssey Conference. Riverside, CA. February 23, 2001

SOD in California. Piedmont Gardeners' Club - Conservation Committee. Piedmont, CA. January 31, 2001

Monitoring SOD in California. NorCal Turf and Landscape Association EXPO. Santa Clara, CA. January 15, 2001

Monitoring Sudden Oak Death in California. Santa Rosa ArcView User Group. Santa Rosa, CA. December 13, 2000

Remote Sensing/GIS for rangeland carrying capacity modeling. Tulare County Center. Tulare, CA. May 4, 2000

Oaks Monitoring Activities. Marin Co Oak Task Force Meeting. Community Center San Rafael, CA. March 17, 2000

GIS and Remote Sensing of Nat Res in CA. Central Valley Academic Conference, Modesto, CA. November 11-12, 1999

STUDENT MENTORING

Current Ph.D. Advisees

Kelly Easterday, ESPM-UCB. Expected Graduation: Spring 2017

Marek Jakubowski, ESPM-UCB. Advisor. Graduated December 2012

Thesis: "Using lidar in wildfire ecology of the California Sierra-Nevada forests"

Anu Kramer, ESPM-UCB. Co-Advisor (with Scott Stephens). Expected Graduation: Spring 2015

Shufei Lei, ESPM-UCB. Co-Advisor (with Alastair Illes). Expected Graduation Spring 2013

Thesis: "Networks of information, people and spaces supporting participation in adaptive environmental management"

Sarah Lewis, ESPM-UCB. Advisor. Expected Graduation: Spring 2013

Jenny Palomino, ESPM-UCB. Co-Advisor (with Matthew Potts). Expected Graduation: Spring 2016

Lisa Schile, ESPM-UCB. Advisor. Graduated December 2012

Thesis: "Tidal Wetland Vegetation in the San Francisco Bay Estuary: Modeling Species Distributions with Sea-Level Rise"

Past Ph.D. Advisees (6)

Shasta Ferranto, ESPM-UCB. Co-Advisor (with Lynn Huntsinger). Graduated Spring 2012

Thesis: "Land use change in the working landscapes of California"

Esther Zeledon, ESPM-UCB. Advisor. Graduated Summer 2010

Thesis: "The Effect of War and Its Aftermath on Land Use and Land Cover in Jinotega Nicaragua"

Tim DeChant, PhD. ESPM-UCB. Advisor. Graduated Spring 2009

Thesis: "Merging tree physiology and landscape ecology: examining the effects of urbanization on California's oak woodlands"

Karin Tuxen, Ph.D. ESPM-UCB. Advisor. Graduated: Spring 2007

Thesis: "Functional mapping of wetland vegetation for monitoring and management."

Desheng Liu, Ph.D. ESPM-UCB. Advisor. Graduated Summer 2006

Thesis: "Spatio-temporal modeling and mapping of Sudden Oak Death in California." Currently Assistant Professor, Department of Geography and Department of Statistics, The Ohio State University

Qinghua Guo, Ph.D. ESPM-UCB. Co-Advisor (with J. Battles). Graduated Summer 2005

Thesis: "Development of geospatial techniques for ecological analysis: A case study of Sudden Oak Death in California." Currently Assistant Professor, Department of Engineering, University of California, Merced

Kristin Byrd, PhD. ESPM-UCB. Advisor. Graduated Spring 2005

Thesis: "Temporal and Spatial Linkages between Watershed Land Use and Wetland Vegetation Response in the Elkhorn Slough Watershed, Monterey County, California." Currently Research Associate with the California Academy of Sciences, San Francisco

Past M.A. Advisees (2)

Matt Wacker, M.S. ESPM-UCB. Graduate Advisor. Graduated Fall 2002

Thesis: "Land use vegetation change on El Dorado County, CA rangelands: implications for rangeland conservation." Currently Land Steward at Marin Agricultural Land Trust

Travis Freed, M. S. ESPM-UCB. Co-Advisor (with S. Stephens)

Current M. S., Ph.D. Dissertation, Orals, and/or Guiding Committees (all ESPM unless noted)

Lara Cushing. Orals committee member. Dissertation orals: 11-9-2012

Lisa Marrack. Orals committee member. Dissertation orals: 6-4-2012

Anu Kramer. Orals committee member. Dissertation orals: 5-3-2012

Amy Romanek. Orals committee member. Dissertation orals: 4-27-2012

Marc Muller. Orals committee member. Dissertation orals: 3-2-2012

Ellen Kersten. Orals committee member. Dissertation orals: 12-9-2011

Miriam Tsalyuk. Orals committee member. Dissertation orals: 5.12.2010

Alice Kelly. Orals committee member. 5.10.2010

Yanlei Chen. Orals committee member. 5.7.2010

Sibyl Driver. Orals committee member. Dissertation orals: 5.4.2010

Kristina Yoshida. Orals committee member. Dissertation orals: 5.3.2010

Melissa Eitzel. Orals committee chair. Dissertation orals: 4.19.2010

Paul Roge. Orals committee member. Dissertation orals: 4.2.2010
Mary Matella. Dissertation committee member. Orals committee chair. Dissertation orals. 12.7.2009
John Dingman. Orals committee member. Dissertation orals: 8.24.2009
Yu-Ting Huang. Ph.D. Orals committee member. Dissertation orals: Fall 2009
Maya Hayden. Orals committee member. Dissertation orals: Spring 2009
Josh Harmsen. Orals committee member. Dissertation orals: Fall 2009
Richard Starfield. Orals committee chair. Dissertation orals: 12.4.2009
Ali Tonak. Orals committee member. Dissertation orals: 2.25.2009
Tendro Ramahamitra. Orals committee member. Dissertation orals: 6.18.2008
Sarah Reed. Orals and dissertation committee member. Dissertation orals: 5.1.2008
Emily Rubridge. Orals and dissertation committee member. Dissertation orals: 6.12.2006
Cole Burton. Orals committee member. Dissertation orals: 5.11.2006
Orien Richmond. Orals and dissertation committee member. Dissertation orals: 4.6.2006
Jun Hak Lee. Ph.D. Orals committee member. Dissertation orals: 1.12.2006
Erica Spotswood. Orals committee member. Dissertation orals: 8.23.2007
Andy Lyons. Orals committee member. Dissertation orals: 1.18.2005

Past M.A. and Ph.D. Committees

Youngryel Ryu. Orals committee member. Graduated Spring 2010
Tim Bean. MS Thesis committee member. Graduated Spring 2010
McCrea Cobb. Dissertation committee member. Graduated Spring 2010
Ashley Holt. Orals committee member. Graduated Spring 2009
Marc Parisien. Orals committee member. Graduated Spring 2009
Kim Rodriguez. Orals and dissertation committee member. Graduated Spring 2009
Suzy McIlroy. Orals and dissertation committee member. Graduated Spring 2009
Brandon Collins. Orals and dissertation committee member. Graduated Spring 2008
Nick Clinton. Orals committee member. Graduated Spring 2008
Fernando Sedano. Orals committee member. Graduated Spring 2008
Karen Weinbaum. Orals committee member. Dissertation orals: 6.2.2007
Qi Chen, Ph.D. Orals and dissertation committee member. Graduated Spring 2007
Josh Fischer, Ph.D. Orals committee member. Graduated Spring 2006
Ling He, M.S. Orals committee member. Graduated Spring 2007
Brent Pederson, Ph.D. Orals and dissertation committee member. Graduated Fall 2005
Xin Miao, Ph.D. Orals committee member. Graduated Summer 2005
Kirk Klausmeyer, M.S. CRP-UCB. Graduated Spring 2005
David Saah, Ph.D. Orals and dissertation committee member. Graduated Fall 2004
Mark Spencer, Ph.D. Orals and dissertation committee member. Graduated Spring 2004
Le Wang, Ph.D. Orals committee member. Graduated Fall 2003
Qian Yu, Ph.D. Orals committee chair. Graduated Summer 2003
Letty Brown, M.S. Graduated Spring 2003
Faith Kearns, Ph.D. ESPM-IB. Orals and dissertation committee Member. Graduated Spring 2003
Kyra Naumoff, M.S. Graduated Spring 2003
Jeff Opperman, Ph.D. Orals and dissertation committee member. Graduated Fall 2002
Stuart Siegel, Ph.D. Geography-UCB. Committee member. Graduated Spring 2002
Kalliopi Tzivanaki, Ph.D. Orals committee member. Graduated Spring 2002
Ben Becker, Ph.D. Orals and dissertation committee member. Graduated Fall 2001

UNIVERSITY SERVICE

Department

Member, ESPM Council: 2007-2010; 2010-2013
Member, ESPM Vision Committee: 2012
Member, CNR Dean's Search Committee: 2007-2008
Chair, ES Seminar Series: 2007-2008; Member, 2008-2010
Chair, ESPM Web and Computing Committee: 2002-2008
Member, ESPM Landscape Ecology Search Committee: 2005
Member, ESPM Divisional Council: 2004-2005
Member, Watershed Science Assistant Professor Search Committee. 2004

Member, Forest Entomology Assistant Cooperative Extension Search Committee: 2002
Member, ESPM Webmaster Search Committee: 2002

College

Faculty Director, Geospatial Innovation Facility (GIF): 2005-present
Chair, Geospatial Innovation Facility (GIF) Oversight Committee: 2005-present
Member, University of California Fire Center Oversight Committee: 2012-present
Member, Blodgett Forest Manager Search Committee: 2007
Co-Director, Center for Assessment and Monitoring of Forest and Environmental Resources (CAMFER): 1999-2005
Member, CNR Directions, Opportunities and Initiatives Subcommittee: 2003
Member, CNR Web Development Committee: 2002

University

Member, Board of Directors, "Friends of Cal Aquatics": 2002-2007
Member, Women's Water Polo Coach Search Committee: 2002
Member, Program Committee for GIS at UC-Berkeley Conference: 1999

Statewide + UC Department of Agriculture and Natural Resources (ANR)

Member, ANR Statewide Conference Steering Committee: 2013
Member, California Agricultural Assessment Core Science Team: 2012
Reviewer, ANR Competitive Grants Program: 2011, 2012
Member, ANR Sustainable Natural Ecosystems Initiative Panel: 2010-2011
Member, ANR Strategic Planning Committee: 2008
Member, ANR Natural Resources and Animal Agriculture Program Leader Position Search: 2007
Member, ANR Lake Tahoe Natural Resources Advisor Position Search: 2005
Member, ANR Core Issue Grants Proposal Review Board: 2005
Member, ANR Analytical Laboratory Review Board: 2005-present
Berkeley Cooperative Extension representative, Academic Assembly Council: 2003-2005
Member, Hopland Research and Extension Center Research Advisory Council: 2000-present
Member, Search Committee, Forest Advisor Humboldt/Del Norte Counties: 2000
Chair, ANR's Monitoring Landscape Change Workgroup: 1999-present

PROFESSIONAL SERVICE

Society Membership & Service

American Society for Photogrammetric Engineering and Remote Sensing (ASPRS)
Member since 1992
Regional Director, Northern California Division 2008-2010
President, Northern California Division 2004-2006
Association of American Geographers (AAG)
Member since 1990
Secretary GIS Specialty Group 1996
Remote Sensing Specialty Group member
American Geophysical Union member
California Botanical Society member
Ecological Society of America (ESA) member
International Association of Landscape Ecology (IALE) member
Society for Woman Geographers member
NASA Earth Science Scholars Network (ESSN) member

Conference Planning

2012 Member, Program Committee of GIScience 2012, Columbus, OH
2012 Member, Scientific Committee of Geobia, 2012. Brazil
2012 Technical Program co-chair, ASPRS 2012 National Conf. Planning Committee, Sacramento, CA
2011 Program Committee of the Sustainable Natural Ecosystems Strategic Initiative Conference:
Managing, Valuing, and Monitoring Ecosystem Services from Working Landscapes, Sacramento
CA
2010 Programme Committee of the 18th International Conf. on Geoinformatics 2010, Beijing, China

- 2008 Member, Technical Planning Committee, 2008 IEEE International Geoscience & Remote Sensing Symposium (IGARSS 2008)
- 2008 Member, Science Committee, GEOBIA Geo-object based Image Analysis Conference (University of Calgary, Canada)
- 2007 Chair, Object-based Image Analysis Symposium Planning Committee (Berkeley, CA)
- 2007 Member, GIS in Agricultural Symposium (part of CalGIS) Planning Committee (Oakland, CA)
- 2006 Member, ANR Orientation Conference Committee (Sacramento, CA)
- 2006 Member, ASPRS 2006 National Conference Planning Committee (Reno, NV)

Other Service Activities

- 2013 Member, Mapping Global Wetland Vegetation and Hydrology, NASA HypsIRI satellite planning team
- 2012-2013 Member, Vegetation Mapping and Remote Sensing Advisory Group, Sonoma County
- 2009 Member, Steering Committee of the HABISTAT project, Belgium
- 2008-2009 Member, Strategic Science Review Panel (SSRP) of the Puget Sound Nearshore Ecosystem Restoration Project (PSNER)
- 2008 Reviewer, USDA Forest Service, PSW, Sudden Oak Death/*P. ramorum* research
- 2007 Member, ASPRS Davidson Awards Committee
- 2006 Member, Monitoring Review Team, San Francisco Estuary Invasive *Spartina* Project (ISP)
- 2004-2006 Member, Wetland Tracker Steering Committee
- 2000-2005 Member, Monitoring Group of the San Francisco Wetlands Restoration Program
- 2004 Chair, Outreach Committee of the Integrated Regional Wetland Monitoring Program

Journal & Book Reviewer

Editorial Board, *Annals of the Association of American Geographers*
 2010-2013: *Methods, Models, and Geographic Information Systems* section
 2010-2013: *Environmental Sciences* section

Associate Editor, 2006-2008, *Wetlands*

Journal Reviewer for:

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| <ul style="list-style-type: none"> <i>Agriculture, Ecosystems and Environment</i> <i>Annals of the Association of American Geographers</i> <i>Biological Conservation</i> <i>Conservation Biology</i> <i>Ecological Applications</i> <i>Environmental Modelling and Software</i> <i>Environmental Practice</i> <i>Estuaries</i> <i>Estuarine, Coast and Shelf Science</i> <i>Forest Ecology and Management</i> <i>Geocarto International</i> <i>Global Change Biology</i> <i>International Journal of Environment and Pollution</i> <i>International Journal of Geographical Information Sciences</i> <i>International Journal of Remote Sensing</i> <i>Journal of Applied Ecology</i> <i>Journal of Biogeography</i> | <ul style="list-style-type: none"> <i>Journal of Coastal Conservation</i> <i>Journal of Environmental Management</i> <i>Journal of Plant Ecology</i> <i>Journal of Tropical Ecology</i> <i>Journal of Vegetation Science</i> <i>Journal of Wildlife Management</i> <i>Kluwer Academic Publishers</i> <i>Knowledge and Management of Aquatic Systems</i> <i>Landscape Ecology</i> <i>Landscape and Urban Planning</i> <i>Photogrammetric Engineering and Remote Sensing</i> <i>Plant Pathology</i> <i>Remote Sensing of Environment</i> <i>Restoration Ecology</i> <i>Sensors</i> <i>Springer Publications</i> <i>Wetlands</i> <i>Urban Habitats</i> |
|--|---|

Funding Agency Reviewer

- 2012 Science Foundation Ireland Research Centres
- 2011 National Science Foundation (NSF), Geography and Spatial Sciences
- 2011 NASA, U.S. Geological Survey, National Park Service, U.S. Fish and Wildlife Service, Smithsonian Institution
- 2008 Belgian Earth Observation Program, Support to Exploitation and Research of Earth Observation Data
- 2009 South Bay Salt Pond RFP
- 2009 UC Discovery Grant Program
- 2005 National Science Foundation (NSF), Geography and Regional Science Division
- 2005 Science Foundation of Ireland (SFI)
- 2005 Cooperative Institute for Coastal and Estuarine Environmental Technology (CICEET)

- 2003 International Science and Technology Center (ISTC), Moscow, Russia
 - 2003 Moldovan-U.S. Bilateral Grants Program of the U.S. Civilian Research and Development Foundation (CRDF)
 - 2003 Natural Environmental Research Council (NERC), London, UK
 - 2003 NOW-COUNCIL Earth and Life Sciences, The Netherlands
 - 2003 South African National Research Foundation (NRF)
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OTHER ACTIVITIES

- 2009-2012 Member, USWP Hall of Fame Committee
 - 2008 Member, Women's Masters 40+ Water Polo National Championship Team
 - 2008 Inducted into the Berkeley High School Athletic Hall of Fame
 - 2007 Inducted into the University of California Athletic Hall of Fame
 - 2006-2009 Member, USA Water Polo Judicial Committee
 - 2006 Member, World Champion Masters 30+ Women's Water Polo Team
 - 2006 Inducted into the US Water Polo Hall of Fame
 - 2004-2008 Coach, Oakland-Mills Masters Women's Water Polo Team
 - 1999-present Member, Oakland-Mills Masters Women's Water Polo Team
 - 2002 Member, Team Liquid Trans-Tahoe Relay Swim Team
 - 1999-2003 Volunteer Coach, UC Berkeley's Women's Water Polo Team
 - 1999 Scout Coach, United States National Women's Water Polo Team
 - 1997-1998 Member, United States National Women's Water Polo Team
 - 1985-1994 Member, United States National Women's Water Polo Team
 - 1992-2000 Athlete Representative, Executive Council of U. S. Water Polo, Inc
 - 1992-1995 Coach, CU Men's and Women's Water Polo Clubs
 - 1985-1986 Member, Great Britain National Women's Water Polo Team
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