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Place of birth: Uruguay
U.S. Citizen

EDUCATION

- Ph.D. in Statistics and Genetics, Iowa State University, June 2001.
- M.Sc. in Statistics, Iowa State University, May 1998.
- Ing. Agr., Facultad de Agronomía, Universidad de la República, Uruguay, Aug. 1991.

PROFESSIONAL EXPERIENCE

Current Positions:

- Research Professor, Department of Biomedical Informatics, The Ohio State University Wexner Medical Center.
- July 2017, Associate Chair for Collaborative Research, Department of Biomedical Informatics, The Ohio State University Wexner Medical Center.
- September 2013, Director, Center for Biostatistics, Department of Biomedical Informatics, The Ohio State University Wexner Medical Center.
- September 2013, Director, Comprehensive Cancer Center-Biostatistics Shared Resource, The Ohio State University.
- May 2013, Director, Center for Clinical and Translational Science-Biostatistics and Research Design Program, The Ohio State University.
- Adjunct Research Professor, Division of Biostatistics, College of Public Health, The Ohio State University.

Previous Positions:

- December 2012-October 2017, Research Associate Professor, Biomedical Informatics, The Ohio State University.
- September 2010-December 2012, Research Associate Professor, Biostatistics, College of Public Health, The Ohio State University.
- September 2006 - September 2010, Research Assistant Professor, Biostatistics, College of Public Health, The Ohio State University.
- May 2013 - August 2013, Interim Director, Center for Biostatistics, Department of Biomedical Informatics, The Ohio State University Wexner Medical Center.
- December 2010 - August 2013, Associate Director, Comprehensive Cancer Center-Biostatistics Shared Resource, The Ohio State University.
- October 2009 - February 2013, Associate Director, Center for Biostatistics, The Ohio State University.
- May 2008 - May 2013, Co-Director, Center for Clinical and Translational Science-Biostatistics and Research Design Program, The Ohio State University.
- July 2003 - September 2006, Biostatistical Scientist, Center for Biostatistics, The Ohio State University.
- September 2001 - June 2003, Visiting Assistant Professor, Statistics Department, The Ohio State University.
- January 2001 - August 2001, Pre-doctoral Research Associate, Animal Science Department, Iowa State University.
- August 2000 - December 2000, Instructor, Statistics Department, Iowa State University.
- August 1999 - May 2000, Teaching Assistant, Statistics Department, Iowa State University.
- August 1994 - August 1999, Research Assistant, Survey Section, Statistics Department, Iowa State University.
- 1991 - 1994, Full time employment: National Association of Milk Producers (Instituto Nacional para el Mejoramiento Lechero), Montevideo, Uruguay.
- 1987 - 1988, Research Assistant, Department of Entomology, Facultad de Agronomía, Uruguay.

HONORS AND AWARDS

- *Teaching Excellence Award*. Presented annually in recognition to outstanding teaching performance as a TA for the Department of Statistics. Spring 2001.
- Recipient of the 1998 *T. A. Bancroft Statistics Award*. Presented annually to the most outstanding Ph.D candidate with a joint major in Statistics. Statistical Laboratory, Iowa State University.

- Selected to represent student body at announcement of the Carver Co-laboratory for Bioinformatics. Topic of presentation was “Opportunities for cross-disciplinary training at Iowa State University.” Des Moines, Iowa, January 2000.
- Selected to represent student body for introduction of the President of Iowa State University, Dr. Martin C. Jischke, at the Plant Sciences Colloquium. Ames, Iowa, October 1999.

TEACHING

- Outreach Teaching
 - Basic Quantitative Trait Loci (QTL) Analysis. July 2009. 2nd Annual NSF-funded Short Course on Statistical Genetics & Statistical Genomics. Honolulu, Hawaii.
 - Linear and Logistic Regression (short course co-taught with Dr. Stanley Lemeshow). August 2005, August 2007. Erasmus Summer Programme. Rotterdam, The Netherlands.
- The Ohio State University:
 - Clinical Trials Design and Methods (workshop. May 2017. Biomedical Informatics, Statistics and Mathematical Biology Institute. The Ohio State University.
 - Omics Data Analysis (workshop). September 2015, 2016, 2017. Biomedical Informatics, Statistics and Mathematical Biology Institute. The Ohio State University.
 - Methods in Biomedical Informatics and Data Science, BMI5750. Summer Term 2014, Summer Term 2015: Biostatistics component. Three credit hours. Department of Biomedical Informatics.
 - Applied Regression Analysis (short course). July 2005, July 2006. Summer Program in Applied Statistical Methods. Center for Biostatistics and College of Public Health.
 - Public Health/Epidemiology 803S: Biostatistics for students in the Program for Experienced Professionals (PEP). Winter Quarter 2004. College of Public Health.
 - Statistics 893: Advanced Individual Studies. Main theme of the course: Statistical Genomics. 2003. Department of Statistics.
 - Statistics 645: Regression Analysis. 2002. Department of Statistics.
 - Statistics 520: Mathematical Statistics. 2001, 2002. Department of Statistics.
 - Statistics 427: Introduction to Probability and Statistics for Engineering and the Sciences I. 2001, 2002. Department of Statistics.
- Iowa State University:
 - Statistics 328: Applied Business Statistics (Department of Statistics). A second statistics course for students in the master of business administration (MBA).
 - Statistics 104 (Department of Statistics): Introductory Statistics for students with biological background.

MENTORING

• GRADUATE STUDENTS

- Co-advisor: Parul Gulati, Ph.D., Biostatistics, College of Public Health. December 2010. Thesis title: “*An Improved Variance Smoothing Method for Testing Differential Expression in Small Sample Size Affymetrix Oligonucleotide Microarrays.*”
- Co-advisor: Ellen Yard, Ph.D., Epidemiology with emphasis in Biostatistics, College of Public Health. January 2009. Thesis title: “*Using Surveillance for Sports Injury Epidemiology.*”
- Co-advisor: Dale Rhoda, M.S., Ph.D. incomplete (due to family reasons), Biostatistics. December 2008. Thesis title: “*Lot Quality Assurance- Sampling Method.*” This work was published in the International Journal of Epidemiology.
- Biostatistics Advisor: Donika Saporito, M.S., Genetic Counseling, Human Genetics. March 2016. Thesis title: “*Penetrance of a Rare Familial Gene Predisposing to Papillary Thyroid Cancer.*”
- Biostatistics Advisor: Kate Micucci, M.S., Human Ecology. November 2006. Thesis title: “*Predictors of Weight Loss in Bariatric Surgery.*”
- Biostatistics Advisor: Jessica Chung, M.S., Epidemiology (with a minor in Biostatistics). Spring 2009.
- Committee Member: Tao Xiao, Ph.D., Biostatistics, College of Public Health. Summer 2015. Thesis title: “*Bayesian Threshold Regression for Current Status Data with Informative Censoring.*”
- Committee Member: Mahmoud Abdel-Rasoul, M.S., Biostatistics, College of Public Health. July 2011. Thesis title: “*Variance Estimator for Cohen’s Kappa in Clustered Study Designs.*”
- Committee Member: Yi Guo, M.S., Biostatistics, College of Public Health. July 2010. Thesis title: “*The choice of reference gene affects statistical efficiency in quantitative PCR data analysis.*”

• POSTGRADUATE TRAINEES

- Patricia Cifuentes, College of Public Health and Department of Biomedical Informatics, 2015-present.

PUBLICATIONS

Refereed Publications

1. McKenzie LB, Roberts KJ, Kaercher RM, Collins CL, Comstock RD, **Fernández SA**, Abdel-Rasoul M, Casavant MJ, Mihalov L. “Paediatric emergency department-based carbon monoxide detector intervention: a randomised trial.” *Inj Prev* 2017; 23:314-320. doi:10.1136/injuryprev-2016-042039
2. Saporito D; Brock P; Hampel H; Sipos J; **Fernández SA**; Liyanarachchi S; de la Chapelle A; Nagy R. “Penetrance of a Rare Familial Mutation Predisposing to Papillary Thyroid Cancer.” *Familial Cancer* (accepted September 2017)

3. Wu J; Liu X; Nayak SG; Pitarresi JR; Cuitio MC; Yu L; Hildreth BE III; Schilling DJ; **Fernández SA**; Leone G; Ostrowski M. "Generation of a Pancreatic Cancer Model Using a Pdx1-Flp Recombinase Knock-in Allele". (Accepted PlosONE, September 2017)
4. Roberts K; Fowler E; Comstock RD; **Fernández SA**; Abdel-Rasoul M; Mihalov L; Casavant M; McKenzie L. "Carbon Monoxide Alarm and Smoke Alarm Use among Parents Recruited from a Pediatric Emergency Department" *The Journal of Primary Prevention* (Accepted April 2017)
5. Goldberg RM, Wei L., **Fernández SA** "The Evolution of Clinical Trials in Oncology: Defining Who Benefits From New Drugs Using Innovative Study Designs." *The Oncologist*. Accepted April 2017
6. Liu H, Dowdle J, Khurshid S, Sullivan NJ, Bertos N, Rambani K, Mair M, Piotr D, Wheeler E, Tang X, Toth K, Lause M, Harrigan M, Eiring K, Sullivan C, Chang SW, Srivastava S, Conway JS, Kladney R, Tang X, McElroy J, Lu Y, Tofigh A, **Fernández SA**, Parvin J, Coppola V, McCrae E, Majumder S, Shapiro C, Yee L, Ramaswami B, Hallett M, Ostrowski M, Park M, Chamberlin HM, Leone G. "Discovery of stromal regulatory networks that suppress Ras-sensitized epithelial cell proliferation." *Development Cell*(Accepted April 2017)
7. Yu L, **Fernández SA**, Brock G. "Power Analysis for RNA-Seq Differential Expression Studies." *BMC Bioinformatics* 18:234 DOI 10.1186/s12859-017-1648-2
8. Wang C, Saji M, Justiniano SE, Yusof AM, Zhang X, Yu L, **Fernández SA**, Wakely P, La Perle K, Nakanishi H, Pohlman N, Ringel MD. "RCAN1-4 is a Thyroid Cancer Growth and Metastasis Suppressor." *JCI*; March 2017. <https://doi.org/10.1172/jci.insight.90651>
9. Sizemore GM, Balakrishnan S, Hammer AM, Thies KA, Trimboli AJ, Wallace JA, Sizemore ST, Kladney R, Woelke SA, Yu L, **Fernández SA**, Chakravarti A, Leone G, Sizemore GM, Ostrowski MC. "Stromal PTEN inhibits the expansion of mammary epithelial stem cells through Jagged-1." *Oncogene*. 2017 Apr 20;36(16):2297-2308.
10. Kent LN, Bae S, Tsai S-Y, Srivastava A, Tang X, Koivisto C, Martin C, Miller G, Zorko S, Plevris E, Hadjiyannis Y, Perez M, Nolan E, Kladney R, Westendorp B, de Bruin A, **Fernández SA**, Rosol T, Pohar K, Pipas J. "Dosage-dependent copy number gains in E2f1 and E2f3 drive HCC." *J Clin Invest*. 2017 Mar 1;127(3):830-842. doi: 10.1172/JCI87583. Epub 2017 Jan 30.
11. McKenzie LB, Roberts KJ, Kaercher RM, Collins CL, Comstock RD, **Fernández SA**, Abdel-Rasoul M, Casavant MJ, Mihalov L. "Pediatric Emergency Department-Based Carbon Monoxide Detector Intervention: A Randomized Trial." *Injury Prevention* December 2016; 0:1-7. doi:10.1136/injuryprev-2016-042039
12. Kent LN, Rakijas JB, Chen H-Z, Pandit SK, Westendorp B, Huntington J, In Bae S, Srivastava A, Senapati S, Koivisto C, Martin CK, Cuitinio MC, Perez M, Clouse JM, Chokshi V, Plevris E, Tang X, Shinde N, Kladney R, Matondo RB, Nantasanti S, Mokry M, Huang K, Mchiraju R, **Fernández SA**, Rosol TJ, Coppola V, Pohar K, Pipas JM, Schmidt CR, de Bruin A, Leone G. "E2f8 mediates tumor suppression in postnatal liver development." *J Clin Invest*. 2016 Aug 1;126(8):2955-69. doi: 10.1172/JCI85506. PMID: 27454291
13. Cifuentes MP, Doogan NJ, **Fernández SA**, Seiber EE. "Revealing the role of factors shaping Americans objective well-being: A systems science approach with network analysis." *Journal of Policy Models* 2016, 38:10181039.

14. Panfil AR, Dissinger NJ, Howard C, Landes K, **Fernández SA** and Green PL. "Functional Comparison of HBZ and the Related APH-2 Protein Provide Insight into HTLV-1 Pathogenesis" *J Virol.* 2016 Jan 27;90(7):3760-72. doi: 10.1128/JVI.03113-15
15. Jadcherla SR, Shubert T, Malkar MB, Sitaram S, Moore RK, Wei L, **Fernández SA**, Castile RG. "Gestational and Postnatal Modulation of Esophageal Sphincter Reflexes in Human Premature Neonates." *Pediatric Research* 2015 Nov; 78(5):540-6. doi:10.1038/pr.2015.149. PMID:26270576.
16. Nakashima H, Kaufmann J, Wang P-Y, Nguyen T, Speranza M-C, Kasai K, Okemoto K, Otsuki A, Nakano I, **Fernández SA**, Goins W, Grandi P, Glorioso J, Lawler S, Cripe T, Chiocca EA. "Histone Deacetylase 6 (HDAC6) Can Impede Oncolytic Viral Replication in Glioma." *Journal of Clinical Investigation* 2015 Nov 2;125(11):4269-80. doi: 10.1172/JCI80713. Epub 2015 Oct 20.
17. Caserta E, Egriboz O, Wang H, Martin C, Koivisto C, Pecot T, Kladney R, Shen C, Pham T, Karikomi MK, Mauntel MJ, Majumder S, Cuitinio MC, Tang X, Srivastava A, Yu L, Wallace J, Mo X, Park M, **Fernández SA**, Pilarski R, LaPerle K, Rosol TJ, Coppola V, Castrillon DH, Cohn DE, O'Malley DM, Backes F, Suarez A, Goodfellow P, Chamberlin HM, Mcrae E, Shapiro CL, Ostrowski MC, Leone G. "Non-catalytic PTEN missense mutation predisposes to organ-selective cancer development in vivo." *Genes Dev.* 2015 Aug 15;29(16):1707-20. doi: 10.1101/gad.262568.115.
18. White J, Hobbs L, and **Fernández SA**. "Fructose Composition of Commercial HFCS-Sweetened Carbonated Beverages." *International Journal of Obesity (Lond).* 2015 Jul;34(28):3651-61. doi: 10.1038/ijo.2014.73. [Epub ahead of print]. PMID: 24798032
19. White JS, Hobbs LJ, **Fernández SA** Re. "Fructose content in popular beverages made with and without high fructose corn syrup". *Nutrition.* 2015. Feb;31(2):417-8. doi: 10.1016/j.nut.2014.06.009. Epub 2014 Jul 9.
20. Cooper J, Wei L, **Fernández SA**, Minneci PC, and Deans K. "Pre-operative prediction of surgical morbidity in children: comparison of five statistical models." *Computers in Biology and Medicine.* 2015 Feb;57:54-65. doi: 10.1016/j.combiomed.2015.11.009. Epub 2014 Dec 8.
21. Wu L, de Bruin A, Wang H, Simmons T, Cleghorn W, Goldenberg LE, Sites E, Sandy A, Trimboli A, **Fernández SA**, Eng C, Shapiro C, Leone G. "Selective roles of E2Fs for ErbB2- and Myc-mediated mammary tumorigenesis." *Oncogene.* 2015 Jan 2;34(1):119-28. doi: 10.1038/onc.2013.511. Epub 2013 Nov 25.
22. Mathsyaraja H, Thies K, Taffany D, Deighan C, Liu T, Yu L, **Fernández SA**, Shapiro CL, Otero J, Timmers C, Lustberg M, Chalmers J, Leone G, Ostrowski MC. "CSF1-ETS2-induced microRNA in myeloid cells promote metastatic tumor growth." *Oncogene.* 2015 Jul;34(28):3651-61. doi:10.1038/onc.2014.294. Epub ahead of print.
23. McCarty SK, Saji M, Zhang X, Kirschner LS, **Fernández SA**, Ringel MD. "BRAF activates and interacts with PAK to regulate cell motility." *Endocrine Related Cancer.* 2014. Vol. 21, issue 6. pii: ERC-14-0424. [Epub ahead of print] PMID: 25228413
24. Parrula C, **Fernández SA**, Landes K, Huey D, Lairmore M, Niewiesk S. "Success of measles virotherapy in ATL depends on type I interferon secretion and responsiveness." *Virus Research* 2014 Aug 30;189:206-13. doi: 10.1016/j.virusres.2014.05.025. Epub 2014 Jun 6.

25. Fleming JL, Dworkin AM, Allain DC, **Fernández SA**, Wei L, Peters SB, Iwenofu OH, Ridd K, Bastian BC, Toland AE. "Allele-specific imbalance mapping identifies *HDAC9* as a candidate gene for cutaneous squamous cell carcinoma." *International Journal of Cancer*. 2014;134(1):244-8. PMID: 3831612.
26. Okemoto K, Kasai K, Wagner B, Haseley A, Meisen H, Bolyard C, Mo X, Wehr A, Lehman A, **Fernández SA**, Kaur B, Chiocca EA. "DNA demethylating agents synergize with oncolytic HSV1 against malignant gliomas." *Clinical Cancer Research* 2013 Nov 1;19(21):5952-9. doi: 10.1158/1078-0432.CCR-12-3588. Epub 2013 Sep 20
27. Guo Y, Pennell ML, Pearl DK, Knobloch TJ, **Fernández SA**, Weghorst CM. "The choice of reference gene affects statistical efficiency in quantitative PCR data analysis." *Biotechniques*. 2013 Oct; 55(4):207-9. PMID:24107253
28. Wu L, de Bruin A, Wang H, Simmons T, Cleghorn W, Goldenberg L, Sites E, Sandy A, Trimboli A, **Fernández SA**, Eng C, Shapiro C, Leone G. "Selective Roles of E2fs for ErbB2- and Myc-mediated Mammary Tumorigenesis." *Oncogene* 2013 Nov 25. doi: 10.1038/onc.2013.511. [Epub ahead of print] PMID: 24276244. PMC4032808
29. Bid HK, Kibler A, Phelps DA, Manap S, Xiao L, Lin J, Capper D, Oswald D, Geier B, DeWire M, Smith PD, Kurmasheva RT, Mo X, **Fernández SA**, Houghton P. "Development, Characterization, and Reversal of Acquired Resistance to the MEK1 Inhibitor Selumetinib (AZD6244) in an In Vivo Model of Childhood Astrocytoma." *Clinical Cancer Research* 2013 Dec 15;19(24):6716-29. doi: 10.1158/1078-0432.CCR-13-0842. Epub 2013 Oct 16. PMID: 24132923
30. Jadcherla SR, Chan CY, **Fernández SA** and Splaingard M. "Maturation of Upstream and Downstream Esophageal Reflexes in Human Premature Neonates: The Role of Sleep and Awake states." *American Journal of Physiology-Gastrointestinal and Liver Physiology*. 2013 Nov;305(9):G649-68. doi: 10.1152/ajpgi.00002.2013
31. Kasai K, Nakashima H, Liu F, Kerr S, Wang J, Phelps M, Potter PM, Goins WB, **Fernández SA**, Chiocca EA. "Toxicology and Biodistribution Studies for MGH2.1, an Oncology Virus that Expresses Two Prodrug-activating Genes, in Combination with Prodrugs." *Mol Ther Nucleic Acids*. 2013 Aug6;2:e113. doi 10.1038/mtna.2013.38.
32. Wallace JA, Li F, Balakrishnan S, Cantemir-Stone CZ, Pecot T, Martin C, Kladney RD, Sharma SM, Trimboli AJ, **Fernández SA**, Yu L, Rosol TJ, Stromberg PC, Lesurf R, Hallett M, Park M, Leone G, Ostrowski MC. "Ets2 in tumor fibroblasts promotes angiogenesis in breast cancer." *PLoS One*. 2013 Aug 16;8(8):e71533. doi: 10.1371/journal.pone.0071533 PMID: 23977064
33. Kannian P, **Fernández SA**, Jones KS, Green PL. "Human T lymphotropic virus type 1 (HTLV-1) SU residue 195 plays a role in determining the preferential CD4+ T cell immortalization/transformation tropism." *Journal of Virology* 2013;87(16):9344-52. PMID: 3302488.
34. Bid HK, London CA, Gao J, Zhong H, Hollingsworth RE, **Fernández SA**, Mo X, and Houghton P. "Dual Targeting of the Type 1 Insulin-like Growth Factor Receptor and its Ligands as an Effective Anti-angiogenic Strategy." *Clinical Cancer Research* 2013;19(11):2984-94. PMID: 3674221.
35. Price R, Song JE, Bingmer K, Kim T-H, Yi J-Y, Nowicki N, Mo X, Hollon T, Murnan E, Alvarez-Beckenridge C, **Fernández SA**, Kaur B, Rivera A, Oglesbee, Cook C, Kwon C-H, Chiocca E. "Cytomegalovirus contributes to glioblastoma in the context of tumor suppressor mutations." *Cancer Research* 2013;73(11):3441-50.

36. Wu C, **Fernández SA**, Criswell T, Chidiac T, Guttridge D, Villalona-Calero M, Bekaii-Saab T. “Disrupting cytokine signaling in pancreatic cancer: A phase I/II study of Etanercept in combination with Gemcitabine in patients with advanced disease.” *Pancreas* 2013;42(5):813-8. PMID: 3664263.
37. Jadcherla S, Chan C-Y, Moore R, **Fernández SA**, Shaker R. “Physiology of Esophageal Sensory-Motor Malfunctions in Neonatal Neurological illness.” *Am J Physiol Gastrointest Liver Physiol.* 2013 Mar 15;304(6):G574-82. doi: 10.1152/ajpgi.00404.2012. Epub 2013 Jan 17. PMID: 24008357
38. Bertino EM, Bekaii-Saab T, **Fernández SA**, Diasio RB, Karim NA, Otterson GA, Villalona-Calero MA. “A phase II study of modulated-capecitabine and docetaxel in chemo-naïve patients with advanced non-small cell lung cancer (NSCLC).” *Lung Cancer* 2013;79(1):27-32. PMID: 3549571.
39. Wang Y, Nowicki MO, Arnold WD, **Fernández SA**, Mo X, Wechuk J, Krisky D, Goss J, Wolfe D, Popovich PG, Lawler S, Chiocca EA. “Comparative effectiveness of antinociceptive gene therapies in animal models of diabetic neuropathic pain.” *Gene Therapy* 2013;20(7):742-50.
40. Jadcherla SR, Parks VN, Peng J, Dzodzomenyo S, **Fernández SA**, Shaker R, Splaingard M. “Esophageal sensation in premature human neonates: temporal relationships and implications of aerodigestive reflexes and electrocortical arousals.” *Am J Physiol Gastrointest Liver Physiol.* 2012 Jan 1;302(1):G134-44. doi: 10.1152/ajpgi.00067.2011. Epub 2011 Aug 18. PMID: 21852361.
41. Jadcherla SR, Peng J, Moore R, Saavedra J, Shepherd E, **Fernández SA**, Erdman SH, DiLorenzo C. “Impact of personalized feeding program in 100 NICU infants: pathophysiology-based approach for better outcomes.” *J Pediatr Gastroenterol Nutr.* 2012 Jan; 54(1):62-70. doi: 10.1097/MPG.0b013e3182288766. PMID: 21694638.
42. Bergese S, Vilorio A, Uribe A, Antor A, and **Fernández SA**. “Aprepitant versus ondansetron in preoperative triple-therapy treatment of nausea and vomiting in neurosurgery patients: study protocol for a randomized controlled trial.” *Trials* 2012, 13:130 doi:10.1186/1745-6215-13-130
43. Luchin AI, Nadella MVP, Thudi NK, Dirksen WP, Gulati P, **Fernández SA**, Rosol TJ. “AU-rich elements in the 3’-UTR regulate the stability of the 141 amino acid isoform of parathyroid hormone-related protein mRNA.” *Molecular and Cellular Endocrinology* 2012;364(1-2):105-12. PMID: 3529141.
44. Mella C, Suarez-Arrabal MC, Lopez S, Stephens J, **Fernández SA**, Hall M, Ramilo O, Mejias A. “Innate Immune Dysfunction is Associated with Enhanced Disease Severity in Infants with Severe Respiratory Syncytial Virus Bronchiolitis.” *Journal of Infectious Diseases* (2012) Dec 27 doi: 10.1093/infdis/jis721. PMID:23204162 [PubMed - as supplied by publisher]
45. Alvarez-Breckenridge CA, Yu J, Pradarelli J, Mao H, Wei M, Harcastle J, Price R, Wojton J, **Fernández SA**, Kaur B, Lawler SE, Vivier E, Moretta A, Caligiuri MA, Chiocca EA. “NK cells impede glioblastoma virotherapy through NKp30 and NKp46 natural cytotoxicity receptors.” *Nature Medicine.* 2012; Dec;18(12):1827-34. PMID: PMC3668784. Published online at <http://www.nature.com/doi/10.1038/nm.3013>.
46. Chen HZ, Ouseph MM, Li J, Pecot T, Chokshi V, Kent L, Bae S, Byrne M, Duran C, Comstock G, Trikha P, Mair M, Senapati S, Martin CK, Gandhi S, Wilson N, Liu B, Huang YW, Thompson JC, Raman S, Singh S, Leone M, Machiraju R, Huang K, Mo X, **Fernández SA**, Kalaszczynska

- I, Wolgemuth DJ, Sicinski P, Huang T, Jin V, Leone G. "Canonical and atypical E2Fs regulate the mammalian endocycle." *Nature Cell Biology*. 2012;14(11):1192-202. PMID: 3616487.
47. Gerber MM, Hampel H; Schulz NP, **Fernández SA**, Wei L, Zhou X-P, de la Chapelle A, Toland AE. "Evaluation of Allele-Specific Somatic Changes of Genome-Wide Association Study Susceptibility Alleles in Human Colorectal Cancers". *PLoS One*. 2012;7(5):e37672. Epub 2012 May 21. PMID: 22629442.
 48. Alvarez-Breckenridge CA, Yu J, Price R, Wei M, Wang Y, Nowicki MO, Ha YP, Bergin S, Hwang C, **Fernández SA**, Kaur B, Caligiuri MA, Chiocca EA. "The histone deacetylase inhibitor valproic acid lessens NK cell action against oncolytic virus-infected glioblastoma cells by inhibition of STAT5/T-BET signaling and generation of gamma interferon." *Journal of Virology* 2012;86(8):4566-77. PMID: 3318659.
 49. Alvarez-Breckenridge CA, Yu J, Wei M, Price R, **Fernández SA**, Kaur B, Caligiuri MA, Chiocca EA. "The HDAC inhibitor valproic acid lessens NK cell action against oncolytic virus-infected glioblastoma cells with inhibition of STAT5/T-BET signaling and IFN γ generation." *Journal of Virology*. 2012 Apr;86(8):4566-77. Epub 2012 Feb 8. PMID: 22318143. PMID: PMC3318659.
 50. Kannian P, Yin H, Doueiri R, Lairmore M, **Fernández SA**, and Green P. "Distinct transformation tropism exhibited by Human T lymphotropic virus type 1 (HTLV-1) and type 2 (HTLV-2) is the result of post-infection T cell clonal expansion." *Journal of Virology* 2012 Apr;86(7):3757-66. Epub 2012 Jan 25. PMID: 22278223. PMID: PMC3302488
 51. Wiet GJ, Stredney D; Kerwin T; Hittle B, Abdel-Rasoul M, **Fernández SA**, Welling DB. "Virtual Temporal Bone Dissection System: Development and Testing." *Laryngoscope*: 2012; 1-12 doi:10.2012/lary.22499
 52. Shu ST, Dirksen WP, Lanigan LG, Martin CK, Thudi NK, Werbeck JL, **Fernández SA**, Hildreth BE, Rosol TJ. "Effects of Parathyroid Hormone-Related Protein and Macrophage Inflammatory Protein-1 α in Jurkat T-cells on Tumor Formation In Vivo and Expression of Apoptosis Regulatory Genes In Vitro." *Leukemia and Lymphoma* 2012 Apr;53(4):688-98. Epub 2012 Jan 3. PMID: 21942940. PMID: PMC3314295
 53. Hopkins CD, Wolcott PJ, Dapino MJ, Truog AG, Babu SS, **Fernández SA**. "Optimizing Ultrasonic Additive Manufactured Al 3003 Properties With Statistical Modeling." *Journal of Engineering Materials and Technology* 2011. Vol.134, Iss.1. DOI: 10.1115/1.4005269. URL: <http://link.aip.org/link/?JYT/134/011004>
 54. Bronisz A, Godlewski J, Wallace JA, Merchant AS, Nowicki MO, Mathsyaraja H, Srinivasan R, Timboli JA, Chelsea MK, Li F, Yu L, **Fernández SA**, Pecot T, Rosol TJ, Cory S, Hallett M, Park M, Piper MG, Marsh CB, Yee L, Jimenez RE, Nuovo G, Lawler SE, Chiocca EA, Leone G, Ostrowski MC. "Reprogramming of the Tumor Microenvironment by Stromal PTEN-regulated miR-320." *Nature Cell Biology* 2011 Dec 18;14(2):159-67. doi: 10.1038/ncb2396. PMID: 22179046. PMID: PMC3271169
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- Cifuentes MP, Doogan NJ, **Fernández SA**, Seiber EE. “Revealing the role of factors shaping Americans objective well-being: A systems science approach with network analysis.” *Journal of Policy Models* 2016, 38:10181039.

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- **Fernández SA**, Fernando RL, Carriquiry AL, Guldbbrandtsen B. “Estimating genotype probabilities in complex pedigrees.” *Bayesian Case Studies, Vol. 5:* 2001; 307-326. Springer-Verlag.

- **Fernández SA**, Fernando RL, Carriquiry AL. “An algorithm to sample unobservable genotypes in complex pedigrees.” *Bayesian Methods With Applications to Science, Policy and Official Statistics (Selected papers from ISBA 2000)*, Monographs in Official Statistics, Eurostat, 125-134.

Statistical Genetics Proceedings papers, (non-refereed)

- Stricker C, Shelling M, Du F, Hoeschele I, **Fernández SA**, Fernando RL. (2002) “A comparison of efficient genotype samplers for complex pedigrees and multiple linked loci.” *Proc. 7th WCGALP*. Montpellier, France.
- Totir LR, Fernando RL, Dekkers JCM, **Fernández SA**. (2002). “A strategy to improve efficiency of marker assisted genetic evaluation under finite locus models.” *Proc. 7th WCGALP*. Montpellier, France.
- Totir LR, Fernando RL, **Fernández SA**. (2001). “The effect of the number of loci on genetic evaluations in finite locus models.” *J. Anim.Sci* 79(Suppl.1):191
- **Fernández SA**, Fernando RL and Carriquiry AL. (1999) “An algorithm to sample marker genotypes in a pedigree with loops.” *Proceedings of the Joint Statistical Meetings*, Baltimore, Maryland.
- **Fernández SA**, Carriquiry AL, Breidt FJ. (1998) “A time series approach to genetic trend estimation.” *Proceedings of the Joint Statistical Meetings*, Dallas, Texas.

Abstracts

1. Saporito D, Heather H, Nagy B, Sipos J, Liyanarachchi S, **Fernández SA**. “Penetrance of a rare familial gene predisposing to papillary thyroid cancer.” [Abstract B-110] Presented at the 35th Annual Meeting of the National Society of Genetic Counselors. September 29, 2016, Seattle, Washington.
2. Yu L, **Fernández SA**, Brock G. “Power Analysis for RNA-Seq Differential Expression Studies.” Joint Statistical Meetings. August 2016. Chicago, IL.
3. McCarty S, Saji M, Zhang X, Lawrence K, **Fernández SA**, Ringel M. “BRAF activates and physically interacts with PAK to regulate cell motility.” 84th Annual Meeting of the American Thyroid Association. October 2014. Coronado, CA
4. Cooper J, Lai W, **Fernández SA**, Deans K, Minneci P “Pre-operative prediction of surgical morbidity in children.” Annual Society of Epidemiologic Research Meeting. June 2014. Seattle, WA.
5. Cooper J., Lai W., **Fernández SA**, Deans K., Minneci P. “Pre-operative prediction of surgical morbidity in children.” Women in Statistics. May 2014. Cary, NC.
6. Roberts KJ, Fletcher E, Comstock RD, **Fernández SA**, Abdel-Rasoul M, Mihalov L, Casavant MJ, McKenzie L. “Carbon Monoxide Detector Use among Parents: Results of a Randomized, Controlled Trial in a Pediatric Emergency Department.” 2013 National Meeting of Safe States Alliance, Society for Advancement of Violence and Injury Research, and CDC Injury Center conference. Baltimore, MD.

7. Jadcherla SR, Peng J, Wei L, **Fernández SA**. “Effect of abrupt esophageal provocation on sensory-motor characteristics of esophageal body and upper esophageal sphincter (UES) contractile reflexes in infants with gastroesophageal reflux disease (GERD).” Digestive Disease Week. May 7-10, 2011. Chicago, IL.
8. Jadcherla SR, Peng J, Wei L, **Fernández SA**. “Esophageal sensory-motor malfunctions in neonates with perinatal neurological disorders: Impact on esophageal peristaltic and upper esophageal sphincter (UES) contractile reflex.” Digestive Disease Week. May 7-10, 2011. Chicago, IL.
9. **Fernández SA**, Rhoda D, Lemeshow S, Fitch D. “Lot Quality Assurance Sampling (LQAS) – Simplicity Gone Awry.” APHA Annual Meeting: ”Methods for Surveillance, Monitoring and Management.” November 7-10, 2010. Denver, CO.
10. Wang H, Karikomi M, Naidu S, Rajmohan R, Caserta E, Chen H-Z, Rawahneh M, Moffitt J, Stephens JA, **Fernández SA**, Weinstein M, La Perle K, Stromberg P, Rosol TJ, Eng C, Ostrowski MC, Leone G. “Allele-specific tumor spectrum in Pten knockin mice.” AACR 101st Annual Meeting 2010. Washington, DC.
11. Quick AM, Seamon LG, **Fernández SA**, Salani R, Paskett E, Martin D. “Sexual function following surgery with or without intracavitary vaginal brachytherapy for early stage endometrial carcinoma.” AACR 101st Annual Meeting 2010. Washington, DC.
12. Gulati P, Jarjoura D, **Fernández SA**, Yu L, Pennell M. “Effects of different filtering methods on microarray data analyses.” Joint Statistical Meetings. Vancouver, Canada. August, 2010.
13. Gulati P, Jarjoura D, **Fernández SA**, Yu L, Pennell M. “Improved Variance Smoothing Method for Testing Expression in Small Sample Size Affymetrix Oligonucleotide Microarrays.” Joint Statistical Meetings. Vancouver, Canada. August, 2010.
14. Jadcherla SR, Parks VN, Peng J, Moore R, **Fernández SA**, Shaker R, Splaingard M. “Maturation of volume dependent recruitment of upper esophageal sphincter contractile reflex (UESCR) in awake and sleeping premature infants.” Topic Forum: Pediatric Gastroenterology: Functional and Motility Disorders. Digestive Disease Week. May 1-6, 2010. New Orleans, Louisiana.
15. Jadcherla SR, Parks VN, Peng J, **Fernández SA**, Shaker R. “Effect of Pharyngeal Stimulus on Upper Esophageal Sphincter (UES) and Lower Esophageal Sphincter (LES) During Development in Human pre-term Infants.” Poster Session: Pediatric Gastroenterology: Functional and Motility Disorders. Digestive Disease Week. May 1-6, 2010. New Orleans, Louisiana.
16. Valentine CJ, Morrow G, **Fernández SA**, Gulati P, Bartholomew D, Long D, Welty S, Rogers LK. “Free Amino Acid (FAA) Quantity in Human donor milk (DM) retained but do not target the Preterm infant.” The Experimental Biology Meeting. April 18-22, 2009. New Orleans, LA.
17. Arnold LE, **Fernández SA**, Mo X, DiSilvestro RA, Crowl LA, Pinto L. (2009) “Zinc for Attention-Deficit/Hyperactivity Disorder: American Pilot Study.” AACAP Meetings Department - 56th Annual Meeting. Honolulu, HI. October 27 - November 1, 2009.
18. Gulati P, Jarjoura D, **Fernández SA**, Yu L, Pennell M. “Improved Variance Smoothing Method for testing Gene Expression Differences in Affymetrix Oligonucleotide Microarrays.” Joint Statistical Meetings. Washington DC. August, 2009.

19. Jadcherla SR, Parks VN, Wang M, Gupta A, Dzodzomenyo S, **Fernández SA**, Splaingard M, Shaker R. "Definition of esophageal sensation in non-verbal premature neonates determined by electro-cortical arousals and visceros-somatic responses." Digestive Disease Week. May 30- Jun 4, 2009. Chicago, Illinois.
20. Gupta A, Parks VN, Wang M, Dzodzomenyo S, **Fernández SA**, Splaingard M, Shaker R, Jadcherla SR. "Volume dependent recruitment of adaptive esophageal peristaltic and upper esophageal sphincter contractile reflexes is preserved in sleep state in healthy premature infants." Digestive Disease Week. May 30- Jun 4, 2009. Chicago, Illinois.
21. Jadcherla S, Wang M, Gupta A, **Fernández SA**, Erdman SH, DiLorenzo C. "Pathophysiology based individualized approach to the feeding management of the complex ICU neonate: Is this the Holy Grail?" Digestive Disease Week. May 30- Jun 4, 2009. Chicago, Illinois.
22. Jadcherla SR, Wang M, Gupta A, DiLorenzo C, **Fernández SA**, Welty SE. "Definition of Neonatal Feeding Problems, Co-Morbidity Risks and Outcomes: Evidence and Experience from 100 Participants." American Pediatrics Society/Society for Pediatric Research. May 2-5, 2009. Washington DC.
23. Fenell C, **Fernández SA** and Huja SS. "Zoledronic acid suppresses remodeling in maxilla of skeletally mature dogs." IADR/AADR/CADR 87th General Session and Exhibition. April 1-4, 2009. Miami, FL.
24. Machado-Parrula CM, Zimmerman B, Lairmore M, **Fernández SA**, Niewiesk S. "Measles and Heat Shock Protein 72 pair up to cure Adult T-cell leukemia." OIA INTERNATIONAL SCHOLAR EXPO-Abstract. September 2008.
25. Elsayed-Awad H, Ohr M, Roth A, Yan W, **Fernández SA**, Patel V. "Effects of Deep Trendelenburg Positioning on Intraocular Pressure During Robotic Radical Prostatectomy." IARS 82nd Clinical and Scientific Congress. March 28-April 1, 2008. San Francisco, California.
26. Mason AS, Phillips CA, **Fernández SA**, and Huja SS. "Short term zoledronic acid induces necrotic foci in dog jaws." IADR 86th General Session & Exhibition. July 2-5, 2008. Toronto, Canada.
27. Huja SS, Phillips CA, **Fernández SA**, and Evanko J. "Zoledronic acid decreases bone formation without causing osteocyte death." IADR 86th General Session & Exhibition. July 2-5, 2008. Toronto, Canada.
28. Jadcherla S, Parks V, Dzodzomenyo S, Gupta A, Keith I, Moore R, **Fernández SA**, Splaingard M. "Modulation of Esophageal Reflexes during Sleep in Premature Human Neonates evaluated with concurrent Polysomnography and Esophageal manometry." DDW-AGA meeting. May 2008. San Diego, California.
29. Jadcherla S, Gupta A, Kim W, **Fernández SA**, Shaker R, Wiet G. "Defining the Sensory-Motor disconnect in Basal and Adaptive Esophageal Reflexes in Human Neonates with Laryngoscopic Abnormalities." DDW-AGA meeting. May 2008. San Diego, California.
30. Bergese S, Bender P, McSweeney T, **Fernández SA**, Sage K. "A Comparative Study Using Primarily Dexmedetomidine Or Midazolam For Sedation During Elective Awake Fiberoptic Intubations." IARS 82nd Clinical and Scientific Congress. March 28-April 1, 2008. San Francisco, California.

31. Pai V., **Fernández S.A.**, Laudick M., Rosselet R., Termuhlen A. “Delayed administration of Filgrastim (G-CSF) following autologous peripheral blood stem cell transplant (APBSCT) in pediatric patients does not change time to neutrophil engraftment and reduces use of G-CSF. ACCP Annual Meeting (October 14-17, 2007), Denver, CO.
32. Arnold L.E., Disilvestro R.A., Bozzolo B.A., Crowl L.A., **Fernández S.A.**, Hollway J. “Zinc for Attention-Deficit/Hyperactivity Disorder: Interim Analysis.” 54th Annual Meeting American Academy of Child and Adolescent Psychiatry. OCTOBER 23-28, 2007. Boston, MA.
33. Harben M., Elsayed-Awad H., **Fernández S.A.**, Spiwak A., Talbott D., Williams T., O'Brien W. “The impact of comorbidities and Aprotinin administration on the change in creatinine in a single center study.” AmSECT 45th International Conference. April 2007. Atlanta, GA
34. Zimmerman B., Parula C., **Fernández S.A.**, Niewiesk, Lairmore M.D. “Efficacy studies of Bortezomib (PS-341) and 17-N-allylamino-17-demethoxygeldanamycin (17-AAG) in a preclinical mouse model of adult T-cell lymphoma.” 9th Annual Scientific Meeting OSUCC. February 2007. Columbus, OH.
35. Nadella M., Dirksen W., Nadella K., Shu S., Cheng A., Morgenstern, Richard V., **Fernández S.A.**, Haung T., Guttridge D., Rosol T.J. “Transcriptional regulation of Parathyroid hormone-related protein promoter P2 by NF- κ B in adult T-cell leukemia/lymphoma.” 9th Annual Scientific Meeting OSUCC. February 2007. Columbus, OH.
36. Kim S., Nair A.M., **Fernández S.A.**, Mathes L., Lairmore M.D. “Enhancement of LFA-1-Mediated T-cell adhesion and viral transmission by human T-lymphotropic virus type 1 p121.” 9th Annual Scientific Meeting OSUCC. February 2007. Columbus, OH.
37. Bolinger C., Yilmaz A., Hartman T.R., Kovacic M.B., **Fernández S.A.**, Ye J., Forget M., Greem P.L., Boris-Lawrie K. “RNA helicase A interacts with divergent lymphotropic retroviruses and is necessary for human T-cell leukemia virus type 1 replication.” 9th Annual Scientific Meeting OSUCC. February 2007. Columbus, OH.
38. Shu S., Nadella P., Dirksen P., **Fernández S.A.**, Thudi N.K., Werbeck J.L., Lairmore M., Rosol T.J. “A novel bioluminescent mouse model and effective therapy for humoral hypercalcemia of malignancy in adult T-cell leukemia/lymphoma.” 9th Annual Scientific Meeting OSUCC. February 2007. Columbus, OH.
39. Yilmaz A., **Fernández S.A.**, Boris-Lawrie K. “Does HIV-induced G2 arrest differentially modulate viral and host cell translation?” 9th Annual Scientific Meeting OSUCC. February 2007. Columbus, OH.
40. Shu S., Nadella M.V.P., Dirksen W.P., **Fernández S.A.**, Kanda N.K., Werbeck J., Rosol T.J. “A novel bioluminescent mouse model and effective therapy for humoral hypercalcemia of malignancy in adult T-cell leukemia/lymphoma.” American Association for Cancer Research. Los Angeles, California. April 2007.
41. Parrula C., Zimmerman B., Nadella P., **Fernández S.A.**, Rosol T., Lairmore M. and Niewiesk S. “Development of Mouse Models of Human T-lymphotropic virus type-I (HTLV-1) associated Adult T cell Leukemia/Lymphoma.” 8th Annual Comprehensive Cancer Center Scientific Meeting. Columbus, OH. February, 2006.

42. Hade E.M., Jarjoura D., **Fernández S.A.**. “Sample Size Re-estimation for Time to Event Studies.” Joint Statistical Meetings. Seattle, WA. August, 2006.
43. Craigmile P.F., Kim N., **Fernández S.A.**, Bonsu B. “Modeling and prediction of influenza outbreaks using chest radiograph data.” Joint Statistical Meetings. Seattle, WA. August, 2006.
44. Jarjoura D., **Fernández S.A.**, Hua K. “Error Variance Estimation with Few Replicates in Cell Line Experiments.” Joint Statistical Meetings. Seattle, WA. August, 2006.
45. Hiestand B.C., **Fernández S.A.**, Schneider C.M., Pritts C.D. “Serum BNP Is Not Associated With Preeclampsia.” SAEM Annual Meeting. San Francisco, CA. May, 2006.
46. Jadcherla S.R., Gupta A., **Fernández S.A.**, DiLorenzo C. “Novel MII-pH methods in the evaluation of physico-chemical and spatiotemporal characteristics and peristaltic clearance mechanisms with reflux events (RE) in infants with chronic lung disease of infancy.” Digestive Disease Week. May 20-25, 2006. Los Angeles, California.
47. Jadcherla S.R., Gupta A., **Fernández S.A.**, Welty S. “Novel MII-pH methods in the evaluation of acid-GER related spatiotemporal characteristics and peristaltic reflexes and symptoms with reflux events (RE) in infants with Broncho Pulmonary Dysplasia (BPD).” Society for Pediatric Research meeting (February 2006)
48. Huja S.S., Hill K.J., **Fernández S.A.**, Gulati P. “Indentation Properties of Maxillary and Mandibular Bone Supporting Erupting Teeth.” ADEA AADR CADR Meeting & Exhibition. March, 2006.
49. Kim N., Bonsu B., **Fernández S.A.**, Harper M.B. “Radiographic Surveillance in Children: A System for Monitoring Epidemics Associated with Prominent Respiratory Symptoms”. Syndromic Surveillance Conference. Seattle, WA. Sept., 2005.
50. Opavsky R., Tsai S., Sharma N., Guimmond M., Aurora J., Opavska J., Trikha P., Stephens J.A., **Fernández S.A.**, Muthusamy N., Felsher D.W., Caligiuri M.A., Leone G. “Novel E2F2B Isoform Functions as Tumor Suppressor in Myc-Induced T-Cell Lymphomagenesis. 70th CSHL Symposium: Molecular Approaches to Controlling Cancer.” Cold Spring Harbor. June, 2005
51. Huja S.S., Hill K.J., **Fernández S.A.**, Gulati P. “Material Properties and Histomorphometric Dynamics in the Canine Alveolar Process.” The 8th International Conference on Biological Mechanisms of Tooth Eruption, Resorption, and Movement. Nov 7-10, 2005.
52. Huja S.S., **Fernández S.A.**, Woodard S.L., Sperling E.A., Banerjee R., Fraser H.L. (2005) “Gradients in the elastic modulus of alveolar process in dogs - a pilot study.” Biological Mechanisms of Tooth Movement and Craniofacial Adaptation. Proceedings of the 8th International Conference, Phuket, Thailand. November 7-10, 2005.
53. Jadcherla S.R., Gupta A., Stoner E., **Fernández S.A.**, Shaker R. “Effect of perinatal neurological injury on pharyngeal reflexes.” Society for Psychophysiological Research, 45th. Annual Meeting. Lisbon, Portugal. Sept. 21-24, 2005.
54. Silverman L.R., Phipps A.J., Montgomery A., **Fernández S.A.**, Tsukuhara T., Ratner L., Lairmore M.D. “In vivo analysis of replication and immunogenicity of proviral clones of Human T-Lymphotropic virus type 1 with elective envelope surface unit mutations.” 12th. international

conference on Human Retrovirology: HTLV and Related Viruses. Montenegro Bay, Jamaica. June 22-25, 2005.

55. Kim N., Bonsu B., **Fernández S.A.**, Harper M.B. "Radiographic Surveillance in Children: A System for Monitoring Epidemics Associated with Prominent Respiratory Symptoms" Pediatric Academic Societies' Annual Meeting. Washington DC, VA. May, 2005.
56. Jadcherla S.R., Gupta A., Stoner E., **Fernández S.A.**, Shaker R. "Identification of reflexive pharyngeal swallowing (RPS) and pharyngo-UES contractile reflex(PUCR) in healthy human neonates."Digestive Disease Week. Chicago, IL, May 14-19, 2005. Published in *Gastroenterology* 2005;128; S-2; A-409.
57. Mousa H., Metheney M., **Fernández S.A.**, Woodley F. "Predictive factors of the clinical and surgical outcome of anti-reflux surgery in children: A retrospective analysis."Pediatric Academic Societies' Annual Meeting. Washington DC, VA. May, 2005.
58. Mousa H., Woodley F., Gulati P., **Fernández S.A.**, Metheney M. "Esophageal Clearance Patterns of Acid and Non-acid Reflux Differ Between Fasting and Post-prandial Periods." Abstract accepted for poster presentation to 2005 Pediatric Academic Societies Annual Meeting. Washington Convention Center, Washington, D.C. May 14-17, 2005. *This abstract was also accepted at Digestive Disease Week 2005. McCormick Place, Chicago, IL. May 14-19, 2005.*
59. Mousa H., Woodley F., Gulati P., **Fernández S.A.**, Metheney M. "Defining the Pattern of Gastroesophageal Reflux and Its pH Status During Fasting and Post-Prandial Periods." Abstract accepted for poster presentation to 2005 Pediatric Academic Societies Annual Meeting. Washington Convention Center, Washington, D.C. May 14-17, 2005. *This abstract was also accepted at Digestive Disease Week 2005. McCormick Place, Chicago, IL. May 14-19, 2005.*
60. Shields B.J., Palermo T.M., Powers J.D., **Fernández S.A.**, Smith G.A. "The role of developmental and contextual factors in predicting children's use of a visual analogue scale". Pediatric Academic Societies' Annual Meeting. Washington DC, VA. May, 2005.
61. Huja S.S., **Fernández S.A.**, Woodard S.L. Sperling E.A., Banerjee R., Fraser H.L. "Elastic modulus of the alveolar process in dogs." 83rd. IADR (International Association for Dental Research) general session and exhibition. Baltimore, MD. March, 2005.
62. Wiet G., Stredney D., Bradley J., Sessanna D., Kimerly I., Powell K., Schmalbrock P., Clymer B., **Fernández S.A.**, Shen H.W., Murakami J., Weisenberger J. and Welling D.B. "The Validation/Dissemination of Temporal Bone Dissection Simulation Project." 13th Annual Medicine Meets Virtual Reality Conference. Long Beach, California. January 26-29, 2005. *This poster won an honorable mention.*
63. Lombardi A.K., Martin D.R., Ranjan C., **Fernández S.A.**. "Increasing Fluoroquinolone Use for Emergency Department Treatment of Community Acquired Pneumonia." ACEP National conference. October 2004.
64. Lombardi A.K., Martin D., Limperos R., **Fernández S.A.** "Determination of Patient Recovery Time from Community Acquired Pneumonia (CAP) According to Initial Pneumonia Outcomes Research Team classification." Annual meeting of SAEM (Society for Academic Emergency Medicine). Orlando, FL. May, 2004.

65. Lombardi A.K. , **Fernández S.A.**, Martin D. “Increasing fluoroquinolone usage as initial empiric treatment of community acquired Pneumonia.” Annual meeting of SAEM (Society for Academic Emergency Medicine). Orlando, FL. May, 2004.
66. Shields B.J. , **Fernández S.A.**, Smith G.A. “Comparison of Mini Trampoline and Full-Size Trampoline-Related Injuries in the United States, 1990-2002.” Pediatric Academic Societies’ Annual Meeting. San Francisco, CA. May, 2004.
67. Licht B., Hyson L., Lin S., Luo Y., **Fernández S.A.**, Licht M., Harper K. “Benign familial partial epilepsy in Poodles: naturally occurring animal model.” American Epilepsy Society Annual Meeting. Boston, Massachusetts. December, 2003.
68. Totir L.R., Fernando R.L., **Fernández S.A.**, Southey B.R. “Genetic evaluation using finite locus models.” ASAS-ADSA Midwest Section Meetings, Des Moines, IA. March, 2001.
69. Fernando R.L., **Fernández S.A.**, “An algorithm to obtain an irreducible Markov chain to sample marker genotypes.” Plant and Animal Genome IX, San Diego, CA. January, 2001.

RESEARCH SUPPORT

Ongoing Research Support

1. Genetic Analysis of the Breast Tumor Microenvironment. (P01 Principal Investigator, Michael C. Ostrowski) P01: NIH-NCI. Annual Direct Cost (Biostatistics Core) \$75,000. Period 06/01/2012-05/31/2017 (renewed in 2012).
Role: Principal Investigator, Director (Biostatistics Core)
2. Genetic and Signaling Pathways in Epithelial Thyroid Cancer. P01: NCI. (P01 Principal Investigator, M. Ringel) Annual Direct Cost (Biostatistics Core) \$99,238. Period 04/30/2013-04/30/2018 (renewed in 2013).
Role: Principal Investigator, Director (Biostatistics Core)
3. Comprehensive Cancer Center Support Grant - Biostatistics Shared Resource. (Program Principal Investigator, M. Caligiuri) P30: NIH-NCI OSU. Annual Direct Cost \$2,530,349. Period: 12/01/2016-11/30/2021 (renewed in 2009, and 2015).
Role: Director (Biostatistics Shared Resource)
4. Clinical and Translational Science Award (CTSA). NIH. (Principal Investigator, R.D. Jackson) Annual Direct Cost (Biostatistics) \$100,218. Period 09/26/2013-04/30/2018 (renewed in 2013). **Role: Director (Biostatistics and Study Design Program)**
5. The Ohio State University and MD Anderson Cancer Center Thyroid Cancer SPORE. NIH. (Principal Investigator, M. Ringel) Annual Direct Cost \$ 131,293. Period 09/25/2013-07/31/2018. **Role: Principal Investigator, Director (Biostatistics Core)**
6. Retrovirus Models of Lymphocyte Transformation-Disease. (Principal Investigator, P. Green) P01: NIH-NCI. Department of Veterinary Biosciences. Core Annual Direct Cost \$140,694. Period 07/01/2014-06/30/2019.
Role: Administration and Biostatistics Core Co-Director, Co-Investigator

7. Circumventing Barriers to Effective Oncolytic Virotherapy of Malignant Gliomas. P01. NCI.(Principal Investigator, E.A. Chiocca/ M. Calgiuri) Annual Direct Cost \$66,655. Period 02/07/2013-01/31/2018.
Role: Administration and Biostatistics Core Co-Director, Co-Principal Investigator
8. Studies of Childhood Sarcomas, P01. NCI. (Principal Investigator, P. Houghton). Annual Direct Cost \$1,222,364. Period 04/03/2013-03/31/18.
Role: Administration and Biostatistics Core Co-Director, Co-Principal Investigator
9. The national patient-centered research network clinical data research networks (CDRN) Phase II. PCORI (PI: V. Roger, Mayo Clinic) Annual Direct Cost \$307,181. Period 9/30/2015-9/30/2018. **Role: PI, OSU site**
10. Precision medicine for dilated cardiomyopathy in European and African ancestry. R01. NHLBI. (Principal Investigator, R. Hershberger) Period 7/29/2015-4/30/2020.
Role: Co-Investigator
11. MicroRNAs in glioma invasion and therapy, R01. NCI (Subcontract with Brigham and Woman's Hospital/Harvard Medical School). Annual Direct Cost-Biostatistics \$19,489.00. Period 09/24/2014-08/31/2019.
Role: Subcontract PI
12. Cancer Prevention and Treatment by Activation of a Brain-Adipocyte Axis. R01CA166590-01A1 NIH-NCI (Principal Investigator: L. Cao) Period 1/1/13 - 12/31/17.
Role: Co-Investigator
13. MITF: Regulating osteoclast gene expression and function. R01AR044719. NCI. (Principal Investigator: Ostrowski/Sharma) Period 03/01/2015-02/27/2020.
Role: Co-Investigator
14. Nicotine treatment for pulmonary sarcoidosis: A clinical trial pilot study. R34 HL123586-01 NIH-NHLBI (Principal Investigator: E. Crouser) Annual Direct Cost \$278,121. Period 09/01/2014-05/31/2017.
Role: Director (Biostatistics)

Completed Research Support

1. Virtual temporal bone surgery: Translating standardized metrics to an automated assessment tool. R01 DC011321-01A1 (Principal Investigators, G. Wiet/D. Stredney). Period 08/05/2011- 07/31/2016.
Role: Co-Investigator
2. Genetic interactions in colorectal cancer susceptibility. (Principal Investigator, A. Toland) R01: NIH/NCI. Molecular Virology, Immunology and Medical Genetics; Human Cancer Genetics Program. Period 2/5/2010 - 1/31/2015. Annual Direct Cost \$375,000.
Role: Co-Investigator
3. SPORE - Experimental therapeutics of leukemia. P50: NCI(Principal Investigator, J. Byrd) Period: 07/01/2009 - 06/30/2014. Annual Direct Cost \$1,669,588.
Role: Co-Investigator (Biostatistics Core)

4. Preclinical Toxicity Evaluation of a Potent Oncolytic Virus.(Principal Investigators, E.A Chiocca and M. Caligiuri) U01:NIH/NINDS Period: December 2008 - November 2013. Annual Direct Cost \$406,638.
Role: Co-Investigator
5. Endothelial microparticles in patients with kidney transplants. (Principal Investigator, S. Brodsky) R21: NIDDK/NIH. Period August 2011- July 2013. Annual Direct Cost \$419,375.
Role: Co-Investigator
6. Anesthesiology Department. College of Medicine. Ohio State University. Biostatistics Core (Contract with the Center for Biostatistics). Period March 2008 - March 2012.
Role: Lead Biostatistician
7. Emergency Department Brief Intervention to Increase Carbon Monoxide Detector Use. R01: NIH/NICHHD. (subcontract with Nationwide Children's Hospital) Period: April 2008 - March 2012. Annual Direct Cost \$324,230.
Role: Principal Investigator
8. Molecular mechanisms of diet-induced carcinogenesis. R01:NIH-NCI.(Principal Investigators, S. Jacob S./K. Ghoshal) Period 01/01/07-12/31/12. Annual Direct Cost \$167,500.
Role: Co-Investigator
9. Effects of prematurity and Chronic Lung Disease of Infancy (CLDI) on the aerodigestive tract defense reflexes. (Principal Investigator, S. Jadcherla, PO1 project 1) P01: NIH (NIDDK) Period April 2006 - March 2011.
Role: Biostatistician
10. Esophageal motility and airway protection mechanisms in infants at risk. (Principal Investigator: S. Jadcherla) R01: NIH (NIDDK) Period June 2006 - June 2010. Annual Direct Cost \$247,307.
Role: Co-Investigator
11. Comprehensive Cancer Center Support Grant - Biostatistics Core. (Principal Investigator, M. Caligiuri) P01: NIH-NCI OSU Period 12/1/04-11/30/10. Annual Direct Cost \$1,997,982.
Role: Co-Investigator (Biostatistics Core)
12. Bisphosphonate Associated Necrosis after mini-implant placement and extraction. (PI: S. Huja) Delta Dental Award. Period: 08/01/2008 to 12/31/2009. Total Cost \$30,000.
Role: Co-Investigator
13. Herpes virus amplicon vectors for treatment of diabetic neuropathy (Neuroscience Clinical Gene Therapy Center). Air Force. (Principal Investigator: E.A. Chiocca) Period September 2010 - September 2011. Annual Direct Cost \$727,270.
Role: Co-Investigator
14. Impact of Pre-Hospital Factors on Functional Independence of Injured Children. HRSA/MCHB. (subcontract with Nationwide Children's Hospital, co-PI: G. Smith) Annual Direct Cost \$166,667. Period 09/1/2007-08/31/2010.
Role: Principal Investigator
15. Validation/Dissemination Virtual Temporal Bone Dissection. (Principal Investigator: G. Wiet) R01: NIH-NCI. Period 07/01/04 - 06/30/09. Annual Direct Cost \$250,000.
Role: Co-Investigator

16. Menthol, Ethnicity and Nicotine Dependence. R01: NIH-NIDA(Principal Investigator: K. Ahijevych) Period 04/01/05 -03/31/08. Annual Direct Cost \$219,713.
Role: Co-Investigator
17. Pilot exploration of zinc effects in ADHD. R21:NIMH.(Principal Investigator: G. Arnold) Period 03/01/05 -03/31/08. Annual Direct Cost \$67,500.
Role: Co-Investigator
18. TNF Blockade in Pancreatic Cancer Patients. R21:NIH-NCI(Principal Investigator: M. Villalona-Calero) Period 09/30/03-09/31/07.
Role: Co-Investigator
19. Phenotypic Determinants of Vestibular Schwannomas. NIH-NCI(Principal Investigator: B. Welling) Period 05/10/05 - 04/30/06.
Role: Co-Investigator
20. Mineral and mechanical properties of bone to understand cranio-facial adaptations to mechanical loading. R21: NIH-OD (Principal Investigator: S. Huja) Period November 03 -October 05.
Role: Co-Investigator
21. Stress, Aging and Wound Healing. R01:NIH/NIA. (Principal Investigator: R. Glaser) Period 09/30/99-08/31/04.
Role: Biostatistician
22. Biomodulation of Capecitabine by Docetaxel in Non-small Cell Lung Cancer. NIH-NCI (Principal Investigator: M. Villalona-Calero) Period 02/01/04-01/31/06.
Role: Biostatistician

INVITED TALKS AND COLLOQUIA

- September 2015, 2016. Organized and co-taught workshop on “Omics Data Analysis.” Biomedical Informatics, Statistics and Mathematical Biology Institute. The Ohio State University.
- August 2015, “Recruiting and Retaining Collaborative Biostatisticians.” Topic-Contributed Panel. Joint Statistical Meetings. Seattle, Washington.
- November 2010, “Lot Quality Assurance Sampling (LQAS): Simplicity Gone Awry.” APHA 138th Annual Meeting. Denver, Colorado.
- July 2009, “Basic QTL Analysis.” 2nd Annual NSF-funded Short Course on Statistical Genetics & Statistical Genomics. Instructor, week long workshop. Honolulu, Hawaii.
- March 2009, “Planning Efficient and Conclusive Experiments.” 2009 Core Facilities Workshop: A Practical Guide to Methods and Techniques in Biomedical Research. OSU Comprehensive Cancer Center, The Ohio State University. March 16-19, 2009
- October 2006, “Power Analysis and Sample Size Calculations in Cell Line Experiments”(Retrovirus Lab Meetings). Veterinary Biosciences, College of Veterinary, Ohio State University.
- March 2006, “Using Lot Quality Assurance Sampling (LQAS) in Assessment of Health Services and Disease Surveillance.” College of Public Health, Ohio State University.

- “Time-series-based filter methods for online biosurveillance.” Joint Statistical Meetings. Regular contributed session. Seattle, WA. August, 2006.
- November 2005, “Planning a clinical trial: Power analysis and sample size calculations.” Research Institute, Columbus Children’s Hospital.
- April 2005, “Basic Statistical Methods in Medicine.” Emergency Medicine, Columbus Children’s Hospital.
- June 2000, “An algorithm to sample missing genotypes.” Animal Sciences Department, University of Wisconsin-Madison.
- June 2000, “An overview of statistical genomics.” Animal Sciences Department, University of Wisconsin-Madison.
- “An algorithm to sample unobservable genotypes in complex pedigrees.” International Society for Bayesian Analysis (ISBA) 2000. Poster presentation. Crete, Greece, June 2000.
- “Sampling marker genotypes for multiallelic loci.” Case Studies in Bayesian Statistics Workshop 5. Poster presentation. Carnegie Mellon, Pittsburgh, Pennsylvania, September 1999.
- “An algorithm to sample marker genotypes in a pedigree with loops.” Joint Statistical Meetings. Regular contributed session. Baltimore, Maryland, August 1999.
- “Sampling marker genotypes in complex pedigrees.” From Jay L. Lush to Genomics: Visions for Animal Breeding and Genetics. Poster presentation. Ames, Iowa, May 1999.
- “A time series approach to genetic trend estimation.” Joint Statistical Meetings. Regular contributed session. Dallas, Texas, August 1998.
- “Calving date and its incidence on weaning weight.” Workshop organized by Facultad de Agronomia. Platform presentation. Uruguay, April 1992.

PROFESSIONAL AND SERVICE ACTIVITIES

• UNIVERSITY SERVICE

- Member, Faculty Search Committee for Translational Data Analytics (TDA) and Food Science and Technology Department. 2015 - 2016.
- Reviewer and Member, Clinical Scientific Research Committee (CSRC)- Comprehensive Cancer Center. 2003 - 2015.
- Reviewer and Member, OSU Sports Medicine Intramural Grants Program. OSU Sports Medicine Center. College of Veterinary Medicine. 2008 - 2010.
- Member, Diversity Enhancement Committee. College of Public Health. 2007 - 2008.
- Biostatistician, Emergency Medicine Journal Club. OSU Medical Center. July 2003 - July 2004.

• GRANT REVIEWER

- Reviewer, NCI SPORE Program Study Section (National Institute of Health). February 2017.

- Reviewer (ad-hoc), Tumor Microenvironment Study Section (National Institutes of Health). Oncology 1-Basic Translational Integrated Review Group. October 2015.
 - Reviewer, Vidi Programme (Innovational Research Incentive Scheme). Netherlands. 2013-present
 - Reviewer and Member, Great Lakes EMSC Research Network (GLEMSCRN) Scientific Advisory Committee (SAC).(Node in the Pediatric Emergency Care Applied Research Network). 2008 - present
- CHAIR AND EDITORSHIPS
 - Associate Editor of Anesthesia & Analgesia
 - Editorial Board member of Journal of Bioinformatics & Proteomics Review
 - Editorial Board member of Journal of Pediatrics & Child Health Care
 - Chair of the Biometry Regular Contributed Session, Joint Statistical Meetings. Baltimore, MA. August 1999.
- JOURNAL REVIEWER
 - JAMA
 - BMC Bioinformatics
 - Epidemiology
 - Human Heredity
 - Genetic Selection Evolution
 - Journal of Biomedical Informatics
 - AIDS Research and Human Retroviruses
 - Blood Cells Molecules and Diseases
 - PloS ONE
- PROFESSIONAL MEMBERSHIPS
 - ASA - American Statistical Association
 - ENAR-International Biometric Society
 - Honor Society: Gamma Sigma Delta.