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EDUCATION

1999 ScD Biostatistics, Harvard University, Cambridge, MA.

1995 BS Statistics (minor: Computer Science), Utah State University, Logan, UT.

PROFESSIONAL EXPERIENCE

2016-present Head, Department of Mathematics and Statistics, Utah State University

2013-2016 Associate Head, Department of Mathematics and Statistics, Utah State University

2012-2016 Director of Graduate Studies, Department of Mathematics and Statistics, Utah State University

2011-present Professor, Department of Mathematics and Statistics, Utah State University

2004-2015 Director, Data Management and Statistics Core, Center for Epidemiologic Studies, Utah State University

2005-2011 Associate Professor, Department of Mathematics and Statistics, Utah State University

2009-2010 Research Fellow, Cytel Software Corporation, Cambridge, MA.

1999-2005 Assistant Professor, Department of Mathematics and Statistics, Utah State University

1995-1999 Teaching Assistant, Department of Biostatistics, Harvard University

1996 Research Assistant, Department of Biostatistics, Dana Farber Cancer Institute, Boston, MA

HONORS AND AWARDS

- Researcher of the Year, College of Science, Utah State University, 2012
- Researcher of the Year, Department of Mathematics and Statistics, Utah State University, 2012
- Researcher of the Year, Department of Mathematics and Statistics, Utah State University, 2011
- Teacher of the Year, Department of Mathematics and Statistics, Utah State University, 2006
- Researcher of the Year, Department of Mathematics and Statistics, Utah State University, 2005
- Top Prof, Mortar Board Honor Society Utah State University Chapter, 2002
- Teaching Fellow, Department of Biostatistics, Harvard School of Public Health, 1996-1998
- NIH Cancer Research Training Grant, 1995-1996
- B.S. Summa Cum Laude, 1995
- Academic Achievement Award, Utah State University, 1995
- Mortar Board, Utah State University, 1994-1995
- Golden Key Peat Marwick Scholarship, 1993

REFEREED PUBLICATIONS

- Saunders, C., Wengreen, H., Schwartz, S., Behrens, S., Corcoran, C. D., Lyketsos, C., & Tschanz, J. T. (2018, April 09). Nutritional status and severe dementia, institutionalization, and mortality: The Cache County dementia progression study. *Alzheimer's & Dementia: The Journal of the Alzheimer's Association*.
- Milman, L., Farooqi-Shah, Y., Corcoran, C. D., & Damele, D. (in press). Interpreting MMSE scores in highly proficient bilingual Asian Indian-English and Spanish-English speakers: Demographic adjustments, item analyses, and supplemental measures. *To appear in Journal of Speech Language Hearing Research*.
- Ridge, P. G., Karch, C. M., Hsu, S., Arano, I., Teerlink, C. C., Ebbert, M. T.W., Gonzalez Murcia, J. D., Farnham, J. M., Damato, A. R., Allen, M., Wang, X., Harari, O., Fernandez, V. M., Guerreiro, R., Bras, J., Hardy, J., Munger, R. G., Norton, M. C., Sassi, C., Singleton, A., Younkin, S. G., Dickson, D. W., Golde, T. E., Price, N. D., Ertekin-Taner, N., Cruchaga, C., Goate, A. M., Corcoran, C. D., Tschanz, J. A., Cannon-Albright, L. A., & Kauwe, J. S.K. (2017, November 29). Linkage, whole genome sequence, and biological data implicate variants in RAB10 in Alzheimer's disease resilience. *Genome Medicine*, 9(1).
- Sanders, C., Behrens, S., Schwartz, S., Wengreen, H., Corcoran, C. D., Lyketos, C. G., & Tschanz, J. T. (2016). Nutritional status is associated with faster cognitive decline and worse functional impairment in the progression of dementia: The Cache County Dementia Progression Study. *Journal of Alzheimer's Disease*.
- Rattiner, G. G., Fauth, E. B., Behrens, S., Sanders, C., Schwartz, S., Norton, M. C., Corcoran, C. D., Mullins, C. D., Lyketos, C. G., & Tschanz, J. T. (2016, August). Closer caregiver and care-recipient relationships predict lower informal costs of dementia care: The Cache County Dementia Progression Study. *Alzheimer's & Dementia*, 12(8), 917-924.
- Hippen, A. A., Ebbert, M. t., Norton, M. C., Tschanz, J. T., Munger, R. G., Corcoran, C. D., & Kauwe, J. S. (2016, June 29). Presenilin E318G variant and Alzheimer's disease risk: The Cache County Study. *BMC Genomics*, 17(Suppl 3), 438.
- Hippen, A. A., Ebbert, M. T.W., Norton, M. C., Tschanz, J. A., Munger, R. G., Corcoran, C. D., & Kauwe, J. S.K. (2016, June 29). Presenilin E318G variant and Alzheimer's disease risk: The Cache County study. *BMC Genomics*, 17.
- Rattiner, G. G., Schwartz, S., Mullins, C. D., Corcoran, C. D., Zuckerman, I. H., Sanders, C., Norton, M. C., Fauth, E. B., Leoutsakos, J. M. S., Lyketsos, C. G., & Tschanz, J. T. (2015). Dementia severity and the longitudinal costs of informal care in the Cache County population. *Alzheimer's & Dementia*, 11, 946-954.
- Snyder, C. M., Fauth, E. B., Wanzek, J., Piercy, K. W., Norton, M. C., Corcoran, C. D., Rabins, P. V., Lyketsos, C. G., & Tschanz, J. T. (2015, May). Dementia caregivers' coping strategies and their relationship to health and well-being: The Cache County Study. *Aging & Mental Health*, 19(5), 390-399.

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Tschanz JT; Pfister R; Wanzek J; Corcoran C; Smith K; Tschanz BT; Steffens DC; Ostbye T; Welsh-Bohmer KA; Norton MC (2012). Stressful life events and cognitive decline in late life: moderation by education and age. The Cache County Study. *Int J Geriatr Psychiatry* ISSN: 1099-1166.

Leoutsakos JM; Han D; Mielke MM; Forrester SN; Tschanz JT; Corcoran CD; Green RC; Norton MC; Welsh-Bohmer KA; Lyketsos CG (2012). Effects of general medical health on Alzheimer's progression: the Cache County Dementia Progression Study. *Int Psychogeriatr* 24 (10), pp. 1561-70.

Ridge PG; Maxwell TJ; Corcoran CD; Norton MC; Tschanz JT; O'Brien E; Kerber RA; Cawthon RM; Munger RG; Kauwe JS (2012). Mitochondrial genomic analysis of late onset Alzheimer's disease reveals protective haplogroups H6A1A/H6A1B: the Cache County Study on Memory in Aging. *PLoS One* 7 (9), pp. e45134.

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Corcoran, CD, Brigham Young University Department of Statistics Seminar, "Doctoral Research Programs in Statistics at Utah State University," Brigham Young University, Brigham Young University, Provo, UT. (February 2014).

Corcoran, CD, Food and Drug Administration Workshop, "StatXact Training Course," Food and Drug Administration, Chevy Chase, MD. (September 19, 2013).

Corcoran, CD, Joint Statistical Meetings, "New StatXact Toolkit for Correlated Categorical Data," American Statistical Association and International Biometric Society, Montreal, Quebec, Canada. (July 2013 - August 2013).

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Treiber K*, Tschanz J, Corcoran C, Stein D, Steinberg M, Norton M, Welsh-Bohmer K, Breitner J, Lyketsos C, and The Cache County Investigators. Vascular Factors are Associated with Increased Risk of Neuropsychiatric Symptoms in Alzheimer's Disease. The Cache County Study. Poster presentation, International Conference on Alzheimer's Disease and Related Disorders. July, 2006, Madrid Spain.

Spiro JR, Rao V, Sheppard JM, Tschanz JT, Norton M, Corcoran C, Treiber K*, Rabins PV, Lyketsos CG. A population-based study of behavior problems in persons with dementia with and without traumatic brain injury. *J Neuropsychiatry Clin Neurosci* 2006 18: 252-255. KA. Does Vitamine E use protect against dementia or increase the risk of mortality? Presentation, Alzheimer's Association International conference on Prevention of Dementia: Early diagnosis and intervention, 2005, Washington, D.C.

Charoonruk G*, Munger R, Wengreen H, Corcoran C, Hayden K, Bastian L, Tschanz J, Norton M, Welsh-Bohmer K. Diabetes Mellitus and risk of Alzheimer's disease in the Cache County Study on Memory, Health and Aging. Presented at the Alzheimer's Association International conference on Prevention of Dementia: Early diagnosis and intervention, 2005, Washington, D.C.

Wengreen HJ, Munger R, Corcoran C, Zandi P, Tschanz J, Norton M, Welsh-Bohmer K. Fruit and vegetable intake and cognitive function in the elderly: The Cache County Study on Memory, Health and Aging. Presented at the Alzheimer's Association International conference on Prevention of Dementia: Early diagnosis and intervention, 2005, Washington, D.C.

Tschanz J, Corcoran C, Toone L, Pfister R, Welsh-Bohmer K, Norton M, Breitner J, Lyketsos, C. Head Injury and Trajectory of Cognitive Decline in Dementia. The Cache County Study. Presented at the International Neuropsychological Society Convention, 2005, St. Louis, MO.

Norton M, Steffens D, Toone L*, Tschanz J, Hayden K, Corcoran C, Klein L, Zandi P, Breitner JCS, Welsh-Bohmer K. Late-life Depression, Mild Cognitive Impairment, APOE and their Interactive Effects on 3-Year Conversion to Dementia. Annual meeting of the Gerontological Society of America, November, 2004, Washington D.C.

Lensegrav-Benson T*, Tschanz J, Masters KS, Carlson MC, Corcoran C, Lykestos C, Heath E, Leslie C, Munger RA, Ostbye T, Welsh-Bohmer K, Norton M, Hayden K. Sedentary Lifestyle Increases Dementia Risk: The Cache County Study. Presented at the Annual Meeting of the American Psychological Association, July, 2004, Honolulu, Hawaii.

Tschanz J, Klein E, Treiber K*, Corcoran C, Norton M, Toone L*, Welsh-Bohmer K, Steinberg M, Munger R, Pieper C, Breitner J, Zandi P, Lyketsos C. Neuropsychiatric Symptoms in Mild Cognitive Impairment and Dementia: Prevalence and Relationship to Cognitive and Functional Impairment. The Cache County Study. Poster presentation, International Conference on Alzheimer's Disease and Related Disorders, July, 2004, Philadelphia, PA.

Toone L*, Tschanz J, Rabins PV, Steinberg M, Onyike C, Corcoran C, Norton M, Welsh-Bohmer K, Breitner J, Zandi P, Lykestos CG. A Population Based Study of Medical Co-Morbidity in Early Dementia and Mild Cognitive Syndrome: Association with Functional and Cognitive Impairment. Poster presentation, International Conference on Alzheimer's Disease and Related Disorders, July, 2004, Philadelphia, PA.

Klein E, Corcoran C, Tschanz J, Norton M, Welsh-Bohmer K, Breitner J, Zandi P, Lyketsos C. Survival from Memory Symptom Onset: A Comparison of Individuals with Dementia and Cognitive Impairment. The Cache County Study. Poster presentation, International Conference on Alzheimer's Disease and Related Disorders, July, 2004, Philadelphia, PA.

Norton MC, Steffens DC, Toone L*, Tschanz JT, Hayden K, Corcoran C, Klein L, Zandi P, Breitner JCS, Welsh-Bohmer KA. Late-life Depression, Mild Cognitive Impairment, *APOE* and their Interactive Effects on 3-Year Conversion to Dementia. Poster presentation, International Conference on Alzheimer's Disease and Related Disorders, July, 2004, Philadelphia, PA.

Charoonruk G.*, Munger RG, Wengreen H, Corcoran C, Tschanz J, Norton M, Bastian L, Welsh-Bohmer K. Diabetes Mellitus and Cognitive Decline in the Cache County Study on Memory, Health and Aging. Presentation, International Conference on Alzheimer's Disease and Related Disorders, July, 2004, Philadelphia, PA.

Wengreen H, Munger R, Corcoran C, Zandi P, Tschanz J, Norton M, Welsh-Bohmer K, Skoog I, Breitner J. Antioxidant Intake and Cognitive Function of Elderly Participants in The Cache County, Utah Study on Memory, Health and Aging. Presentation, International Conference on Alzheimer's Disease and Related Disorders, July, 2004, Philadelphia, PA.

Steinberg M, Corcoran C, Huber C*, Welsh-Bohmer K, Norton M, Zandi P, Breitner JCS, Tschanz J, Lyketsos C. A Longitudinal Model for Neuropsychiatric Symptoms in Dementia: The Cache County Study. Poster presentation, International Conference on Alzheimer's Disease and Related Disorders, July, 2004, Philadelphia, PA.

Klein E, Tschanz J, Corcoran C, Norton M, Welsh-Bohmer K, Breitner J, Zandi P, Lyketsos C. Estimating Survival Duration from Memory Symptom Onset: A Comparison of Methods. The Cache County Study. Poster presentation, Society of Epidemiological Research, June, 2004, Salt Lake City, UT.

Norton M, Skoog I, Toone L, Tschanz J, Corcoran C, Zandi P, Hart A, Breitner J, Welsh-Bohmer K, and Steffens D. Improving Assessment of Incidence of First-Onset Geriatric Depression in Population-Based Studies. Poster presentation, Society of Epidemiological Research, June, 2004, Salt Lake City, UT.

Lensegrav-Benson T*, Lisota R*, Tschanz J, Masters K, Norton M, Carlson M, Corcoran C, Lyketsos C, Heath E, Leslie C, Munger R, Ostybe T, Welsh-Bohmer K, Hayden K. Physical Activity is Associated with Better Cognitive Performance. Annual Meeting of the Western Psychological Association, April 2004, Phoenix AZ.

Lisota R*, Steffens D, Toone L*, Tschanz JT, Norton M, Corcoran C, Welsh-Bohmer KA, Breitner JCS. Vascular Risk Factors Predict Chronicity of Depression in the Elderly. Annual AAGP Meeting, February 2004, Baltimore MD.

Schneiter K, Corcoran C. A Network Algorithm for Exact Family-Based Association Tests. Spring Meeting of the Western North America Region of the International Biometrics Society, June 2003, Denver CO.

Huber C*, Steinberg M, Tschanz J, Corcoran C. A Longitudinal Model for Behavioral Disturbances among the Elderly with Dementia: The Cache County Memory Study. Posters on the Hill, April 2003, Washington, D.C.

Norton MC, Steffens DC, Skoog I, Corcoran C, Welsh-Bohmer KA, Breitner JCS. Prior Minor Depression Is More Predictive of Future Episodes of Depression in the Elderly than Gender, Age, or APOE status: The Cache County Study. American Association for Geriatric Psychiatry, March 2003, Honolulu HI

Tschanz J, Welsh-Bohmer K, Norton M, Corcoran C, Breitner J. Progression to Dementia in Diverse Types of Mild Cognitive Impairments of Aging. International Neuropsychological Society 31st Annual Meeting, February 2003, Honolulu HI.

Tschanz J, Norton M, Corcoran C, LaCaille R,* Welsh-Bohmer K, Breitner J. Cognitive screening and self-perception of memory problems predict mild cognitive impairment and dementia. International Conference on Alzheimer's Disease and Related Disorders, July 2002, Stockholm Sweden.

Norton M, Tschanz J, Corcoran C, Mumford S*, Welsh-Bohmer K, Breitner J. Apolipoprotein E4 interacts with mild cognitive deficit to shorten time to dementia onset. International Conference on Alzheimer's Disease and Related Disorders, July 2002, Stockholm Sweden.

Differential impact of genetic and demographic variables on clinical course of dementia and Alzheimer's disease. International Conference on Alzheimer's Disease and Related Disorders, July 2002, Stockholm Sweden.

Hayden K, Khachaturian A, Breitner J, Tschanz J, Corcoran C, Norton M. Evaluation of performance of a two-stage screen for incident dementia. International Conference on Alzheimer's Disease and Related Disorders, July 2002, Stockholm Sweden.

West N, Tschanz J, Welsh-Bohmer K, Corcoran C, Wyse B, Weight C*, Breitner J. Genetic and non-genetic risk factors for cognitive decline in the normal elderly. Annual Meeting of the International Neuropsychological Society, Feb 2001, Chicago, IL.

Wengreen HJ, Munger RG, West N, Cutler DR, Corcoran CD, Zhang J, Sassano NE. Protein Intake and Risk of Osteoporotic Hip Fracture in Elderly Utah Residents. International Conference on Nutrition and Aging, July 2001, Paris France.

RESEARCH FUNDING

Co-PI, "Preparing Association Analysis Software Tools for Next-Generation Sequencing Data" (NIH R01 HG 008976; PI: Christoph Lange, Harvard University; 09/2016-06/2019). Role: Develop algorithms for permutation-based multiple testing procedures for family-based association studies.

Co-I, "Epidemiology of Alzheimer's Disease Resilience and Risk Pedigrees" (NIH R01 award AG 054052; PI: Dr. Keoni Kauwe, BYU; 09/2016-06/2021). Role: Supervise statistical analyses to identify measurable risk and resilience factors for Alzheimer's disease, which will lead to better strategies for treatment and prevention of this devastating disease.

Co-I, "Pleiotropic and interaction effects on Alzheimer's disease risk and progression" (NIH R01 award AG 042611; PI: Dr. Keoni Kauwe, BYU; 09/2012-06/2017). Role: Provide analytic support to better understand the relationships between genetics, Alzheimer's dementia, and biological processes that result in Alzheimer's pathology that may or may not accompany disease symptoms.

Co-I, "miRNA and colorectal cancer: Associations with tumor phenotype and survival" (NIH R01 award CA 163683, 9/2012-06/2017). Role: Use statistical methods to identify miRNAs that will elucidate pathways important in the etiology of colorectal cancer and will provide insight into potential targets for screening and treatment.

Co-I, "Prenatal and Neonatal Biologic Markers for Autism" (NIEHS, award period 10/2011-09/2016; Principal Investigator: Dr. Lisa Croen, Kaiser Permanente). Role: Provide statistical expertise, particularly with analyses of genetic association and gene-environment interactions; assist with manuscript and presentation preparation.

Co-I, "Dietary patterns, cognition and Alzheimer's Disease: The Cache County Study" (NIH R15 AG 037392, award period 04/2010-03/2012; Principal Investigator: Dr. Heidi Wengreen, Utah State University)

Co-I, "The Cache County Dementia Progression Study" (NIH R01; PI: Dr. JoAnn Tschanz, Utah State University; 07/2009-06/2011). Role: Provide expertise in study design and data analysis, particularly in assessing the trajectory of dementia symptoms after disease onset.

Co-I, "Lifespan Stressors and Alzheimer's Disease: The Cache County Study" (NIH R01 AG 11380-09; PI: Dr. Maria Norton, USU; 07/2008-06/2011). Role: Provide statistical support with respect to study design, data analysis, and manuscript preparation.

Co-PI, "Exact Tests for Genetic Association Studies" (NIH Phase I SBIR award; PI: Dr. Pralay Senchaudhuri, Cytel Software Corporation; 04/2010-09/2010). Role: Develop and implement algorithms for exact tests of genetic association with family-based data, along with permutation procedures to handle multiple testing problems with genome-wide studies.

Consultant, "Software for Bias Correction with Generalized Linear Models" (NIH Phase I SBIR; PI: Dr. Pralay Senchaudhuri, Cytel Software Corporation; 10/2009-03/2010). Role: Test software for bias

correction with binomial data, and measure the effectiveness of the approach in cases of near separability. Develop and test methods for correcting bias with conditional logistic regression.

Co-I, "Biosensor Chip for Venous Thromboembolism Genotyping" (NIH R01 HL071114; PI: Dr. David Ward, Nevada Cancer Institute and USU; 12/2008-11/2009). Role: Provide biostatistical support for analyzing genome-wide study of venous thrombosis in an African-American sample.

Co-I, "Early Detection of Alzheimer's Disease in a Community Population Using Longitudinal Cognitive Assessment" (Private Foundation Award; PI: Dr. Norman Foster, University of Utah Alzheimer's Center; 11/2006-10/2007)

Co-PI, "Exact Inference Software for Correlated Categorical Data" (NIH Phase II SBIR; PI: Dr. Pralay Senchaudhuri, Cytel Software Corporation; 11/2005-03/2007). Role: Implement algorithms for exact inference with correlated data in StatXact.

Co-PI, "Exact Inference Software for Correlated Categorical Data" (NIH Phase I SBIR; PI: Dr. Pralay Senchaudhuri, Cytel Software Corporation; 09/2004-03/2005). Role: Implement algorithms for exact inference with correlated data and explore the feasibility of expanding this toolbox via a Phase II proposal.

Consultant, "Family Based Tests of Association for Complex Disease" (NIH R01; PI: Dr. Nan Laird, Harvard University; 12/2002-11/2007). Role: Develop algorithms for exact family based association tests, and implement these algorithms in the FBAT software package.

Co-I, "Progression of Dementia: A Population Study" (NIH R01; PI: Dr. JoAnn Tschanz, USU; 09/2002-08/2007). Role: Provide expertise in study design and data analysis, particularly in assessing the trajectory of dementia symptoms after disease onset.

Co-I, "Epidemiology of Dementia in Cache County, Utah" (NIH R01 AG 11380; PI: Dr. Kathleen Welsh-Bohmer, Duke University; 04/2002-03/2007). Role: Provide expertise in study design and data analysis, particularly in identifying ameliorating factors for the onset of dementia and dementia symptoms.

Co-I, "Cache County Family-Based Cohort Study on Aging" (NIH R01 AG18712; PI: Dr. Ron Munger, USU; 09/2000-08/2003). Role: Develop new methods for family based association tests in collaboration with Dr. Nan Laird at Harvard University, and provide expertise in gathering data from siblings of the original Cache Study cohort.

PI, "Exact Order-Restricted Inference for Dose-Response Data" (USU New Faculty Grant, 07/2000-06/2001)

ADVISING

PhD STUDENTS		
Student	Year Completed	Title/Topic
Chris Johnson	2021*	Saddlepoint methods for generalized linear models
Devin Eddington	2021*	Permutation-based multiple-testing approaches for family-based association tests
Brinley Zabriskie	2019*	Meta-analysis for small or sparse samples
Sarah Schwartz	2017	Exact Approaches for Bias Detection and Avoidance with Small, Sparse, or Correlated Categorical Data
William Welbourn	2012	Robust Computational Tools for Multiple Testing with Genetic Association Studies
Larry Cook	2009	Small-sample Methods for the Analysis of Clustered Binary Data
Kady Schneider	2004	Exact Family-Based Association Tests

* Indicates anticipated year of completion.

MS STUDENTS		
Student	Year Completed	Topic
Kristi Reutzel	2019*	Exact methods for discrete-time survival analysis
Chrissy Stevens	2017	
Austin Bowles	2011	Serum cytokine levels and risk of dementia
Megan Borrowman	2011	Patterns of stressful life events and Alzheimer's disease risk
Abbie Lundgreen	2009	Comparing methods for family-based association tests
Colette Childs	2009	Heritability of cognitive change
Cassidy Allen	2008	Heritability of cognitive traits using complex pedigrees and sibships
Yanwei Ouyang	2006	Computational efficiency of exact family-based association tests
Sarah Schwartz	2006	Multivariate analysis of longitudinal neuropsychological measures in the Cache County Memory Study
Leslie Toone	2003	Use of classification methods for dementia screening
Jennifer Harrick	2002	Correcting for left truncation bias when evaluating survival among the elderly with dementia
Shea Watrin	2001	Operating characteristics of exact methods for correlated categorical data

* Indicates anticipated year of completion.

COURSES TAUGHT

Course	Number	Semesters Taught
University Connections	USU 1010	2
Statistical Methods	STAT 2000	1
Business Statistics	STAT 2300	2
Statistics for Scientists	STAT 3000	17
Linear Regression and Time Series	STAT 5100	2
Categorical Data Analysis	STAT 5120	13
Analysis of Longitudinal and Survival Data	STAT 5810/6910	1
Introduction to Mathematical Statistics	MATH 5720	7
Advanced Statistical Computing	STAT 6550	6

UNIVERSITY AND PROFESSIONAL SERVICE

- USU Central Promotion and Tenure Committee 2015 – 2016
- President, American Statistical Association Utah Chapter, 2013 – 2014
- Vice President, American Statistical Association Utah Chapter, 2012 – 2013
- Utah State University Faculty Senate 2007 – 2013.
- Department Undergraduate Statistics Advisor 1999 – 2012.
- Chair, Utah State University Faculty Senate Committee on Committees 2008 – 2009.
- Chair, Department of Mathematics and Statistics Computing Committee, 2005 – 2009.
- Secretary, American Statistical Association Utah Chapter, 2002 – 2006.
- Member of Department of Mathematics and Statistics Undergraduate Curriculum Committee, 2003 – 2005
- Department of Mathematics and Statistics Graduate Committee, 2002 – 2003.
- Department of Mathematics and Statistics Undergraduate Committee, 2001 – 2002.