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Environmental and Natural Resource Sciences Department
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Education

Ph.D. University of Minnesota, 1999. (Forestry)

Dissertation: "Adoption-Diffusion of Internet-Based Information Systems in a Natural Resource Management Agency: An Early Adopter-Based Technology Transfer Model," Drs. Marvin Bauer and Steven Daley Laursen, Advisors.

Graduate Certificate, University of Minnesota, 1996. (Teaching Opportunities Program for Doctoral Students)

M.S. University of Michigan, 1994. (Natural Resources Policy and Management)

Masters Project: "Leelanau County Inland Lakes Project: A Study of Development and Water Quality within the Little Traverse and Lime Lake Watersheds" Dr. Charles Olson, Advisor.

Graduate Certificate, University of Michigan, 1994. (Remote Sensing)

B.S. Kent State University, 1992. (Natural Resources, minor: Sociology)

Professional Certification

Geographic Information Systems Professional, 2008 (GISP #59102): Geographic Certification Institute, Park Ridge, IL. Current certification valid through March 25, 2013.

Professional Experience

2009-Present: Professor, Environmental and Natural Resource Sciences Department, Humboldt State University, Arcata, CA.

2006-Present: Director, Institute for Spatial Analysis, Humboldt State University, Arcata, CA.

2005-Present: Co-Director, Klamath Watershed Institute, Humboldt State University, Arcata, CA.

2007-Present: Research Associate, California Center for Rural Policy, Arcata, CA.

2008: Fulbright Scholar, Senior Scholar International Master's Degree Programme in Geoinformatics (GIMP). University of Helsinki, Finland.

2006-2007: Director, Environmental Research, California Center for Rural Policy, Arcata, CA.

2005: Fulbright Scholar, Distinguished Chair in Airborne Remote Sensing, Simon Fraser University, Burnaby, British Columbia, Canada.

2004-2009: Associate Professor, Environmental and Natural Resource Sciences Department, Humboldt State University, Arcata, CA.

1998-2004: Assistant Professor, Environmental and Natural Resource Sciences Department, Humboldt State University, Arcata, CA.

1998: Lecturer, College of Arts and Sciences: Honors Division, Univ. of Minnesota, Minneapolis, MN.

1996-1997: Lecturer: College of Natural Resources, Univ. of Minnesota, St. Paul, MN.

1995-1997: Teaching Assistant: Dept. of Forest Resources, Univ. of Minnesota, St. Paul, MN.

Professional Appointments

2008-Present: California Water Quality Monitoring Council: Appointed by Secretary Adams (California EPA) and Secretary Chrisman, (Resources Agency).

2007-Present: California Department of Water Resources/USGS, Salton Sea, Socioeconomic Focus Technical Group, Member.

Professional Association and Society Affiliations

American Society for Photogrammetry and Remote Sensing (ASPRS).

Society for American Foresters (SAF).

Fulbright Association

Sigma Xi, Scientific Research Society, inducted 1999.

Gamma Sigma Delta, Honor Society of Agriculture, inducted 1997.

Xi Sigma Pi, Honor Society of Forestry and Natural Resources, inducted 1993.

Publications

Books and Book Chapters:

Steinberg, S.J., C.H. Perry, and B.R. Edwards,

Application of Geospatial Technology for Long-Term Temporal Assessment of Hydrological Systems, *in: GIS Urban Water Resources*, Patrick L. Lawrence, Ed., Springer, 2010. *In Preparation.*

Steinberg, S.J. and S.L. Steinberg,

Geospatial Analysis Technology and Social Science Research, *in: Handbook of Emergent Technologies*, Sharlene Hesse-Biber, Editor, Oxford University Press, 2010. *In Press.*

Steinberg, S.L. and **S.J. Steinberg**,

Global Women Superheroes: Place, Space and Action, *in: Gender and Power in Global Context*, Samir Dasgupta, Editor. SAGE Publications, 2010. *In Press.*

Steinberg, S.L. and **S.J. Steinberg**,

A Sociospatial Approach to Globalization: Mapping Ecologies of Inequality, *in: Understanding the Global Environment*, pp 99-117. Samir Dasgupta, Editor. Pearson Longman, Delhi, India, 2009. ISBN: 9788131717028.

Steinberg, S.J. and S.L. Steinberg,

Geographic Information Systems for the Social Sciences: Investigating Space and Place, SAGE Publications, Thousand Oaks, California, 2006. ISBN: 0761928723.

Peer Reviewed Papers:

- Crain, B.J., J.W. White and **S.J. Steinberg**,
A Geographic Analysis of Rare Plant Richness Hotspots in Napa County, California, *In Preparation*.
- Kauffman-Axelrod, J.L. and **S.J. Steinberg**,
Development and Application of an Automated GIS Based Evaluation for Prioritization of Wetland Restoration Opportunities, *In Preparation*.
- Degagne, R.S., T.W. Henkel, **S.J. Steinberg** and L.Fox III,
Identifying *Dicymbe corymbosa* Monodominant Forests in Guyana Using Satellite Imagery, *Biotropica*, Vol. 41, No. 1, January 2009 pp. 7-15.
- Judd, C., **S.J. Steinberg**, F.A. Shaughnessy, and G.B. Crawford,
Mapping salt marsh vegetation using aerial hyperspectral imagery and linear unmixing in Humboldt Bay, California. *Wetlands*, Vol. 27, No. 4, December 2007, pp. 1144–1152.
- O’Neal, C.B., J.D. Stuart, **S.J. Steinberg**, and L.Fox III,
Geographic analysis of natural fire rotation in the California redwood forest during the suppression era, *Fire Ecology*, Vol. 2, No. 1, pp 73-99, 2006.

Conference Proceedings Papers:

- Lumbert, J., GA Amoussou, and **S.J. Steinberg**,
Community-Based Disaster Response Design Using an Open Source GIS. *In: American Society for Photogrammetry and Remote Sensing, Annual Proceedings, 2007*.
- Amoussou, GA., E. Cashman, and **S.J. Steinberg**,
“Ways to Learn and Teach Creativity and Design in Computing Science”, 1st ACM Science of Design International Symposium Proceedings, 2007
- Amoussou, GA., E. Cashman and **S.J. Steinberg**,
“Building an Interdisciplinary Community to Learn and Teach Creativity and Design”, 2nd International Conference on Design Science Research in Information Systems and Technology, 2007.
- C. Judd and **S.J. Steinberg**,
Mapping Submerged Macrophytes: Using Multi-Range Spectral Feature Fitting To Map Submerged Eelgrass In A Turbid Estuary. *In: American Society for Photogrammetry and Remote Sensing, Annual Proceedings, 2007*.
- Steinberg, S.J.**, I.P. McGovern, J.D. Stuart and C.A. Lee,
Comparing multiple resolution imagery for vegetation sampling planning. *In: American Society for Photogrammetry and Remote Sensing, Annual Proceedings, 2003*.
- Patton, J. and **S.J. Steinberg**,
Humboldt Bay, CA Interagency Decision Support System, *In: American Society for Photogrammetry and Remote Sensing, Annual Proceedings, 2001*.
- Hass, M.D. and **S.J. Steinberg**,
Geographic information systems in rural area natural resources planning processes: remote data accessibility and technology. *In: American Society for Photogrammetry and Remote Sensing, Annual Proceedings, 2000*.

Steinberg, S.J. and S.B. Daley Laursen,
ForNet: The Design and Implementation of an Internet-based, Interactive Natural Resource Remote Sensing and GIS System for Natural Resource Managers. *In: American Society for Photogrammetry and Remote Sensing, Annual Proceedings, 1999.*

Steinberg, S.J. and S.B. Daley Laursen,
ForNet: Delivering Spatial Data to Natural Resource Managers and the Public. *In: Proceedings of Society of American Foresters National Conference, 1997.*

Steinberg, S.J., C.H. Perry and S.B. Daley Laursen,
Factors Influencing Success in Preparing Future Faculty. *In: Proceedings of Sixth National Conference on the Education and Employment of Graduate Teaching Assistants, 1997.*

Steinberg, S.J. and M.E. Bauer,
Remote Sensing Systems for the 21st Century. *In: Proceedings of the Minnesota GIS/LIS Consortium, 7th Annual Conference, St. Cloud, Minnesota.*

Bauer, M.E., C.A. Sersland and **S.J. Steinberg**,
A Land Cover Classification of the Twin Cities Metropolitan Area Using Landsat TM. *In: Proceedings of the Thirteenth William T. Pecora Memorial Remote Sensing Symposium, Sioux Falls, SD. 1996.*

Research Reports and other Papers:

Steinberg, S.J.,
North Coast Marine Information System, Report to the Resource Legacy Fund Foundation, Institute for Spatial Analysis, July 2008.

Steinberg, S.J. and Sheila L. Steinberg,
[People, Place and Health: A Sociospatial Perspective of Agricultural Workers and their Environment](#), California Center for Rural Policy/Institute for Spatial Analysis, for the California Endowment, 2008. 102 pp.

Steinberg, S.J. and Sheila L. Steinberg,
[People, Place and Health: A Pesticide Atlas of Monterey County and Tulare County, California](#), California Center for Rural Policy/Institute for Spatial Analysis, for the California Endowment, 2008. 151 pp.

“Seeing” the Forest for the Trees: Using Satellite Imagery to Study Tropical Forests in Guyana, CSU Geospatial Review: Geographic Information Science in the California State University System, Vol. 6, pp. 1-2. Spring, 2008.

Steinberg, S.J., M.D. Smith and M.O.A. Gough,
[McKinleyville Community Planning Area Residential Development Analysis](#), Humboldt State University Department of Environmental and Natural Resource Sciences, for the Healthy Humboldt Coalition, March 17, 2007. 35 pp.

Child Poverty, 2000: California Center for Rural Policy (CCRP), CSU Geospatial Review: Geographic Information Science in the California State University System, Vol. 5, pg. 4. Spring, 2007.

Multiple-scale habitat modeling for the American marten using GIS and Remote Sensing, CSU Geospatial Review: Geographic Information Science in the California State University System, Vol. 4, pg. 7. Spring, 2006.

Smith, M.D. and **S.J. Steinberg**,

[Room to Grow? An Assessment of the Potential for Unincorporated Humboldt County to Accommodate Future Projected Population Growth](#), Humboldt State University Department of Environmental and Natural Resource Sciences, for the Resource Legacy Fund Foundation, January 2005. 71 pp.

Modeling Marten Habitat for Conservation, CSU Geospatial Review: Geographic Information Science in the California State University System, Vol. 2, pp. 1-2. Spring, 2004.

Presentations:

Refereed Conferences

Royer, C.F., A. P. Stubblefield, **S.J. Steinberg**, T. Uyeki, and S. Eliason,
Building a Foundation for Coordinated Water Quality Monitoring in the Klamath Basin, 2009 American Water Resources Association (AWRA) Annual Water Resources Conference, November 9-12, 2009. Seattle, WA. *Presentation*.

J.L. Deshais, L. Arguello, J.D. Stuart and **S.J. Steinberg**,
Predicting Sudden Oak Death in Redwood National And State Parks: Ecological Niche Modeling of Key Transmission Host Species Using Maximum Entropy, Sudden Oak Death Symposium IV, June 15-18, 2009, Santa Cruz, CA. *Poster Presentation*.

Keeble, S.M., S.L. Steinberg and **S.J. Steinberg**,
Rural Latino Entrepreneur Network Analysis, Pacific Sociological Association Conference, San Diego, CA, April 8-11, 2009, *Paper Presentation*.

Degagne, R., **S.J. Steinberg**, and T. Henkel,
Identifying *Dicymbe corymbosa* Tropical Monodominant Forests in Guyana Using Landsat Satellite Imagery. ASPRS 75th Annual Conference, Baltimore MD, March 9-13, 2009. *Poster Presentation*.

Steinberg S.L., **S.J. Steinberg**, J.L. Kauffman and J.R. Ekert,
Public Participation GIS Research and Agricultural Farmworkers in California. Twenty-eighth Annual ESRI International User Conference, San Diego, CA, August 4-8, 2008. *Paper Presentation*.

Steinberg, S.J., R. Degagne, and M.O. Gough,
Broadband Demand Aggregation: Planning Broadband in Rural Northern California. Twenty-eighth Annual ESRI International User Conference, San Diego, CA, August 4-8, 2008. *Paper Presentation*.

Steinberg, S.J., S.L. Steinberg, J.L. Kauffman, N.S. Yandell, J.R. Ekert, and M.J. Strong,
Combining aerial imagery with environmental data and community-based knowledge to examine agricultural pesticide exposure. ASPRS Annual Conference, Portland OR, April 29-May 2, 2008. *Poster Presentation*.

Gilkerson W.A., **S.J. Steinberg**, F.J. Shaughnessy, and G.B. Crawford,
A Spatial Model of Eelgrass (*Zostera marina*) Habitat in Humboldt Bay, California. Presented at the Humboldt Bay Symposium, Eureka, CA, April 23-24, 2008. *Poster Presentation*.

- Amoussou, GA. and **S.J. Steinberg**,
A Model to Integrate the Science of Design into Undergraduate Education, Consortium for Computing Sciences in Colleges, Southwestern Regional Conference, April 18 & 19, 2008. *Workshop Presentation.*
- Eckert J. R., **S.J. Steinberg** and S.L. Steinberg,
Public Participation GIS and Agricultural Workers' Health. 79th Annual Meeting of the Pacific Sociological Association, Portland, OR, April 10-13, 2008. *Paper Presentation.*
- Gilkerson, W.A., **S.J. Steinberg**, F. J. Shaughnessy and G.B. Crawford,
A spatial model of potential eelgrass (*Zostera marina*) habitat in Humboldt Bay, CA. 22nd NorthWest Algal Symposium, April 4-6, 2008, Charleston, OR. *Paper Presentation.*
- Shaughnessy, F.J., G.B. Crawford, **S.J. Steinberg**, J. Montoya, M.O. Gough
Humboldt CICORe's Part of the National Ocean Observation Effort. 22nd NorthWest Algal Symposium, April 4-6, 2008, Charleston, OR, *Poster Presentation.*
- Edwards, B.R., **S.J. Steinberg** and K.A. Reeves,
A Century of Riparian Change in the Lower Mokelumne River, 26th Salmonid Restoration Conference, Lodi, CA, March 5-8, 2008. *Poster Presentation.*
- Davidson J., M. Ragwar, A. Smith, GA Amoussou, and **S.J. Steinberg**,
A Framework Using a Service Oriented Architecture for Community Information and Referral Systems. Poster, Ninth Annual Northwestern Regional Conference of the Consortium for Computing Sciences in Colleges Linfield College, McMinnville, OR October, 12-13, 2007. *Poster Presentation.*
- Degagne, R., T. Henkel, and **S.J. Steinberg**,
Examining the distribution of *Dicymbe corymbosa* monodominant forests in Guyana with satellite imagery, Poster, Mycological Society of America Annual Meeting, Baton Rouge, LA, August, 2007. *Poster Presentation.*
- Amoussou, GA, E. Cashman and **S.J. Steinberg**,
Building an Interdisciplinary Community to Learn and Teach Creativity and Design, 2nd International Conference on Design Science Research in Information Systems & Technology (DESRIST 2007), Pasadena, CA, May 2007. *Paper Presentation.*
- Judd, C. and **S.J. Steinberg**,
Mapping Salt Marsh Vegetation in Humboldt Bay, California: Classifying Association Type and Percent Cover using Aerial Hyperspectral Imagery. ASPRS Annual Conference, Tampa FL, May 7-11, 2007. *Presentation.*
- Degagne, R., T. Henkel, and **S.J. Steinberg**,
Examining the distribution of *Dicymbe corymbosa* monodominant forests in Guyana with satellite imagery." Poster, California GIS Conference, Oakland, CA, April 2007. *Poster Presentation.*
- Amoussou, GA., **S.J. Steinberg**
Assessment of Teaching the Science of Design in the California State University Computer Science Program, 36th Annual ASEE/IEEE Frontiers in Education Conference, 2006. *Presentation.*
- Smith, M.D. and **S.J. Steinberg**,
The Use of Visual Simulation Software to Model Future Land Use Change in Rural Communities. 69th Annual Meeting of the Rural Sociological Society, Louisville, KY, August 2006. *Presentation.*

- Steinberg, S.L., **S.J. Steinberg** and J.E. Pollom,
Mapping Social Inequalities in Health: Examining the Role of Poverty, 77th Annual Meeting of the Pacific Sociological Association, Los Angeles, CA, April 2006. *Presentation*.
- Kirk, T.A., W.J. Zielinski and **S.J. Steinberg**,
Multiple-scale Habitat Modeling of the American Marten in Northeastern California, Western Section of the Wildlife Society, Invited Symposium: Fisher and Martin in California, Moving Science and Management Forward. Sacramento, CA, February 2006. *Poster Presentation*.
- Steinberg, S.J.**, L. Fox, J.D. Stuart and I.P. McGovern,
Utilizing High Resolution Imagery and Feature Extraction for Vegetation Mapping at the Whiskeytown National Recreation Area, Redding, California, American Society for Photogrammetry and Remote Sensing, Denver, CO. May, 2004. *Presentation*.
- Perry, C.H., B.R. Edwards, **S.J. Steinberg**, and K.A. Reeves
 A century of riparian change in the lower Mokelumne River, American Water Resources Association 2004 spring specialty conference, geographic information systems (GIS) and water resources III, Nashville, TN, May, 2004.
- Steinberg, S.J.**, I.P. McGovern, J.D. Stuart and C.A. Lee,
 Comparing multiple resolution imagery for vegetation sampling planning. American Society for Photogrammetry and Remote Sensing, Anchorage, AK. May, 2003. *Paper presentation*.
- Ritts, W.D., E. Jules, T. Jimerson, and **S.J. Steinberg**,
Predicting the Spread of a Road-Transported Invasive Pathogen: Port-Orford Cedar Root Disease in the Smith River National Recreation Area. at the Second Conference on Klamath-Siskiyou Ecology: Biodiversity and Habitat Restoration, May 29-31, 2003, Cave Junction, OR. *Poster presentation*.
- Edwards, B.R., **S.J. Steinberg** and K.A. Reeves,
 A View to the Past: Using Historical Aerial Photographs for Planning and Prioritizing Riparian Restoration Along the Lower Mokelumne River, San Joaquin County, California. American Society for Photogrammetry and Remote Sensing, Anchorage, AK. May, 2003. *Poster presentation*.
- Steinberg, S.J.**
 Data model selection for the collection of spatially explicit social science research data. Presented at the American Association of Behavioral and Social Sciences, Las Vegas, NV February, 2003. *Conference Presentation*.
- Steinberg, S.J.**
 Integrating geographic information systems (GIS) technology into the social sciences. American Association of Behavioral and Social Sciences, Las Vegas, NV February, 2002. *Conference Presentation*.
- Patton, J. and **S.J. Steinberg**
 Humboldt Bay, CA Interagency Decision Support System, American Society for Photogrammetry and Remote Sensing, St. Louis, MO. May 2001. *Paper presentation*.
- Steinberg, S.J.**
 Creating an interactive online data repository for the Klamath basin: establishing a prototype Klamath webGIS. Klamath Basin Fish and Water Management Symposium, Arcata, CA. May, 2001.

Steinberg, S.J. and S.B. Daley Laursen

ForNet: The Design and Implementation of an Internet-based, Interactive Natural Resource Remote Sensing and GIS System for Natural Resource Managers. American Society for Photogrammetry and Remote Sensing, Seattle, WA. 1999. *Poster presentation.*

Steinberg, S.J. and S.B. Daley Laursen

ForNet: Delivering Spatial Data to Natural Resource Managers and the Public. Society of American Foresters National Conference, Memphis, TN. 1997. *Poster presentation.*

Steinberg, S.J., C.H. Perry and S.B. Daley Laursen

Factors Influencing Success in Preparing Future Faculty. The Sixth National Conference on the Education and Employment of Graduate Teaching Assistants, Minneapolis, MN. 1997. *Paper presentation.*

Steinberg, S.J. and M.E. Bauer

Remote Sensing Systems for the 21st Century. Minnesota GIS/LIS Consortium, 7th Annual Conference, St. Cloud, MN. October 1-3, 1997. *Conference Presentation.*

Steinberg, S.J.

ForNet: Delivering Spatial Data to Natural Resource Managers and the Public. The 5th Annual Environmental Science and Engineering Conference, Minneapolis, MN, May 16-17, 1997. *Poster Presentation.*

Bauer, M.E., **S.J. Steinberg** and C.A. Sersland

Forest and Land Cover Classification of the Twin Cities Metropolitan Area. Minnesota Academy of Science 65th Annual Meeting, St. Paul, Minnesota, April 18-19, 1997. *Conference Presentation.*

Bauer, M.E., C.A. Sersland and **S.J. Steinberg**

A Land Cover Classification of the Twin Cities Metropolitan Area Using Landsat TM. *Proceedings*, Thirteenth William T. Pecora Memorial Remote Sensing Symposium, Sioux Falls, SD. 1996. *Paper presentation.*

Invited Talks

S.L. Steinberg and **S.J. Steinberg.**

People, Place and Health: A Sociospatial Perspective of Agricultural Workers and Their Environment. Presentation to Annual Board of Directors Meeting, California State Rural Health Association. Sacramento, California. June 19, 2009.

S.J. Steinberg and S.L. Steinberg

Mapping Pesticide Exposure with Community-Based Knowledge: Increasing Community Power with Mapping. Presented at the 2007 Agricultural Worker Health Initiative Conference: Cultivando Cambio Para el Futuro, Sacramento, CA, August 22-24, 2007.

Steinberg, S.J.

McKinleyville Community Planning Area Residential Development Capacity Analysis. Presented at the Humboldt County League of Women Voters, Eureka CA, March 17, 2007.

Steinberg, S.J.

Science Panel: The Search for Common Ground. Invited Panelist, Klamath Watershed Conference, Redding, CA, November 7-9, 2006.

Steinberg, S.J.

Feature Extraction for Vegetation Mapping from High Resolution Multispectral Imagery. Presented at the Centre for Scientific Computing, Simon Fraser University, Burnaby, British Columbia, Canada, February 4, 2005.

Steinberg, S.J. and D. Renwick,
webGIS for Economic Development (and Beyond). Presented at the Warfinger Building,
Eureka, CA, December 13, 2004.

Steinberg, S.J. and M. Perry,
*Spatial Information Systems in the Internet Age: An introduction to Internet based mapping
technology*. Presented at the Redwood Technology Consortium: Tech Expo, Eureka, CA,
April 30, 2004.

Steinberg, S.J.
Spatial analysis projects and research activities at HSU. Presented at the Redwood
Technology Consortium: Tech Expo, Eureka, CA, May, 2003.

Steinberg, S.J.
Mapping Topologies and Geographic Information System Analysis, Vectors or Grids?
Presented at Humboldt State University Math Department Colloquium, September 26, 2002.
Seminar.

Steinberg, S.J.
Spatial Data in the Internet Age: The Evolution of GIS and Remote Sensing. Presented at the
United State Geological Survey, Denver, CO, March, 1998.

Other Presentations

S.L. Steinberg and **S.J. Steinberg**.
People, Place and Health: A Sociospatial Perspective for Farmworker Communities.
Presentation to LatinoNet. Eureka, CA . June 12, 2009.

S.L. Steinberg and **S.J. Steinberg**.
*Mapping Pesticide Exposure with Community-Based Knowledge: Increasing Community
Power with Mapping in Monterey County, California*. Poder Popular-Monterey County.
Gonzales, CA. June 25, 2008.

S.L. Steinberg and **S.J. Steinberg**.
*Mapping Pesticide Exposure with Community-Based Knowledge: Increasing Community
Power with Mapping in Tulare County, California*. Poder Popular-Tulare County. Visalia,
CA. June 12, 2008.

S.J. Steinberg
Coordinating Monitoring and Assessment in the Klamath River Basin, Klamath Water
Quality Coordination Group, Klamath, CA, April 17, 2007. *Presentation*.

Perry M.P., B.R. Davenhall, **S.J. Steinberg**,
Community webGIS at Humboldt State University, MapServer Users conference, St. Paul,
MN, June, 2003. *Poster presentation*.

Steinberg, S.J.
Spatial analysis projects and research activities at HSU. Presented at Redwood Sciences Lab:
Arcata, CA, December 18, 2001. *Seminar*.

Steinberg, S.J.
Klamath river fisheries restoration task force: update on activities and demonstration of
Klamath webGIS. Natural resource applications of GIS workshop, Humboldt State
University, Arcata, CA, 2000. *Presentation*.

Research Grants/Projects and Gifts

- 2009: USDA Forest Service, Pacific Southwest Region State and Private Forestry, Forest Health Protection, “Phytophthora ramorum disease potential in Redwood National and State Parks, California: a dynamic process model based on ecological niches of key transmission species.” (Co-Investigator with L. Arguello and J.D. Stuart) \$54,272; duration 2 years.
- 2009: U.S. Department of Agriculture, Cooperative State Research, Education and Extension Service, “Conservation of surface and ground water in a Western watershed experiencing rapid loss of irrigated agricultural land to development” (Co-Investigator with R. Van Kirk, B. Finney, Y. Everett and M. Baker) \$620,000; duration 3 years.
- 2008: Redwood National Park, “Sudden Oak Death Research” (Co-Investigator with J.D. Stuart) \$25,000; duration 1 year.
- 2008: Environmental Protection Agency, “Issues in Tribal Environmental Research and Health Promotion: Novel Approaches for Assessing and Managing Cumulative Risks and Impacts of Global Climate Change” (Co-Investigator with S.L. Steinberg and K. Sloan, Yurok Tribe Environmental Program) \$974,792 total, [\$257,000 HSU portion]; duration 4 years. *Pending.*
- 2008: Ford Foundation, “A Place-Based Integrated Economic Development Model: Environment, Action and Assets” (Co-Investigator with S.L. Steinberg) \$150,000; duration 1 year.
- 2008: Karuk Tribe of California, “Karuk Tribe of California, Tribal Service Area TANF Calculation” (Co-Investigator with M.A. Rizzardi and S.L. Steinberg) \$7250; duration 6 months.
- 2008: Resources Legacy Foundation, “HSU: North Coast Marine Life Protected Areas” (Co-Investigator with L.S. Quackenbush) \$49,622; duration 6 months.
- 2007: California Emerging Technology Fund and the Humboldt Area Foundation, “California Broadband Demand Aggregation Pilot Project” (California Center for Rural Policy Project) \$606,000; duration 1 year.
- 2007: State Water Resources Control Board, “Coordinating Monitoring and Assessment in the Klamath River Basin” \$275,000; duration 2 years.
- 2007: The California Endowment, “Agricultural Worker Health Initiative, GIS Mapping in Monterey and Tulare Counties, CA” (Co-Investigator with S.L. Steinberg) \$70,000; duration 2 years.
- 2006: Pacificcorp, “Study management agreement Klamath Blue-Green Algae Working Group” \$450,000; duration: 3 years.
- 2006: National Science Foundation/Humboldt State University, “SoD-TEAM: Teaching Creativity and Conceptual Representation - Design Toolkit” (co-Investigator with GA. Amoussou and E.M. Cashman) \$275,000; duration: 2 years.
- 2006: Pacific Coast Joint Venture “Restoration Potential of Eelgrass in Humboldt Bay” (co-Investigator with F. Shaughnessy) \$10,000; duration 1 year.
- 2006: Humboldt State University Research and Creative Activity Award, “Assessment of Teaching the Science of Design in the CSU Computer Science programs,” (co-Investigator with GA.Amoussou) \$3000; duration: 1 year.

- 2006: Healthy Humboldt Coalition, “McKinleyville Urban Study Area Visualization Analysis” (co-Investigator with M.D. Smith) \$24,408.75; duration: 4 months.
- 2006: California State University, GIS Specialty Center, “GIScience for Rural Community Assessment,” \$6729; duration 1 year.
- 2005: Fulbright Distinguished Chair, Airborne Remote Sensing, Simon Fraser University, Burnaby British Columbia, Canada. Research Stipend \$25000 CDN (\$20,250 USD, approximate); duration 7 months.
- 2005: Center for Educational Excellence, Collaboration and Inquiry, Humboldt State University, “Web-facilitated Collaborative Hands-on Teaching and Learning” (co-Investigator with Mr. Ken Pinkerton and Mr. Doug Renwick) \$500; duration 1 year.
- 2004: Preserving Wild California Program, Resources Legacy Foundation, “Room to Grow? An Assessment of the Potential for Unincorporated Humboldt County to Accommodate Future Projected Population Growth” (co-Investigator with M. Smith) \$50,000; duration: 1 year.
- 2004: California ReLeaf 2004 Urban Forestry Grant Program, “Gift to the Streets, an Exploratory Journey of the Trees of Eureka, California” (co-Investigator with Mr. Ken Pinkerton and Dr. Carolyn Ward) \$6107; duration 2 years.
- 2004: Center for Environmental Economic Development for the Collaborative Learning Circle Program, “Collaborative Learning Circle GIS Mapping.” \$500; duration: 3 months.
- 2003: Sun Microsystems Inc. Academic and Research Computing Group, “A Java enhanced, Web-enabled Geographic Information Database and Educational Support Server Phase II” *Gift*: \$8,400.
- 2003: National Park Service, Whiskeytown National Recreation Area. “Phase III, Whiskeytown Vegetation Classification Map Accuracy Assessment” (co-investigator with L. Fox and J. Stuart) \$32,000; duration: 1 year.
- 2003: National Park Service, Whiskeytown National Recreation Area. “Phase II, Whiskeytown Vegetation Classification Mapping” (co-investigator with L. Fox) \$64,630; duration: 1 year.
- 2003: California Department of Fish and Game, Compliance Monitoring of the Pacific Lumber Company Habitat Conservation Plan. (co-investigator with S.R. Martin) \$362,062; duration: 1 year.
- 2003: Visual Learning Systems, Inc. “Feature Analyst Grant Program for Higher Education” *Gift*: \$1,398,500; duration: 2 years.
- 2003: Sun Microsystems Inc. Academic and Research Computing Group, “A Java enhanced, Web-enabled Geographic Information Database and Educational Support Server” *Gift*: \$36,930.
- 2003: HSU Emeritus and Retired Faculty Association, “Integrating varied spatial datasets for Northern California” \$500; duration: 1 year.
2003. U.S. Forest Service, Six Rivers National Forest, Humboldt County Invasive Weed GIS Database. \$2470; duration: 2 years.
2002. National Oceanographic and Atmospheric Administration, “Northern California Coastal Ocean Monitoring in Support of CSU CICORE Program” (co-investigator with F.J. Shaughnessy, et. al.) \$190,034; duration: 4 years.

- 2002: California Department of Fish and Game, Compliance Monitoring of the Pacific Lumber Company Habitat Conservation Plan. (co-investigator with S.R. Martin) \$343,387; duration: 1 year.
- 2002: Institute for Sustainable Forestry, Collaborative Learning Circle GIS Mapping. \$500; duration: 3 months.
- 2002: Humboldt State University Foundation, Humboldt State University Spatial Data Library. \$1250; duration: 1 year.
- 2001: National Park Service, Whiskeytown National Recreation Area. "Whiskeytown Vegetation Classification Mapping" (co-investigator with J.D. Stuart) \$25,000; duration: 1 year.
- 2001. San Joaquin County Resource Conservation District. "Historical Assessment of the Ecological Condition and Channel Dynamics of the Lower Mokelumne River: 1927-1997" \$27,000; duration 2 years.
- 2001. Humboldt Bay Recreation and Harbor District. Humboldt Bay GIS data development and webGIS. \$69,144; duration: 5 years.
- 2001: HSU, Research, Scholarship and Creative Activities Award. Historical Assessment of the Ecological Condition and Channel Dynamics of the Lower Mokelumne River: 1927-1997. \$3,425; duration: 1 year.
- 2001: HSU College of Natural Resources and Sciences. "CNRS Information Resource and Access Assessment" (co-investigator with G. Amoussou and S.A. Burgess) \$5,000.
- 2001: Hoopa Valley Tribal Council, "Klamath-Trinity webGIS Database Design and Access Project" \$25,252; duration 2 years.
- 2000: California Department of Fish and Game, "Compliance Monitoring of the Pacific Lumber Company Habitat Conservation Plan" (co-investigator with S.R. Martin and C.J. Widner) \$766,169; duration 3 years.
- 2000: Humboldt Bay Agency Coordination Group, "Humboldt Bay GIS Database Design and Access Project" \$32,500; duration 1 year.
- 1999: Sun Microsystems Inc. Academic and Research Computing Group, "A Web/Java-Based Spatial Data Visualization Library" *Gift*: \$157,010.
- 1999: US Fish and Wildlife Service, "Comparative Analysis of the Klamath River Basin Ecosystem" (co-investigator with Y. Everett) \$53,500; duration: 4 years.
- 1997: Office of Environmental Assistance Decision Cases, University of Minnesota, "Northern States Power Company and the Temporary Storage of Spent Nuclear Fuel at Prairie Island, MN" (co-investigator with C.H. Perry) \$5700; duration: 2 years.

Academic and Professional Service

Humboldt State University

- 2009-Present: Committee Member, College of Natural Resources Personnel Committee for Promotion and Tenure.
- 2008-2009: Member of the Board of Directors of the Humboldt State University Sponsored Programs Foundation and Member of Finance Committee.

2005-2008: Member of the Board of Directors of the Humboldt State University Sponsored Programs Foundation and Member of Incentives Committee.

2006-2008: Senior Staff/Summer Research Mentor for National Science Foundation Research Experience for Undergraduates.

2006-2007: Committee on Learning Management Systems at HSU.

2005-2006: Research Associate and Advisor to California Center for Rural Policy.

2003-2005: Research Associate, Klamath Watershed Institute.

2004: Task Force on the Information Technology Service Model at HSU.

2003-Present: Member of the Board of Directors of the Northern California Institute of Marine Science.

2002-2004: College of Natural Resources Curriculum Committee.

2001-2004: HSU Standing Committee on Information Technology.

2000-2003: College of Natural Resources Computing Technology Committee.

2000-2001: College of Natural Resources Curriculum Committee.

1998-2007: Co-director of the Advanced Spatial Analysis Facility (ASAF), and Spatial Analysis Lab (SA-Lab), College of Natural Resources and Sciences.

1998-Present: Biometrics Committee, Humboldt State University.

1998-1999: Web Registration Committee, Humboldt State University.

University of Minnesota

1997-1998: Graduate Studies Committee, Department of Forest Resources, University of Minnesota.

1997-1998: College of Natural Resources Computer Committee, University of Minnesota.

1997-1998: Curriculum Committee, Department of Forest Resources, University of Minnesota.

1997-1998: Xi Sigma Pi, Delta Chapter Chair.

1996: Faculty search committee, Preparing Future Faculty Program, University of Minnesota.

Professional

2008-Present: President, ASPRS Northern California Chapter.

2009: Peer Reviewer: Cartographica: The International Journal for Geographic Information and Geovisualization (one article)

2007: President-Elect, ASPRS Northern California Chapter.

2007: Peer Reviewer: Journal of Interpretation Research (one article)

2005: Peer Reviewer: International Journal of Remote Sensing (three articles).

2003-2004: Committee Member: Scholarship/Internship Committee, Geospatial Information and Technology Association (GITA).

2003: Session Moderator, "Ecological Modeling," ASPRS National Meeting, Anchorage AK.

2003: Session Moderator, Annual Conference of the American Association of Behavioral and Social Sciences (AABSS), Las Vegas, NV.

2001-2004: Chair: Northern California Region ASPRS Education Committee.

2001-Present: Advisor: Humboldt State University Student Chapter, ASPRS.

2001: Session Moderator, Pre-Symposium Workshop, "Geographic Information Systems as a Management Tool," Klamath River Basin Fish and Water Management Symposium, Arcata, CA.

2000-2001: Planning Committee: Klamath River Basin Fish and Water Management Symposium.

1999: Session moderator, "Technology Training and Education for Natural Resource Managers," ASPRS National Meeting, Portland, OR.

1997: Session moderator "Data Collection Technologies," Society of American Foresters, Minnesota State Conference.

1997: Planning Committee: American Society for Photogrammetry and Remote Sensing, First North American Symposium on Small Format Aerial Photography.

1996-1997: Planning Committee: Society of American Foresters, Minnesota State Conference.

Graduate Students Advised*:

Thesis Advisor (11): R.S. Degagne (2007); B.R. Edwards (2005); W.A. Gilkerson (2008); M.D. Hass (2000); C. Judd (2006); J.L. Kauffman (2007); T.A. Kirk (2007); I.P. McGovern (2008); L.M. Miller (2006); M.T. Perry (2005); D.R. Ritts (2003).

Thesis Committee Member (16): C.N. Aw-yang (2003, Forestry); M.E. Cole (2004, Fisheries); B.J. Crain (2008, Biology, M.A.); Y. DiCarlo (2000); E.K. Edelman (2001); H. Fitting (2004, Biology, M.A.); S.W. Headley (2003, Forestry); S.B. Henricy (2001); C.A. Lee (2004., Forestry); J.B. Letton, (2007); D.E. Marshall (1998, Mathematical Modeling); C.B. Oneal (2005, Forestry); J.E., Pollom (2006); D. Powers (2007, Forestry); M. Vouri (2009, M.S., Geomatics; Univ. Of Helsinki, Finland) C. West (2007, Forestry).

* Student was awarded a Masters of Science in Natural Resources (Natural Resources Planning and Interpretation emphasis) unless otherwise noted.

Selected Honors and Awards

2005: Alistair McCrone Promising Faculty Scholars Award, Humboldt State University.

1994-1998: Graduate Research Assistantship, Dept. of Forest Resources, Univ. of Minnesota.

1997: Teaching Leadership Award, Pew Charitable Trusts.

1993: Thesis Research Grant, Rackham School of Graduate Studies, Univ. of Michigan.

Community Service

2009-Present: Den Leader, Boy Scouts of America, Redwood Empire Council, CA.

2010-2014: Member Board of Trustees, Arcata School District (elected, 4 year term)

2005-2009: Member Board of Trustees, Arcata School District (elected, 4 year term)

2002-2004: Chair, Eagle Scout Board of Review, Pacific Rim District, Redwood Empire Council, CA.

- 1999-2002: Member Eagle Scout Board of Review, Pacific Rim District, Redwood Empire Council, CA.
- 2003-2004: Secretary and Member of the Board of Directors, Eureka Discovery Museum.
- 1988-2002: Assistant Scoutmaster, Boy Scouts of America. (Toledo Area Council, OH; Wolverine Council, MI, Indianhead Council, MN, Redwood Empire Council, CA)
- 1999-2001: Treasurer and Member of the Board of Directors, Eureka Discovery Museum.