David J. Brown

Department of Crop and Soil Sciences
Washington State University
201 Johnson Hall, P.O. Box 646420
Pullman, WA 99164-6420

(509) 335-1859
Fax: (509) 335-8675
dave.brown@wsu.edu

PROFESSIONAL APPOINTMENTS

2010 – *Associate Professor of Soil Geography*
Dept. of Crop & Soil Sciences, Washington State University, Pullman, WA

2007 – 2010 *Assistant Professor of Landscape Pedology*
Dept. of Crop & Soil Sciences, Washington State University, Pullman, WA

2002 – 2006 *Assistant Professor of Landscape Pedology*
Dept. Land Resources & Environ. Sci., Montana State Univ., Bozeman, MT

2001 – 2002 *Graduate Research Assistant*
Dept. of Soil Science, University of Wisconsin, Madison, WI

2001 (summer) *Lecturer*, Field Experience in Soil Inventory Methods
College of Natural Res., University of Wisconsin, Stevens Point, WI

2000 (fall) *Lecturer*, Pedology
Dept. of Soil Science, University of Wisconsin, Madison, WI

1999 – 2000 *Fulbright Scholar*, Uganda

1996 – 1999 *NSF Graduate Research Fellow*, Penn State and UW-Madison

1995 – 1996 *Penn State Graduate School Fellow*

1992 – 1995 *Energy Conservation Technical Specialist*, Utilities Dept., Palo Alto, CA

1988 – 1991 *High School Science Teacher*, U.S. Peace Corps, Fiji

EDUCATION

2002	Soil Science	Ph.D.	University of Wisconsin–Madison
2002	Biometry	M.S.	University of Wisconsin–Madison
1997	Geography	M.S.	The Pennsylvania State University, University Park
1988	Electrical Eng.	B.S.	University of Illinois, Urbana-Champaign
1988	Rhetoric	B.A.	University of Illinois, Urbana-Champaign

ACADEMIC AWARDS AND DISTINCTIONS

Soil Science Society of America Journal Outstanding Reviewer Award (2004)
NSF International Research Fellowship, World Agroforestry Centre (ICRAF), Nairobi (2003)
Fulbright Student Award, Uganda (1999-2000)
NSF Graduate Research Fellowship (1996-1999)
Graduate School Fellowship, The Pennsylvania State University (1995-1996)
Champ Tanner Scholarship, UW-Madison, Soil Science (2001)
William T. Dibble Scholarship, UW-Madison, College of Agriculture and Life Sciences (1999)

RESEARCH

Research Interests

Soil Geography. My research is focused on measuring, modeling and explaining the spatial variability of soil properties and processes at hillslope to regional scales. Currently that research is focused on short- and long-term greenhouse gas flux dynamics (CO_2, CH_4 and N_2O) for agricultural landscapes. In pursuing this research, I make extensive use of digital terrain modeling, optical remote sensing, spatial statistics, and proximal soil sensing techniques.

Grants and Contracts ([A]Lead investigator, [B]Portion of funding within larger grant, [C]shared)

Years	Funds ($)	Description
2012-2014	80,000[C]	Field Phenomics Platform Development. WSU-ARC, Emerging Research Issues for Washington Agriculture, Internal Competitive Grant Program. (PI: M. Pumphrey. Co-PIs: A. Carter, K. Garland-Campbell, S. Hulbert, R. Knowles, C. Steber, Q. Zhang)
2011-2016	4,640,000[A]	Site-specific climate friendly farming. USDA-NIFA-AFRI climate change program. (co-PIs: E. Brooks, J.U.H. Eitel, D.R. Huggins, K. Painter, K. Reardon, J.L. Smith, C.O. Stöckle, L. Vierling). USDA-NIFA Award No. 2011-67003-30341.
2010-2013	150,000[A]	Soil Organic Carbon measurement and modeling in the vicinity of Mount Rainier National Park. USDA-NRCS.
2011-2013	458,174[B]	Big Sky Regional Carbon Sequestration Partnership, Phase III. Lee Spangler, PI (DOE-NETL $67 million, DE-FC26-05NT42587).
2008-2010	87,924[A]	Mapping soil-water dynamics on the Palouse with proximal soil sensing. WSU-ARC, Emerging Research Issues for Washington Agriculture, Internal Competitive Grant Program. (Co-PI's: David Huggins, Colin Campbell, and Doug Cobos)
2006-2011	176,108[A]	Modeling and measuring the spatio-temporal variability of methane emissions from tropical dambo wetlands. NSF Geog. & Reg. Sci. Grant No. 0620142. (Collaborator Philip Dennison, Univ. of Utah received $84,892 on NSF Geog. & Reg. Sci. Grant No. 0620206.)
2005-2009	284,000[B]	Big Sky Regional Carbon Sequestration Partnership, Phase II. Susan Capalbo, PI. (DOE DE-FC26-05NT42587, $14.3 million). *Terrestrial group leader, group budget $2.2 million
2005-2007	50,000[A]	Soil-Landscape Modeling to Estimate the Potential Impact of Coal-Bed Methane (CBM) Development, Ashland District, Custer National Forest. (USDA-Forest Service cooperative agreement)
2004-2005	25,000[A]	Landscape analysis for soil and ecological mapping in the Custer National Forest. (USDA-Forest Service cooperative agreement)
2003-2005	42,706[B]	The Northern Rockies and Great Plains Regional Carbon Sequestration Partnership. Susan Capalbo, PI (DOE Award No. DE-FC26-03NT41995, $2.0 million).

2003-2006	75,000[A]	Soil carbon monitoring in the laboratory and field with quantitative diffuse reflectance spectroscopy. (USDA-CSREES-NRI Award No. 2003-35107-13774)
2003	22,874[A]	Spectral and Geographic Analysis of Soil Carbon in East Africa. (NSF- Intl Res Fellows Program, Award No. 0202582)

Research Publications

Peer-Reviewed Journal Articles (*senior author or principal investigator)

Citations (12/31/14): 697 total, h-index = 13

29. Shrestha, S.L., K.A. Garland-Campbell, C.M. Steber, W.L. Pan, **D.J. Brown**, S.H. Hulbert, 2015. Association of physiological and agronomic traits with drought tolerance in diverse spring wheat genotypes and recombinant inbred populations. (in prep)

28. Piaskowski, J.L., **D.J. Brown**, K.G. Campbell, 2015. Soluble stem carbohydrates in spring wheat: NIR calibration and prediction of drought response. Agronomy Journal. (in review)

27. Poggio, M., **D.J. Brown***, R.S. Bricklemyer, 2015. Development and testing of a VisNIR penetrometer for in situ soil characterization. Computers and Electronics in Agriculture. (accepted)

26. Gasch, C., T. Hengl, B. Gräler, H. Meyer, T. Magney, **D.J. Brown**. Spatio-temporal interpolation of soil moisture, temperature, and electrical conductivity in 3D+T: the Cook Farm data set. Spatial Statistics (accepted)

25. Bruner, E.A., P.A. Okubara, R. Abi-Ghanem, **D.J. Brown**, and Reardon, C.L. Use of pressure cycling technology for cell lysis and recovery of bacterial and fungal communities from soil, BioTechniques. (accepted).

24. Nocita, M., A. Stevens, B. van Wesemael, M. Aitkenhead, M. Bachmann, B. Barth, E. Ben Dor, D.J. Brown, M. Clairotte, A. Csorba, P. Dardenne, J.A.M. Demattê, V. Genoty, C. Guerrero, M. Knadel, L. Montanarella, C. Noonx, L. Ramirez-Lopez, J. Robertson, H. Sakai, J.M. Soriano-Disla, K.D. Shepherd, B. Stenberg, E.K. Towett, R. Varga and J. Wetterlind, 2015. Soil Spectroscopy: An Alternative to Wet Chemistry for Soil Monitoring. Advances in Agronomy, In Press. DOI:10.1016/bs.agron.2015.02.002

23. Brevik, E.C., S. Abit, **D. Brown**, H. Dolliver, D. Hopkins, D. Lindbo, A. Manu, M. Mbila, S.J. Parikh, D. Schultz, J. Shaw, R. Weil, D. Weindorf, 2014. Soil Science Education in the United States: History and Current Enrollment Trends. Journal of the Indian Society of Soil Science, Vol. 62, No. 4, pp 299-306.

22. Nocita, M., A. Stevens, B. van Wesemael, **D.J. Brown**, Shepherd, K.D., Towett, E., Vargas, R, and Montanarella, L., 2015. Soil spectroscopy: an opportunity to be seized. Global Change Biology, 21: 10-11. doi: 10.1111/gcb.12632.

22. Lugumira, J.S., **D.J. Brown***, P.E. Dennison, M.K. Hansen, and L.A. Vierling, 2014. Delineating dambo catenary soil-landscape units using aerial gamma-ray and terrain data: a comparison of classification approaches. International Journal of Remote Sensing, 35(24): 8272-8294. DOI:10.1080/01431161.2014.979302

21. Totman, M.E., M.E. Swanson, T.M Rodgers, P.A. McDaniel, R.A. Rupp, **D.J. Brown**, 2014. Soil organic carbon stocks in the forests of Mount Rainier National Park, Washington

USA. Soil Science Society of America Journal, 78: S270-S280. doi: 10.2136/sssaj2013.08.0374nafsc

20. Bricklemyer, R.S., **D.J. Brown***, P.J. Turk and S.M. Clegg, 2013. Improved intact soil core carbon determination applying regression shrinkage and variable selection techniques to complete-spectrum laser-induced breakdown spectroscopy (LIBS). Applied Spectroscopy, 67(10): 1185-1199.

19. Bricklemyer, R.S., **D.J. Brown***, J. Barefield, S.M. Clegg, 2011. Intact soil core total, inorganic and organic carbon measurement using laser-induced breakdown spectroscopy (LIBS). Soil Sci. Soc. of Am. J., 75(3): 1006-1018.

18. Ge, Yufeng, C.L.S. Morgan, S. Grunwald, **D.J. Brown**, 2011. Comparison of Soil Reflectance Spectra and Calibration Models Obtained Using Multiple Spectrometers, Geoderma, 161(3-4): 202-211.

17. **Brown, D. J.** *, E.R. Hunt, R.C. Izaurralde, K.H. Paustian, C.W. Rice, B.L. Schumaker, T.O. West, 2010. Soil Organic Carbon Change Monitored Over Large Areas. EOS, 91(47): 441-442.

16. Bricklemyer, R.S., **D.J. Brown***, 2010. On-the-go VisNIR: Potential and limitations for mapping soil clay and organic carbon. Comput. Electron. Agr., 70(1): 209-216. doi:10.1016/j.compag.2009.10.006

15. Campbell, C.S., Bissey, L.L., Cobos, D.R., Dunne, K.M., Campbell, G.S., **Brown, D.J.** 2010. Insights into soil water use through interpreting moisture sensor data. Japanese Soil Science Society Journal. 114:19-22.

14. Eitel, J.U.H., D.S. Long, P.E. Gessler, E.R. Hunt, **D.J. Brown**, 2009. Sensitivity of ground-based remote sensing estimates of wheat chlorophyll content to variation in soil reflectance. Soil Sci. Soc. of Am. J., 73:1715-1723. doi: 10.2136/sssaj2008.0288

13. Serbin, G., C.S.T. Daughtry, E.R. Hunt Jr., **D.J. Brown**, 2009. Effect of soil spectral properties on remote sensing of crop residue cover. Soil Sci. Soc. of Am. J., 73: 1545-1558. doi:10.2136/sssaj2008.0311

12. Morgan, C.L.S, T.H. Waiser, **D.J. Brown**, D.J., and C.T. Hallmark, 2009. Simulated in situ characterization of soil organic and inorganic carbon with visible near-infrared diffuse reflectance spectroscopy. Geoderma, 151:249-256. doi:10.1016/j.geoderma.2009.04.010

11. Hansen, M.K., **D.J. Brown***, P.E. Dennison, S.A. Graves, and R.S. Bricklemyer, 2009. Inductively mapping expert-derived soil-landscape units within dambo wetland catenae using multispectral and topographic data. Geoderma, 150(1-2): 72-84. doi:10.1016/j.geoderma.2009.01.013

10. Serbin, G., C.S.T. Daughtry, E.R. Hunt Jr, J.B. Reeves III and **D.J. Brown**, 2009. Effects of soil composition and mineralogy on remote sensing of crop residue cover. Remote Sens. Environ., 113(1), 224-238. doi:10.1016/j.rse.2008.09.004

9. Sankey, J.B., **D.J. Brown***, Melisa L. Bernard, Rick L. Lawrence, 2008. Comparing local vs. global visible and near-infrared (VisNIR) diffuse reflectance spectroscopy (DRS) calibrations for the prediction of soil clay, organic C and inorganic C. Geoderma, 148(2): 149-158. doi:10.1016/j.geoderma.2008.09.019

8. **Brown*, D.J.**, 2007. Using a global VNIR soil-spectral library for local soil characterization and landscape modeling in a 2nd-order Uganda watershed. Geoderma, 140(4): 444-453. doi:10.1016/j.geoderma.2007.04.021.

7. Waiser, T.H., C.L.S. Morgan, **D.J. Brown**, and C.T. Hallmark, 2007. In situ characterization of soil clay content with visible near-infrared diffuse reflectance spectroscopy. Soil Sci. Soc. of Am. J., 71(2): 389-396.

6. Mahan, S.A. and **D.J. Brown**, 2007. An optical age chronology of late Quaternary extreme fluvial events recorded in Ugandan dambo soils. Quaternary Geochronology, 2: 174–180.

5. **Brown*, D.J.**, K.D. Shepherd, M.G. Walsh, M.D. Mays, T.G. Reinsch, 2006. Global soil characterization with VNIR diffuse reflectance spectroscopy. Geoderma, 132:273-290.

4. **Brown*, D.J.**, R.S. Bricklemyer and P.R. Miller, 2005. Validation requirements for diffuse reflectance soil characterization models with a case study of VNIR soil C prediction in Montana. Geoderma, 129(3-4): 251-267.

3. **Brown*, D.J.**, K. McSweeney, and P.A. Helmke, 2004. Statistical, geochemical, and morphological analyses of stone line formation in Uganda. Geomorphology, 62(3-4): 217-237.

2. **Brown*, D.J.**, M.K. Clayton, and K. McSweeney, 2004. Potential terrain controls on soil color, texture contrast and grain-size deposition for the original catena landscape in Uganda. Geoderma, 122(1): 51-72.

1. **Brown*, D.J.**, P.A. Helmke, and M.K. Clayton, 2003. Robust geochemical indices for redox and weathering on a granitic laterite landscape in central Uganda. Geochimica et Cosmochimica Acta, 67(15): 2711-2723.

Book Chapters (# peer-reviewed technical paper)

2.# **Brown, D.J.**, 2005. A historical perspective on soil-landscape modeling. In: S. Grunwald (Ed.), Environmental Soil-Landscape Modeling: Geographic Information Technologies and Pedometrics. CRC Press, Boca Raton, FL, pp. 61-103. [2 citations]

1. **Brown, D.J.**, 2003. Soil Classification/USA. In: D. Hillel (General Ed.), Encyclopedia of Soils in the Environment. Elsevier, Ltd., Oxford, UK, vol. 1, pp. 235-245.

Proceedings papers

8. Lugumira, J.S., D.J. Brown, M. Swanson, P.E. Dennison, L.A. Vierling. Using aerial gamma-ray and terrain data as lone predictors of dambo catenary units. GlobalSoilMap Conference 2013. 7-9 October 2013. Orléans, France.

7. Hansen, M.K., P.E. Dennison, and **D.J. Brown**, 2008. Classifying Ugandan Dambo Wetland Soils Using Multispectral and Topographic Remote Sensing Data. Proc. 3rd Global Workshop on Digital Soil Mapping. 30 Sep. – 3 Oct., 2008, Utah State University, Logan, UT.

6. Bricklemyer, R.S., **D.J. Brown***, 2008. Potential and limitations of "on-the-go" VisNIR spectroscopy for measuring and mapping soil clay and organic carbon content. Proc. 3rd Global Workshop on Digital Soil Mapping. 30 Sep. – 3 Oct., 2008, Utah State University, Logan, UT.
5. Roberts, P., E. Meirik, **D.J. Brown** and B.E. Frazier, 2008. Landform Mapping of the North Cascades National Park, Washington. Proc. 3rd Global Workshop on Digital Soil Mapping. 30 Sep. – 3 Oct., 2008, Utah State University, Logan, UT.
4. Meirik, E., B. Frazier, **D.J. Brown**, P. Roberts, and R. Rupp, 2008. Contribution of vegetation mapping by spectral remote sensing to digital soil mapping. Proc. 3rd Global Workshop on Digital Soil Mapping. 30 Sep. – 3 Oct., 2008, Utah State University, Logan, UT.
3. Hansen, M.K., P.E. Dennison, S.A. Graves, and **D.J. Brown**. Ugandan dambo wetland classification using multispectral and topographic remote sensing data. Proc. ASPRS 2008 Annual Conference, 28 Apr – 2 May, 2008, Portland, OR.
2. Serbin, G., C.S.T. Daughtry, E.R. Hunt Jr., G.W. McCarty, P.C. Doraiswamy, and **D.J. Brown**, 2008. Improved remotely-sensed estimates of crop residue cover by incorporating soils information. Proc. 2008 IEEE International Geoscience & Remote Sensing Symposium IGARSS'08. 6-11 Jul., 2008, Boston, MA, USA.
1. Bricklemyer, R.S., **D.J. Brown***, S.M. Clegg, and J. Barefield, 2008. Simulated in situ soil carbon measurements using combined VisNIR and LIBS sensors. Proc. 1st Global Workshop on High Resolution Digital Soil Sensing & Mapping. 5-8 Feb., 2008, Sydney, Australia.

Book Reviews

1. **Brown, D.J.**, 2004. A review of Soil Formation, 2nd edition, by Nico van Breemen and Peter Buurman. Soil Sci., 169(4): 315-316.

Newsletter articles

2. **Brown, D.J.**, 2007. Proximal visible and near infrared diffuse reflectance spectroscopy for soil-landscape modeling. NIR News, 17(8), 7-9.
1. **Brown, D.J.**, 2005. Pedometrics and NIR spectroscopy. The NIR Spectrum, 3(2): 3-6.

Presentations

Summary

Conference presentations with abstracts:	71 total, 2 invited
Seminar presentations:	10 total, 5 external invited
Workshop presentations:	3 invited
Workshop co-instructor:	1 invited
Other presentations:	5 total, 1 external invited

Conference presentations with published abstracts *(# invited)*

72. Brown, D.J., 2014. Advances in Precision Ag Technologies. 2015 WSU Extension Winter Cereals Seminar, Walla Walla County, Walla Walla, WA. Jan. 13.

71. Brooks, E.S., M. Poggio, T.A. Anderson, C. Gasch, M. Yourek, N. Ward, T. Magney, D. Brown, D. Huggins. 2014. Capturing field-scale variability in crop performance across a regional-scale climosequence. AGU Fall Meeting, Dec. 15-19, San Francisco, CA. (poster)

70. Brown, D.J., C. Gasch, D.R. Huggins, E.S. Brooks, C.S. Campbell, D.R. Cobos, 2014. An agronomic field-scale sensor network for monitoring soil water and temperature variation. AGU Fall Meeting, Dec. 15-19, San Francisco, CA. (poster)

69. Gasch, C., T. Hengl, B. Graeler, T. Magney, D. Brown, 2014. Spatio-temporal interpolation of soil moisture in 3D+T using automated sensor network data. AGU Fall Meeting, Dec. 15-19, San Francisco, CA. (poster)

68. Yourek, M.A., ES Brooks, T.S. Magney, T.R. Anderson, D.J. Brown, 2014. Field-Scale Soil Moisture Mapping Using RapidEye Satellite Imagery and Distributed Hydrologic Modeling. AGU Fall Meeting, Dec. 15-19, San Francisco, CA. (Poster)

67. Bruner, E.A., Okubara, P.A., Abi-Ghanem, R., Brown, D.J., and Reardon, C.L., 2014. Recovery of bacterial and fungal communities from soil through the use of pressure cycling technology. The First Global Soil Diversity Conference; December 2-5; Dijon, France. (poster)

67. Brown, D.J., D.R. Huggins, C.O. Stockle, E. Brooks, J.U.H. Eitel, K.M.Painter, L.A.Vierling and C.Reardon, 2014. Site-Specific Climate-Friendly Farming: Benefits and Challenges of Transdisciplinary Research. ASA-CSSA-SSSA Annual Meeting, Long Beach, CA, Oct. 21-24. (oral)

66. Bruner, E.A., D. Brown, E. Brooks and L. Carpenter-Boggs, 2014. Quantifying in-Situ Nitrate and Ammonium Production in Response to Site-Specific Setting in No-till Dryland Wheat Agroecosystems of the Pacific Northwest. ASA-CSSA-SSSA Annual Meeting, Long Beach, CA, Oct. 21-24 (poster)

65. Gasch, C., T. Hengl, B. Graeler, D. Brown, 2014. Soil moisture content in 3D + Time: visualization and modeling at the field-scale. ASA-CSSA-SSSA Annual Meeting, Long Beach, CA, Oct. 21-24 (oral)

64. Gasch, C., T.R. Anderson, M. Yourek, E. Brooks, D. Brown, 2014. Calibration of soil moisture sensors using pedotransfer functions. ASA-CSSA-SSSA Annual Meeting in Long Beach, CA, Oct. 21-24 (poster)

63. Kostyanovsky, K., D.R. Huggins, C.O. Stockle, D. Brown, S.R. Waldo and B. Lamb, 2014. Seasonal and Diurnal Dynamics of N2O and CO2 Emissions in No-till Winter Wheat System in Pacific Northwest. ASA-CSSA-SSSA Annual Meeting, Long Beach, CA, Oct. 21-24 (oral)

62. Magney, T., N.K. Ward, E. Brooks, D.R. Huggins, S. Finch, J.U.H. Eitel, L.A. Vierling, M. Yourek, T.R. Anderson, C.O. Stockle and D. Brown, 2014. Assessing the controls on spatio-temporal nitrogen uptake patterns using a biophysical process model and high

resolution satellite imagery. ASA-CSSA-SSSA Annual Meeting, Long Beach, CA, Oct. 21-24 (oral)

61. Poggio, M., D. Brown, D. and R.S. Bricklemyer, 2014. Estimating Soil Clay Content in Situ with a VisNIR Penetrometer Fore Optic. ASA-CSSA-SSSA Annual Meeting, Long Beach, CA, Oct. 21-24 (oral)

60. Wavrin, J., D.R. Huggins, D.J. Brown, K. Painter, and A.D. Esser. 2014. Precision N Management of Spring Wheat: Defining and Assessing Performance Classes. ASA-CSSA-SSSA Annual Meeting, Long Beach, CA, Oct. 21-24 (poster)

59. Poggio, M., **D.J. Brown**, R.S. Bricklemyer, 2014. In situ evaluation of a VisNIR penetrometer for soil characterization. 20th World Congress of Soil Science, Jeju, Korea, June 8-13.

58. **Brown, D.J.**, M. Poggio, R.S. Bricklemyer, 2014. Estimating soil clay content in situ with a VisNIR penetrometer fore optic. EGU 2014, Vienna, Austria, 27 April – 2 May.

57.# **Brown, D.J.** and M. Poggio, 2013. In situ Soil Spectroscopy for Precision Management. Soil Spectroscopy: the present and future of soil monitoring. FAO HQ, Rome, Italy, 4-6 Dec.

57. **Brown, D.J.**, M. Poggio, and R.S. Bricklemyer. Development and testing of a VisNIR penetrometer for in situ soil characterization. In Abstracts, Pedometrics 2013, Nairobi, Kenya. 28-30 Aug. 2013 (oral).

56. **Brown, D.J.**, R.S. Bricklemyer, S.M. Clegg, J.B. Reeves, and D.B. Smith. Rapid, multi-sensor, laboratory soil characterization for carbon and related soil properties. In Abstracts, IUSS Global Soil Carbon Conference, Madison, WI. 3-5 June 2013 (oral).

55. Yourek, M.A., E.S. Brooks, T.S. Magney, T.R. Anderson, **D.J. Brown** (2012), Field-Scale Soil Moisture Mapping Using RapidEye Satellite Imagery and Distributed Hydrologic Modeling, Abstract H43G-155, presented at 2012 Fall Meeting, AGU, San Francisco, Calif., 3-7 Dec.

54. Poggio, M., R.S. Bricklemeyer, and **D.J. Brown**, 2012. Development and testing of a VisNIR penetrometer for in situ soil characterization. In Abstracts, 2012 Fall Meet., American Geophysical Union, San Francisco, CA. 3-7 Dec. 2012 (poster).

53. **Brown, D.J.**, E. Brooks, J.U. Eitel, D. Huggins, K. Painter, R.A. Rupp, J.L. Smith, C. Stockle and L. Vierling, 2012. Site-Specific, Climate-Friendly Farming: Early Activities and Accomplishments. ASA-CSSA-SSSA Annual Meeting in Cincinnati, OH, Oct. 21-24 (poster).

52. Bruner, E.A., **D.J. Brown**, D. Huggins, E. Brooks, J. U. Eitel, T. Magney, L. Vierling, M. Poggio and T. T. Brown, 2012. Science-Based Zone Mapping for Site-Specific N Management in Dryland Wheat-Based Cropping Systems On Complex, Pacific Northwest Palouse Landscapes. ASA-CSSA-SSSA Annual Meeting in Cincinnati, OH, Oct. 21-24 (oral).

51. Chahal, M., **D. J. Brown**, E. Brooks, C. Campbell, and D. Cobos, 2012. Field-Scale Soil Moisture Space-Time Geostatistical Modeling for Complex Palouse Landscapes in the

Inland Pacific Northwest. ASA-CSSA-SSSA Annual Meeting in Cincinnati, OH, Oct. 21-24 (poster).

50. Huggins, D., R. A. Rupp, P. Gessler, W. Pan, **D. J. Brown**, S. Machado, V. P. Waldon, J. Abatzoglou and S. D. Eigenbrode, 2012. Dynamic Agroecological Zones for the Inland Pacific Northwest, USA. ASA-CSSA-SSSA Annual Meeting in Cincinnati, OH, Oct. 21-24 (poster).

49. Huggins, D., **D.J. Brown**, K. Keller, E. Brooks, J. L. Smith, B. Lamb, and S. D. Eigenbrode,, 2012. Linkages Among C, N and Water Footprints in Wheat-Based Cropping Systems. ASA-CSSA-SSSA Annual Meeting in Cincinnati, OH, Oct. 21-24 (oral).

48. Kostyanovsky, K., D. Huggins, C. Stockle, J. L. Smith, **D.J. Brown** and W. Pan, 2012. Dynamics of CO2 and N2O Emissions in the Wheat System: Continuous Automated Irga Monitoring Study. ASA-CSSA-SSSA Annual Meeting in Cincinnati, OH, Oct. 21-24 (oral).

47. Kostyanovsky, K., D. Huggins, C. Stockle, J. L. Smith, **D.J. Brown**, and W. Pan, 2012. Continuous Automated Measurements of Soil N2O and CO2 Emissions with the Portable Irga System in the Static Chamber Microplot Study. ASA-CSSA-SSSA Annual Meeting in Cincinnati, OH, Oct. 21-24 (poster).

46. Boylan, R.D., E. Brooks, D. Huggins, and **D.J. Brown**, 2012. Carbon and Field-Scale Nitrate Flux Modeling Across Wide Climate Gradients and Diverse Soil Variability in the Dry-Land Agricultural Region of the Inland Pacific Northwest. ASA-CSSA-SSSA Annual Meeting in Cincinnati, OH, Oct. 21-24 (poster).

45. Bricklemyer, R. S., **D. J. Brown**, S. M. Clegg, J. E. Barefield. 2011. Importance of interrogation volume and full spectrum LIBS for measuring carbon in intact soil cores. In Abstracts, 2011 Fall Meet., American Geophysical Union, San Francisco, CA. 5-9 Dec. 2011 (poster).

44. **Brown, D.J.**, E.S. Brooks, J. Eitel, D.R. Huggins, 1, K. Painter, Richard Rupp, J.L. Smith, C. Stockle, L.A. Vierling (2011). Site-Specific, Climate-Friendly Farming. In Abstracts, 2011 Fall Meet., American Geophysical Union, San Francisco, CA. 5-9 Dec. 2011 (poster).

43. Huggins, D.R., R. Rupp, P. Gessler, W. Pan, **D.J. Brown**, S. Machado, V.P. Walden, S. Eigenbrode, J.T. Abatzoglou (2011). Dynamic Agroecological Zones for the Inland Pacific Northwest, USA. In Abstracts, 2011 Fall Meet., American Geophysical Union, San Francisco, CA. 5-9 Dec. 2011 (poster).

42. Bricklemyer, R.S., **D.J. Brown**, S. Clegg, and J. Barefield (2009). Organic and inorganic carbon determination for intact, field-moist soil cores using LIBS and VisNIR. International Symposium on Soil Organic Matter Dynamics: Land Use, Management and Global Change, Colorado Springs, CO, July 6-9 (poster).

41. **Brown, D.J.**, G. Nyamadzawo, and P.E. Dennison, 2008. Spatially Distributed Methane Flux Measurements for a Tropical Dambo Wetland Landscape in Uganda. AGU Fall Meeting in San Francisco, CA, Dec. 15-19 (poster).

40. Bricklemyer, R.S., **D.J. Brown**, S.M. Clegg, J.E. Barefield, 2008. Simulated in situ determination of soil profile organic and inorganic carbon with LIBS and VisNIR. AGU Fall Meeting in San Francisco, CA, Dec. 15-19 (poster).

39. Serbin, G., C.S.T. Daughtry, E.R. Hunt Jr., G.W. McCarty, P.C. Doraiswamy, and **D.J. Brown**, 2008. Improvement of Remote Sensing of Crop Residue Cover by Accounting for Green Vegetation and Soil Spectral Properties. HyspIRI Science Workshop in Monrovia, CA, Oct. 21-23 (poster).

38. Serbin, G., C.S.T. Daughtry, E.R. Hunt Jr., G.W. McCarty, P.C. Doraiswamy, and **D.J. Brown**, 2008. Improvement of remote sensing of crop residue cover by accounting for green vegetation and soil spectral properties. ASA-CSSA-SSSA Annual Meetings in Houston, TX, Oct. 5-9 (poster).

37. Hansen, M.K., P.E. Dennison, and **D.J. Brown**, 2008. Classifying Ugandan Dambo Wetland Soils Using Multispectral and Topographic Remote Sensing Data. 3rd Global Workshop on Digital Soil Mapping. Sep. 30 – Oct. 3 in Logan, UT (oral).

36. Bricklemyer, R.S., **D.J. Brown**, 2008. Potential and limitations of "on-the-go" VisNIR spectroscopy for measuring and mapping soil clay and organic carbon content. 3rd Global Workshop on Digital Soil Mapping. Sep. 30 – Oct. 3 in Logan, UT (oral).

35. Roberts, P., E. Meirik, **D.J. Brown** and B.E. Frazier, 2008. Landform Mapping of the North Cascades National Park, Washington. 3rd Global Workshop on Digital Soil Mapping. Sep. 30 – Oct. 3 in Logan, UT (oral).

34. Meirik, E., B. Frazier, **D.J. Brown**, P. Roberts, and R. Rupp, 2008. Contribution of vegetation mapping by spectral remote sensing to digital soil mapping. 3rd Global Workshop on Digital Soil Mapping. Sep. 30 – Oct. 3 in Logan, UT (oral).

33. Serbin, G., C.S.T. Daughtry, E.R. Hunt Jr., G.W. McCarty, P.C. Doraiswamy, and **D.J. Brown**, 2008. Improved remotely-sensed estimates of crop residue cover by incorporating soils information. IEEE International Geoscience & Remote Sensing Symposium IGARSS'08. Jul. 6-11 in Boston, MA (oral).

32. Hansen, M.K., P.E. Dennison, S.A. Graves, and **D.J. Brown**, 2008. Ugandan dambo wetland classification using multispectral and topographic remote sensing data. ASPRS 2008 Annual Conference. Apr 28-May 2 in Portland, OR (oral).

31. Bricklemyer, R.S., **D.J. Brown**, S.M. Clegg, and J. Barefield, 2008. Simulated in situ soil carbon measurements using combined VisNIR and LIBS sensors. 1st Global Workshop on High Resolution Digital Soil Sensing & Mapping. Feb. 5-8, Sydney, Australia (oral).

30. **Brown, D.J.**, R.S. Bricklemyer, C. Christy (2007), Soil organic carbon estimation and mapping using "on-the-go" VisNIR spectroscopy. AGU Fall Meeting in San Francisco, CA, Dec. 10-14 (poster).

29. Bricklemyer, R.S., **D.J. Brown**, S.M. Clegg, J.E. Barefield (2007). Simulated in situ determination of soil profile organic and inorganic carbon using combined VisNIR and LIBS sensors. AGU Fall Meeting in San Francisco, CA, Dec. 10-14 (poster).

28. Campbell, C.S., J. Crupper, **D.J. Brown**, D.R. Cobos, G.S. Campbell, D. Uberuaga, D.R. Huggins, J.L. Smith, R.A. Gill (2007). Field-scale distributed wireless network for

monitoring dynamic hydrologic processes. AGU Fall Meeting in San Francisco, CA, Dec. 10-14 (oral).

27. Dennison, P.E., M.K. Hansen, S.A. Graves, **D.J. Brown**, E. Matthews (2007). Mapping methane-significant dambo wetlands in central Uganda using remote sensing and topographic data. AGU Fall Meeting in San Francisco, CA, Dec. 10-14 (poster).

26. **Brown, D.J.**, J.C. Crupper, C.S. Campbell, D.R. Cobos, C.A. Perillo, D.R. Huggins, 2007. Constructing a Field-Scale Dynamic Landscape Model of Soil Hydrology Using Data from a Distributed Wireless Sensor Network. ASA-CSSA-SSSA Annual Meeting in New Orleans, LA, Nov. 4-8 (oral).

25. Wielopolski, L., **D.J. Brown**, C.R. Izaurralde, S. Mitra, R. Omonode, and H.A. Torbert, 2007. Non-Destructive Carbon Measurement in Soil over Large Fields. ASA-CSSA-SSSA Annual Meeting in New Orleans, LA, Nov. 4-8 (oral).

24. Bricklemyer, R.S., **D.J. Brown**, S.M. Clegg, J.E. Barefield, 2007. Simulated in situ determination of soil profile organic and inorganic carbon using combined VisNIR and LIBS sensors. ASA-CSSA-SSSA Annual Meeting in New Orleans, LA, Nov. 4-8 (oral).

23. Bricklemyer, R.S., **D.J. Brown**, C. Christy (2007), Soil Organic Carbon Estimation and Mapping using "On-the-Go" VisNIR Spectroscopy. ASA-CSSA-SSSA Annual Meeting in New Orleans, LA, Nov. 4-8 (poster).

22. Serbin, G., C.S.T. Daughtry, E.R. Hunt Jr., P.C. Doraiswamy, G.W. McCarty, and **D.J. Brown**, 2007. Improved Remote Crop Residue Cover Estimation by Incorporation of Soil and Residue Information. ASA-CSSA-SSSA Annual Meeting in New Orleans, LA, Nov. 4-8 (poster).

21. Serbin, G., C.S.T. Daughtry, E.R. Hunt, Jr., P.C. Doraiswamy, **D.J. Brown**, 2007. Hyperspectral remote sensing estimation of crop residue cover: Soil mineralogy, surface conditions, and their effects. Soil and Water Conservation Society Annual Meeting in Tampa, FL, July 21-25 (poster).

20. **Brown, D.J.**, S.A. Mahan (2006), Late Quaternary extreme hydroclimatic events recorded in Ugandan dambo wetland sediments. AGU Fall Meeting in San Francisco, CA, Dec. 11-15 (poster).

19. Borino, M.L, **D.J. Brown**, J.D. Watts, R.A. MacMillan, 2006. The impact of proximal soil sensing prediction errors on soil-landscape model parameter estimation. World Congress of Soil Science in Philadelphia, PA, Jul 9-15 (poster).

17. Steward, G.C. and **D.J. Brown**, 2006. Effects of sample preparation on VNIR (350-2500 nm) diffuse reflectance predictions of soil organic and inorganic C for Soils in north central Montana. World Congress of Soil Science in Philadelphia, PA, Jul 9-15 (poster).

16. Borino, M.L., **D.J. Brown**, J.D. Watts, and R.A. MacMillan, 2006. The impact of proximal soil sensing prediction errors on soil-landscape model parameter estimation. Western Society of Soil Science Annual Meeting in Park City, UT, Jun. 19-21 (poster).

15. **Brown, D.J.**, S.A. Mahan, 2006. Dambo geography, geomorphology and soil formation in Uganda.. AAG Annual Meeting in Chicago, IL, Mar. 8-11 (oral).

14. Waiser, T., C.L.S. Morgan, **D.J. Brown**, 2005. In situ characterization of soil profiles with visible-near infrared spectroscopy. ASA-CSSA-SSSA Annual Meeting in Salt Lake City, UT, Nov. 6-10, (oral).

13. **Brown, D.J.** and S.A. Mahan, 2005. Hydroclimatic controls on dambo geomorphology and soil formation in Uganda. GSA Annual Meeting in Salt Lake City, UT, Oct 16-19 (oral).

12. Mahan, S.A. and **D.J. Brown**, 2005. An optical age chronology of late quaternary extreme fluvial events recorded in Uganda dambo soils. GSA Annual Meeting in Salt Lake City, UT, Oct 16-19 (oral).

11. **Brown, D.J**, 2005. Mapping soil organic C, texture and clay mineralogy in a Ugandan dambo using digital terrain modeling and proximal VNIR diffuse reflectance spectroscopy. Pedometrics 2005, Naples, FL, Sep. 11-14 (oral).

10. Morgan, C.L.S., T. Waiser, and **D.J. Brown**, 2005. Characterizing soil clay content profiles in situ using visible-near infrared spectroscopy. Pedometrics 2005, Naples, FL, Sep. 11-14 (oral).

9. Mahan, S.A. and **D.J. Brown**, 2005. An optical age chronology of late quaternary extreme fluvial events recorded in Uganda dambo soils. 11th International Conference on Luminescence and Electron Spin Resonance Dating, University of Cologne, Cologne Germany, Jul. 24-29 (poster).

8. **Brown, D.J.**, K.D. Shepherd, and M.G. Walsh, 2003. "Soil Classification based on VNIR Diffuse Reflectance Spectroscopy." ASA-CSSA-SSSA Annual Meeting in Denver, Nov. 2-6 (oral).

7. **Brown, D.J.**, M.K. Clayton, K. McSweeney, and J.M. Norman, 2002. Terrain and parent material controls on texture contrast in Uganda: GLS regression and thin-plate splines. ASA-CSSA-SSSA Annual Meeting in Indianapolis, IN, Nov.10-14 (oral).

6. **Brown, D.J.**, and P.A. Helmke, 2002. Geochemical indicators of weathering and redox in laterite formation. ASA-CSSA-SSSA Annual Meeting in Indianapolis, IN, Nov. 10-14 (poster).

5.# **Brown, D.J.**, K.D. Shepherd, R.S. Bricklemyer, and P. Miller, 2002. Soil analysis at the landscape scale: applications of diffuse reflectance spectrometry. ASA-CSSA-SSSA Annual Meeting in Indianapolis, IN, Nov. 10-14 (oral).

4. **Brown, D.J.**, V.T. Holliday, K. McSweeney, and J.M. Norman, 2001. The Origin and Implications of the Natural Body Concept in Pedology. ASA-CSSA-SSSA Annual Meeting in Charlotte, NC, Oct. 21-25 (oral).

3. **Brown, D.J.**, M.K. Clayton, P.A. Helmke, V.T. Holliday, K. McSweeney, and J.M. Norman, 2001. The Formation of Soil-Stoneline-Ironstone-Saprolite Profiles in Uganda. ASA-CSSA-SSSA Annual Meeting, Charlotte, NC, Oct. 21-25 (poster).

2. **Brown, D.J.**, K. McSweeney, V.T. Holliday, and M.K. Clayton, 2000. The present, past and future of the catena concept. ASA-CSSA-SSSA Annual Meeting in Minneapolis, MN, Nov. 5-9 (oral).

1. **Brown, D.J.**, K. McSweeney, M.K. Clayton, and V.T. Holliday, 2000. A Re-examination of the Catena Concept on the Landscape of Origin in East Africa. ASA-CSSA-SSSA Annual Meeting in Minneapolis, MN, Nov. 5-9 (poster).

Seminar Presentations (# external invited)

18. Brown, D.J., 2014. Sensing Techniques for Site-Specific Soil Management. Far West Agribusiness Association December 2014 Winter Conference, Kennewick, WA, USA, Dec. 9.

17. Brown, D.J., 2014. Precision Orchard Soil Management: Technologies and Possibilities. Washington State Horticulture Association 110th Annual Meeting and Northwest Hort Expo, Kennewick, WA, USA, Dec. 1.

16. Brown, D.J., D.R. Huggins, C.O. Stockle, E. Brooks, J.U.H. Eitel, K.M. Painter, L.A. Vierling, C. Reardon, 2014. Site-Specific Climate-Friendly Farming: Optimizing Nitrogen- and Water-Use Efficiency For Spatially Variable Landscapes, University of Idaho GIS Day, Nov. 19, 2014 (slides and poster).

15. Brown, D.J., 2014. The Potential for Precision Soil Management in Orchards. WSU Tree Fruit Research & Extension Center, Wenatchee, WA. Aug. 13, 2014.

14. Poggio, M., R.S. Bricklemyer, D.J. Brown, 2014. In situ evaluation of a VisNIR penetrometer for soil characterization. WSU Academic Showcase, March 28, 2014. Pullman, WA, USA.

13. **Brown, D.J.**, 2014. Site-specific climate friendly farming: REACCH integration. REACCH Annual Meeting, March 6, 2014. Richland, WA, USA.

12. **Brown, D.J.**, 2011. The role of pedology in precision nitrogen management. Washington State University, Dept. Earth and Environmental Sciences, Geology Seminar, Feb. 7, 2011. Pullman, WA, USA.

11. **Brown, D.J.**, 2011. Site-specific climate friendly farming: the methods to our madness. Washington State University, Dept. of Crop and Soil Sciences, Soil Science Seminar, Feb. 7, 2011. Pullman, WA, USA.

10. **Brown, D.J.**, 2011. Site-specific nitrogen management for climate change mitigation. Washington State University, Environmental Science & Regional Planning Seminar, Jan. 18, 2011. Pullman, WA, USA.

9. **Brown, D.J.**, 2009. Mapping soil properties and processes: a vision for 21st-century pedology. Washington State University, Dept. of Crop and Soil Sciences, Soil Science Seminar, Jan. 26, 2009. Pullman, WA, USA.

8. **Brown, D.J.**, 2009. The role of tropical dambo wetlands in the global atmospheric methane cycle. Washington State University, ESRP 593, Graduate Seminar in Environmental Science, Jan. 27, 2009. Pullman, WA, USA.

7.# **Brown, D.J.**, 2008. Seasonal dambo wetlands in Uganda: a positive feedback loop in the global atmospheric methane (CH_4) cycle. University of Utah, Department of Geography Colloquium, Nov. 7, 2008. Salt Lake City, UT, USA.

6. Brown, D.J, 2007. Nested soil-landscape modeling. WSU Statistics Department seminar series, Pullman, WA, Apr. 17.

5.# **Brown, D.J.**, 2006. Linking terrain modeling, geomorphology, hydrology, and soils on the original catena landscape in central Uganda, Michigan State University, Dept. of Geography, Mar. 20, 2006. East Lansing, MI, USA.

4.# **Brown, D.J.**, 2006. Linking terrain modeling, geomorphology, hydrology, and soils on the original catena landscape in central Uganda. Baylor University, Dept. of Geology, Mar. 3, 2006. Waco, TX, USA.

3.# **Brown, D.J.**, 2005. Characterizing Landscapes and Soils for Quantitative Soil-Landscape Modeling. University of Delaware, Dept. of Plant and Soil Sciences, Jan. 27, 2005.

2. Brown, D.J., 2002. Soil analysis at the landscape scale: applications of diffuse reflectance spectrometry. MSU Ecology Departmental Seminar, Nov. 21.

1. Brown, D.J., 2002. Soil analysis at the landscape scale: applications of diffuse reflectance spectrometry. MSU Plant Science Departmental Seminar, Nov. 11.

Workshop Instructor (# invited)

1.# **Brown, D.J.**, 2005. Quantitative Visible and Near-Infrared Diffuse Reflectance Spectroscopy for Soil Characterization. Pedometrics '05 in Naples, FL. IUSS, Division 1, Commission 1.5, Pedometrics, Gainesville, FL, USA, Sep. 8-9, 2005. Instructor for two-day pre-conference workshop (17 participants, Gainesville, FL, co-taught with Dr. Fred McClure.)

Workshop Presentations *(# invited)*

3.# **Brown, D.J.**, D. Archibald, A. Plante, 2009. Advanced Instrumentation for Measuring SOC. The Determination of Soil Organic Carbon in Agricultural Soils Spanning North America. The California Institute of Technology, Pasadena, CA, May 27, 2009 (Sponsored by the Jet Propulsion Laboratory).

2.# **Brown, D.J.**, 2007. Measurement, Monitoring & Verification of Terrestrial Carbon Sequestration, National Energy Technology Laboratory Progress Meeting in Morgantown, WV, Aug. 14-15 (oral).

1.# **Brown, D.J.**, 2006. Calibration, validation and the question of outliers. Workshop on Emerging Modalities for Soil Carbon Analysis: Sampling Statistics and Economics, Brookhaven National Lab., Brookhaven, NY, Jan. 19-20.

Other Oral Presentations (# external invited)

9. **Brown, D.J.**, 2010. Using VisNIR spectroscopy to estimate soil organic carbon. Western Regional Cooperative Soil Survey Conference, Las Vegas, June 22, 2010.

8. **Brown, D.J.**, R. Bricklemyer, R. Lawrence, P. Miller, J. Fessenden, S. Clegg, J. Watts, and R. Engel, L. Vierling, E. Strand, A. Hudak, 2009. Big Sky Carbon Sequestration

Partnership: Terrestrial Activities. DOE Fossil Energy Partnerships Meeting, Pittsburgh, PA, Nov. 16.

7. Bricklemyer, R., **D.J. Brown,** R. Lawrence, P. Miller, J. Fessenden, S. Clegg, J. Watts, and R. Engel, 2009. Cropland/Rangeland Activities. Big Sky Carbon Sequestration Partnership Annual Meeting, Gallatin Gateway, MT, Sep. 24.

6.# **Brown, D.J.**, 2006. Shootout dataset: the soil scientists modeling approach and soil heterogeneity. IDRC '06 in Chambersburg, PA, Aug. 4-11.

5. **Brown, D.J.**, R. Lawrence, P. Miller, J. Fessenden, S. Clegg, R. Bricklemyer, J. Watts, G. Vance, J. Schuman, J. Derner, and R. Engel, 2007. Terrestrial carbon sequestration. Big Sky Carbon Sequestration Partnership Annual Meeting, Bozeman, MT, Aug. 23.

4. **Brown, D.J.**, 2007. Big Sky Carbon Sequestration Partnership Cropland and Rangeland Activities. DOE Regional Carbon Sequestration Partnerships, Pittsburgh, PA, Dec. 13-14.

3. Capalbo, S., B. Smith and **D. Brown**, 2005. Big Sky Carbon Sequestration Partnership, Phase II. DOE Regional Carbon Sequestration Partnerships, Pittsburg, PA, Oct. 12-14.

2. **Brown, D.J.**, C.L.S. Morgan and S. Grunwald, 2004. Soil Characterization with Visible and Near-Infrared (VNIR) Diffuse Reflectance Spectroscopy (DRS). Presentation to NRCS-Soil Survey leadership, Seattle, WA, Nov. 2 (at ASA-SSSA-CSSA Annual Meeting).

1. **Brown, D.J.**, 2003. Diffuse Reflectance Spectroscopy and Soil Material Classification. Presentation to National Soil Survey Center staff, Lincoln, NE, Jul. 21.

INSTRUCTION

Teaching Philosophy

My classes focus on labs, exercises, discussion and experiential learning. Toward that end, I constantly experiment with alternative techniques that spur student engagement.

Teaching Program

Annually, I teach environmental spatial statistics (SoilS/Stat/ESRP/Geol 508) and World Agricultural Systems (CropS/SoilS 360). I have also played an active role in the development of a new certificate in "geospatial analysis." For many years I taught pedology and have also taught terrain analysis at the graduate level.

Graduate Student Supervision

Name	Degree	Complete	Notes
Steward, Genevieve	MS	Dec, 2006	
Meirik, Emily	MS	Jun, 2008	Co-advisor, non-thesis
Roberts, Phil	MS	May, 2009	Co-advisor
Bricklemyer, Ross	PhD	Dec, 2013	
Sebadduka, Jerome	PhD	Aug, 2014	
Poggio, Matteo	PhD	??	

Bruner, Emily	PhD	??	
Astutiningsih, Novi	PhD	??	Co-advisor, Crops PhD program
Song, Yuanhong	MS	??	

Graduate committee member: Margaret Buchanan (MS, 5/2005, Montana State U.), Joel Sankey (MS, 9/05, Montana State U.), Brian Eckenrod (MS, 6/06, Montana State U.), Jennifer Strause (MS, 4/08, WSU non-thesis), Matthew Hansen (MS, 9/07, U. of Utah), Scott Graves (MS, 1/08, U. of Utah), Jake Wavrin (MS, ??, WSU), Matt Yourek (MS, ??, U. of Idaho),

Courses Taught

Course No.	Description	when	Enrolled	Credit
SoilS 508	Environmental Spatial Statistics	S, 2014	12	3
SoilS/Crops 360	World Agricultural Systems	F, 2013	25	3
Soils 502	N measurement – IGERT (coordinator, team taught)	S, 2013	6	2
SoilS 508	Environmental Spatial Statistics	F, 2012	12	3
SoilS/Crops 360	World Agricultural Systems	F, 2012	46	3
CE 543	N measurement – IGERT (coordinator, team taught)	S, 2012	7	2
SoilS 508	Environmental Spatial Statistics	F, 2011	16	3
SoilS/Crops 360	World Agricultural Systems (co-taught w/Ullrich)	F, 2011	65	3
SoilS 508	Environmental Spatial Statistics	F, 2010	31	3
SoilS/Crops 360	World Agricultural Systems (co-taught w/Ullrich)	F, 2010	53	3
SoilS 451	Soil Geography	F, 2009	14	3
SoilS/Crops 360	World Agricultural Systems (co-taught w/Ullrich)	F, 2009	65	3
SoilS 502	Environmental Spatial Statistics	F, 2008	8	3
SoilS/Crops 360	World Agricultural Systems (co-taught w/Ullrich)	F, 2008	49	3
SoilS 502	Statewide tour	F, 2007	14	1
SoilS 502	Environmental Spatial Statistics	F, 2007	6	3
SoilS 451	Landscape Pedology	F, 2007	5	3
SoilS 551	Advanced Pedology (conjoint)	F, 2007	3	3
SoilS/Crops 360	World Agricultural Systems (co-taught w/Ullrich)	F, 2007	39	3
LRES 535	Tech. of Spatial Analysis†	F, 2006	8	3
LRES 454	Landscape Pedology	F, 2006	26	3
LRES 454	Landscape Pedology	F, 2005	28	3
LRES 580	Soil-Landscape Analysis*	S, 2005	2	3
LRES 454	Landscape Pedology	F, 2004	43	3
LRES 580	Terrain Analysis (co-taught w/ McGlynn)	S, 2004	8	3
LRES 454	Landscape Pedology	F, 2003	33	3
LRES 454	Soil Classification & Pedology	F, 2002	35	3
SOIL 360	Field Exp. in Soil Inv. Methods (UW-Stevens Point)	2001(sum)	60	3
Soil Sci 325	Pedology (UW-Madison)	F, 2000	34	3

Undergraduate Research

An average of four undergraduate students per year have been employed on an hourly basis in my laboratory and gained first hand experience in basic soil analysis techniques as well as soil spectroscopy.

Academic credit for undergraduate research under my supervision:

- Sydney Schoepke Fall, 2005 VisNIR spectroscopy for soil C analysis
- Jennifer Watts Spring, 2006 VisNIR spectroscopy for soil mineralogy
- Ashley Bembenek Fall, 2006 Dambo wetland sediment analysis
  (All three continued on for graduate studies at MSU.)

Teaching Assistant

Course	Title	Year	Enrollment
Soil Sci 325	Pedology (UW-Madison)	1997-99	15-30
GEOG 454	Geographic Analysis I (Penn State Univ.)	1996	~50

Secondary School Teaching (Peace Corps-Fiji)

1991	Form 6–Physics, Math; Form 5–Physics, Math
1990	Form 6–Physics (2 sections); English; Form 5–Math, Physics
1989	Form 6–English (2 sections); Form 5–Physics, Math; Form 3–Economics

SERVICE

Professional

2006 -	Associate Editor for the Soil Science Society of America Journal, division S-5, Pedology
2006 -	Leader, Terrestrial Sequestration group, Big Sky Carbon Sequestration Partnership
2007	Co-organizer for a symposium (three oral sessions and one poster session) at the Soil Science Society of America Annual Meetings, New Orleans, LA, Nov. 4-8, 2007. *Advancing measurement techniques and modeling synergy for environmental soil research in space and time" (co-sponsored by S1, S5, S6 & S9)*
2007	*Ad hoc* grant proposal reviewer for USDA-SBIR (2 proposals)
2006	USDA-SBIR Soil, water and air, proposal review panel member (Feb, 2006)
2006	*Ad hoc* grant proposal reviewer for DOE-SBIR
2005	*Ad hoc* grant proposal reviewer for DOE-SBIR
2005-06	Guest co-editor, Geoderma Special Issue, Pedometrics '05
2004-05	Scientific program committee member for Pedometrics '05 in Naples, FL. IUSS, Division 1, Commission 1.5, Pedometrics

2003 Selector for 2001 "Best Paper in Pedometrics" award, IUSS, Working Group of Pedometrics Provisional Commission

2003-04 Soil Science Society of America, Education Award Committee

Ad hoc reviewer for Applied Geochemistry, Chemical Geology, European Journal of Soil Science, Geoderma, Soil Science, Soil Science Society of America Journal, and Vadose Zone Journal, Journal of Geophysical Research – Biogeosciences, Annals of the American Association of Geographers, Journal of Near Infrared Spectroscopy

Member of the following professional societies:

International Union of Soil Sciences (IUSS), Div. 1, Comm. 1.5, Pedometrics; American Association of Geographers (AAG); American Geophysical Union (AGU); Geological Society of America (GSA); Soil Science Society of America (SSSA)

University, College and Department

Committees

2007-08 ad hoc committee to develop a joint soil science – environmental science degree

2008 ad hoc committee to develop a certificate in geospatial analysis

2008 ad hoc committee to form a Center for Landscape Analysis and Management

2007-08 WSU Agro-Meteorologist search committee (# 4541)

2007- WSU-CCS Safety Committee

2005-06 MSU Executive committee, Ecological and Environmental Statistics MS program

2005-06 MSU LRES Departmental Representative on Faculty Council

2005-06 MSU LRES Faculty search committee, Soil Nutrient Management

2004-06 MSU Graduate application review committee

2004-07 MSU Committee on International Programs

2004-05 Frank Munshower Scholarship committee in Land Rehabilitation

2002- LRES Curriculum Committee

2002 Montana Ag. Exp. Station review committee for Dr. Bruce Maxwell

2002-06 Maintained USDA permit to import foreign soils for LRES department.

OUTREACH

Outreach Presentations (oral)

Brown, D.J. 2010. Site-Specific Climate-Friendly Farming. Cook Agronomy Farm board meeting, 2 Dec. 2010, Pullman, WA, USA.

Brown, D.J. 2010. Carbon and Your Crop and Rangeland. Understanding carbon markets for farmers, ranchers, and forest owners workshop. April 23, 2010, Malo, WA, USA.

Brown, D.J. 2010. VisNIR and SOC change measurement. USDA cooperative soil survey state planning meeting. June 2, 2010, Spokane, WA, USA.

Bricklemyer R., **D.J. Brown**, P. Miller, L. Cisneros-Dozal, J. Fessenden, J. Watts, R. Lawrence, R. Engel, C. Block, R. Feddema. 2008. Overview of Cropland C Sequestration Research in Montana. Regional Opportunities in Agriculture and Forestry Carbon Sequestration. Workshop 20 Oct. 2008, Bozeman, MT, USA. *(Invited)*

Brown, D.J., R. Bricklemyer, P. Miller, L. Cisneros-Dozal, J. Fessenden, J. Watts, R. Lawrence, R. Engel, C. Block, R. Feddema. 2008. Overview of Cropland C Sequestration Research in Montana. Big Sky Carbon Sequestration Partnership Annual Meeting. 29 Oct. 2008, Spokane, WA, USA.

Brown, D.J, R.S. Bricklemyer, and R. Evans, 2007. Carbon Sequestration and Trading, Cook Agronomy Farm Field Day, Jun 28.

Borino, M.L. and **D.J. Brown**, 2006. Quantitative Soil-landscape Modeling in the Beartooth Mountains, Custer National Forest, Montana. Regional USDA Forest Service Soil Scientists Meeting, Billings, MT, May 8-9.

Brown, D.J., 2005. Soil Characterization with Visible and Near-Infrared (VNIR) Diffuse Reflectance Spectroscopy (DRS). MSU Crop and Pest Management School, Bozeman, MT, Jan. 6.

Brown, D.J., 2004. Soil characterization based upon diffuse reflectance spectroscopy. National Cooperative Soil Survey (NCSS) Work Planning Conference in Billings, MT, May 27.

Brown, D.J., 2004. Diffuse reflectance spectroscopy for soil characterization. Montana Precision Agriculture Research Association Winter Meeting, Bozeman, MT, Jan. 30.

Brown, D.J., 2004. Soil Taxonomy, Sampling & Radiometry. MSU Crop and Pest Management School, Bozeman, MT, Jan. 7.

Other outreach activities

Serve as regional expert and contact point for enquiries on agricultural carbon sequestration, largely as terrestrial lead for the Big Sky Carbon Sequestration Partnership.

April, 2015

FACULTY RESUME'

MARC A. EVANS
Professor
Department of Mathematics
Washington State University
Pullman, WA 99164-3113

EDUCATION

Formal Education

University of Wyoming, Laramie, Wyoming, September 1987 through August 1989. Earned Doctor of Philosophy in Statistics, August 1989. Dissertation title: Topics in the Estimation of Population Size from Capture-Recapture Data using Log-linear Models.

University of Wyoming, Laramie, Wyoming, September 1984 through August 1987. Earned Master of Science in Statistics, August 1987. Thesis title: A Review and Evaluation of the Estimation Procedures used to Estimate Waterfowl Abundance in the State of Wyoming.

Humboldt State University, Arcata, California, January 1981 through June 1984. Earned Bachelor of Arts in Mathematics with a Minor in Biology, June 1984.

Los Angeles Pierce College, Woodland Hills, California, September 1971 through June 1980.

PROFESSIONAL EXPERIENCE

2011-present	Professor, Department of Mathematics	Washington State Univ.
2006-2011	Professor, Department of Statistics	Washington State Univ.
1995-2006	Assoc. Professor, Department of Statistics	Washington State Univ.
1995-2009	Cooperative Extension Statistical Specialist	Washington State Univ.
1989-1995	Asst. Professor, Program in Statistics	Washington State Univ.
1984-1989	Graduate/Teaching Assistant	University of Wyoming
1988	Operations Research Analyst	U.S.D.A. Forest Service
1985-1987	Statistical Consultant	University of Wyoming

MEMBERSHIPS

Professional

International Biometric Society

HONORS AND AWARDS

Scholarships, Fellowships and Awards

WSU College of Sciences Tom Lutz Teaching Award, 2012
Certificate of Appreciation, Disability Awareness Association of WSU, 2002
Annual Paper Competition Award, WNAR Biometric Society, 1990.
Edward Demming Award, Edward Demming Foundation, 1988-1989.
John P. Ellbogen Meritorious Classroom Teaching Award, University of Wyoming, 1988-1989.
Outstanding Ph.D. Student Honor Book Award, Statistics Department, University of Wyoming, 1987-1988.
Senior Graduate Assistantship Award, University of Wyoming, 1988-1989.
American Statistical Association Institutional Award, Statistics Department, University of Wyoming, 1985-1986.

COMMITTEE SERVICE

National and International

Elected Secretary WNAR International Biometric Society (1999 - 2000)
Re-elected Secretary WNAR International Biometric Society (2001 - 2002)
Local arrangements chair for the WNAR/IMS 1996 Joint Regional Meeting held June 23 - June 26, 1996 at Washington State University.
Elected to the WNAR Biometric Society Regional Committee (governing board) for 1994-1996.
Appointed to the WNAR Biometric Society Student Paper Competition for 1994.
Appointed to the WNAR Biometric Society Advisory Committee for 1990-1993.
Outside reviewer for tenure and promotion, Kansas State University (1999).
Outside reviewer for tenure and promotion, New Mexico State University (1999).
Outside reviewer for tenure and promotion, University of Montana (2002).
Outside reviewer for tenure and promotion, Montana State University (2013).

Reviewer for Biometrics, Statistics in Medicine, Ecology, Canadian Journal of Statistics, Journal of Agricultural, Biological and Environmental Statistics, Environmetrics, Statistics and Probability Letters, Journal of Statistical Computation and Simulation, and Bioscience

COMMITTEE SERVICE (Continued)

University

Faculty Senate Catalog Subcommittee (Co-chair), 2005 - 2015.
College of Sciences Dean's Search Committee, 2010.
Elected to Faculty Senate, 2002 - 2007.
Search Committee for the Principal Assistant (OGRD), 2002 - 2003.
Appointed to the University Steering Committee for Computing and Telecommunications, 1996-1999.
General Education Subcommittee on Mathematics for 1992.

College of Agriculture, Human and Natural Resource Sciences

Faculty Search Committee, Biostatistician position at HREC, 2002 - 2003.
Tenure Steering Committee for Dr. Joan Anderson, AMID 2002-2005
College of Agriculture and Home Economics Tenure and Promotion Committee for 1998 - 2000.
College of Agriculture and Home Economics Advisory Committee for Academic Program Computer Facilities for 1996 - 1998.
Division of Sciences Ad Hoc Committee on Environmental Science for 1994.
CAHE Library Committee for 1991.

College of Sciences

Departments of Mathematics and Statistics Merger Committee 2011
Mathematics and Statistics Reorganization Committee 2009 - 2010

Department

Department of Mathematics Undergraduate Studies Committee for 2012-2014
Department of Mathematics Social Committee for 2012-2014
Department of Statistics Curriculum Committee for 2008-2011.
Department of Statistics Curriculum Committee for 2004-2006.
Search Committee Member, Computer Systems Administrator 2006 (An. Sci. and Stat.)
Department of Statistics Curriculum Committee (Chair) for 2003.
Program in Statistics Curriculum Committee (Chair) for 2002.
Program in Statistics Graduate Studies Committee (Chair) for 1995-2001.
Program in Statistics Faculty Search Committee for 1992-1993, 1995-1996, 1997-1998.
Program in Statistics Library Committee for 1990, 1995.
Program in Statistics Masters Degree Implementation Committee for 1993, 1994.
Program in Statistics Seminar Committee for 1989, 1992, 1993 and 1994.
Program in Statistics Masters Degree Brochure Committee for 1992.
Program in Statistics Improvement in Instruction Committee for 1990.

COMMITTEE SERVICE (Continued)

Community

Secretary, Palouse Jrs. Volleyball Club for 2004-2006
Manager and Coach, Pullman Soccer Club U-18 team for 2006
Manager, Pullman Soccer Club U-16 team for 2004
Manager, Pullman Soccer Club U-15 team for 2003
Manager, Moscow United and Pullman Soccer Club U-14 team for 2002 - 2003
Manager, Pullman Soccer Club U-13 team for 2001
Manager, Pullman Soccer Club U-12 team for 2000-2001
Quartermaster, Troop 460, Boy Scouts for 2000-2001

COURSES TAUGHT

Institution	Number	Name	Hours	Times Instructed
Wash. State Univ.	STAT 522	Biostatistics and Statistical Epidemiology	3	4
Wash. State Univ.	STAT 212	Introduction to Statistical Methods	4	15
Wash. State Univ.	STAT 530	Applied Linear Models	3	3
Wash. State Univ.	STAT 412	Biometry	3	14
Wash. State Univ.	STAT 590	Statistical Consulting Practicum	1	14
Wash. State Univ.	STAT 590	Statistical Consulting Practicum	2	1
Wash. State Univ.	STAT 600	Special Projects	varies	
Wash. State Univ.	PSW 42	Interpret. Stat. Anal. for Ext. Faculty	0	1
Wash. State Univ.	STAT 520	Stat. Anal. Qual. Data	3	12
Wash. State Univ.	STAT 512	Analysis of Designed Exp.	3	16
Wash. State Univ.	STAT 510	Topics in Probability and Statistics	3	1
Wash. State Univ.	STAT 535	Regression Analysis	3	1
Univ. of Wyoming	STAT 690	Intro. to Stat. Software	3	1
Univ. of Wyoming	STAT 401	Stat. Cpts for Bus. and Man. Sci.	3	1
Univ. of Wyoming	STAT 402	Stat. Meth. for Bus. and Man. Sci.	3	1
Univ. of Wyoming	STAT 705	Stat. Meth. for the Biol. and Soc. Sci.	3	1
Univ. of Wyoming	STAT 655	Sampling Techniques	3	1
Univ. of Wyoming	STAT 407	Intro. Stat. for Soc. Sci.	3	1
Univ. of Wyoming	STAT 405	Fundamentals of Statistics	3	1

GRADUATE STUDENT ADVISEES

Past Students:

Reberte, Juan Carlos, Master's Student - Graduated December 1993
Hui-ling Lee, Master's Student in Statistics - Graduated May 1997
Kari Cheney, Master's Student in Statistics - Graduated July 1998
Stephan Mech, Master's Student in Statistics - Graduated December 1998
Liz Bartlett, Master's Student in Statistics - Graduated June 1999
Hayden Stewart, Master's Student in Statistics - Graduated May 2001
Matt Goff, Master's Student in Statistics - Graduated December 2001
Mark Minton, Master's Student in Statistics - Graduated May 2002
Brian Kulik, Master's Student in Statistics - Graduated February 2004
Gang Wang, Master's Student in Statistics - Graduated July 2004
Stephanie Kane, Master's in Statistics, Chair - Graduated May 2005
Meng Zhang, Master's in Statistics, Chair - Graduated May 2005
Robison, Barry, Graduate Minor - Graduated December 1999, PhD in Zoology
Theodore Morgan, Graduate Minor - Graduated May 2002, PhD in Zoology
Michael Zanis, Graduate Minor - Graduated May 2002, PhD in Botany
Krista Nicols, Graduate Minor - Graduated December 2002, PhD in Zoology
Robert Drew, Graduate Minor - Graduated December 2005, PhD in Zoology
Zishun Zhao, Master's in Statistics, Chair - Graduated December 2006
Ying Hu, Master's in Statistics, Chair - Graduated December 2006
Yannan Sun, Master's in Statistics, Chair - Graduated May 2007
Berna Buzbas, Master's in Statistics, Chair - Graduated December 2008
Adrienne Ohler, Master's in Statistics, Chair - Graduated May 2009
Sanatan Shreay, Master's in Statistics, Chair - Graduated December 2009
Min Huang, Master's in Statistics, Chair - Graduated May 2010
Scott Goates, Master's in Statistics, Chair - Graduated May 2010
Qiujie Zhang, Master's in Statistics, Chair - Graduated June 2010
Li Zhu, Master's in Statistics, Chair - Graduated December 2010
Peiling Wu , Master's in Statistics, Graduated May 2011
Rhonda Crate, Master's in Statistics, Graduated, May 2012
Keegan Murphy, Master's in Statistics, Graduated, May 2012
Qian Qian Wang, Master's in Statistics, Graduated, December 2012
Yan Xing, Master's in Statistics, Graduated, August 2012
Elliot Moon, Master's in Statistics, Graduated, May 2013
Jingze Jiang, Master's in Statistics, Graduated, May 2013
Long Zhang, Master's in Statistics, Graduated, May 2013
Dong-Jun Rew, Master's in Statistics, Graduated, May 2014
Chieh Lee, Master's in Statistics, Graduated, May 2014
Andrew Allen, Master's in Statistics, Graduation, August 2014
Jung Lee, Master's in Statistics, Graduated, December 2014

GRADUATE STUDENT ADVISEES

Current Students:

Xun Xu, Master's in Statistic, Graduation, Fall 2015
Phillip Witt, Master's in Statistics, Graduation, Fall 2015
Lyudmyla Kompaniyets, Graduation, Spring 2015

Other Thesis Committees:

Ph.D. 24
M.S. 107

RESEARCH GRANTS AND CONTRACTS

Funded Research Grants and Contracts:

USDA 2014 Washington State Department of Agriculture Specialty Crop Block Grant (#123272) Elizabeth Beers (PI). $199,820.

USDA ARS. Fostering Coexistence: Statistical Investigations in GE Alfalfa. Marc A. Evans (PI). $15,272. 4/1/2013 to 1/16/2016.

NSF. International Research Evaluation Metrics. Prema Arasu (PI), Marc A. Evans, Danna Moore, Daniel Nordquist and Jane Payumo (Co-PIs). $235,269. 7/1/2013 to 6/30/2016.

DIABETES ACTION RESEARCH & EDUCATION FOUNDATION. Understanding the Goal Setting Process in Diabetes Dietary Self-Care in Latinos and Caucasians with Type 2 Diabetes. $20,000.00. Jill Shultz (leader), Linda Massey, Sue Butkus and Marc Evans (Co-leaders). 1/2005 - 12/2006.

AVENTIS, INC. What is the Fiscal Utility of Lantus® in the Management of Type 2 Diabetes Melitus in the United States? $110,925.00. Dr. David Sclar (PI), Dr. John White, Ms. Linda Robison, Dr. Marc A. Evans, and Dr. Robert Rosenman, and Dr. Barry Hicks. Effective dates: 9/1/2002 - 3/31/2003.

BAYER CORPORATION, INC. Baycol Cost-Effectiveness Analysis. $70,344. Co-PI's Dr. Tracy Skaer, Dr. David Sclar and Dr. Linda Robison. Effective dates: 5/1/2000 - 10/31/2000.

ARC Project WNP00340 - Interactive Computer Programs for Statistics Education. Effective dates: 2/29/2000 - 11/30/2002.

USDA Higher Education Challenge Grant Program - Using Technology in a Collaborative Learning Setting to Enhance Classroom Discussion. $80,000.00. Co-PI's Dr. Stephan Hines and Dr. Gary Brown. Effective dates: 8/23/98 - 8/22/01.

ARC Project WNP00103 - Psychosocial and Dietary Factors Affecting Risk and Management of Diet-Related Chronic Disease. Effective dates: 1997 - 2000.

ARC Project WNP00195 - Analysis of Capture-Recapture Data: Development of Computer Software. $3000.00. Effective dates: 1996-1998.

CAHE Academic Programs - Multimedia Course Development for the Program in Statistics. $12,500.00. Co-P.I.: Mike Jacroux.

Funded Research Grants and Contracts:

USDA Extension Service - Communicating About Agricultural Chemicals: Designing Credible Food Safety Programs for Differing Audiences. $47,748.13. P.I.: Val Hillers. Effective dates: 7/91 - 7/92.

ARC Project 0919 - A Computer Program for the Comprehensive Analysis of Capture-Recapture, Band-Recovery, and Aerial Survey Data. $2,000.00. Effective dates: 1991 - 1995.

Previously Reviewed Grants and Contracts:

Lindbergh Fund (1)
WSU CAHE Academic Programs (2)
NSF(2)
NIH (2)
Washington Attorney General (1)
USDA (2)
Robert Wood Johnson Foundation (2)
NIRT (Nanoscale Interdisciplinary Research Teams) (2)

Professional Consultations

Baxter Bioscience
Invertebrate Ecology

PUBLICATIONS

Keen, H. A., Nelson, O. L., Robbins, C. T., Evans, M. A., Shepherdson, D. J. and Newberry, R. C. (2014). Validation of a novel cognitive bias task based on differences in quantity of reinforcement for assessing environmental enrichment. ***Animal Cognition, 17(3),*** 529-541.

Goodstein, E., Bohlschied, J., Evans, M. A. and Ross, C. F. (2014). Perception of flavor finish in white wine: A time intensity study. ***Food Quality Preference, 36,*** 50-60.

Johnson, R.C. and Evans Marc A. (2014). Comparative growth and development of hexaploid and tetraploid reed canarygrass. ***Crop Science 54,*** 1 -8.

Villamor, R. R., Evans, M. A. and Ross, C. F. (2013). Ethanol, tannin and fructose concentration effects on sensory properties of model red wines. ***American Journal of Enology and Viticulture.***

Keen, H. A., Nelson, L. O., Robbins, C. T., Evans, M.,Shepardson, D. J. and Newberry, R. C. (2014). Validation of a novel cognitive bias task based on differences in quantity of reinforcement for assessing environmental enrichment. ***Animal Cognition, 17(3),*** 529-541.

Guiliani, R., Koteyeva, N., Vosnesenskaya, E., Evans, M. A., Cousins, A. B. and Edwards, G. E. (2013). Coordination of leaf photosynthesis, transpiration and leaf structural traits in rice and wild relatives (genus Oryza). ***Plant Physiology, 162,*** 1632-1651.

Fortin, J., Schwartz, C., Gunther, K., Tiesberg, J., Haroldson, M., Evans, M. and Robbins, C. (2013). Dietary adaptability of grizzly bears and American black bears in Yellowstone National Park. ***Journal of Wildlife Management 77(2):*** 270-281.

Villamor, R., Evans, M., Mattinson, D. and Ross, C. (2012). Effects of ethanol, tannins and fructose on the headspace concentration and sensory significance of odorants in a model wine. ***Food Research International 50(1),*** 38-45.

Mobbs, Tamara L., Peters, Troy R., Wu, Joan Q., Davenport, Joan and Evans, Marc A. (2012). Effects of four soil surfactants on four soil-water properties in sand and silt loam. ***Journal of Soil and Water Conservation 67(4),*** 273-281.

Johnson, R.C., S.E. Petrie, M.C. Franchini, and Marc Evans. (2012) Yield and Yield Components of Winter-Type Safflower. ***Crop Science, 52,*** 2358 - 2364.

Sclar, D. A., Evans, M. A., Robison, L. M. and Skaer, T. L. (2012) α_1- Proteinase Inhibitor (Human) in the Treatment of Hereditary Emphysema Secondary to α_1-Antitrypsin Deficiency: Number and Cost of Years of Life Gained. ***Clinical Drug Investigations, 32(5),*** 353-360.

Early, K., Shultz, J., Evans, M., Corbett, C. F., Butkus, S. N. and Massey, L. (2012). Dietary Goal Attainment Measures and Psychosocial Factors Among Mexican Americans and Non-Hispanic Whites With Type 2 Diabetes. ***Ecology of Food and Nutrition 51(3),*** 227-247.

Inglis, D., Gundersen, B., Miles, C., Roozen, J., Wallace, R., Wszelaki, A., Walters, A., and Evans, M. (2011). Evaluation of physiological leaf roll on tomato cultivars grown in high tunnel vs. open field plots, 2010. ***Plant Disease Management Reports, Report 5:VO72.***

Agnes, J. T., Herndon, D., Ueti, M. W., Ramabu, S. S., Evans, M., Brayton, K. A. and Palmer, G. H. (2010). Association of pathogen strain-specific gene transcription and transmission efficiency phenotype of Anaplasma marginale. ***Infection and Immunology 78,*** 2446-2453.

Nitzan, N., Evans, M. A., Cummings, T., Johnson, D. Batchelor, D., Olsen, C. and Brown, C. (2009). Field Resistance to Potato Stem Colonization by the Black Dot Pathogen *Colletotrichum coccodes*. ***Plant Disease, Vol. 93(11),*** 1116-1122..

Clement, S. L., McPhee, K. E., Elberson, L. R. and Evans, M. A. (2009). Pea weevil, Bruchus pisorum L. (*Coleoptera: Bruchidae*), resistance in *Pisum sativum* x *P. fulvum* interspecific crosses. ***Plant Breeding, Vol. 128(5),*** 478-485.

Johnson, H. D., Dasgupta, N., Zhang, H. and Evans, M. A. (2008). Internet approach versus lecture and lab based approach for teaching an introductory statistical methods course: students' opinions. ***Teaching Statistics 31(1)***, 21-26.

Johnson, H. D., and Evans, M. A. (2008). Illustrating the sampling distribution of a statistic: Minitab revisited. ***Australian Mathematics Teacher 64(1), 35-40.***

Johnson, R. C., Hopkins, A. and Evans, M. A. (2008). Carbon isotope discrimination, selection response, and forage production of tall fescue in contrasting environments. ***Crop Science, Vol 48,*** 1048 - 1054.

Malezke, B. T., Koehler, G. M., Wielgus, R. B., Aubry, K. B. and Evans, M. A. (2008). Winter habitat characteristics associated with lynx foraging behavior in Washington. ***Journal of Wildlife Management, Vol. 72(7), 1473-1478.***

Rominger, E. M., Goldstein, E. J. and Evans, M. A. (2008). Unreported predator control, serial autocorrelation, and erroneous model input make biological inferences circumspect. Response to Bender and Weisenberger. ***Journal of Wildlife Management, Vol. 72(2), 580-582.***

Clement, S. L., Hellier, B. C., Elberson, L. R., Staska, R. T., and Evans, M. A. (2007). Flies (Diptera: Muscidae: Calliphoridae) are efficient pollinators of ***Allium ampeloprasum*** L. (Alliaceae) in field cages. ***Journal of Economic Entomology, Vol. 100(1)***, 131-135.

Johnson, R. C., Kisha, T. J. and Evans. M. A. (2007). Characterizing Safflower germplasm with AFLP molecular markers. ***Crop Science, Vol. 47,*** 1728-1736.

Barkan, L., Evans M. A. and Edwards, G. E. (2006). Increasing UV-B induces biphasic leaf cell expansion in *Phaseolus vulgaris*, suggesting multiple mechanisms for controlling plant growth. ***Photochemistry and Photobiology, 82*** (online).

Nitzan, N. Evans, M. A., Johnson, D. A. (2006). Colonization of potato plants after aerial infection by ***Colletotrichum coccodes***, causal agent of potato black dot. ***Plant Disease 90:*** 999-1003.

Fransson, B. A., Lagerstedt, A., Bergstrom, A., Hagman, R., Park, J. S., Chew, B. P., Evans, M. A. and Ragle, C. A. (2007). C-reactive protein, tumor necrosis factor alpha and interleukin 6 in dogs with pyometra and SIRS. ***Journal of Veterinary Emergency Critical Care, OnLineEarly Article, Edited for publication 2007***

Gaskins, C. T., Snowder,G. D., Westman M. K. and Evans, M. A. (2005). Influence of body weight, age and weight gain on fertility and prolificacy in four breeds of ewe lambs. To appear in the ***Journal of Animal Science, Vol. 83:*** 1-10.

Johnson, R. C., Bradley, V. and Evans, M. A. (2005). Seed sample method, genetic structure and growth of model Ryegrass populations after three generation cycles. ***Plant Genetic Resources Newsletter Vol. 144,*** 1 - 7.

Sclar, D. A., Evans, M. A., Skaer, T. L., Robison, L. M., Chung, K. C., Poulios, N. S. (2005). Economic and epidemiologic modeling of full-length antihemophilic factor (recombinant), plasma/albumin-free method (rAHF-PFM), in previously treated patients with Hemophilia A: Comparison with B-domain deleted rFVIII (BDDrFVIII), and the value of potential viral transmission reduction due to plasma/albumin-free status. ***Drugs in Research and Development 6(3),*** 149 - 156.

Morgan, T. J., Evans, M. A., Garland Jr., T., Swallow, J. G. and Carter, P. A. (2005). Molecular and quantitative genetic divergence among populations of house mice with known evolutionary histories. ***Heredity 94,*** 518-525.

Biddle, M. K., Fox, L. K., Evans, M. A. and Gay, C. C. (2005). ***Mycoplasma species*** isolated from several body sites are the same. To appear in the ***Journal of American Veterinary Medical Association, Vol. 227(3):*** 455-459.

Johnson, R. C., Bradley, V. L. and Evans, M. A. (2004). Inflorescence sampling improves effective population size of grasses. ***Crop Science, Vol. 44:*** 1450-1455.

Sclar D. A., Skaer T.L., Robison L.M., Evans M.A., Chung K.C., Li-McLeod J., Poulios N.S. (2003). Anti-D Immunoglobulin in the Treatment of Immune Thrombocytopenic Purpura in Adults in the United

Kingdom: An Evaluation of Clinical Outcomes and Resource Utilization. Proceedings of the 43rd Annual Scientific Meeting of the British Society for Haematology. Glasgow, Scotland. ***British Journal of Haematology, 121(Suppl 1):94.***

Clement, S. L. Elberson, L. R., Youssef, N., Young, F. L. and Evans, M. A. (2004). Cereal aphid and natural enemy populations in different cereal production systems in Washington. Submitted to the ***Journal of the Kansas Entomological Society, Vol. 77(3):*** 165-173.

Frannson, B. A., Karlstam, E., Bergstrom, A., Lagerstedt, A., Park, J. S. Evans, M. A. and Ragle, C. A. (2004). C-reactive protein in the differentiation of Pyometra from Cystic Endometrial Hyperplasia/Mucometra in dogs. ***Journal of the American Animal Hospital Association, 40(5),*** 391-399.

Biddle, M. K., Fox, L. K., Hancock, D. D. Gaskins, C. T. and Evans, M. A. (2004). Effects of storage time and thawing methods on the recovery of *Mycoplasma Species* in milk samples from cows with intramammary infections. ***Journal of Dairy Science, Vol. 87:*** 933-936.

Sclar D. A., Skaer T. L., Robison L. M., Evans M. A., Chung K.C., Li-McLeod J., Poulios N. S. (2003). Economic Modeling of Full-length Antihemophilic Factor (Recombinant), Plasma/Albumin-Free Method (rAHF-PFM), Versus B-Domain Deleted rFVIII (BDDrFVIII) in Previously Treated Persons with Hemophilia A. Proceedings of the 19th Congress of the International Society on Thrombosis and Haemostasis. Birmingham, England. July 17, 2003. ***Journal of Thrombosis and Haemostasis, 89(Suppl 1):1140***

Smith, J. D., Kidwell, K. K., Evans, M. A., Cook, R. J. and Smiley, R. W. (2003). Evaluation of Spring Cereal Grains and Wild *Triticum* Relatives for Disease Reaction to *R. solani* AG-8 in Controlled Environments. ***Crop Science, Vol. 43:*** 701-709.

Smith, J. D., Kidwell, K. K., Evans, M. A., Cook, R. J. and Smiley, R. W. (2003). Assessment of Spring Wheat Accessions for Disease Reaction to *Rhizoctonia solani* AG-8 in Controlled Environment and No-till Field Evaluations. ***Crop Science, Vol. 43:*** 694-700.

Johnson, R. C., Bradley, V.L. and Evans, M. A. (2002). Reductions In Effective Population Size During Grass Seed Regeneration And Improvements With Sampling. ***Crop Science. 42,*** 286-290.

Skaer, T. L., Sclar, D. A., Evans, M. A., Mukherjee, S. K. and Robison, L. (2001). HMG-CoA Reductase Inhibitors in Secondary Prevention of CHD: Comparison of Expense Per Year of Life Gained. ***The American Journal of Cardiology 87,*** 21-25 (Editor pulled the paper due to class action lawsuit controversy of the drug Baycol studied in the paper).

Evans, M. A., Hansen, C. M. and Shultz, T. D. (2000). Response to use of bootstrap procedure and Monte Carlo simulation. ***Journal of Nutrition. Vol 130,*** 2619.

Rominger, E. M., Robbins, C. T., Evans, M. A. and Pierce, D. J. (2000). Autumn foraging dynamics of woodland caribou in experimentally manipulated habitats, northeastern Washington, U. S. A. ***The Journal of Wildlife Management, 64(1),*** 160-167.

Carnahan, K. G., Prince, B. C., Ludwig, T. E., Uzumcu, M., Evans, M. A. and Mirando, M. A. (1999). Effect of oxytocin on concentration of prostaglandin F in the uterine lumen and subsequent endometrial responsiveness to oxytocin in pigs. ***Journal of Reproduction and Fertility, Vol. 117,*** 207-212.

Hansen, C. M., Evans, M. A. and Shultz, T. D. (1999). Application of the bootstrap procedure provides an alternative to standard statistical procedures in the estimation of the vitamin B-6 requirement. ***Journal of Nutrition, 129***, 1915-1919.

Park, Y., McGuire, M. K., Behre, R., McGuire, M. A., Evans, M. A. and Shultz, T. D. (1999). High fat dairy product consumption increases Δ9c,11t-18:2 (rumenic acid) and total lipid concentrations of human milk. ***Nutrition Research, 34***, 543-549.

Call, D. R., Hallett, J. G., Mech, S. G. and Evans, M. (1998). Consideration for measuring genetic variation and population structure with multilocus fingerprinting. ***Molecular Ecology 7(10)***, 1337-1346.

Beerman, K., Brown, G. and Evans, M. (1998). Interactive CD Study Modules in Food Science and Human Nutrition: Assessing Technology-Enhanced Study Programs. ***Journal of Educational Multimedia and Hypermedia 7(4)***, 365-374.

Huang, Y. C., Chen, W., Evans, M. A., Mitchell, M. E. and Shultz, T. D. (1998). Vitamin B6 requirements and status assessment of young women fed high protein diet with varying levels of vitamin B6. ***The American Journal of Clinical Nutrition 67(2)***, 208-220.

Evans, M. A., Kim, Hag-Min, and O'Brien, T. E. (1996). An Application of Profile-likelihood based Confidence Interval to Capture-Recapture Estimators. ***Journal of Agricultural, Biological and Environmental Statistics 1(1),*** 131-140.

Clement, S. L., Evans, M. A. and Lester, D. G. (1996). Settling and feeding responses of pea weevil (*Coleoptera: Bruchidae*) to flowers of selected pea lines. ***Journal of Economic Entomology 89(3),*** 775-779.

Rominger, E. M., Robbins, C. T., and Evans, M. A. (1996). Winter foraging dynamics of woodland caribou. ***Journal of Wildlife Management 60(4),*** 719-728.

Beerman, K. A., Dittus, L. K. and Evans, M. A. (1995). Validation of a dietary assessment instrument designed to measure fat intake. ***Nutrition Research 15(7),*** 969-976.

Evans, M. A., Bonett, D. G. and McDonald, L. L. (1994). A general theory for modeling capture-recapture data from a closed population. ***Biometrics 50(2),*** *396-405.*

Evans, M. A., and Bonett D. G. (1994). Bias reduction for multiple recapture estimators of closed population size. ***Biometrics 50(2),*** 388-395.

Mallatt, J., Baily, J. F., Lampa, L. J., Evans, M. A. and Tate, W. (1994). Stereology of a fish gill: Quantitative ultrastructure of gill epithelial cells in the larval lamprey *Petromyzon marinus*. ***Canadian Journal of Fisheries and Aquatic Sciences, 52,*** 1150-1164.

Mallatt, J., Baily, J. F., Lampa, L. J., Evans, M. A. and Brumbaugh, S. (1994). A fish-gill model for quantifying the ultrastructural effects of Methylmercury, Kepone®, and heat shock. ***Canadian Journal of Fisheries and Aquatic Sciences. 52,*** 1165-1182.

Dittus, K. L., Beerman, K. A. and Evans, M. A. (1994). Testing the utility of a 24-hour semiquantitative food frequency questionnaire for estimating fat intake in a free-living population. ***Nutrition Research 14(6),*** 807-815.

Gray, A. K., Evans, M. A. and Thorgaard, G. H. (1993). Viability and development of thirty diploid and triploid salmonid hybrids. ***Aquaculture 112***, 125-142.

Evans, M. A. and Bonett, D. G. (1993). A constrained Cook-Jacobson model of visibility bias. ***Biometrics 49(3)***, 853-859.

Otis, D. L., McDonald, L. L. and Evans, M. A. (1993). Parameter estimation in encounter sampling surveys. ***Journal of Wildlife Management 57(3)***, 543-548.

Evans, M. A. and Bonett, D. G. (1992). Multiple recapture methods when sampling without replacement. ***Communications in Statistics: Theory and Methods 21(9)***, 2609-2624.

Evans, M. A. and Bonett, D. G. (1989). Maximum likelihood estimation for the negative multinomial log-linear model. ***Communications in Statistics:-Theory and Methods 18(11)***, 4059-4065.

Nowell, C., Evans, M. A. and McDonald, L. L. (1988). Length-biased sampling in contingent valuation studies. ***Land Economics 64(4)***, 367-371.

Papers in Refereed Journals (under review)

Rosnow, Josh J., Evans, Marc A., Kapralov, Maxim V., Cousins, Asaph, Edwards, Gerald E. and Rolason, Eric H. (2015). Kranz and single-cell forms of C_4 plants in subfamily Suaedoideae show kinetic C_4 convergence for PEPC and Rubisco with divergent amino acid substitutions. Submitted to the ***Journal of Experimental Botany***.

Publications in Non-Refereed Journals

Evans, Trevor, Evans, Marc and Verrell, Paul. (2005). Dicamptodon Aterrimus (Idaho Giant Salamander). Reproduction. ***Herpetological Review Vol(36),*** 295.

Books

Ratkowsky, D. A., Evans, M. A. and Alldredge, J. R. (1993). ***Cross-over Experiments: Design, Analysis, Application***. Published by Marcel Dekker, Inc., New York.

Papers in Preparation

Minton, M. and Evans, M. A. (2014). A Monte Carlo simulation of the statistical methods for analyzing block designs with a binary response. To be resubmitted to ***Journal of Agricultural, Biological and Environmental Statistics***.

Evans, M. A. (2014). Multiple recapture estimates of population size using observable covariates. For submission to ***Biometrics.***

Evans, M. A. (2014). Removal methods for estimates of population size using observable covariates. For submission to ***Journal of Agricultural, Biological and Environmental Statistics.***

Evans, M. A. (2014). Likelihood based multiple recapture estimates of population size for heterogenous capture rates. For submission to ***Biometrics.***

Evans, M. A. (2014). Likelihood based removal methods for estimating population size under heterogenous capture rates. For submission to ***Journal of Agricultural, Biological and Environmental Statistics.***

Evans, M. A. (2014). Likelihood based estimates of species richness using Markov Chain Monte Carlo. For submission to ***Biometrics.***

Abstracts

David A. Sclar, Marc A. Evans, John R. White, Tracy L. Skaer, Linda B. Robison. Economics of Basal Insulin Added to Oral Agents Versus Twice-Daily Premixed Insulin as Initial Therapy for Type 2 Diabetes. Accepted for presentation at the European Association for the Study of Diabetes (EASD) Congress, Athens, Greece. September 10-15, 2005.

David A. Sclar, B.Pharm., Ph.D., Tracy L. Skaer, B.Pharm., Pharm.D., Linda M. Robison, MSPH, Marc A. Evans, Ph.D., Karen C. Chung, Pharm.D., M.S., Josephine Li-McLeod, Ph.D., Nick S. Poulios, Ph.D. Economic Modeling of Full-length Antihemophilic Factor (Recombinant), Plasma/Albumin-Free Method (rAHF-PFM), Versus B-Domain Deleted rFVIII (BDDrFVIII) in Previously Treated Persons with Hemophilia A. Proceedings of the 19th Congress of the International Society on Thrombosis and Haemostasis. Birmingham, England. July 17, 2003. ***Journal of Thrombosis and Haemostasis*** 2003;89(Suppl 1):1140.

David A. Sclar, B.Pharm., Ph.D., Tracy L. Skaer, B.Pharm., Pharm.D., Linda M. Robison, MSPH, Marc A. Evans, Ph.D., Karen C. Chung, Pharm.D., M.S., Josephine Li-McLeod, Ph.D., Nick S. Poulios, Ph.D. Anti-D Immunoglobulin in the Treatment of Immune Thrombocytopenic Purpura in Adults in the United Kingdom: An Evaluation of Clinical Outcomes and Resource Utilization. Proceedings of the 19th Congress of the International Society on Thrombosis and Haemostasis. Birmingham, England. July 17, 2003. ***Journal of Thrombosis and Haemostasis*** 2003;89(Suppl 1):1158.

David A. Sclar, B.Pharm., Ph.D., Tracy L. Skaer, B.Pharm., Pharm.D., Linda M. Robison, MSPH, Marc A. Evans, Ph.D., Karen C. Chung, Pharm.D., M.S., Josephine Li-McLeod, Ph.D., Nick S. Poulios, Ph.D. Epidemiologic Modeling of Direct Cost-Avoidance Associated with Use of Full-Length Antihemophilic Factor (Recombinant), Plasma/Albumin-Free Method (rAHF-PFM) Under Theoretical Emergence of a Novel Blood [Plasma] Borne Virus Infecting Previously Treated Persons with Hemophilia A. Proceedings of the 45th Annual Meeting of the American Society of Hematology. San Diego, California. December 7, 2003. ***Blood*** 2003;102(11)(Part 2):506b.

David A. Sclar, B.Pharm., Ph.D., Tracy L. Skaer, B.Pharm., Pharm.D., Linda M. Robison, MSPH, Marc A. Evans, Ph.D., Karen C. Chung, Pharm.D., M.S., Josephine Li-McLeod, Ph.D., Nick S. Poulios, Ph.D. Aralast [$Alpha_1$ Proteinase Inhibitor (Human)] in the Treatment of Hereditary Emphysema Secondary to $Alpha_1$-Antitrypsin Deficiency: Effects on Life-Years Gained. Proceedings of the 12^{th} $Alpha_1$ Foundation Conference. Chicago, Illinois, June 1, 2003.

Presentations (contributed presentations to professional societies)

Johnson, R. C., Bradley, V. L. and Evans, M. A. (2002). Seed sampling techniques and diversity maintenance in outcrossing grass species. ***Crop Science Society of America Abstracts, P. 182030.*** Evans, M. A. (1992). Analysis of Cross-over Designs having a Binary Response. ***Biometric Bulletin 9(4)***, 15.

Evans, M. A., Bonett, D. G. and McDonald, L. L. (1989). A unified theory for modelling capture-recapture data from a closed population. ***Biometric Bulletin 6(4)***, 9.

David A. Sclar, Marc A. Evans, John R. White, Tracy L. Skaer, Linda M. Robison. (2005) Economics of Basal Insulin Added to Oral Agents Versus Twice-Daily Premixed Insulin as Initial Therapy for Type 2 Diabetes. ***European Association for the Study of Diabetes 41^{st} Annual Meeting***. Athens, Greece, September 13, 2005.

Evans, M. A. (2005). Multiple Recapture Estimation for Heterogeneous Capture Rates Using Markov Chain Monte Carlo. ***WNAR Biometric Society Meetings***, Fairbank, Alaska.

Hellier, B., Clement, S. L., Elberson, L. R., Evans, M. A. and Staska, R. (2003). *Allium ampeloprasum* seed production in field cages with insect pollinators. ***American Society for Horticultural Science, 2003 Annual Meeting***

Gaskins, C. T., Snowder,G. D., Westman M. K. and Evans, M. A. (2002). Relationship of weight and age at breeding and body weight gain with ewe-lamb fertility in four breeds. ***7th World Congress On Genetics Applied to Livestock Production. Vol. 8***, 32-35. Montpellier, France.

Hansen, C. M., Evans, M. A., Shultz, T. D. Application of the bootstrap to estimation of vitamin B-6 requirement. **Experimental Biology 98**. 1998

Evans, M. A. Profile-likelihood based Confidence Intervals: A Comparative Study. **WNAR Biometric Society Meetings**. Palo Alto, California, 1995.

Clement, S. L., Evans, M. A. and Lester, D. G. Resistance in *Pisum* germplasm to feeding by adult pea weevils. **Entomology Society of America Annual Meeting**. Indianapolis, Indiana, 1993.

Evans, M. A. Modeling heterogeneous capture-recapture data. **WNAR Biometric Society Meetings**. Laramie, Wyoming, 1993.

Evans, M. A. Analysis of cross-over designs having a binary response. **WNAR Biometric Society Meetings**. Corvallis, Oregon, 1992.

Evans, M. A. Parameter estimation for the Cook-Jacobson model of visibility bias under linear and nonlinear constraints. **WNAR Biometric Society Meetings**. Bozeman, Montana, 1990.

Evans, M. A., Bonett, D. G. and McDonald, L. L. A unified theory for modelling capture-recapture data from closed populations. **WNAR Biometric Society Meetings**. Davis, California, 1989.

Evans, M. A. A unified theory for modelling capture-recapture data from closed populations. **Colorado-Wyoming Chapter of the American Statistical Association**. Boulder, Colorado, 1989.

Bonett, D. G., McDonald, L. L., Evans, M. A. and Bromaghin, J. Log-linear models of multiple recapture and band recovery sampling. **WNAR Biometric Society Meetings**. Honolulu, Hawaii, 1988.

Evans, M. A. Capture-recapture and the estimation of population size with log-linear models. **Colorado-Wyoming Chapter of the American Statistical Association**. Boulder, Colorado, 1988.

Presentations (Invited)

A Sampling Method for Maintaining Genetic Diversity in Artificially Regenerated Populations of Grass. Presented to the College of Agriculture, University of Idaho, 2004.

A Comparison of Inferential Methods for Analyzing Block Designs with a Binary Response. Presented to the Joint Colloquim Series, Washington State University Program in Statistics and the University of Idaho Department of Statistics, 2003.

Multiple Recapture Estimation for Heterogeneous Capture Rates Using Markov Chain Monte Carlo. Presented to the Joint Colloquim Series, Washington State University Program in Statistics and the University of Idaho Department of Statistics, 2001.

On-Farm Experimental Design: Statistical Inference in Agricultural Research Design. Presented at the Washington State University Cooperative Extension 2000 Conference, October 2000.

Continuous Covariates in Capture-Recapture Experiments on Closed Populations. Presented to the College of Agriculture, University of Idaho, 1998.

Profile likelihood based confidence intervals for generalized linear models with applications to capture-recapture data. Presented to the College of Agriculture, University of Idaho, 1994.

Qualitative data analysis for designed experiments. Presented to the Program in Statistics, Washington State University, 1993.

Analytic methods for cross-over designs having a qualitative response. Presented to the Program in Statistics, Washington State University, 1992.

Analytic methods for cross-over designs having a qualitative response. Presented to the College of Agriculture, University of Idaho, 1991.

Capture-recapture methods for closed and open populations, and band recovery data. Presented to the Program in Statistics, Washington State University, 1991.

Discrete multivariate procedures with special applications to nonparametric analysis. Presented to the College of Agriculture, University of Idaho, 1990.

Honors Students

Served On Committee	**College**	**Date**
Jennifer M. Schmidt	Pharmacy	November 2, 2011

Masters Students Chaired Committee	**Department**	**Date**
Carlos Reberte	Statistics	December 1993
Hui-ling Lin	Statistics	May 1997
Kari Cheney	Statistics	July 1998
Steve Mech	Statistics	December 1998
Elizabeth Bartlett	Statistics	June 1999
Hayden Stewart	Statistics	May 2001
Matt Goff	Statistics	December 2001
Mark Minton	Statistics	May 2002
Brian Kulik	Statistics	February 2004
Gang Wang	Statistics	July 2004
Stephanie Kane	Statistics	May 2005
Meng Zhang	Statistics	May 2005
Ying Hu	Statistics	December 2006
Zishun Zhao	Statistics	December 2006
Yannan Sun	Statistics	May 2007
Berna Buzbus	Statistics	December 2008
Adrienne Ohler	Statistics	May 2009
Sanatan Shreay	Statistics	December 2009
Min Huang	Statistics	May 2010
Scott Goates	Statistics	May 2010
Qiujie Zhang	Statistics	June 2010
Li Zhu	Statistics	December 2010
Peiling Wu	Statistics	May 2011
Rhonda Crate	Statistics	May 2012
Keegan Murphy	Statistics	May 2012
Yan Xing	Statistics	June 2012
Qian qian Wang	Statistics	December 2012
Elliot Moon	Statistics	May 2013
Jingze Jiang	Statistics	May 2013
Long Zhang	Statistics	May 2013
Dong-Jun Rew	Statistics	May 2014
Chieh Lee	Statistics	May 2014
Andrew Allen	Statistics	August 2014
Jung Lee	Statistics	December 2014

Total = 34

Masters Students Served on Committee	Department	Date
Lijian He	Statistics	April 1994
Dmitry Hindanov	Statistics	July 1994
Changru Wang	Statistics	June 1995
James Davis	Statistics	August 1995
Ye Wang	Statistics	December 1995
Dave Smith	Statistics	April 1996
Rafic Fahs	Statistics	May 1996
Bei Wang	Statistics	May 1996
Chengcheng Gu	Statistics	June 1996
Hagmin Kim	Statistics	June 1996
Boqing Wang	Statistics	April 1997
Matt Clark	Statistics	May 1997
Monte Cheney	Statistics	July 1997
Xiaomei Guan	Statistics	August 1997
Peijin Xie	Statistics	March 1998
Murat Sever	Statistics	April 1998
Thomas Marsh	Statistics	June 1998
Glade Erickson	Statistics	January 1999
Bruce Austin	Statistics	April 2000
Binfang Ke	Statistics	December 2000
Leona Ding	Statistics	May 2001
Korash Hernandez	Statistics	May 2001
Maher Hasan	Statistics	July 2001
Xiaoping Jin	Statistics	July 2001
Nick Som	Statistics	May 2002
Shidong Zhang	Statistics	May 2002
Huan Tian	Statistics	June 2002
Jason Winfree	Statistics	April 2003
Thomas Flottemesch	Statistics	May 2003
Yu Xia	Statistics	May 2003
Qinghua Liu	Statistics	July 2003
Prabin Thapa	Statistics	July 2003
Jose Sanchez	Statistics	June 2003
Mei Yu	Statistics	June 2004
Su-Chun Yang	Statistics	July 2004
Fei Li	Statistics	July 2004
Binhu Li	Statistics	May 2005
Jim Griswald	Statistics	May 2005
Ling Liu	Statistics	December 2005
Xiaomei Chen	Statistics	March 2006
Abdul Razack	Statistics	May 2006
Yuanlong Ge	Statistics	July 2007
Desheng Zuo	Statistics	July 2007
Huan Zhou	Statistics	July 2007
Wen Du	Statistics	August 2007

Masters Students Served on Committee	Department	Date
Ken Horton	Statistics	December 2007
Dustin Walton	Statistics	May 2008
Yucan Liu	Statistics	June 2008
Kwon Bun Suh	Statistics	June 2008
Saad Ali Alshahrani	Statistics	June 2008
Yan Wang	Statistics	July 2008
Audrey Yeo	Statistics	July 2008
Jing You	Statistics	July 2008
Lia Nogiara	Statistics	July 2008
Caiping Zhang	Statistics	December 2008
Carl Walker	Statistics	May 2009
Dane Sorensen	Statistics	May 2009
Adam Seaburg	Statistics	May 2009
Jun Wang	Statistics	May 2009
Kidane Ghebrehawariat	Statistics	May 2009
Varma Abhishek	Statistics	June 2009
Tosmai Puenpatom	Statistics	December 2009
Xiaochan Niu	Statistics	May 2010
Wensheng Wang	Statistics	May 2010
Ye Tian	Statistics	May 2010
Yi Lu	Statistics	May 2010
Nan Yang	Statistics	August 2010
Limin Yang	Statistics	August 2010
Nathan Skuza	Statistics	December 2010
Diem Nguyen	Statistics	December 2010
Xiaohui Huang	Statistics	December 2010
Miguel Henry	Statistics	December 2010
Liunzi (Julie) Yu	Statistics	December 2010
Monte Shaffer	Statistics	May 2011
Yunfei Li	Statistics	May 2011
John Snyder	Statistics	May 2011
Hatice Senol	Statistics	May 2011
Xuan Fei	Statistics	May 2011
Shuo Li	Statistics	June 2011
Hainan Wang	Statistics	June 2011
Andrew Hanks	Statistics	July 2011
Rasmita Basu	Statistics	August 2011
Fang Chen	Statistics	May 2012
Hui Sun	Statistics	December 2012
Huixin Li	Mathematics	May 2013
Ludwig Linares	Mathematics	May 2013
Lin Cui	Mathematics	July 2013
Hui Sun	Mathematics	December 2013
Yingzi Li	Mathematics	December 2013
Sherzod Akhundjanov	Mathematics	December 2013

Masters Students Served on Committee	**Department**	**Date**
Giang Trinh	Mathematics	May 2013
Xing Zhang	Mathematics	May 2013
Kellon Tomen	Mathematics	May 2013
Xiaonan Liu	Mathematics	May 2013
Boying Lui	Mathematics	May 2013
Zhiyu Qian	Mathematics	May 2013
Chuan Tian	Mathematics	May 2013
Bing Han	Mathematics	May 2014
Xiaoming Wen	Mathematics	December 2014

Total = 99

Masters Students Served on Committee	**Department**	**Date**
Elizabeth Engriser	Zoology	December 1993
Monika Merbecks	FSHN	December 1993
Katrina Sue Johnson	Animal Sciences	December 1994
Mark Harting	Animal Sciences	July 1995
Anne Seinwill	Zoology	May 1996
Muhammad Ali Aali	Animal Sciences	May 1996
Broderick Gant	Animal Sciences	May 1996
Holly Munch	Natural Resources	August 1996
Leona Ding	Mathematics	April 2000
Maria Domenica Leo	Anthropology, U of I	July 2000
Jared Farley	Zoology	December 2001
Ben Maletzke	Natural Resources	August 2004
Emily Goodstein	Food Science	December 2011

Total = 13

Current Masters Students	**Department**	**Date**
Phillip Witt	Mathematics	December 2015
Lyudmyla Kompaniyets	Mathematics	December 2015
Emily Wooley	Mathematics	May 2015

Total = 3

Serve on Committee		
Sylvia Madrid	MS Mathematics	May 2015
Steven LeBlanc	Mathematics and Statistics	May 2015
Umesh Bastola	Mathematics and Statistics	May 2015
Wen Chen	Mathematics and Statistics	May 2015
Sansi Yang	Mathematics and Statistics	May 2015

Total = 5

Doctoral Students Served on Committee	Department	Date
Eric Rominger	Zoology	May 1995
Lewis Payne	Botany	(Did not pass prelims - 1996)
Kevin Carnihan	Animal Sciences	December 1997
Yushi Zhang	Animal Sciences	August 1997
Todd Scarlett	Zoology	August 1998
Yniv Paulti	Zoology	August 1998
Steve Mech	Zoology	August 1999
Jayne Brahler	Interdisciplinary	August 1998
Antonio Calles	Animal Sciences	August 1999
Barry Robison	Zoology (minor - statistics)	December 1999
Mary Allen	Accounting	December 2000
Michael Zanis	Botany (minor - statistics)	May 2002
Ted Morgan	Zoology (minor - statistics)	May 2002
Krista Nicols	Zoology (minor - statistics)	December 2002
Terence Farrell	Interdisciplanary	July 2005
Robert Drew	Zoology (minor - statistics)	December 2005
Kathaleen Briggs Early	FSHN	May 2007
Valeria Confortti	Animal Science	May 2007
Hugh Robinson	Natural Resources	May 2007
Leslie Riley	Zoology (minor - statistics)	December 2008
Jerermy Baumgardt	Wildlife (U of I)	December 2011
Remedious Vallimor	FSHN	Food Science, May 2012
Heidi Keen	Animal Science (minor - statistics)	2014 Posthumous
Kristan Erwin	Biological Science (minor - statistics)	May 2014
Xun Xu	Management Operations (minor - statistics)	May 2015

Total = 25

Current Doctoral Students Serve on Committee	Department	Date
Charles Diako	Food Science (minor - statistics)	2017
John Jorgensen	School of the Environment	2019

July 2015

FACULTY RESUME

NAIRANJANA DASGUPTA
Professor
Department of Mathematics
Washington State University
Pullman, WA 99164-3144

EDUCATION

- University of South Carolina, Columbia, SC, January 1995 through August 1996.
  - Earned Ph. D in Statistics, **August 1996**.
  - Dissertation title: Comparison to control in logistic regression.

- University of South Carolina, Columbia, SC, August 1991 through December 1994.
  - Earned M.S in Statistics, **December 1994**.
  - Thesis title: Hyperfinite Probability.

- Presidency College, Calcutta, India, September 1987 through September 1990.
  - Earned Bachelor of Sciences (with Honors) in Statistics with Minors in Mathematics and Economics, **September 1990**.

PROFESSIONAL EXPERIENCE

Date	Title	Employer
2011-	*Professor* Department in Mathematics	Washington State University (WSU)
2008-2011	*Professor* Department in Statistics	Washington State University (WSU)
2002-2007	*Associate Professor* Department in Statistics	Washington State University (WSU)
1996-2002	*Assistant Professor*, Program in Statistics.	Washington State University (WSU)
1991-1996	*Graduate/Teaching Assistant* Department of Statistics.	University of South Carolina (USC)

PROFESSIONAL SOCIETY MEMBERSHIPS

- American Statistical Association
- Mu Sigma Rho Statistics Honor Society

ADVISING

Chair, MS

1. Xaiomei Guan (1997)
2. Peijin Xie (1998)
3. Monte Cheney (1998)
4. Glade Erickson (1999)
5. Fatuma Yusuf (1999)
6. Bruce Austin (2000)
7. Fengqin Zhao (2000)
8. Qizhi Wei (2000)
9. Maher Hasan (2001)
10. Gongwei Chen (2001)
11. Kristine Grimsrud (2002)
12. Prabin Thapa (2003)
13. Qinghua Liu (2003)
14. Jing Xi (2004)
15. Alok Anand (2005)
16. BenHu Li (2005)
17. Xiaomei Chen (2006)
18. Sridhar Komar (2006)
19. Wen Du (2007)
20. Tamizheniyan Suyambulingam (2008)
21. Armenak Markosyan (2008)
22. Lia Norguera (2008)
23. Kwon Suh (2007)
24. Ciaping Zhang (2008)
25. Adam Seaburg (2009)
26. Kidane Ghebrehawariat (2009)
27. Bryan Klingaman (2009)
28. Dane Sorenson (2009)
29. Avishek Varma (2009)
30. Nan Yang (completed 2010)
31. Limin Yang (completed 2010)
32. Rashmita Basu (completed 2011)
33. John Snyder (completed 2011)
34. Tobin Northfield (completed 2011)
35. Yianzi Li (completed 2011)
36. Hatice Senol (completed 2011)
37. Monte Shaffer (completed 2011)
38. Qize Li (completed 2012)

39. Yingzi Li (completed 2013)
40. Huixin Li (completed 2013)
41. Ludwig Lineares (completed 2013)
42. Ruojin Zhang (completed 2013)
43. Xing Zhang (completed 2014)
44. Pavan Dhanireddy (completed 2014)
45. Xiaonan Liu (completed 2014)
46. Boying Liu (completed 2014)
47. Tian Chuan (completed 2014)
48. Lili Zhao (expected 2015)
49. Huinan Liu (espected 2016)
50. Amrina Fedrous (expected 2015)

PhD Committee Chair:

1. Ziyi Chen (passed GQE, expected 2018)
2. Jillian Morrison (GQE Summer 2015, expected 2018)

PUBLICATIONS LIST in Refereed Journals (appeared/ accepted)
(*: indicates primary author)

1. *Dasgupta, N., and Spurrier J. D., (1997). A class of multivariate chi-square distributions with applications to comparison to control, *Communications in Statistics: Theory and Methods* **26**(7), 1559-1573.

2. *Dasgupta, N. and Alldredge, J.R., (1998). A multivariate χ^2 analysis of resource selection data, *Journal of Agricultural, Biological and Environmental Statistics*, **3**, 323-334

3. *Dasgupta N., Martin, J. W., and Guan, X., (1999). Statistical analysis of spectral UV data collected at Ocean City, New Jersey. *American Chemical Society Volume: "A Systems Approach to Service Life Prediction of Organic Coatings"* **73**, 56-70

4. *Dasgupta, N., and Alldredge J. R., (2000). A chi-square goodness-of-fit analysis of dependent resource selection data, *Biometrics,* **56**,402-408

5. *Dasgupta, N., and Spurrier J., D., Martinez, E., and Moore B.C., (2000). Comparison to control in logistic regression, *Communication in Statistics: Simulation and Computation,* **29**(4), 1039-1050

6. *Dasgupta N., Xie P., Cheney, M., Broemeling, L., Mielke, C.H., and Shields J.P., (2000). Spokane Heart Study: Weibull regression and Coronary Artery Disease, *Communication in Statistics: Simulation and Computation* **29**(3),747-762.

7. *Dasgupta, N., Pascual, F.G., and Spurrier, J.D., (2001). Small sample techniques for

comparing several logistic regression slopes to a standard. *Journal of Statistical Computation and Simulation* **71**, 141-161.

8. Ritzenthaler, K.L., McGuire, M.K., Falen, R., Shultz, T.D., Dasgupta, N., and McGuire, M. A., (2001). Estimation of conjugated Linoleic Acid (CLA) intake by written dietary assessment methodologies underestimates actual intake evaluated by food duplicate methodology *Journal of Nutrition* **131**(5), 1548-54)

9. Martinez, E., Moore B.C., Schaumloffel, J., Dasgupta N., (2001). Induction ofmorphological deformities in Chironomus tentans exposed to zinc and lead spiked sediments. *Environmental Toxicology and Chemistry,* **20** (11), 2475-2481.

10. Martinez, E., Moore, B., Schaumloffel, J., and Dasgupta N., (2001). The potential association between menta deformities and trace elements in Chironomidae (Diptera) takem from a heavy metal contaminated river. *Archives of Environmental Contamination and Toxicology.* **42**(3) : 286-291

11. Masad, E., Jandhyala V. K., Dasgupta, N., Somedavan N., and Shashidhar, N., (2002). Modeling of air void distribution in asphalt mixes by a means of x-ray computed tomography *Journal of Materials in Civil Engineering* March/April 122-129.

12. *Dasgupta, N., and Alldredge, J. R., (2002). A single-step method for identifying individual resources *Journal of Agricultural, Biological and Environmental Statistics*, 7(2) 208-220.

13. Masters N., Mcguire M.A., Beerman K. A., Dasgupta N., and McGuire M.K., (2002) Maternal supplementation with conjugated linoleic acid decreses milk fat in humans. *Lipids*, **37** (2) 133-138.

14. *Dasgupta, N., Chen, G., (2002). Some robustness issues for in comparing multiple logistic regression slopes to a control for small samples. *Journal of Statistical Computation and Simulation* **72** (12) 925-935.

15. Sunseri, M. A., Johnson, D. A., and Dasgupta, N., (2002). Survival of detached sporangia of *Phytophthora infestans* exposed to ambient conditions. *American Journal of Potato Research.* 79, 443-450

16. Martinez, E.A., B. Moore, J. Schaumloffel, and N. Dasgupta. 2003. Morphological abnormalities in Chironomus tentans exposed to cadmium and copper spiked sediments. *Ecotoxicology and Environmental Safety*. 55:204-212.

17. *Alldredge J.R., and Dasgupta N., Multiple comparison in resource Selection using Logistic regression. 2003 *Journal of Agricultural, Biological and Environmental Statistics* 8(3) pp356-366.

18. *Johnson, H.D., and Dasgupta N., 2004. Traditional versus Non-traditional teaching: Perspectives of Students in Introductory Statistics Classes, *Journal of Statistics Education*. 13(5).

19. Martinez, E., Moore, B., Schaumloffel, J., and Dasgupta N., 2004. "Effects of exposure to a combination of Zinc and Lead spiked sediments on moutpart development and growth in Chironomus tentans (Diptera: Chironomidae)" *Environmental Toxicology and Chemistry* 23(3):662-667

20. Martinez, E.A., B. Moore, J. Schaumloffel, and N. Dasgupta. 2004. Teratogenic vs. mutagenic abnormalities in chironomid larvae exposed to Zn and Pb. *Archives of Environmental Contamination and Toxicology*. 47(2): 193-198

21. Nunes M.C.S., Vasconcelos M.J.P., Pereira J.M.C., Dasgupta N., Alldredge R.J., Rego F.C. 2004. Land cover type and fire in Portugal. Do fires burn land cover selectively? *Landscape Ecology*, Kluwer Academic Publishers. 20(6): 661-673.

22. Salimath SS, BP Carter, N Das Gupta and Kulvinder S. Gill. 2004. Identification of DNA based markers associated with market class and quality traits in wheat. ASA-CSSA-SSSA International Annual Meetings, Seattle, Washington - Oct 31 - Nov 4, 2004. (accepted poster)

23. Anderson, N.K.,Beerman, K.A., McGuire M.A., Dasgupta N., Griinari J.N,, Williams J., and McGuire M.K., 2005. Trans Fatty Acid Intake And Maternal Adiposity Interact To Influence Human Milk Fat, *Journal of Nutrition*. 135(3): 416-21.

24. Kristin L. Ritzenthaler, Michelle K. McGuire, Mark A. McGuire, Terry D. Shultz, Alfred E. Koepp, Lloyd O. Luedecke, Travis W. Hanson, Nairanjana Dasgupta and Boon P. Chew. 2005. "Consumption of Conjugated Linoleic Acid (CLA) from CLA-Enriched Cheese Does Not Alter Milk Fat Or Immunity In Lactating Women" *Journal of Nutrition*. 135(3): 422-430

25. Porter, L. D., Dasgupta, N., and Johnson, D.A. 2005. Effects of tuber depth and soil moisture on infection of potato tubers in soil by Phytophthora infestans. *Plant Dis.* 89:146-152.

26. *Dasgupta N.,Solorzano, E., Lazar, N.A., 2006. Using Numerical Methods to Find the Least Favorable Configuration when Comparing k Test Treatments to Both

Positive and Negative Controls, *Journal of Statistical Computation and Simulations* 76(3): 251-265.

27. Wold, L, Martinez, E.A., B. Moore, J. Schaumloffel, and N. Dasgupta. 2006. Growth and morphological responses in Chironomus tentans to arsenic exposure. *Archives of Environmental Contamination and Toxicology* 51(4) 529-536

28. *Dasgupta, N., SahaRay, R. 2007. Optimal Allocation for comparing k Test Treatments to Positive and Negative Control with unequal weighting under A-optimality and MV-optimality, *Metrika*, 65(1) 83-92.

29. D. L. Traul, H. Li, N. Dasgupta, D. O'Toole, J. A. Eldridge, T. E. Besser, C. J. Davies. 2007. Resistance to malignant catarrhal fever in *Bison bison* is associated with MHC class IIa polymorphism, *Animal Genetics*, 38, 141-147

30. *Dasgupta, N., Jacroux, M.A., & SahaRay, R. (2010). Partially Replicated Fractional Factorial Designs. *Metrika,* 71, 295-311.

31. *Dasgupta, N. (2009). A and D-optimal allocations in a multipoint grouped logit experiment. *Advances in Applied Statistics*, 12(2) 145-162.

32. *Dasgupta, N., Solorzano E., Tong, T., (2010) Comparing multiple test Treatments to Both Positive and Negative Controls, *Journal of Statistical Planning and Inference*,140, 180-188

33. Johnson, H.D., Dasgupta, N., Zhang, H., & Evans, M.A. (2010,). Internet Approach versus Lecture and Lab Based Approach for Teaching an Introductory Statistical Methods Course: Students' Opinions. *Teaching Statistics* 31(1), 21-26.

34. Tollefson, T.N., Shipley, L., Myers, W.L., Keisler, D.H., & Dasgupta, N. 2010. The influence of summer and autumn nutrition on body condition and reproduction in lactating mule deer. *The Journal of Wildlife Management.* 74(5) 974-986.

35. Das B., Chen C., Dasgupta N and Cook,D.J. 2010. (accepted) Automated Prompting in a Smart Home Environment. *DMS2010 IEEE Computer Society Press.*

36. Yunfei Li, Ka-sum Lam, Nairanjana Dasgupta and Ping Ye 2011. (accepted)A Yeast's Eye View of Mammalian Reproduction: Cross-species Gene Co-expression in Meiotic Prophase *BMC Systems Biology*

37. Tollefson, T.N., Shipley, L., Myers, W.L., & Dasgupta, N. 2011. Forage Quality Influence on Mule Deer Fawns. *The Journal of Wildlife Management.* 75(4) 919-928.

38. Orfe, L., Dasgupta, N., & Call, D.R. (2011). Transcriptional response of epidemic and non-epidemic strains of Listeria monocytogenes to acid and bile challenge. *Applied and Environmental Microbiology.*

39. * Dasgupta, N., Chen, Y., Basu, R., and Daoud S.S., An Application of Unsupervised learning methods to Proteomic Data from Colon Cancer" Contemporary topics in mathematics and statistics with applications " Vol 1 Ch 9, pp 170-184, Asian Books, New Delhi, 2013.

40. Dasgupta, N., & Sutradhar, B., Yang L.,(2012) Many to one comparisons in a longitudinal binary data set up. *Sankhya B.* http://www.springerlink.com/openurl.asp?genre=article&id=doi:10.1007/s13571-012-0049-9.

41. Dasgupta, N., Shaffer M., Many to one comparison for non-linear growth curves for apple growth, (2012, accepted) *Journal of Applied Statistics*

42. Ritzenthaler, K.L., McGuire, M.K., McGuire, M.A., Shahin, A.M., Shultz, T.D., & Dasgupta, N. (2012 accepted). Concentrations of conjugated linoleic acid (CLA) in human plasma and lipid fractions and their relationships with dietary CLA intake. *Journal of Nutrition.*

43. Dasgupta, N., Chen, Y.O., Kalyanaraman, A., & Daoud, S.S. (2012, accepted, in press). Comparing clustering algorithms: An example with proteomic data. *Advances and Applications in Statistics*

44. Dasgupta, N., Krishnan, N., & Cook, D.J. (2012, in press). Automated activity interventions to assist with activities of daily living. *Agents and Ambient Intelligence* , IOS Press.

45. Morris, C.F., Fuerst, E.P., Dasgupta, N., & McLean, D.J. (2013). Optimizing experimental design using the house mouse (Mus musculus L.) as a model for determining grain feeding preferences. *Journal of Food Sciences*, 78 (10), 1614-1620.

46. Zekri, A.N., Bahnassy, A.A., Shoeab, F.E., Mohamed, W.S., Sabry, G.M., Dasgupta, N., & Daoud, S.S. (2014). Aberrant Methylation Patterns of Multiple Tumor Supressor Genes in Hepatitis C Virus Genotype-4-Associated Hepatocellular Carcinoma: Prognostoc and Predictive value. *Journal of Advanced Research,* 5, 27-40.

47. Doherty, M.C., McGuire, M., Beerman, K.A., Dasgupta, N., Ahmadzadeh, A., & McGuire, M.K. (accepted, 2014). Loss of body fat and higher milk fat in early lactation are associated with shorter duration of postpartum anovulation in women. *Journal of Human Lactation.*

48. Dasgupta, N., Zhang, R., and Schmidt, T., (accepted 2015) Significance Testing of Alternate Bearing in "Granny Smith" apples *Advances and Applications in Statistics*

49.

Refereed papers under review

1. Dasgupta, N., Lazar, N.A., & Genz, A.C. (submitted, under revision). A look at multiplicity through misclassification.

2. Chaves, Salazar, Dasgupta, Schmidt. (submitted, 2015) Hoogenboom Modeling Apple Bloom Phenology

3. Chaves, Salazar, Dasgupta, Schmidt. (submitted 2015) Modeling Fruit growth of apples

Work in progress:

1. Sutradhar, B., Dasgupta, N., Estimation and Inference for Longitudinal Ordinal Data.
2.

Book Review

a. Dasgupta N., (2000). *Technometrics*, Statistics with Stata 5, by Lawrence C. Hamilton, Duxbury Press.

a. Dasgupta N., (2003). *Technometrics*, Analyzing Categorical Data, by Jeffery S. Seminoff, Springer Texts in Statistics, Springer-Verlag, New York.

b. Dasgupta N., (2006). *Technometrics*, Bayesian Analysis for Categorical Data, by Peter Congdon, John Wiley and Sons Chichester.

c. Dasgupta, N., (2007). Technometrics, DNA, Words and Models: Statistics of Exceptional Words, by Robin, Rodoplhe and Schbath, Cambridge University Press.

HONORS AND AWARDS

1. Nominated for the "Outstanding Mentor Award" among research faculty in March 2006.
2. Travel award to attend NSF-CBMS Regional Research Conference in the Mathematical Sciences titled "New Horizons in Multiple Comparison Procedures", 2001.
3. Outstanding graduate student award 1996, University of South Carolina, Columbia, SC.
4. Runner-up for Outstanding graduate student award 1995, University of South Carolina, Columbia, SC.
5. Runner-up for Outstanding graduate student award 1994, University of South Carolina, Columbia, SC.
6. Graduate Teaching Assistant Award 1993, University of South Carolina, Columbia, SC.
7. Best First Year student award 1992, University of South Carolina, Columbia, SC.
8. P. C. Mahalanobis Memorial Award, Presidency College, 1990.
9. Surendranath Bose Memorial Award, Presidency College, 1988.

PROFESSIONAL AND COMMITTEE SERVICE

NATIONAL/ INTERNATIONAL

- Associate Editor, *Journal of Statistical Computation and Simulation*, 2001- current.
- Member of Regional Advisory Board, WNAR International Biometric Society, 1999-2001.
- Nominated to the Regional Council for WNAR 2001.
- Nominated to the ASA Committee on "Career Development"

REFEREEING

Served as Reviewer for the following journals:

- *Journal of American Statistical Association.*
- *Journal of Statistical Computation and Simulation.*

- *Communication in Statistics: Theory and Methods.*
- *Journal of Wildlife Management*
- *Journal of Statistical Inference and Planning*
- *Biometrics*
- *American Statistician*

RESEARCH GRANTS AND CONTRACTS

FUNDED

CURRENT:

Agency: HHS
SubAgency: NIH
Title: 3D Printed Surface Modified Porous Metal Coatings for Load-bearing Implants
Action: Award request was funded on 7/13/2015 and entered in balances/set-up.
Contact PI/Lead PI: Bandyopadhyay, Amit
Co-I: Bose Susmita
Co-I: Dernell William Scott
Co-I: Dasgupta Nairanjana

PAST:

1. Funded 1997 ($23,480.00)
   National Institute of Standards and Technology
   P. I on "A statistical model for the UV radiation data for Coatings Service Life prediction Consortium".

2. Funded 1998 ($17,400.00)
   National Institute of Standards and Technology
   P. I on "Parameter Estimation for Stochastic Models for Cumulative Damage fitted with NIST's moisture enhanced data".

3. Funded 2005 ($905000)
   National Science Foundation
   Collaborator on UBM: Foundation in mathematical biology through interdisciplinary research,training, and curriculum development.

4. Funded 2005 ($6000)
   Orville A. Vogel wheat research funds
   Co-operator on DNA marker technology for wheat quality traits and market class identification

5. Funded 2009-2011 ($20208)
   WTFRC
   Co-PI on "Modeling Washington Apple bloom phenology and Fruit Growth"

1. Funded 2008-2013 ($1073296)
   National Institute of Health
   Collaborator on "Trophoblast MHC-I: Trigger for Immune mediated abortion of cloned bovine fetuses"

2. Funded 2010-2014 ($1276965)
   National Institute of Health
   Collaborator on "Smart Environment Technologies for Health Assessment and Assistance"

3. Funded 2012-2014 (45300)
   WTFRC
   Co-PI on "Development of apple bloom phenology and fruit growth models"

PENDING

1. **NIH. Co-PI on " Biomarkers Discovery and Racial Disparity of Hepatitis C-associated Liver"**

DENIED

National Institute of Health, 1997
Cooperator on "Sperm Biochemical Instability in Vitro Handling"

National Institute of Health, 1998
Cooperator on "Early detection of coronary artery diseases"

American Dietetic Association, 1999
Cooperator on "Effect of Nutritional Intervention on Patient Outcomes in Hemodialysis Patients"

USDA, 2004
Co-PI on "Development of DNA kit specific to Wheat Marker Classes"

Department of Defense, 2004
Collaborator on "Id (inhibitor of differentiation) gene expression in prostate cancer"

National Science Foundation, 2004
Co-PI on "Collaborative Research: Combining Semi-Parametric and Non-Parametric Methods for Improved Estimation with Economic Data"

National Science Foundation, 2006
Co-PI on "Efficient Planning and Analysis of Two-Level Factorial Experiments"

National Institute of Health, 2009
Collaborator on "Surface Modified Porous Ti for Load Bearing Implants"

PRESENTATIONS

Invited

1. "Preliminary analysis of the Ocean city, UV irradiation data" Quarterly meeting for "Coatings Service Life prediction Consortium", National Institute for Standards and Technology, Gaithersberg, MD, Feb. 1997.

2. "Comparison to control in Logistic regression" University of Idaho, WSU, UI Statistics Joint Colloquium series, Sept 1997.

3. "Statistical analysis of the Ocean city, UV irradiation data" Quarterly meeting for "Coatings Service Life prediction Consortium", National Institute for Standards and Technology, Gaithersberg, MD, Oct 1997.

4. "Multiple Comparisons in Logistic regression" Biological Sciences and Systems Engineering Graduate Seminar, WSU, Oct 1997.

5. Lecture series on "Logistic Regression: Models, estimation and potential Applications" North Bengal University, India, Dec 1997.

6. "Small sample problems in logistic regression" at the invited workshop on "Symposium Predicting Species Occurrences" Snow Bird, Utah, Oct 1999.

7. "A Small sample technique when comparing several logistic regression slopes to a control", Washington State University, University of Idaho joint colloquium series, Feb 2000.

8. "Some small sample problems when comparing several logistic regression slopes to a control", University of Idaho Agricultural Sciences Seminar series, Dec 2000.

9. "Some multiple comparison issues in logistic regression" 15th Anniversary Alumni Conference at University of South Carolina, March 2001.

10. " Of midge flies, potato blight, multiple comparison and logistic regression", Invited colloquium speaker at University of California, Davis, May 2001.

11. "Comparing k treatments to a positive and a negative control", University of Idaho Agricultural Sciences Seminar series, Feb 2003.

12. "Large and Small Sample Issues in comparing Logistic Regression parameters to a control", Indian Statistical Institute, Kolkata, India, Feb 2004.

13. "Comparing k treatments to a positive and a negative control", Washington State University, University of Idaho joint colloquium series, 2005.

14. "Issues in optimally designing an experiment with binary data" University of Idaho Agricultural Sciences Seminar series, Oct 2006.

15. "Comparing multiple treatments to both positive and negative controls", Washington State University Colloquium series, Oct 2008.

16. "Comparing k treatments to both positive and negative controls", Memorial University of New Foundland, May 2009.

17. "Many to one comparison in longitudinal data" University of Idaho Agricultural Sciences Seminar series, Oct 2011.

18. "Clustering Proteomic Data" CIAS conference, Indian Statistical Institute, Jan 2012

19. "Modeling apple growth stages with longitudinal binary data" The International Environmetrics Society Meeting, Jan 2012.

Contributed

1. A Multivariate χ^2 analysis of resource selection data" (Joint with J. R. Alldredge) of Western North American Regional (WNAR) Meetings, San Diego, CA, June 1998.

2. "Modified Goodness of Fit in Resource Selection Data" American Statistical Association, Joint Meeting, Baltimore, MD, August 1999.

3. "Exact Unconditional Tests for comparing several logistic regression slopes to a standard", The 2nd International Conference on Multiple Comparisons, Berlin, Germany, June 2000.

4. "Comparing k treatments to both positive and negaitive control", The 3rd International Conference on Multiple Comparison, Bethesda, MD, USA, 2002.

5. "Optimal Allocation for comparing k Test Treatments to Positive and Negative

Control with unequal weighting under A-optimality and MV-optimality" Joint Statistical Meetings, Seattle, WA, August 2006.

Guest Lecturer

1. "Life and times of F.N. David and contributions to correlation coefficients" One Laboratory period for "Women, Science and Culture" class, WSU, Spring 1999.

2. "Life and times of Gertrude Cox and some simple statistical concepts" One Laboratory period for "Women, Science and Culture" class, WSU, Spring 2000.

3. "Life and times of Gertrude Cox, and the Goodness of Fit measure" One Laboratory period for "Women, Science and Culture" class, WSU, Spring 2001.

4. "M&M and the Goodness of Fit test" One Laboratory period for "Women, Science and Culture" class, WSU, Spring 2001.

5. Guest Lecture for CSS 442, On design issues and data Analysis.

Session Chairs:

1. The 3rd International Conference on Multiple Comparison, Bethesda, MD, USA, 2002
2. Joint Statistical Meetings in San Francisco, CA 2003.
3. ISS-2015 MUN, NL Canada