Contact Information

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Research interests

My research interests are in the area of statistical genetics and cover many subtopics within the area. I am most fascinated by the use of inheritance in humans to understand human disease, health and associated quantitative traits. This is a running theme and motivation throughout my work. I love the interface between science and statistics and find that the best statistical methods come out of collaboration. My past work has included methods development in family-based association testing and genetics of gene expression studies. I have also worked over many other areas of statistical genetics from classical segregation studies to linkage and association studies. I am currently looking for a new area of methods work and am particularly interested in aspects of the human microbiome.

Key interests: statistical genetics, genetic epidemiology, genetics of gene expression, variance components methods, multivariate linkage, linkage disequilibrium, family-based association tests, meta-analysis, microbiome; high-dimensional data

Education

North Carolina State University, Raleigh, NC: Ph.D. in <u>Statistics</u>, 1999
 North Carolina State University, Raleigh, NC: M.Stat., 1996
 Northeastern State University, Tahlequah, OK: B.S. in <u>Mathematics</u> with minors in <u>Computer Science</u> and <u>Physics</u>, summa cum laude, 1993

Professional Positions

Faculty, Human Medical Genetics Program, University of Colorado Denver, 2012- current
Faculty, Computational Bioscience Program, University of Colorado Denver, 2010- current
Associate Professor, Department of Mathematical and Statistical Sciences, University of Colorado Denver, 2008- current
Graduate Chair, Department of Mathematical and Statistical Sciences, University of Colorado Denver, 2009- 2011
Associate Professor, Department of Statistics, Oklahoma State University, 2006-2008
Undergraduate Advisor, Department of Statistics, Oklahoma State University, 2006-2008

Affiliate Assistant Professor, Department of Biostatistics, University of Washington, 2004-2008

Assistant Professor, Department of Statistics, Oklahoma State University, 2004-2006 Consultant, Rosetta Inpharmatics Inc., 2003-2005 Senior Statistician, Rosetta Inpharmatics Inc., 2001-2003 Assistant Professor, Institute for Public Health Genetics, 1999-2004 Assistant Professor, University of Washington, Department of Biostatistics, 1999-2004 Fellow, Biostatistics Branch, National Institute of Environmental Health Sciences, 1997-1999 Staff Scientist, NeuralMed, Inc., 1996-1997 Statistical Intern, GlaxoWellcome, Inc., Summer 1996 Instructor, North Carolina State University, 1995-1996

<u>Honors</u>

Sigma Xi, The Scientific Research Society, 1999
Gertrude M. Cox Outstanding Academic Achievement Award Fellow/Outstanding Masters Candidate, NCSU Department of Statistics, 1996
Mu Sigma Rho, Statistical Honor Society, 1996
Recipient of a National Science Foundation Graduate Fellowship, 1995-1997
Recipient of a Patricia Roberts Harris Graduate Fellowship, 1994-1995
Invited delegate to the NSF Summer Mathematics Institute at the University of California at Berkeley, 1993
Twice selected Northeastern State University Mathematics Student of the Year, 1992, 1993
Kappa Mu Epsilon, Mathematical Honor Society, 1991

Bibliography

Submitted Manuscripts:

- 1. Yorgov D, Edwards KL, Santorico SA (revision under review) Use of Admixture and Association for Detection of Quantitative Trait Loci: using the Type 2 Diabetes Genetic Exploration by Next-generation sequencing in Ethnic Samples (T2D-GENES) study. BMC Proceedings.
- Wan JY, Hall TO, Swenson BR, Santorico SA, Edwards KL (revision under review) Linkage and Familybased Association Approaches using Imputed Whole Genome Sequence Data from T2D-GENES. BMC Proceedings.

Refereed Research Articles

- Razzaghi H, Tempczyk-Russell A, Haubold K, Santorico SA, Shokati T, Christians U, Churchill MEA. Genetic and Structure-Function Studies of Missense Mutations in Human Endothelial Lipase. PLoS One. In press.
- 2. Wu H, Wu MC, Zhi D, **Santorico SA**, Cui X. Statistics for Next Generation Sequencing Meeting Report. Frontiers in Genetics. 2012; 3(July), 128. doi:10.3389/fgene.2012.00128. PubMed PMID: 22811695
- Razzaghi H, Santorico SA and Kamboh MI. Population-based Resequencing of LIPG and ZNF202 Genes in Subjects with Extreme HDL Levels. Frontiers in Genetics, 2012; 3:89. doi: 10.3389/fgene.2012.00089. PubMed PMID: 22723803
- 4. Morris TL, Payton ME, **Santorico SA** (2011) A Permutation Test for Compound Symmetry with Application to Gene Expression Data. Journal of Modern Applied Statistical Methods, 11(2): 447-461
- 5. Wan JW, Edwards KL, **Santorico SA** (2011) Investigating Genetic and Environmental Correlations between Traits of the Metabolic Syndrome in the Multi-Ethnic GENNID Study. JP Journal of Biostatistics. 2011; 6(2):77-96.

- Edwards KL, Wan JY, Hutter CM, Fong PY, Santorico SA. Multivariate Linkage Scan for Metabolic Syndrome Traits in Families With Type 2 Diabetes. Obesity. 2011;19(6):1235-43. doi: 10.1038/oby.2010.299. PubMed PMID: 21183932.WOS:000291021600019.
- Kippola TA, Santorico SA. Methods for Combining Multiple Genome-Wide Linkage Studies. In: Bang HZXKMMVHL, editor. Statistical Methods in Molecular Biology 2010. p. 541-60. doi: 10.1007/978-1-60761-580-4_21. PubMed PMID: 20652521
- Bis JC, Heckbert SR, Smith NL, Reiner AP, Rice K, Lumley T, Hindorff LA, Marciante KD, Enquobahrie DA, Monks SA, Psaty BM. Variation in inflammation-related genes and risk of incident nonfatal myocardial infarction or ischemic stroke. Atherosclerosis. 2008;198(1):166-73. doi: 10.1016/j.atheroselerosis.2007.09.031. PubMed PMID: 17981284. WOS:000255491800020.
- 9. Edwards KL, Hutter CM, Wan JY, Kim H, **Monks SA**. Genome-wide linkage scan for the metabolic syndrome: The GENNID study. Obesity. 2008;16(7):1596-601. doi: 10.1038/oby.2008.236. PubMed PMID: 18421265. WOS:000257325300020.
- Marciante KD, Bis JC, Rieder MJ, Reiner AP, Lumley T, Monks SA, et al. Renin-angiotensin system haplotypes and the risk of myocardial infarction and stroke in pharmacologically treated hypertensive patients. American Journal of Epidemiology. 2007;166(1):19-27. doi: 10.1093/aje/kwm059. PubMed PMID: 17522061. WOS:000247530400005.
- 11. French B, Lumley T, **Monks SA**, Rice KM, Hindorff LA, Reiner AP, et al. Simple estimates of haplotype relative risks in case-control data. Genetic Epidemiology. 2006;30(6):485-94. doi: 10.1002/gepi.20161. PubMed PMID: 16755519. WOS:000239851900003.
- 12. Hing AV, LeBlond C, Sze RW, Starr JR, **Monks S**, Parisi MA. A novel oculo-oto-facial dysplasia in a native Alaskan community with autosomal recessive inheritance. American Journal of Medical Genetics Part A. 2006;140A(8):804-12. doi: 10.1002/ajmg.a.31160. PubMed PMID: 16523509. WOS:000236571700002.
- Sieh W, Edwards KL, Fitzpatrick AL, Srinouanprachanh SL, Farin FM, Monks SA, et al. Genetic susceptibility to prostate cancer: prostate-specific antigen and its interaction with the androgen receptor (United States). Cancer Causes & Control. 2006;17(2):187-97. doi: 10.1007/s10552-005-0454-8. PubMed PMID: 16425097. WOS:000234754500008.
- Simon JS, Karnoub MC, Devlin DJ, Arreaza MG, Qiu P, Monks SA, et al. Sequence variation in NPC1L1 and association with improved LDL-cholesterol lowering in response to ezetimibe treatment. Genomics. 2005;86(6):648-56. doi: 10.1016/j.ygeno.2005.08.007. PubMed PMID: 16297596. WOS:000234396200003.
- Kim H, Hutter CM, Monks SA, Edwards KL. Comparison of single-nucleotide polymorphisms and microsatellites in detecting quantitative trait loci for alcoholism: The Collaborative Study on the Genetics of Alcoholism. Bmc Genetics. 2005;6. doi: 10.1186/1471-2156-6-s1-s5. PubMed PMID: 16451661. WOS:000236103400005.
- 16. Schadt EE, Lamb J, Yang X, Zhu J, Edwards S, Guhathakurta D, Sieberts SK, **Monks S**, et al. An integrative genomics approach to infer causal associations between gene expression and disease. Nature Genetics. 2005;37(7):710-7. doi: 10.1038/ng1589. PubMed PMID: 15965475. WOS:000230196400017.
- Monks SA, Leonardson A, Zhu H, Cundiff P, Pietrusiak P, Edwards S, et al. Genetic inheritance of gene expression in human cell lines. American Journal of Human Genetics. 2004;75(6):1094-105. doi: 10.1086/426461. PubMed PMID: 15514893. WOS:000224866400013.
- Austin MA, Edwards KL, Monks SA, Koprowicz KM, Brunzell JD, Motulsky AG, et al. Genome-wide scan for quantitative trait loci influencing LDL size and plasma triglyceride in familial hypertriglyceridemia. Journal of Lipid Research. 2003;44(11):2161-8. doi: 10.1194/jlr.M300272-JLR200. PubMed PMID: 12923221. WOS:000187011300016.
- 19. Schadt EE, **Monks SA**, Drake TA, Lusis AJ, Che N, Colinayo V, et al. Genetics of gene expression surveyed in maize, mouse and man. Nature. 2003;422(6929):297-302. doi: 10.1038/nature01482. PubMed PMID: 12646919 . WOS:000181637300037.

- 20. Schadt EE, **Monks SA**, Friend SH. A new paradigm for drug discovery: integrating clinical, genetic, genomic and molecular phenotype data to identify drug targets. Biochemical Society Transactions. 2003;31:437-43. doi: 10.1042/bst0310437. PubMed PMID: 12653656. WOS:000182338800032.
- Hastings MD, Bates SJ, Blackstone EA, Monks S, Mutabingwa TK, Sibley CH. Highly pyrimethamineresistant alleles of dihydrofolate reductase in isolates of Plasmodium falciparum from Tanzania. Transactions of the Royal Society of Tropical Medicine and Hygiene. 2002;96(6):674-6. doi: 10.1016/s0035-9203(02)90349-4. PubMed PMID: 12630380. WOS:000181165200024.
- LaGasse JM, Palmer JP, Brantley MS, Nepom GT, Leech NJ, McCulloch DK, Rowe RE, Hagopian WA, Monks S. Successful prospective prediction of type 1 diabetes in schoolchildren through multiple defined autoantibodies - An 8-year follow-up of the Washington State Diabetes Prediction Study. Diabetes Care. 2002;25(3):505-11. doi: 10.2337/diacare.25.3.505. PubMed PMID: 11874938 . WOS:000174168500015.
- Mberu EK, Nzila AM, Nduati E, Ross A, Monks S, Kokwaro GO, et al. Plasmodium falciparum: in vitro activity of sulfadoxine and dapsone in field isolates from Kenya: point mutations in dihydropteroate synthase may not be the only determinants in sulfa resistance. Experimental Parasitology. 2002;101(2-3):90-6. doi: 10.1016/s0014-4894(02)00108-x. PubMed PMID: 12427462. WOS:000179436600002.
- 24. Martin ER, **Monks SA**, Warren LL, Kaplan NL. A test for linkage and association in general pedigrees: The pedigree disequilibrium test. American Journal of Human Genetics. 2000;67(1):146-54. doi: 10.1086/302957. PubMed PMID: 10825280. WOS:000088926900017.
- 25. **Monks SA**, Kaplan NL. Removing the sampling restrictions from family-based tests of association for a quantitative-trait locus. American Journal of Human Genetics. 2000;66(2):576-92. doi: 10.1086/302745. PubMed PMID: 10677318. WOS:000088373100025.
- Nzila AM, Nduati E, Mberu EK, Sibley CH, Monks SA, Winstanley PA, et al. Molecular evidence of greater selective pressure for drug resistance exerted by the long-acting antifolate pyrimethaminel/sulfadoxine compared with the shorter-acting chlorproguanil/dapsone on Kenyan Plasmodium falciparum. Journal of Infectious Diseases. 2000;181(6):2023-8. doi: 10.1086/315520. PubMed PMID: 10837185. WOS:000087923900021.
- Anderson JL, Hauser ER, Martin ER, Scott WK, Ashley-Koch A, Kim KJ, Monks SA, et al. Complete genomic screen for disease susceptibility loci in nuclear families. Genetic Epidemiology. 1999;17:S473-S8. PubMed PMID: 10597478. WOS:000083945800074.
- Monks SA, Martin ER, Umbach DM, Kaplan NL. Two tests of association for a susceptibility locus for families of variable size: An example using two sampling strategies. Genetic Epidemiology. 1999;17:S655-S60. PubMed PMID: 10597509. WOS:000083945800105.
- 29. Monks SA, Kaplan NL, Weir BS. A comparative study of sibship tests of linkage and/or association. American Journal of Human Genetics. 1998;63(5):1507-16. doi: 10.1086/302104. PubMed PMID: 9792878. WOS:000076985200027.

Publications on which I am cited as a member of the "COPDGene Investigators" (my ongoing role is as statistician and statistical geneticist on a longitudinal study of the genetics of COPD):

- 1. Cho MH, Castaldi PJ, Wan ES, Siedlinski M, Hersh CP, Demeo DL, et al. A genome-wide association study of COPD identifies a susceptibility locus on chromosome 19q13. Human Molecular Genetics. 2012;21(4). doi: 10.1093/hmg/ddr524. PubMed PMID: WOS:000299792800019.
- Kim DK, Cho MH, Hersh CP, Lomas DA, Miller BE, Kong X, et al. Genome-Wide Association Analysis of Blood Biomarkers in Chronic Obstructive Pulmonary Disease. American Journal of Respiratory and Critical Care Medicine. 2012;186(12):1238-47. doi: 10.1164/rccm.201206-1013OC. PubMed PMID: WOS:000312574200010.
- 3. Martinez CH, Chen Y-H, Westgate PM, Liu LX, Murray S, Curtis JL, et al. Relationship between

quantitative CT metrics and health status and BODE in chronic obstructive pulmonary disease. Thorax. 2012;67(5). doi: 10.1136/thoraxjnl-2011-201185. PubMed PMID: WOS:000302959000008.

- Rambod M, Porszasz J, Make BJ, Crapo JD, Casaburi R, Investigators CO. Six-Minute Walk Distance Predictors, Including CT Scan Measures, in the COPDGene Cohort. Chest. 2012;141(4). doi: 10.1378/chest.11-0870. PubMed PMID: WOS:000302592700010.
- Wells JM, Washko GR, Han MK, Abbas N, Nath H, Mamary AJ, et al. Pulmonary Arterial Enlargement and Acute Exacerbations of COPD. New England Journal of Medicine. 2012;367(10):913-21. doi: 10.1056/NEJMoa1203830. PubMed PMID: WOS:000308343300008.
- Zach JA, Newell JD, Jr., Schroeder J, Murphy JR, Curran-Everett D, Hoffman EA, et al. Quantitative Computed Tomography of the Lungs and Airways in Healthy Nonsmoking Adults. Investigative Radiology. 2012;47(10):596-602. doi: 10.1097/RLI.0b013e318262292e. PubMed PMID: WOS:000308864700007.
- Foreman MG, Zhang L, Murphy J, Hansel NN, Make B, Hokanson JE, et al. Early-Onset Chronic Obstructive Pulmonary Disease Is Associated with Female Sex, Maternal Factors, and African American Race in the COPDGene Study. American Journal of Respiratory and Critical Care Medicine. 2011;184(4):414-20. doi: 10.1164/rccm.201011-1928OC. PubMed PMID: WOS:000293959600011.
- Han MK, Kazerooni EA, Lynch DA, Liu LX, Murray S, Curtis JL, et al. Chronic Obstructive Pulmonary Disease Exacerbations in the COPDGene Study: Associated Radiologic Phenotypes. Radiology. 2011;261(1):274-82. doi: 10.1148/radiol.11110173. PubMed PMID: WOS:000295039000030.
- 9. Hardin M, Silverman EK, Barr RG, Hansel NN, Schroeder JD, Make BJ, et al. The clinical features of the overlap between COPD and asthma. Respiratory research. 2011;12:127. PubMed PMID: MEDLINE:21951550.
- Kim DK, Hersh CP, Washko GR, Hokanson JE, Lynch DA, Newell JD, et al. Epidemiology, radiology, and genetics of nicotine dependence in COPD. Respiratory Research. 2011;12. doi: 10.1186/1465-9921-12-9. PubMed PMID: WOS:000287156300002.
- 11. Siedlinski M, Cho MH, Bakke P, Gulsvik A, Lomas DA, Anderson W, et al. Genome-wide association study of smoking behaviours in patients with COPD. Thorax. 2011;66(10):894-902. doi: 10.1136/thoraxjnl-2011-200154. PubMed PMID: WOS:000295026900011.
- 12. Washko GR, Hunninghake GM, Fernandez IE, Nishino M, Okajima Y, Yamashiro T, et al. Lung Volumes and Emphysema in Smokers with Interstitial Lung Abnormalities. New England Journal of Medicine. 2011;364(10):897-906. doi: 10.1056/NEJMoa1007285. PubMed PMID: WOS:000288170300006.

Other Scholarly Publications

- Santorico SA (2008) Data made available for data mining at The GeneNetwork (http://www.genenetwork.org/) for my paper: Genetic Inheritance of Gene Expression in Human Cell Lines. Am J Hum Genet 75(6):1094-105
- 2. Monks SA (2006) Statistical Issues in Ecogenetic Studies. In Fundamentals of Ecogenetics, edited by LG Costa and DL Eaton. Wiley
- 3. **Monks SA** (2003) The genetics of gene expression: a new tool for hunting the elusive disease gene. University of Washington, School of Public Health and Community Medicine, Spotlight on Research. Issue 11: Winter 2003, p. 3

Conferences, Symposiums and Invited Talks

"Role of Linkage in Whole Genome Sequence Data" at the Genetics Analysis Workshop, serving as group leader and presenter, Stevenson, WA, October, 2012

- "Mathematical Modeling of the Effects of Sperm Donor Limits on Consanguinity and Disease Incidence" invited seminar at the Annual Meeting for the American Association of Tissue Banks held in Keystone, CO, September, 2012
- "Unsupervised Learning Techniques Applied to Clinical and CT Variables in COPD" presented at the COPDGene Investigator's Meeting held in Boston, MA, November 2011
- Organizer and moderator for the NIH funded conference: "Statistical Analyses for Next Generation Sequencing" held in Birmingham, AL, September 26-27, 2011
- Seminar titled "An Exploration into the Microbiome" to the Department of Biostatistics at the University of Alabama Birmingham, September 23, 2011
- "Unsupervised Learning Techniques Based on Linear Models" presented at the COPDGene Subtype Working Group Summer Workshop held in Denver, CO, August 17-19, 2011
- Attended FaceBase Consortium Annual Meeting, Denver, CO, May 19-20, 2011
- Attended and participated in Investigator's Meeting of COPDGene held in Denver, CO, May 14, 2011
- "Dimension Reduction Methods in the Study of the Genetics of Gene Expression" presented in The Human Medical Genetics Seminar Series, University of Colorado Denver, March 31, 2011
- Attended International Human Microbiome Congress, Vancouver, BC, March 9-11, 2011
- Invited to give a talk at CSU in the Department of Statistics: "Dimension Reduction Methods In The Study Of The Genetics Of Gene Expression", February 2010
- Attended and participated in Investigator's Meeting of COPDGene held in Boston, MA, November 11-12, 2010
- Seminar on "Dimension Reduction Techniques for Genetic Studies of Gene Expression" given in the UCD Department of Integrative Biology, Feb 13, 2009
- "Dimension Reduction Techniques for Genetic Studies of Gene Expression," Department of Mathematical and Statistical Sciences, University of Colorado Denver, 2008
- "Dimension Reduction Techniques for Genetic Studies of Gene Expression," Department of Anatomy and Neurobiology, University of Tennessee, Memphis, 2008
- "To combine or not to combine..." COPD Gene Investigators Meeting, 2008
- "Hunting for disease genes using multi-ethnic samples," Department of Mathematical and Statistical Sciences, University of Colorado Denver, 2008
- "I have to take what? (How to get thru your enrollment period)", OSU Faculty Fellows, 2007
- "Dimension Reduction Methods in the Study of the Genetics of Gene Expression," ENAR 2007
- "Genetic Inheritance of Gene Expression in Humans", Department of Statistics, University of Nebraska-Lincoln, 2006
- "Genetic inheritance of gene expression in humans", The Third Seattle Symposium in Biostatistics Statistical Genetics and Genomics, 2005
- "Genetics of expression by use of dimension reduction techniques", NSF Research Coordination Network Retreat: Development, Evaluation, & Dissemination of Methods for the Analysis of Gene Expression, 2005
- "Genetic influences on gene expression in humans", University of Michigan, Department of Biostatistics, 2005
- "Expression QTLs", Oklahoma Medical Research Foundation, 2005
- "What do you need to know to do quantitative research in genetics or genomics?", Department of Statistics, Oklahoma State University, 2004
- "RAS genes, antihypertensive drugs, and the risk of MI or stroke: methods and preliminary results", NHLBI Ancillary Pharmacogenetics Investigators Meeting, 2004
- "Genetic influences on gene expression in humans", Department of Biostatistics, University of Washington, 2004

- ""The use of genetics, genomics and statistics to unravel complex traits", Women in Rheumatology Meeting, 2004
- "An innovative approach that synthesizes expression profiles, genotypes and phenotypes", Meeting of the Eastern North American Region of the International Biometric Society, 2004

"The Genetics of Gene Expression in Mice", Keystone Symposia: Human genome sequence variation and the inherited basis of common disease, 2004

"Integrating clinical, genetic, genomic, and molecular phenotype data to dissect a complex trait", Department of Statistics, North Carolina State University, 2003

- "Integrating clinical, genetic, genomic, and molecular phenotype data to dissect a complex trait", University of Washington Cardiovascular Health Research Unit, 2003
- "Integrating clinical, genetic, genomic, and molecular phenotype data to dissect a complex trait", University of Alabama Section on Statistical Genetics, 2003
- "Genetics of gene expression surveyed in maize, mouse and man", Wellcome Trust Advanced Course in Human Genome Analysis: Genetic Analysis of Multifactorial Diseases, 2003
- "The genetics of gene expression: a survey of maize, mouse and man", Centre National de Genotypage, Evry, France, 2002

"Studying the genetics of gene expression in humans", Puget Sound Chapter of the ASA, 2002

- "The genetics of gene expression: a survey of maize, mouse and man", Department of Biostatistics, University of Washington, 2002
- "Hunting the elusive disease gene", Careers in Statistics Seminar, Shorewood High School 2002 "Exploring the Genetics of Gene Expression in Humans", Rosetta Inpharmatics, 2002
- "Fine mapping of quantitative trait loci using gametic phase disequilibrium within general pedigrees", Gordon Research Conference in Quantitative Genetics and Genomics, 2001
- "What can I do with a degree in statistics?" Local meeting of the American Statistical Association, 2001
- "Studying the genetics of gene expression", Workshop in Statistical Genetics and Computational Molecular Biology, 2001
- "Linkage disequilibrium studies: the what, why, when and how", Interactive Seminar in Public Health Genetics, University of Washington, 2000

"Removing the Size Restrictions from Family-based Tests of Association for a Quantitative Trait Locus", Department of Biostatistics, University of North Carolina, 1999

"Removing the Size Restrictions from Family-based Tests of Association for a Quantitative Trait Locus", Department of Mathematical Sciences, University of Arkansas, 1999

"Removing the Size Restrictions from Family-based Tests of Association for a Quantitative Trait Locus", Department of Biostatistics, University of Michigan, 1999

- "Removing the Size Restrictions from Family-based Tests of Association for a Quantitative Trait Locus", Department of Biostatistics, University of Washington, 1999
- "Family-based association testing: a review of days gone by and greater things to come", Department of Genetics, University of Washington, 1999

Funding History

Funded Projects		
1-13-GSK-13 (Friedman) ADA	1/1/2013-12/31/2015	1.8 (Y1-Y2)
"Role of Maternal Obesity and Type 2 Diabetes on Development of the Infant Microbiome and Adiposity"		
2 R01 HL089897-06 (Crapo/Silverman) NIH/NHLBI "Genetic Epidemiology of COPD"	8/1/2012-7/31/2017	1.2 (Y1-Y5)
1 X01 HG006829-01 (Spritz) NIH/CIDR "GWAS of Orofacial Shape in Africans"	12/15/2011 – 12/14/2016	
UC Denver, Center for Faculty Development Grant (Santorico) 7/1/2009-6/31/2010 "Creation of an online tutorial for R statistical software" Tutorial available at: <u>https://math.ucdenver.edu/RTutorial/</u>		
Santorico University of Colorado Denver, College of Liber	2009 al Arts and Sciences, Researc	ch Dissemination Grant
1U01DE020054-01 (Spritz) 9/1/09-8/31/14 1.2 (Y4/Y5) NIH/NIDCR \$437,577 "Genetic Determinants of Orofacial Shape and Relationship to Cleft Lip/Palate"		
(Monks) OSU A&S Summer Research Grant "Building a Toolbox for Understanding the Gen	7/2007 etics of Complex Traits"	
(Monks) OSU-Big XII Faculty Fellowship Program	1/24/2006	
(Monks) OSU A&S Dean's Incentive Grant "Finding Racial Differences in the Genetic and E	7/1/2006-7/31/2006 Environmental Causes of the Metabolic Syndrome"	
R03 HD 50631-01 (Monks) NIH Subcontract with Children's Hospital and Regional Medical (Anne Hing) "Homozygosity Mapping of Oculo-Oto-Facial Dysplasia"		
5R01HL043201-13 (Monks) NIH / PHS Subcontract from the University of Washington "Anti-hypertensive Drug-Gene Interactions and		earch Unit (Bruce Psaty)

(Monks) OSU A&S Summer Research Grant "Separating the Wheat from the Ch Studies"	8/1/2005-8/31/2005 naff: Use of Dimension Reduction Methods in Large Scale Genomic
(Monks) OSU A&S Dean's Incentive Grant "Using Caution in the Analysis of M	7/1/2005-7/31/2005 Iulti-site Human Genetic Studies"
ASPH Grant No. S1946-21/23 (Mor CDC/HHS Subcontract from the University of "Centers for Genomics and Public H	Washington (Karen Edwards)
Sub-contract (S Monks) Rosetta Inpharmatics, Inc. "Genetics of Gene Expression for Ic	8/1/2003-7/31/2004 Ientification of Susceptibility Genes"
CDF (S Monks) UW-Biostatistics "Elucidating the genetic web: a the	7/1/2003-6/30/2004 oretical framework for model-free tests of genetic interaction"
RO1 CA97934 (D Strom) NIH "Interactions of KSHV and Endothe	4/1/2003-3/31/2004 lial Cells"
Sub-contract (S Monks) Rosetta Inpharmatics, Inc. "Genetics of Gene Expression for Ic	8/1/2002-7/31/2003 Ientification of Susceptibility Genes"
RO1 GM 32618 (D Strom) NIH "Molecular Basis of Crown Gall Tur	7/1/2002-2/28/2004 norigenesis''
S1946-21/22 (K Edwards) ACPH/CDC "UW Center for Genomics and Pub	10/1/2001-9/30/2005 lic Health"
5 U01 AG16976-02 (WA Kukull) NIH/NIA "Alzheimer's Disease Data Coordina	7/1/2000-6/30/2001 ating Center"
5 R01 HL50268-07 (MA Austin) NIH/NHLBI "Genetics of the Metabolic Syndroi	6/1/2000-5/31/2001 me in Japanese Americans"
5 R01 HL49513-07 (MA Austin) NIH/NHLBI	7/1/1999-6/30/2001

"Genetic Epidemiology of Hypertriglyceridemia"

Formal Teaching

MATH 7826-002: <u>Topics in Probability & Statistics – Categorical Data Analysis</u> (Fall 2012) Most coursework in statistics focuses on analysis of continuous data, starting from t-tests, ANOVA and regression. Application of these methods to categorical data, while justified for large samples, is typically not optimal. Analogous methods often exist for categorical variables. This course will cover analysis of data involving variables of a categorical nature.

MATH2830, <u>Introductory Statistics</u> (Fall 2011, Spring 2012) Basic statistical concepts, summarizing data, probability concepts, distributions, confidence intervals, hypothesis testing.

MATH 7926, Readings in Applied Probability and Statistics. (Fall 2010, Spring 2011, Spring 2012, Fall 2012)

MATH 6395, <u>Multivariate Methods</u>. (Fall 2010) Multivariate distributions, hypothesis testing and estimation. Multivariate analysis of variance, discriminant analysis, multidimensional scaling, factor analysis, principal components. Prereq: MATH 5387

MATH5840, <u>Independent study</u>. (Summer 2010) with Shoshana Rosskamm on Statistical Methods for Sequence Data

MATH5016, <u>Research Experience for Teachers</u>. (Summer 2010) 6 credit hours, 2 students. "Datamining for Genetic Causes Of Human Disease"

MATH 7382, <u>Mathematical Statistics II.</u> (Spring 2010, Spring 2012) Hypothesis testing, robust estimation, tolerance intervals, nonparametric inference, sequential methods. Prereq: MATH 7381.

MATH 7381, <u>Mathematical Statistics I</u>. (Fall 2009, Fall 2011) Mathematical theory of statistics. Parametric inference: discrete and continuous distributions, methods of parameter estimation, confidence intervals.

MATH 6840 <u>Independent Study: Advanced Methods in Statistical Learning II (Fall 2009)</u> Course focused on material beyond MATH6388 and utilized the book by Hastie, Tibshirani and Friedman on The Elements of Statistical Learning (Springer-Verlag)

MATH 6388 <u>Advanced Statistical Methods for Research</u> (Spring 2009, Spring 2011) The second in a twosemester course in applied statistics. Topics include multifactor analysis of variance and covariance, categorical data, general linear models, bootstrapping, and other computationally intensive statistical methods.

MATH 7926 <u>Readings in Applied Probability and Statistics</u> (<i>Spring 2009) with Melissa Santos focusing on Bayesian Statistics, includes weekly meetings to go through Bayesian Methods for Data Analysis by Bradley P. Carlin and Thomas A. Louis (3rd Edition, 2008)

MATH 4830/5830 <u>Applied Statistics</u> (Fall 2008) Review of estimation, confidence intervals and hypothesis testing; ANOVA; categorical data analysis; non-parametric tests; linear and logistic regression.

STAT5910/6910, <u>Methods in Statistical Genetics</u> (Fall 2006) Coverage focuses on the theory of statistical techniques used in human genetic studies. The course will include discussion of segregation/aggregation, linkage and association methods.

STAT5513, Multivariate Analysis (Fall 2005 and 2007) Statistical theory concerning: Multivariate normal distribution, simple, partial and multiple correlation, multivariate sampling distributions. Wishart distribution, general T-distribution, estimation of parameters and tests of hypotheses on vector means and covariance matrix. Classification problems, discriminate analysis and applications.

STAT5063, <u>Multivariate Methods</u> (Spring 2005-2008) Use of Hotelling's T-squared statistic, multivariate analysis of variance, canonical correlation, principal components, factor analysis and linear discriminant functions.

STAT5073, <u>Categorical Data Analysis</u> (Spring 2005-2008) Analysis of data involving variables of a categorical nature. Contingency tables, exact tests, binary response models, loglinear models, analyses involving ordinal variables, multinomial response models. Computer usage for analysis is discussed.

STAT5023, <u>Statistics for Experimenters II</u> (Autumn 2004 & 2006) Analysis of variance, covariance, use of variance components and their estimation, completely randomized, randomized block and Latin square designs, multiple comparisons.

Biostat 516, <u>Statistical Methods in Genetic Epidemiology</u> (Autumn 2003) Responsible for the creation, development and assessment of this course. Coverage includes theory and application of statistical techniques used in genetic epidemiology. The course will include discussion of association studies, linkage and segregation analyses. Examples stressed with reference to assumptions and limitations.

Biostat 111, <u>Lectures in Applied Statistics</u> (Spring 2001) Organized a series of guest lectures aimed at introducing undergraduate students to potential career areas in statistics

Biostat 551, <u>Statistical Genetics II: Quantitative Traits</u> (Winter 2000, 2001 and 2003) Responsible for the creation, development and assessment of this course. The course presents the statistical basis for describing genetic and environmental variation in quantitative traits, and methods of mapping and characterizing quantitative trait loci. (Note: this course draws students from biostatistics, statistics, epidemiology, medicine, computer science, ecology, applied mathematics and mathematics)

PHG 580, <u>Seminar in Public Health Genetics</u> (Autumn 2000-Spring 2001) Coordinated seminar series on topics related to public health genetics, including current bioethical, legal, medical, biotechnology, and public policy issues

Stat 311, <u>Introduction to Statistics</u> (1995-1996) Examining relationships between two variables using graphical techniques, simple linear regression and correlation methods; Producing data using experimental design and sampling.

Other Teaching

Presentation titled "Statistics and Biostatistics Info Session" given to the UC Denver Math Club on November 10, 2011

Instructor/session leader at the Rocky Mountain Math Circle Meeting held July 18 – July 22, 2011. Morning

Stephanie A. Santorico, Ph.D. (formerly Stephanie A. Monks)

and afternoon sessions covering the topic of "Hunting the Elusive Disease Gene"

- Instructor/session leader for the Rocky Mountain Math Circle, February 12, 2011. Work focused on "Mathemagical Card Tricks"
- Led a Research Experience for Teachers for a group of 4 teachers during Summer 2011. Project title: "Statistical Tools for Studying the Effects of our Resident Microbes on Health and Disease"
- Served on a panel for the Department of Mathematical & Statistical Sciences TA Seminar Series. Topic was on experiences in teaching, November 2010
- Co-organizer and presenter for Math Circle Meeting held July 26 July 30, 2010. My sessions included "Playing with Probability" and two sessions on "Mathemagical Card Tricks"
- Attended the 2010 Teacher Research Experience Conference where I co-presented a poster on the results of my summer Research Experience for Teachers (RET) and gave a panel presentation concerning "Transfer" resulting from the RET.
- Gave two training sessions for CU Succeed teachers that were going to be teaching MATH2830, Elementary Statistics, during the 2010 to 2011 Academic Year
- Led a Research Experience for Teachers for a group of 4 teachers during Summer 2010. Project title: "Datamining For Genetic Causes Of Human Disease"

NHLBI Genomics Proteomics Workshop, July 2009. Gave two lectures on Genetical Genomics

- Member of the American Society of Human Genetics' NSF-funded Geneticist-Educator Network of Alliances (GENA) project, 2009-present
- Instructor to be (NIMH grant under review), "Short Course on Statistical Genetics & Genomics for Mental Health Investigators", Submitted 2008

Seminar/Discussant, Broken Arrow High School Honors Statistics Class, "Careers in Statistics," 2006

- Instructor, NSF Annual Plant Microarray Short Course on Design and Analysis of Plant Microarray Experimentation: "QTL Analysis of Expression" 2005 and 2006
- Instructor, Seattle Epidemiology, Biostatistics & Clinical Research Methods: "Statistical Methods in Genetic Epidemiology", 2004
- National Human Genome Research Institute Mentor for local high school teachers and students, 2003present
- Instructor, BioPharmaceutical Technology Center Institute, Course in Computational Approaches to Analyzing Gene Expression Data, "Treating Gene Expression Data as Quantitative Traits", 2003

Instructor: Genetics in the New Millennium: Myths, Medicine and Public Health: "Tools for gene discovery: molecular biology, genetic epidemiology and population genetics", 2000

Instructor: Summer Institute in Statistical Genetics at North Carolina State University, 1999-2001

Guest Lecture, Epi 518, Computer Applications in Genetic Epidemiology, Spring 2000-2003

Guest Lecture, Epi 517, Genetic Epidemiology, Spring 2000, 2001, 2003

Guest Lecture, Biostat 111, Lectures in Applied Statistics, Spring 2000, 2001, 2003

Current Advisees

Ph.D. Committee Member

Joanne Cole (Human Genetics Program), Fall 2012-Miranda Kroehl (Biostatistics), Summer 2012 -Melissa Bilbao, Primary Advisor, Fall 2011-Sesha Dassanayaka, Fall 2011-Daniel Dvorkin (Biostatistics), Advisory Committee Member, Spring 2010 – Jason Fagerness, Primary Advisor, Spring 2010 – Daniel Yorgov, Primary Advisor, Fall 2010 -

M.S. Committee Member David Hart, Primary Advisor, Fall 2010 -Kenneth McKeever, Primary Advisor, Fall 2010 – Sokhna Ndiaye, Primary Advisor, Fall 2011-Certificate students in Statistics at UCD I provide open advising to students in our undergraduate and graduate certificate program. Past Advisees Ph.D. Committee Member and Thesis Advisor Qiang Guo (OSU Statistics): "Dimension Reduction Methods in the Study of the Genetics of Gene Expression", Spring 2006-Fall 2009 Leon Shi (OSU Statistics): "Homozygosity Mapping with Unknown Common Ancestors", Fall 2004-2008 Ph.D. Committee Member Melissa Santos: Fall 2008-Summer 2011 Deb Batistas: Fall 2008 Amy Wagler (OSU Statistics): Spring 2005-2007 Tracy Morris (OSU Statistics): Spring 2006-2007 Elisabeth Rosenthal (UW Biostatistics): Summer 2003-2008 Josh Bis (UW Epidemiology): Autumn 2003-2006 Shenaz Hussain (UW Epidemiology): Autumn 2003-2006 Helen Kim (UW Epidemiology): Winter 2000-Autumn 2003 M.S. Committee Member and Thesis or Project Advisor Aiwu Zhang (OSU Statistics, MS Thesis), "An S-Plus Program for Simulating a Trait Under the Influence of Two Genetic Loci", Spring 2005-2007 Angel Wan (UW Biostatistics, MS Thesis), "Power, Type I Error, and Parameter Estimation for the Variance Components Method of Bivariate Linkage Analysis for Quantitative Traits in Random Families", Autumn 2002-2006 Rebecca Crepin, Primary Advisor, "", Fall 2009 – Spring 2012 Brittany Schaffer, Primary Advisor, "", Fall 2010-Summer 2012 M.S. Committee Member Xinchen Gu, Spring 2012 Aaron Nielson, Spring 2012 John Quinn, Primary Advisor, Spring 2009 – Spring 2011 Sidney Phoon, Fall 2009 – Summer 2010 Philip Wallis, Spring 2010 – Fall 2010 Shoshana Rosskamm, Spring 2009 – Summer 2010 Sara Schmidt, Spring 2009 Sarah Tocheri, Fall 2008 Hui Zeng (OSU Statistics): Spring-Fall 2006 Sungmi Brown (OSU Statistics): Spring 2006-2007 Yanina Grant (OSU Statistics): Spring 2005-2006 Janae Nicholson (OSU Statistics): Spring 2005-2006 Dongmei Yu (UW Biostatistics): Autumn 2003 Master of Public Health in Public Health Genetics, Committee Member and Chair Erin Pfieffer, "Gene On Rate of Cognitive Decline in Alzheimer's Disease", Winter-Spring 2001 **B.S.** Research Project Advisor

Dustin Weems (OSU Statistics), "A User's Guide to Confounding and Effect Modification", Fall 2005-2007

B.S. Advisor

I advised all Statistics Undergraduate majors at OSU during 2007-2008. During that year, the program grew from 11 to 19 undergraduate students.

Graduate Certificate in Applied Statistics,

Joshua Browning (Primary advisor), "Using Text Mining to Detect Insults in Social Commentary", Fall'12 Tu Huynh, "Wage Gaps for Electrical Engineers and Mathematicians", Spring 2009

University Service

Chair of the Search Committee for an Assistant Professor of Applied Statistics, Fall 2012-Spring 2013 Member sub-committee for evaluation of service for a tenure review, Fall 2012

Member of the UCD Minority Affairs Committee, Fall 2012 -

Chair for a post tenure review committee, Summer 2012

Member of the research sub-committee for a comprehensive review, Spring 2012

Member of the UCD College of Arts and Sciences, Educational Policies and Curriculum committee, Spring 2012-current

Member of University Graduate Council, Fall 2011-current

Member research subcommittee for 3 comprehensive reviews; Chair of one of these committees, Fall 2011 Member of the Downtown Faculty Assembly, Fall 2010 - current

Organizer of Graduate Chat series in the Department of Mathematical & Statistical Sciences. Sessions have included: Choosing a concentration area, selecting breadth courses, finding an advisor. An Introduction to our Faculty's Research Topics. Tracking your progress towards degree. Obtaining grant funding. Ins and outs of external funding, Fall 2010 – Spring 2011

Member of Department Tenure Review Committee, including serving as a member on the Service subcommittee, Fall 2010

Member of ad hoc committee to work on Departmental Personnel Policy for Clinical Track Faculty, Fall 2010current

Member of Merit Review Committee, Spring 2010 and Spring 2011

Available for interested individuals at the Table for the Department at the UC Denver Open house, Spring 2010

Chair, Search Committee for Post-doctoral Research in Statistics, Spring 2009

Chair, Search Committee for a faculty member in Statistics, Spring 2009

Chair of Graduate Committee, Fall 2009 – Spring 2011

Member Departmental Executive Committee, Fall 2009 – Spring 2011, Fall 2013-

Recruiting Exhibitor for UCD at the annual meeting of the Society for Advancing Hispanics/Chicanos & Native Americans in Science, 2009 and 2011

Judge for Research and Creative Activity Day at the University of Colorado Denver, April 2009

Organizer, UCD Statistics Seminar Series, Fall 2008-Spring 2009

Member, Graduate Committee, 2008-2012

Chair, Search Committee for a tenure-track assistant professor position in statistics, 2008-2009

Organizer, "Introduction to using the HPCC at OSU" by Dana Brunson, Ph.D., Sr. Systems Engineer, High Performance Computing Center, Oklahoma State University, Feb 2008

Member, Committee for Assessment and Development Policy on Research, OSU, Department of Statistics, 2008

Mentor, Lan Zhu, OSU Department of Statistics, 2007-2008

Chair, OSU Departmental Head Search Committee, 2007-2008

OSU Faculty Associate (mentoring program for dormitory), 2007-2008

Member and Chair, OSU College of Arts and Sciences Scholarship Committee, 2006-2008

Member, OSU College of Arts and Sciences Faculty Council, 2006-2008

Member of the Personnel Committee, Department of Statistics, Oklahoma State University, 2006-2008 Member, Dispute Resolution Hearing Committee at Oklahoma State University Dec 2005-Jan 2006 Organizer of the "Student Research Symposium in Statistics" at Oklahoma State University, 2005 Co-developer of PhD level assessment plans and reports for the Office of University Assessment and Testing,

Department of Statistics, Oklahoma State University, 2005

Member of the Graduate Committee, Department of Statistics, Oklahoma State University, 2004-2008 Evaluation of student teaching assistants, Department of Statistics, Oklahoma State University, 2004-2008 Grader, PhD qualifying exams, Department of Statistics, Oklahoma State University, 2004-2008

Co-organizer and co-chair of Second Workshop in Statistical Genetics and Computational Molecular Biology, 2003

Member of the University of Washington, School of Public Health and Community Medicine, Committee on Distance Learning, 2003

Member of the Admissions and Curriculum Committee, UW, M.S. Program in Genetic Epidemiology, 2002-2004

Member of the Consulting Committee, Department of Biostatistics, University of Washington, 2002-2004

- Member of the Education Policy and Teaching Evaluation Committee, Department of Biostatistics, University of Washington, 2000-2004
- Member of the Public Health Genetics Committee responsible for the creation of a Ph.D. in Public Health Genetics, 2000-2001
- Member of the Faculty Committee for the development and creation of a certificate program and PhD pathway in Statistical Genetics, Department of Biostatistics University of Washington, 1999
- Member of the Faculty Search Committee, Department of Biostatistics, University of Washington, 1999-2001
- Member of the Academic Program Committee, Admissions Committee and Curriculum Committee for Public Health Genetics, 1999-2001

Member of an implementation team for the North Carolina State University Strategic Plan, 1999

Service Outside University Setting

Abstract reviewer, Annual Meeting for the Society for Advancing Hispanics/Chicanos & Native Americans in Science, October 2012

Regular member of the NIH, Genomics, Computational Biology and Technology Study Section, June 2012 - Member, NIH F16 Study Section for Fellowships: Risk, health and healthcare, March 2012

Member, NIMH grant review panel for "Integrating Multi-Dimensional Data to Explore Mechanisms Underlying Mental Disorders", November 2011

Member, grant review panel for the NIH Genomics, Computational Biology and Technology Study Section, July 2011

Reviewer for "Best Paper" awards in Statistical Genetics for the Science Unbound Foundation, June 2011 Review Editor of Frontiers in Statistical Genetics and Methodology, February 2011 -

- Attended ENAR Fostering Diversity in Biostatistics Workshop and gave talk on "Careers in Statistics and Biostatistics" (March 2010)
- Grant review: Medical Research Council (MRC) of the United Kingdom, Career Development Award in Biostatistics (December 2010)

Reviewer for American Journal of Epidemiology (March 2010)

Reviewer of manuscripts for Plant Cell (April 2009) and Obesity (April 2009)

Member NIH grant review panel, June 4-5 2009: Genes, Genomes and Genetics Integrated Review Group; Genomics, Computational Biology and Technology Study Section

Stephanie A. Santorico, Ph.D. (formerly Stephanie A. Monks)

Grant reviewer for the Swiss National Science Foundation, January 2009

- Session proposal for American Society of Human Genetics 2009 Meeting: "Strength in Numbers: Combining Genetic Studies for Better Understanding of Complex Traits" Submitted Dec 2008
- Member, NIMH grant review panel for "Limited Competition for Data Deposition and Analyses of Genome Wide Association Studies of Mental Disorders (Collaborative R01)", July 2008
- Member, NHGRI grant review panel for "Epidemiological Investigation of Putative Causal Genetic Variants", Mar 2008
- Review Editor, Frontiers in Neurogenomics, 2008-present
- Statistical Expert for The Plant Cell (provide reviews of statistical analyses), 2008-2010
- Book evaluation for CRC PRESS, 2007
- Book evaluation for SAGE Publications, Inc., 2005
- Associate Editor for the journal Molecular Biology and Evolution, 2005-2008
- Member grant review panel for the Genes, Genomes and Genetics Integrated Review Group; NIH Genomics, Computational Biology and Technology Study Section, 2005 and 2006

Organizer and Moderator, Invited session at the Annual Meeting of the American Society for Human Genetics: "Genetics of Gene Expression: New Strategies for Studying Complex Traits", 2003

Session Moderator, Linkage disequilibrium and haplotypes. Annual Meeting of the American Society of Human Genetics, 2003

Representative, Western North American Region of the International Biometric Society, 2003-present Statistical Genetics Consultant for Insightful Inc., 2001-2004

- Statistical Genetics Consultant for the Pacific Northwest Research Institute, 2001-2004
- Grant reviewer, Center for Ecogenetics and Environmental Health, 2001
- Member of the American Statistical Association
- Member of the American Society for Human Genetics
- Member of the International Genetic Epidemiology Society
- Referee for the American Journal of Human Genetics, Behavior Genetics, Biological Psychiatry, Biometrics, Clinical Genetics, Computational Statistics and Data Analysis, Genetic Epidemiology, Genetical Research, Genetics, Human Heredity, International Journal of Obesity, Journal of Statistics Education, Obesity, PLOS Genetics, Nature, Science, Statistical Applications in Genetics and Molecular Biology, The Plant Cell, Trends in Genetics, Pediatric Obesity ongoing

Participant in Workshops/Sympossiums

Day long workshop on the Ensembl genome browser, January 2013

Two day training for the BC-SNPs Platform, Fall 2012

Attendee, Frontiers in Metagenomics Conference, May 6-8, 2012

Participant, FaceBase Consortium Annual Meeting, June 24-26, 2012

Attendee, Frontiers in Pregnancy Research Symposium, Sept 6, 2012

Recertification with Collaborative Institutional Training Initiative for Human Subjects Research, May 2012 Participant in The Engaged Faculty Institute for 2012. Focused topic: Service-Learning 101.

Proposal Writing: Credible Arguments for Your Research, Workshop Participant, University of Colorado Denver, Office of Research Development and Education, Spring 2009

Have completed the Human Research Curriculum – Basic Course, passed July 24, 2009

- Participant in the Geneticist-Educator Network of Alliances (GENA) meeting, June 8 11, 2009, held in Seattle WA
- Participant, "How to run a Math Teachers' Circle", MAA, Washington, DC, July 27 31, 2009
 CUOnline Winter Webcamp Workshops: "Blackboard fundamentals" and "Producing and adding video to your course", Jan 2009

UCD College of Liberal Arts and Sciences, Assessment Workshop, Jan 2009

Preparation for Proposal Writing: Strategic Elements of Success, Workshop, University of Colorado Denver, Office of Research Development and Education, Jan 2009

Attended American Society of Human Genetics Meeting, Nov 2008

Science Webinar: "Analyzing CNV Data Across Array Platforms: Hapmap Project", Oct 2008

"Dollars and Sense: Fund Searching for Survival", University of Colorado Denver, Office of Research Development and Education, Oct 2008

One-on-one training with Brian Yuhnke of CUOnline, "Adobe Connect for Creating Online Lectures", Oct 2008

Science Webinar: "CNVs vs SNPs: Understanding Human Structural Variation in Disease", July 2008

Attended Joint Statistical Meetings including a full day short course on "Bayesian Methods and Software for Data Analysis" by Bradley P. Carlin and Thomas A. Louis, Aug 2008

University of Colorado Denver, New Faculty Orientation Sessions: "Meet Our Students - Panel Discussion", "Other Faculty Resources (GLBS, women, faculty of color)", "New Employee Orientation with HR &

Benefit Services", "College Teaching 101", Aug 2008

"IRB 101", Oklahoma State University, October 2007

"A Field Guide to Genbank and NCBI Molecular Biology Resources", September 2005

- "Human Participant Protections Education for Research Teams", May 2005
- "Write Winning Grants" Seminar at Oklahoma State University, 2004

Training course: MATLAB Fundamentals and Programming Techniques, August 2002

Certificate Program in Distance Learning Design and Development, 2000-2001

"The Ethical Conduct of Research with Humans" held at University of Washington, 2000

"Genetics and Public Health: The Future is Now", 2000

"Second Seattle Symposium in Biostatistics: Analysis of Correlated Data", 1999

Faculty Fellows Program at the University of Washington, 1999-2000

Short Course on Statistical Analysis for Genetic Epidemiology (S.A.G.E.) software, 1998 Workshop: Helping Today's Students Learn Statistics: Using Visual Statistics, 1998 Genetic Analysis Workshop 11, 1998

Workshop: An Overview of the Role of the Biopharmaceutical Statistician, 1998