

CURRICULUM VITAE

David J. Vandenberg, Ph.D.
Professor of Biobehavioral Health
The Pennsylvania State University

OFFICE ADDRESS

Department of Biobehavioral Health
The Pennsylvania State University
258A Health & Human Dev. Building
University Park, PA 16802
Tel:(814) 863-8430
djv4@psu.edu
eRA Commons Name: DVANDENBERGH
Open Researcher and Contributor Identification: orcid.org/0000-0002-5620-2870

RESEARCH FOCUS AND EXPERTISE

I study the basis of individual differences in addictive behaviors, which includes both genes and the environment. My areas of expertise include molecular biology, molecular neuroscience, and genetics.

EDUCATION

- Postdoctoral fellowship: California Institute of Technology; mentor: David Anderson, 1987-1990
- Ph.D., Biochemistry, December, 1987, The Pennsylvania State University, University Park, PA
- B.S., Chemistry, May, 1981, University of North Carolina at Chapel Hill

EMPLOYMENT AND ACADEMIC APPOINTMENTS

Professor, Department of Biobehavioral Health, The Pennsylvania State University, July, 2015-present.

Associate Director, Penn State Institute of the Neurosciences, Huck Institute of the Life Sciences, 2012-present.

Associate Professor, Department of Biobehavioral Health and **Research Associate**, Center for Development and Health Genetics (2004-2009), Member of the Neuroscience Option of the Huck Institutes for the Life Sciences, The Pennsylvania State University, July, 2004-July 2015.

Assistant Professor, Department of Biobehavioral Health, and **Research Associate**, Center for Development and Health Genetics, Member of the Neuroscience Option of the Huck Institutes for the Life Sciences, The Pennsylvania State University, 1998-2004.

Senior Staff Fellow, Molecular Neurobiology Branch, Addiction Research Center, National Institute on Drug Abuse, 1992-1997.

Staff Fellow, Laboratory of Molecular Neurobiology, Addiction Research Center, National Institute on Drug Abuse, 1990-1992.

AWARDS

Teaching Excellence Award, 2017-18, Biobehavioral Health Dept. (\$1,000)

Thomas W. and Jane Mason Tewksbury Endowment for Teaching Excellence, Aug 2016

Teaching Recognition Award, Biobehavioral Health Dept. (\$1,000) Sept 2011

Service to the Penn State Institute for the Neurosciences Award (\$500), 2011

First Place, Poster Competition, Society for Neuroscience, Baltimore Chapter, 1992

Phi Lambda Upsilon Honorary Chemical Society, Mu Chapter-The Pennsylvania State University

M. Frank Malette Award, Distinction in Biochemistry Studies-The Pennsylvania State University (1982)

John Motley Morehead Scholar, University of North Carolina, Chapel Hill (1977-1981).

RESEARCH

Peer-Reviewed Publications (* = student/trainee, ** = first/senior author)

Public URL for MyBibliography:

<http://www.ncbi.nlm.nih.gov/sites/myncbi/1TWq6rewucvAs/bibliographahy/45780007/public/?sort=date&direction=descending>

1. Gajos, J.M., Russell, M.A., Cleveland, H.H., **Vandenbergh, D.J.**, and Feinberg, M.E. (2018). Romantic Partner Alcohol Misuse Interacts with *GABRA2* Genotype to Predict Frequency of Drunkenness in Young Adulthood. *Journal of Contemporary Criminal Justice*, 35(1):7-20.
2. Walter A, Herrold AA, Gallagher VT, Lee R, Scaramuzzo, M, Bream T, Seidenberg PH, **Vandenbergh DJ**, O'Connor K, Talavage TM, Nauman EA, Slobounov SM, Breiter HC, (In press) KIAA0319 genotype predicts the number of past concussions in a division I football team: A Pilot Study. *Journal of Neurotrauma* (doi: 10.1089/neu.2017.5622) PMID: 30351182 needs PMID???
3. Schlomer GL, Murray J, Yates B, Hair KL, **Vandenbergh DJ**. (2018). Father Absence, Age at Menarche, and Sexual Behaviors in Women: Evaluating the Genetic Confounding Hypothesis using the Androgen Receptor Gene. *Evolutionary Behavioral Sciences* (<http://psycnet.apa.org/doi/10.1037/ebs0000137>)
4. Schlomer, G.L., Cleveland, H. H., Deutsch A., Feinberg, M. E., Greenberg, M., Spoth, R., Redmond C., & **Vandenbergh, D.J.** (2018) Developmental Change in Adolescent Delinquency: Modeling Time-Varying Effects of a Preventative Intervention and *GABRA2*

- Haplotype linked to Alcohol Use. *Journal of Youth and Adolescence*. (Sep 22. doi: 10.1007/s10964-018-0929-z.) PMID: 30244312
5. Hernandez Cordero, A.I., Carbonetto, P., Riboni Verri, G., Gregory, J.S., **Vandenbergh, D.J.**, Gyekis, J.P., Blizard, D.A., & Lionikas, A. (2018) Replication and discovery of musculoskeletal QTLs in LG/J and SM/J advanced intercross lines. *Physiological Reports* 6(4) PMID: 29479840. **needs PMID???** doi: 10.14814/phy2.13561
 6. Russell, M.A., **Vandenbergh, D.J.** Schlomer, G.L., Cleveland, H. H., Feinberg, M.E., Greenberg, M. T., Spoth, R. L., & Redmond, C. (2018). PROSPER Intervention Effects on Adolescents' Alcohol Use by GABRA2 Genotype and Age. *Prevention Research* 19(1)27-37, [PMC5552492](#) doi: 10.1007/s11121-017-0751-y.
 7. Cleveland HH, Griffin AM, Wolf PSA, Wiebe RP, Schlomer GL, Feinberg ME, Greenberg MT, Spoth RL, Redmond C, **Vandenbergh DJ**. (2018) Transactions between Substance Use Intervention, the Oxytocin Receptor gene (OXTR), and Peer Substance Use predicting Youth Alcohol Use. *Prevention Research* 19(1):15-26, [PMC5696096](#), <http://dx.doi.org/10.1007/s11121-017-0749-5>. <http://rdcu.be/D1md>; Special Issue: <https://link.springer.com/journal/11121/19/1/page/1>
 8. Cleveland HH, Schlomer GL, **Vandenbergh DJ**, Wolf PSA, Feinberg ME, Greenberg MT, Spoth RL & Redmond C. (2018) Associations between alcohol dehydrogenase genes and alcohol use across early and middle adolescence: Moderation x Preventive intervention. *Development and Psychopathology* 30(1):297-313. PMID:28534462 **needs PMID???** doi: 10.1017/S0954579417000633.)
 9. Vandenbergh MP, **Vandenbergh DJ**, Vandenbergh JG. (2017) Lamarck Revisited: The Implications of Epigenetics for Environmental Law. *Michigan Journal of Environmental and Administrative Law* 7(1)1-50. Available on the SSRN site: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2974409
 10. Schlomer, G.L., Cleveland, H.H., Feinberg, M.E., Greenberg, M., Spoth, R., Redmond, C., Tricou E.P., **Vandenbergh, D.J.** (2017). Extending Previous cGxl Findings on 5-*HTTLPR*'s Moderation of Intervention Effects on Early Adolescent Substance Misuse Initiation. *Child Development* 88(6):2001-2012. [PMC5422137](#), doi: 10.1111/cdev.12666
 11. Massimo L, Munoz E, Hill N, Mogle J, Mulhall P, McMillan CT, Clare L, **Vandenbergh D**, Fick D, Kolanowski A. (2017) Genetic and Environmental Factors Associated with Delirium Severity in Older Adults with Dementia. *International Journal of Geriatric Psychiatry*, 32(5):574-581. PMID: [PMC5083230](#), doi: [10.1002/gps.4496](https://doi.org/10.1002/gps.4496)
 12. Cleveland HH, Schlomer GL, **Vandenbergh DJ**, Wiebe RP. (2016) Gene x Intervention Designs: A Promising Step toward Understanding Etiology and Building Better Preventive Interventions. *Criminology & Public Policy*, 15(3):711-720. doi:10.1111/1745-9133.12221
 13. Gyekis JP, Lang DH, **Vandenbergh DJ**, Gerhard GS, Griffith JW, Dodds JW, Shihabi ZK, Tilley (Krishnan) MK, Blizard DA (2016) A Chromosome 13 locus is associated with male-specific mortality in mice. *Aging Clin. Exp. Res.* 28(1):59-67. doi: [10.1007/s40520-015-0370-z](https://doi.org/10.1007/s40520-015-0370-z). PMID: 25995165, **needs PMID???**
 14. **Vandenbergh DJ**, Schlomer GL, Cleveland HH, Schink AE, Hair KL, Feinberg ME, Neiderhiser JM, Greenberg MT, Spoth RL & Redmond C. (2016). An Adolescent Drug

- Use Intervention Blocks the Effect of *CHRNA5* Genotype on Smoking in High School. *Nicotine & Tobacco Research* 18(2): 212-220 doi: 10.1093/ntr/ntv095, [PMC4723675](#)
15. Griffin AM, Cleveland HH, Schlomer GL, Vandenberg DJ, Feinberg ME (2015) Differential Susceptibility: The Genetic Moderation of Peer Pressure on Alcohol Use. *Journal of Youth and Adolescence* 44(10), 1841-1853. doi: 10.1007/s10964-015-0344-7, PMID: [PMC4772722](#)
 16. *Schlomer GL, Cleveland HH, **Vandenberg DJ**, Feinberg ME, Neiderhiser JM, Greenberg MT, Spoth RL & Redmond C. (2015) Developmental Differences in Early Adolescent Aggression Trajectories: A Gene x Environment x Intervention Analysis. *Journal of Youth and Adolescence* 44(3):581-97. doi: 10.1007/s10964-014-0198-4, PMID: [PMC4324089](#)
 17. *Schlomer GL, Fosco GM, Cleveland HH, **Vandenberg DJ**, Feinberg ME. (2015) Looking forward in candidate gene research: Concerns and suggestions. Peer-reviewed response to commentary on article in *Journal of Marriage and Family* 77(2):351-354. doi: [10.1111/jomf.12165](#)
 18. *Schlomer GL, Fosco GM, Cleveland HH, **Vandenberg DJ**, Feinberg ME. (2015) Interparental Relationship Sensitivity Leads to Adolescent Internalizing Problems: Different Genotypes, Different Pathways. *Journal of Marriage and Family* 77(2):329-343. doi: 10.1111/jomf.12168, PMID: [PMC4382105](#)
 19. Cleveland HH, Schlomer GS*, **Vandenberg DJ**, Feinberg M, Greenberg M, Spoth R, Shriver MD, Zaidi AA, Hair KL* (2015) The conditioning of intervention effects on early adolescent alcohol use by maternal involvement and dopamine receptor D4 (DRD4) and serotonin transporter linked polymorphic region (5-HTTLPR) genetic variants. *Developmental Psychopathology* 27(1):51-67. doi:10.1017/S0954579414001291, PMID: [PMC4450765](#)
 20. McCarter RJ, Stout JT, **Vandenberg DJ**, and McClearn GE (2014) Exploiting Causal Complexity in Aging. *Annual Review of Gerontology and Geriatrics*, 34(1): 229-241 ed. R. Sprott, Springer, New York. doi: [10.1891/0198-8794.34.229](#)
 21. Heiderstadt KM, **Vandenberg DJ**, Gyekis JP*, Blizard DA. (2014) Communal nesting increases pup growth but has limited effects on adult behavior and neurophysiology in inbred mice. *J Am Assoc Lab Anim Sci*. 2014;53(2):152-60. PMID: [PMC3966271](#).
 22. Weinhouse C, Anderson OS, Bergin IL, **Vandenberg DJ**, Gyekis JP*, Dingman MA*, Yang J, Dolinoy DC (2014) Perinatal Bisphenol A Exposure Promotes Dose-Dependent Incidence of Murine Hepatic Tumors. *Environmental Health Perspectives* 122(5):485-91. doi: 10.1289/ehp.1307449. PMID: [PMC4014767](#)
 23. **Vandenberg DJ****, Schlomer GL* (2014) Finding Genomic Function for Genetic Associations in Nicotine Addiction Research: The ENCODE project's role in future pharmacogenomic analysis. *Physiology, Biochemistry & Behavior*, 123:34-44. doi: 10.1016/j.pbb.2014.01.009, PMID: [PMC4117825](#)
 24. Dingman MA*, Gyekis JP*, Whetzel CA, Klein LC, **Vandenberg DJ**** (2013) Age-Specific Locomotor Responses to Nicotine in Yellow and Mottled *A^{vy/a}* Mice. *BioMed*

- Central Research Notes*, 6(1):497. doi: 10.1186/10.1186/1756-0500-6-497, URL: <http://www.biomedcentral.com/1756-0500/6/497>) PMID 24289264
25. Lionikas A, Meharg C, Derry JM, Ratkevicius A, Carroll AM, **Vandenbergh DJ**, Blizard DA, (2012) Resolving Candidate genes of mouse skeletal muscle QTL via RNA-Seq and expression network analyses. *BMC Genomics* Nov 5;13:592. doi: 10.1186/1471-2164-13-592.
 26. Gyekis JP*, Dingman MA*, Revitsky AR, Bryant BP, **Vandenbergh DJ**, Frank ME, Blizard DA. (2012) Gustatory, trigeminal, and olfactory aspects of nicotine intake in three mouse strains, *Behav Genet.* Sep;42(5):820-9 PMID: 22618163
 27. Kapelewski CH, **Vandenbergh DJ**, Klein LC (2011) Effect of Monoamine Oxidase Inhibition on Rewarding Effects of Nicotine in Rodents. *Current Drug Abuse Reviews* 4:110-120.
 28. Gyekis J*, Blizard DA, Stout JT, **Vandenbergh DJ**, McClearn GE, Hager R. (2011) Genetic and Maternal Effects on Offspring Mortality in Mice. *Evolutionary Biology* 38(4):434-440. doi: 10.1007/s11692-011-9131-x
 29. Sloane LB, Stout JT, **Vandenbergh DJ**, Vogler GP, Gerhard GS, and McClearn GE (2011) QTL Analysis of Tail Tendon Break Time in Mice of C57BL/6J and DBA/2J Lineage. *J. Gerontology A (Biological Sci Med Sci)* 66(2):170-178.
 30. Minnix JA, Robinson JD, Lam CY, Carter BL, Foreman JE*, **Vandenbergh DJ**, Tomlinson GE, Wetter DW, Cinciripini PM. (2011) The Serotonin Transporter Gene and Startle Response During Nicotine Deprivation. *Biological Psychiatry* 86(1):1-8.
 31. Gyekis JP*, Foreman JE*, Anthony K, Klein LC and **Vandenbergh DJ****, (2010) Perinatal Nicotine Exposure Delays Genital Development in Mice. *Reproductive Toxicology* 29(3):378-380.
 32. Lang DH, Gerhard GS, Griffith JW, Vogler GP, **Vandenbergh DJ**, Blizard DA, Stout JT, Lakoski JM, and McClearn GE. (2010) Quantitative Trait Loci (QTL) Analysis of Longevity in C57BL/6J byDBA/2J (BXD) Recombinant Inbred Mice. *Aging Clinical and Experimental Research* 22(1):8-19.
 33. Gyekis JP*, Foreman JE*, Anthony K, Klein LC, and **Vandenbergh DJ****. (2010) Activity-related behaviors in the hole-board predict nicotine consumption in C57B6 mice prenatally exposed to nicotine. *Behavioral Brain Research* 206:139-142.
 34. Whitfield KE, Yao X, Boomer KB, Vogler GP, Hayward M, **Vandenbergh DJ**** (2009) Analysis of Candidate Genes and Hypertension in African American Adults. *Ethnicity and Disease* 19(1):18-22. [PubMed](#)
 35. Foreman JE*, Lionikas A, Lang DH, Gyekis JP*, Krishnan M, Sharkey NA, Gerhard GS, Grant MD, Vogler GP, Mack HA, Stout JT, Griffith JW, Lakoski JM, Hofer SM, McClearn GE, **Vandenbergh DJ****, and Blizard DA** (2009) Genetic Architecture for Hole-board Behaviors Across Substantial Time Intervals in Young, Middle-aged, and Old Mice. *Genes, Brain and Behavior* 8: 714-27.
 36. Lang, Dena H., Conroy DE, Lionikas A, Mack HA, Larsson L, Vogler GP, **Vandenbergh DJ**, Blizard DA, McClearn GE, Sharkey NA. (2009) Bone, Muscle and Physical Activity:

- Structural Equation Modeling of Relationships and Genetic Influence with Age. *Journal of Bone and Mineral Research* 24:1608-1617. PMC2730930
37. Blizard DA, Lionikas A, **Vandenbergh DJ**, Vasilopoulos T, Gerhard GS, Griffith JW, Klein LC, Stout JT, Mack H, Lakoski JM, Larsson L, Spicer JM, Vogler GP, McClearn GE. (2009) Blood pressure and heart rate QTL in mice of the B6/D2 lineage: sex differences and environmental influences. *Physiological Genomics* 36(3):158-66. PMID: PMC2646459 [PubMed](#)
 38. Blizard DA, **Vandenbergh DJ**, Lionikas A, and McClearn GE, (2008) Learning in the two-bottle alcohol preference test. *Alcohol: Clinical and Experimental Research* 32(12): 2041-6. [PubMed](#)
 39. Han B, Altman NS, Mong JA, Klein LC, Pfaff DW, and **Vandenbergh DJ****. (2008) Comparing quantitative trait loci and gene expression data for sequenced organisms. *Advances in Bioinformatics* 2008:Article ID 719818, 6 pages. PMC2775685
 40. DeThorne, Laura Segebart, Stephen A. Petrill, Ron Channell, Sara Hart, Rebecca Campbell, Kirby Deater-Deckard, Lee Anne Thompson, Chris Schatschneider, **David J. Vandenbergh** (2008) Genetic Effects on Children's Conversational Language Use. *Journal of Speech, Language, & Hearing Research* 51(2):423-35. PMC2435205 [PubMed](#)
Erratum in: *J Speech Lang Hear Res.* 2008 Oct;51(5):1381.
 41. Yoon, Dustin Y., Christopher A. Rippel, Andrew J. Kobets, Christina M. Morris, Jennifer E. Lee, Phillip N. Williams, Dana D. Bridges, **David J. Vandenbergh**, Yin Y. Shugart, Harvey S. Singer (2007) Dopaminergic Polymorphisms in Tourette Syndrome: Association with the DAT Gene (SLC6A3) *American Journal of Medical Genetics B* 144(5):605-610. [PubMed](#)
 42. Petrill SA, Deater-Deckard K, Thompson LA, Schatschneider C, Dethorne LS, **Vandenbergh DJ**. (2007) Longitudinal genetic analysis of early reading: The Western Reserve Reading Project. *Read Writ.* 20(1-2):127-146. PMC2760987
 43. Whitfield, K.E., King, G., Moller, S., Edwards C., Nelson, T., & **Vandenbergh D.** (2007) Concordance Rates for Smoking Among African American Twins. *Journal of the National Medical Association* 99(3):213-217. [PubMed](#)
 44. **Vandenbergh, DJ ****, Richard J. O'Connor, Michael D. Grant, Akilah L. Jefferson, George P. Vogler, Andrew A. Strasser, and Lynn T. Kozlowski (2007) Dopamine Receptor Genes (*DRD2*, *DRD3*, and *DRD4*) and Gene-Gene Interactions Associated with Smoking-Related Behaviors. *Addiction Biology* 12(1):106-116. [PubMed](#)
 45. Rippel CA, Kobets AJ, Yoon DY, Williams PN, Shugart YY, Bridges DD, **Vandenbergh DJ**, Singer HS. (2006) Norepinephrine Transporter Polymorphisms in Tourette Syndrome With and Without ADHD: No Evidence for Significant Association. *Psychiatric Genetics* 16(5):179-180. [PubMed](#)
 46. Bower, Abbey L., Dean H. Lang; George P. Vogler, **David J. Vandenbergh**, David A. Blizard, Joseph T. Stout, Gerald E. McClearn, and Neil A. Sharkey (2006) QTL Analysis of Trabecular Bone in BXD F2 and RI Mice. *Journal of Bone and Mineral Research* 21(8):1267-75. [PubMed](#)

47. Johannes F, Blizard DA, Lionikas A, Lang DH, **Vandenbergh DJ**, Stout JT, Strauss JA, McClearn GE, and Vogler GP (2006) QTL Influencing Baseline Hematocrit in the C57BL/6J and DBA/2J Lineage: Age-Related Effects. *Mammalian Genome* 17:689-699. [PubMed](#)
48. Lionikas, A., Blizard D.A., **Vandenbergh D.J.**, Stout J.T., Vogler G.P., McClearn G.E., and Larsson L. (2006) Genetic Determinants of Weight of Fast- and Slow-Twitch Skeletal Muscles in Old Mice. *Mammalian Genome* 17:615-628. [PubMed](#)
49. Dar DE, Metzger TG, **Vandenbergh DJ**, and Uhl GR (2006) Dopamine uptake and Cocaine binding mechanisms: The involvement of charged amino acids from the transmembrane domains of the human dopamine transporter. *European Journal of Pharmacology* 538(1-3):43-7. [PubMed](#)
50. Foreman, JE*, Blizard DA, Gerhard G, Mack HA, Lang DH, Van Nimwegen KL, Vogler GP, Stout JT, Shihabi ZK, Griffith JL, Lakoski JM, McClearn GE, and **Vandenbergh DJ****. (2005) Serum Alkaline Phosphatase Activity is Regulated by a Chromosomal Region Containing the Alkaline Phosphatase 2 (*Akp2*) Gene in C57BL/6J and DBA/2J Mice. *Physiological Genomics* 23(3):295-303. [PubMed](#)
51. O'Connor RJ, Kozlowski LT, **Vandenbergh DJ**, Strasser AA, Grant MD, Vogler GP (2005). An examination of early smoking experiences and smoking status in a national cross-sectional sample. *Addiction* 100:1352-1357. [PubMed](#)
52. Lang, Dean H., Neil A. Sharkey, A. Lionikas, Holly A. Mack, Lars Larson, George P. Vogler, **D. J. Vandenbergh**, David A. Blizard, Joseph T. Stout, Joseph P. Stitt, Gerald E. McClearn (2005) Adjusting Data to Body Size: A Comparison of Methods as Applied to Quantitative Trait Loci (QTL) Analysis of Musculoskeletal Phenotypes. *Journal of Bone and Mineral Research* 20(5):748-757 [PubMed](#) PMC1201530
53. Lionikas, A., Blizard D.A., Gerhard G.S., **Vandenbergh D.J.**, Stout J.T., Vogler G.P., McClearn G.E., and Larsson L. (2005) Genetic Determinants of Fast- and Slow-Twitch Skeletal Muscle Weight in 500-day Old Mice of the C57BL/6J and DBA/2J Lineage. *Physiological Genomics* 21(2):184-192 [PubMed](#)
54. Lang, Dena H., Neil A. Sharkey, Holly A. Mack, George P. Vogler, **D. J. Vandenbergh**, David A. Blizard, Joseph T. Stout, Gerald E. McClearn (2005) Quantitative Trait Loci Analysis of Structural and Material Skeletal Phenotypes in C57BL/6J and DBA/2 F₂ and RI Mice. *Journal of Bone and Mineral Research* 20:88-99. [PubMed](#) PMC1201529
55. Blizard, David A., **D. J. Vandenbergh**, Akilah L. Jefferson, Cynthia D. Chatlos, George P. Vogler, Gerald E. McClearn. (2004) Effects of periadolescent ethanol exposure on alcohol preference in two BALB substrains. *Alcohol* 34(2-3):177-185. [PubMed](#)
56. Klein, Laura Cousino, Michele M. Stine, **D. J. Vandenbergh**, Courtney A. Whetzel and Helen M. Kamens (2004) Sex Differences in Voluntary Oral Nicotine Consumption by Adolescent Mice: A Dose-Response Experiment. *Pharmacology Biochemistry and Behavior* 78:13-25. [PubMed](#)
57. Lionikas, A., D. Blizard, **D.J. Vandenbergh**, M. Glover, G. Vogler, G.E. McClearn, and L. Larsson (2003) Genetic Architecture of fast- and slow-twitch skeletal muscle weight in 200-day-old mice of the C57BL6/J and DBA/2J Lineage. *American Journal of Physiology: Physiological Genomics* 16:141-152. [PubMed](#)

58. **Vandenbergh, DJ****, Michael D. Grant, Virginia Severns (2003) A Simple Tandem Repeat Polymorphism is present Eighth Intron of FLJ12960, a Possible Queuine Salvage Enzyme Gene. *Molecular and Cellular Probes* 17(6):319-320. [PubMed](#)
59. **Vandenbergh, DJ****, Kate Anthony, and Keith Whitfield (2003) Optimizing DNA Yield from Buccal Swabs in the Elderly: Attempts to Promote Buccal Cell Growth in Culture. *American Journal of Human Biology* 15:637-642. [PubMed](#)
60. Kozlowski, Lynn T., George P. Vogler, **D. J. Vandenbergh**, Andrew A. Strasser, Richard J. O'Connor (2003) Response to a Letter to the Editor - "Letter to the Editor: Using a Telephone Survey to Acquire Genetic and Behavioral Data Related to Cigarette Smoking in "Made-Anonymous" and "Registry" Samples." *American Journal of Epidemiology* 158:192.
61. Kerin, Tara K*. George P. Vogler, David A. Blizard, Joseph T. Stout, Gerald E. McClearn and **Vandenbergh, DJ****. (2003) Anogenital Distance Measured at Weaning is Correlated with Measures of Blood Chemistry and Behaviors in 450 Day-Old Female Mice. *Physiology & Behavior* 78:697-702. [PubMed](#)
62. Klein, Laura C., Michele M. Stine, Donald W. Pfaff, and **Vandenbergh, DJ**. (2003) Maternal Nicotine Exposure Increases Nicotine Preference in Periadolescent Male but not Female C57BL/6J Mice. *Nicotine & Tobacco Research* 5:117-124. [PubMed](#)
63. **Vandenbergh, DJ****, Ryan Peterson, Kathrine Heron, Karl B. Shpargel*, Abigail Woodroffe*, David A. Blizard, Gerald E. McClearn and George P. Vogler (2003) Simple Tests to Detect Errors in High-Throughput Genotype Data in the Molecular Laboratory. *Journal of Biomolecular Techniques* 14(1):9-16. [PubMed](#) PMC2279894
64. **Vandenbergh, DJ****, Christina J. Bennett*, Michael D. Grant, Andrew A. Strasser, Richard O'Connor, George P. Vogler and Lynn T. Kozlowski (2002) DAT's not all, but it may be more than we realize. Response to: "Non-replication of Genetic Association Studies: Is *DAT* All Folks?" by G. Swan and C. Lerman. *Nicotine and Tobacco Research* 4:251-252. [PubMed](#)
65. Kozlowski, Lynn T., George P. Vogler, **Vandenbergh, D.J.**, Andrew A. Strasser, Richard J. O'Connor, Berwood A. Yost (2002) Using a Telephone Survey to Acquire Genetic and Behavioral Data Related to Cigarette Smoking in "Made Anonymous" and "Registry" Samples. *American Journal of Epidemiology* 156:68-77. [PubMed](#)
66. **Vandenbergh, DJ****, Christina J. Bennett*, Michael D. Grant, Andrew A. Strasser, Richard O'Connor, George P. Vogler and Lynn T. Kozlowski (2002) Smoking Status and the Human Dopamine Transporter Variable Number of Tandem Repeats (VNTR) Polymorphism: Failure to Replicate and Finding that Never-smokers May be Different. *Nicotine and Tobacco Research* 4:333-340. [PubMed](#)
67. Barr, Cathy L., Chun Xu, Jaimie Kroft, Yu Feng, Karen Wigg, Gwyneth Zai, Rosemary Tannock, Russell Schachar, Molly Malone, Wendy Roberts, Marcus M. Nothen, Frank Gruenhege, **Vandenbergh, D.J.**, George Uhl, Glen Sunohara, Nicole King, and James L. Kennedy (2001) Haplotype Study of Four Polymorphisms at the Dopamine Transporter Locus Confirm Linkage to Attention-Deficit Hyperactivity Disorder. *Biological Psychiatry* 49: 333-339. [PubMed](#)

68. McClearn, Gerald E. and **Vandenbergh, DJ.** (2000) The Structure and Limits of Animal Models: Examples from Alcohol Research. *Institute for Laboratory Animal Research Journal* **41**:144-152. [PubMed](#)
69. **Vandenbergh, DJ****, Lawrence A. Rodriguez, Elisabeth Hivert, Jocelyn Huang Schiller, Gregory Villareal, Elizabeth W. Pugh, Herb Lachman, and George R. Uhl (2000) Long Forms of the Dopamine Receptor (DRD4) Gene VNTR are More Prevalent in Substance Abusers: No Interaction with Functional Alleles of the Catechol-O-Methyltransferase (COMT) Gene. *Am. J. Med. Genet., Neuropsychiatric Genetics Section* **96**: 678-683. [PubMed](#)
70. **Vandenbergh, DJ****, Miles D. Thompson, Ed H. Cook, Elisabeth Bendahhou, Tuan Nguyen, Matthew D. Krasowski, Dorsa Zarrabian, David Comings, Edward M. Sellers, Rachael F. Tyndale, Susan R. George, Brian F. O'Dowd, and George R. Uhl (2000) Human Dopamine Transporter Gene: Coding Region Conservation Among Normal, Tourette's Disorder, Alcohol Dependent, and Attention Deficit Hyperactivity Disorder Populations. *Molecular Psychiatry* **5**:283-292. [PubMed](#)
71. Mitsuhashi, Chieko, Shigeo Kitayama, Katsuya Morita, **Vandenbergh, D.**, George R. Uhl, and Toshihiro Dohi (1998) Tyrosine-533 of rat dopamine transporter: involvement in interactions with 1-methyl-4-phenylpyridinium and cocaine. *Molecular Brain Research* **56**: 84-88. [PubMed](#)
72. Rothman, Richard B., Mayme L. Silverthorn, John R. Glowa, Dorota Matecka, Kenner C. Rice, F. Ivy Carroll, John S. Partilla, George R. Uhl, **Vandenbergh, D.J.**, and Christina M. Dersch (1998) Studies of the Biogenic Amine Transporters. VII. Characterization of a Novel Cocaine Binding Site Identified with [125I]RTI-55 in Membranes Prepared from Human, Monkey and Guinea Pig Caudate. *Synapse* **28**: 322-338. [PubMed](#)
73. **Vandenbergh, DJ****, Alan Zonderman, Jocelyn Huang, George R. Uhl, and Paul R. Costa, Jr. (1997) No Association between Novelty Seeking and Dopamine D4 Receptor (DRD4) exon III Seven Repeat Alleles in Baltimore Longitudinal Study on Aging Participants. *Molecular Psychiatry* **2**:417-419. [PubMed](#)
74. Wang, Xia-Bing, Masahiko Funada, Yasuo Imai, Randall S. Revay, Hiroshi Ujike, **Vandenbergh, D.J.**, George R. Uhl. (1997) rGBeta1: A Psychostimulant-Regulated Gene essential for Establishing Cocaine Sensitization. *J. Neurosci.* **17**: 5993-6000. [PubMed](#)
75. **Vandenbergh, DJ****, Lawrence A. Rodriguez, Ivan Miller, George R. Uhl and Herbert M. Lachman (1997) A High-Activity Catechol-O-Methyltransferase Allele is More Prevalent in Polysubstance Abusers. *Am. J. Med. Genetics* **74**:439-442. [PubMed](#)
76. Kaddis, F., E.D. Clarkson, M. Weber, **Vandenbergh, D.J.**, D. Donovan, J. Mallet, P. Horellou, G.R. Uhl, and C.R. Freed. (1997) Intra-Striatal Grafting of Cos Cells Expressing Human Aromatic-L-Amino-Acid Decarboxylase: Neurochemical Effects. *J. Neurochem.* **68**:1520-1526. [PubMed](#)
77. Gelernter, Joel, **Vandenbergh, D.**, S.D. Kruger, D.L. Pauls, R. Kurlan, A.J. Pakstis, K.K. Kidd, and G. Uhl. (1995) The Dopamine Transporter Protein Gene (SLC6A3): Primary Linkage Mapping and Linkage Studies in Tourette's Syndrome. *Genomics* **30**:459-463. [PubMed](#)

78. Donovan, David M.** , **Vandenbergh, DJ****, Michael Perry, Geoffrey S. Bird, George R. Uhl. (1995) Human and Mouse Dopamine Transporter Genes: Conservation of 5'-flanking Sequence Elements and Gene Structures. *Mol. Brain Res.* **30**:327-335. [PubMed](#)
- **Co-first authors with Donovan listed first.
79. Lossie, Amy C., **Vandenbergh, D.J.**, George R. Uhl, and Sally Camper, (1994) Localization of the Dopamine Transporter Gene (DAT1) on Mouse Chromosome 13. *Mammalian Genome* **5**:117-118. [PubMed](#)
80. Persico, Antonio M., **Vandenbergh, D.J.**, Stevens S. Smith, and George R. Uhl, (1993) Dopamine Transporter Gene Polymorphisms are not Associated with Polysubstance Abuse. *Biological Psychiatry* **34**:265-267. [PubMed](#)
81. Mori, N., Y. Tajima, H. Sakaguchi, **Vandenbergh, D.J.**, H. Nawa, and P.M. Salvatera (1993) Partial Cloning of the Rat Choline Acetyltransferase Gene and in situ Localization of its Transcripts in the Cell body of Cholinergic Neurons in the Brain Stem and Spinal Cord. *Molecular Brain Research* **17**:101-111. [PubMed](#)
82. **Vandenbergh, DJ****, Antonio M. Persico, Anita L. Hawkins, Constance A. Griffin, Xiang Li, Ethylin Wang Jabs, and George R. Uhl, (1992) Human Dopamine Transporter Gene (DAT1) Maps to Chromosome 5p15.3 and Displays a VNTR. *Genomics* **14**:1104-1106. [PubMed](#)
83. **Vandenbergh, DJ****, Antonio M. Persico, and George R. Uhl, (1992) A Human Dopamine Transporter cDNA Predicts Reduced Glycosylation, Displays a Novel Repetitive Element and Provides Racially-Dimorphic Taq I RFLPs. *Molecular Brain Research* **15**:161-166. [PubMed](#)
84. Mori, Nozomu, Christopher Schoenherr, **Vandenbergh, D.J.**, and David J. Anderson (1992) A Common Silencer Element in the SCG10 and Type II Sodium Channel Genes Binds a Factor Present in Non-Neuronal Cells but Not in Neuronal Cells. *Neuron* **9**:45-54. [PubMed](#)
85. Hardison, R., D. Krane, **Vandenbergh, D.**, J.-F. Cheng, J. Mansberger, J. Taddie, S. Schwartz, X.Q. Huang, W. Miller, (1991) Sequence and Comparative Analysis of the Rabbit Alpha-like Globin Gene Cluster Reveals a Rapid Mode of Evolution in a G+C Rich Region of Mammalian Genomes. *J. Mol. Biol.*, **222**:233-249. [PubMed](#)
86. **Vandenbergh, DJ****, N. Mori and D.J. Anderson, (1991) Co-expression of Multiple Neurotransmitter Enzyme Genes in Normal and Immortalized Sympathoadrenal Progenitor Cells. *Developmental Biology* **148**:10-22. [PubMed](#)
87. **Vandenbergh, DJ****, Magdalena James-Pederson, and Ross C. Hardison, (1991). An Apparent Pause Site in the Transcription Unit of the Rabbit Alpha-Globin Gene. *J. Mol. Biol.*, **220**:255-270. [PubMed](#)
88. Mori, N., S.J. Birren, R. Stein, D. Stemple, **Vandenbergh, D.J.**, C.W. Wuenschell, and D.J. Anderson, (1990) Contributions of Cell-extrinsic and Cell-intrinsic Factors to the Differentiation of a Neural-crest-derived Neuroendocrine Progenitor Cell. *Cold Spring Harbor Symposia on Quantitative Biology*, **55**:255- 264.

89. **Vandenbergh, DJ***, Carol W. Wuenschell, Nozomu Mori, and David J. Anderson, (1989) Chromatin Structure as a Molecular Marker of Cell Lineage and Developmental Potential in Neural Crest-Derived Chromaffin Cells. *Neuron* **3**:507-518. [PubMed](#)
90. Boggs, N.T., H.D. Bruton, D.H. Craig, J.A. Helpem, H.C. March, M.D. Pegram, **Vandenbergh, D.J.**, K.A. Koehler and R.G. Hiskey, (1982) Chemical Modification of Peptides Containing Gamma-Carboxyglutamic Acid, *J. Org. Chem.* **47**:1812-1816. (Not in PubMed)

CHAPTERS AND NON PEER-REVIEWED ARTICLES

1. Smolen, T.N., **Vandenbergh, D.J.** & McCarter R.J. (2017) Gerald E. McClearn 1927-2017: A Founding Father of Behavioral Genetics OBITUARY, *Behavior Genetics* **47**(3): 263-264.
2. **Vandenbergh, D.J.** (2008) Cloning and Genetic Analysis of Dopamine Transporters. In M. Trudell and S. Izenwasser (Eds.) *Dopamine Transporters: Chemistry, Biology, and Pharmacology*. New York: Wiley
3. **Vandenbergh, D.J.** (2000) Techniques of Molecular Genetics. In M. Ernst and J. Rumsey (Eds.) *Functional Neuroimaging in Child Psychiatry*. Cambridge: Cambridge University Press, pp. 315-327.
4. **Vandenbergh, D.J.** (1998) Cloning of Neurotransmitter Transporter Genes: Beyond the cDNA Coding Region. *Methods in Enzymology* **296**:498-514. [PubMed](#)
5. Uhl, George R., **Vandenbergh, D.J.**, L.R. Rodriguez, L. Miner, and N. Takahashi, (1997) Dopaminergic Genes and Substance Abuse. Ed. by David S. Goldstein, Graeme Eisenhofer and Richard McCarty, Academic Press, San Diego, *Adv. In Pharmacology* **42**:1024-1032. [PubMed](#)
6. Uhl, George R., **Vandenbergh, D.J.**, and Lucinda Minor (1996) Dopamine Transporter Knockouts and Psychomotor Stimulant "Dirty Drugs". *Current Biology* **6**: 935-936. [PubMed](#)

MANUSCRIPTS IN PRESS, SUBMITTED, OR IN PROGRESS

Griffin, A. M., Schlomer, G. L., **Vandenbergh, D. J.**, & Cleveland, H. H. (in press). Challenges and strategies for integrating molecular genetics into behavioral science. In A.W. Harrist & S. M. Wilson (Eds.), *Emerging Issues and Alternative Perspectives on Strengthening Individuals and Families* (Vol, 2). New York, NY: Springer

Vandenbergh DJ, Schlomer GL, Cleveland HH, Schink AE, Feinberg ME, Neiderhiser JM, Greenberg MT, Spoth RL, Redmond C. (In preparation) Interaction between genotypes at OPRM1 and CHRNA5 and an adolescent substance prevention intervention on smoking during high school. Intended for Nic & Tob Res.

GRANT SUPPORT, Current

BBH Seed Funding (Vandenbergh) 11/3/2018-6/30/2019
 Biobehavioral Health Dept. \$6,000

Title: **Pilot Study of Gaps in the Human Genome Analyzed by Undergraduate Researchers**

Role: PI

This project will test the feasibility of training undergraduates to do original research that combined bioinformatics and benchwork to discover polymorphic sites in the human genome that have not been analyzed due to their sequence complexity.

CTSI Bridges to Translation IV (Bunce, PI) 9/1/2018-8/31/2019
 Penn State Clinical Translational Science Institute (CTSI) \$64,100

Title: **Translational Neuroimaging: Implementation of a clinic-friendly neuroclinical assessment for personalized medicine in the treatment of opioid use disorder**

Role: Co-I

This project will incorporate genetic markers of addiction into a new brain imaging methodology that detects activity in the frontal cortex to predict relapse.

Submitted 5/4/2017

R01DK08512-04 (Stifter) 9/1/2013-7/31/2018
 NIH/NIDDK \$1,066,890

Title: **Risks for Childhood Obesity II: Parenting and Self-Regulation in Early Childhood**
 Summary: This study examines the role of temperament, self-regulation and parenting in the development of childhood obesity.

Role: Co-I (in years 4 and 5, 5% for 12 months, 0.6 person months)

T32DA017629 (Collins, PI) 7/1/2016-6/30/2021
 NIH/NIDA \$2,592,050 0 months effort

Title: **Prevention and Methodology Training**

This training program incorporates advanced statistical methods and genetics in analysis of prevention projects designed to reduce substance use and other risky behaviors.

Role: Faculty Affiliate

T32LM012415 (Ritchie, Honavar, Li, PIs) 4/01/2016-3/31/2021
 NIH/NLM \$1,604,971 0.6 months (5%) contributed

Title: **Penn State Biomedical Big Data to Knowledge (B2D2K) Training Program**

This training program will produce biomedical data scientists with the ability to develop novel algorithmic and statistical methods for building predictive, explanatory, and causal models of biomedical data (Biomedical Big Data to Knowledge, B2D2K)

Role: Student Affairs Committee Chair, Faculty Affiliate

GRANT SUPPORT, Pending

2R01 DA??? (Cleveland, Vandenbergh M-PI) 07/01/2018-06/30/2022
 NIH/NIDA \$ 2,631,971

Title: **Adding Social and Genetic Complexity to Substance Use Intervention Research**
 This project will incorporate peer association and peer substance use patterns with genetics and preventive intervention on substance use outcomes.
 Role: Co-PI / M-PI, Grants.gov Tracking#: GRANT12669597

R01??? (Slobounov, PI) OSP# 202532, 04/01/2019-03/31/2024
 NIH/NINDS??? \$3,847,558 0.6 months (5%) in Y1,2,3, & 5, ??? (15%) in Y4.
 Title: **Genetic Influence on Brain Circuit Microstructure after Exposure to Multiple Head Acceleration Events**
 Role: Co-I
 This project will assess the role of select genes on the risk of brain damage in football players receiving impacts that might cause concussion.

Subaward to Penn State (**Vandenbergh, PI**) \$295,118 1.35 mon (15%) acad., 0.45 sum.
 R01 – resubmission (Lionikas, PI) 04/01/2017 03/31/2022
 NIH/NIAMS \$1,492,919
 Title: **Dissection of genes underlying variation in skeletal muscle mass**
 This project will test candidate genes responsible for QTLs on chromosomes 3 (c-Met), 13 (Fst), and X that affect muscle mass in the mouse.
 Role: Co-Investigator

GRANT SUPPORT, Completed (Reverse Chronological Order)

Huck-HHD Mini-grant (**Vandenbergh, PI**) 12/2015-12/2016
 Huck Institute for the Life Sciences, Penn State \$5,000
 Title: **Collecting Genome-Wide Epigenetic Data in gPROSPER, a Gene-By-Environment Study of Human Behavioral Interventions**
 Summary: This project will demonstrate the feasibility of collecting DNA methylation epigenetic data from buccal swab DNA from the PROSPER intervention study.

R01DA030389-01 Cleveland & **Vandenbergh** (M-PI) 08/01/2011-05/31/2016
 NIH/NIDA \$2,514,641
 Title: **Implications of Genetic Variance for Substance Use Interventions in Adolescence**
 Summary: Genotypes of candidate genes from adolescents in an intervention study (PROSPER) will be tested for interactions with intervention treatment to suggest why some children modify their behavior and some do not.
 Role: M-PI (15% for 12 months, 1.8 person months Effort)

AR056280-01A2, Blizard (PI) 4/01/09 – 02/28/14
 NIH/NIAMS \$1,507,890
 Title: Genetic Variation of Muscle Mass
 The genetic architecture of variation in five hindlimb muscle mass will be examined in an intercross of LG/J and SM/J mice, with fine mapping of relevant loci using a panel of congenic strains.
 Role: Co-I (5% Effort Donated)

Penn State Seed Grant (**Vandenbergh, PI**) 3/5/2013-7/1/2013
 Social Sciences Research Institute, Level 1 \$3,000

Title: Ethanol Olfaction in a Mouse Model and Future Studies of Human Behavior

Collection of pilot data for an R01 to explore the behavioral, neurophysiological and molecular aspects of differences in sensitivity to ethanol vapors in mice, with a goal of extending into human studies of sensitivity to alcohol.

Penn State Seed Grant, Klein (PI) 11/1/2013-10/31/2014
Social Sciences Research Institute, Level 1 \$7,200

Title: The Neurobiological Underpinnings of Nicotine Exposure on Limited Access Ethanol Consumption in Periadolescent Female C57BL/6J Mice

This project assesses the differences in nicotinic receptor expression in mice given access to both nicotine and ethanol to model the high frequency of co-administration of these two drugs in human beings.

Role: Co-I (5% Effort Donated)

Penn State Seed Grant (Vandenbergh, PI) 04/14/11-04/13/12
Level II Seed Grant Social Sciences Research Institute \$10,000

Title: **Methyl-Rich Dietary Supplements Diminish Nicotine-Related Behavior**

Summary: We test the ability of methyl-donating compounds to reduce nicotine consumption and assess epigenetic markers on genes related to nicotine.

American Association for Laboratory Animal Science, (Blizard, PI) 5/1/09-4/30/10
GLAS program \$24,979

Title: Behavioral and Neurobiological Effects of Communal Nesting in Inbred Mice

Summary: Communal nesting in 3 lines of inbred mice will be compared to single nesting for effects on subsequent adult behaviors, and expression of NGF and BDNF in several brain regions.

Role: (Co-investigator, 5% effort, contributed)

R01 DK081512-01A1 (Stifter, PI) 8/20/2009-7/31/2011
NIH/NICHD \$739,814

Title: Temperament and Parenting: Risks for Rapid Weight Gain and Childhood Obesity

Summary: The role of genetics is incorporated with temperament and parenting styles to assess their affects on body weight in young to middle-aged children.

Role: Co-Investigator (10% Effort)

Penn State Seed Grant (Vandenbergh, PI) 11/01/08-10/31/09
Social Sciences Research Institute \$7,500

Title: Nicotine's Effects on Obesity and Addiction in a Mouse Model

The use of the Agouti (Viable Yellow) mouse as a biomarker for assessing nicotine's epigenetic effects on obesity based on coat color will be tested.

Ellison Medical Foundation, (McClearn, PI) 10/02/06-09/30/10
Grant Program \$857,723

Title: Mechanisms of Longevity-Influencing Quantitative Trait Loci

Summary: Breeding by genotypic selection will generate mice with two longevity-related loci in increasing and/or decreasing configurations to test for epistatic interactions on a variety of aging-related phenotypes.

Role: Co-Investigator

<p>Penn State Seed Grant (Eckhardt, PI) Children Youth & Families Consortium Title: Components of Population Variation: Social and Developmental Perspectives Summary: Examination of genetic variation in candidate genes for development. Role: Co-investigator</p>	<p>11/12/08-11/11/09 \$4,980</p>
<p>Penn State Seed Grant, (Moore, PI) Children Youth & Families Consortium Title: Genetic Risk, Prenatal Exposure to Substances, and Family Environment: Influences on Child Regulatory Outcomes Summary: Developing observation criteria for a study of adopted children for genetic analysis Role: Co-investigator</p>	<p>4/1/2008-3/31/2009 \$20,018</p>
<p>2T32 AG00276-06, (Vogler, PI) NIH/NIA Title: Training in Genetics of Complex Behaviors in Aging Summary: This interdisciplinary training program's goal is training pre- and post-doctoral scholars who can advance and apply the concepts and methods of quantitative and molecular genetics to problems of health-related and functional behaviors in late adulthood and old age. Role: Faculty (Contributed)</p>	<p>06/01/00 - 04/30/10 \$1,583,484</p>
<p>1R03MH077978-01A1 (Andrews, PI) NIH/NIMH Title: Mapping and Serotonergic Regulation of Multiple BDNF Transcript Isoforms in Mice Summary: The various splice forms of the BDNF gene will be mapped to specific brain regions and their regulation by serotonin pathway activity will be assessed. Role: Co-investigator, 5% effort</p>	<p>4/01/07-3/31/08 \$200,752</p>
<p>P30 AG024395 (Hayward, PI) NIH/NIA Title: Center on Population Health and Aging Summary: This proposal will integrate epidemiological, behavioral, and genetic aspects of aging. Role: Co-investigator (5% effort)</p>	<p>7/01/2004 - 6/30/2008 \$1,060,380</p>
<p>Penn State Seed Grant, (PI: Vandenbergh) Col. Health & Hum Dev Title: <i>Ankk1</i> – A Potential Gene For Drug Abuse Behaviors Summary: <i>Ankk1</i> will be assessed for a potential role in addiction by examining localization of gene expression to the brain, specifically to reward-related regions, and by the ability of nicotine and ethanol to regulate its expression.</p>	<p>01/01/06-12/30/07 \$14,997</p>
<p>R01 AA014711 (Blizard, PI) NIH/NIAAA Title: Alcohol Exposure Effects: Genetic Basis</p>	<p>07/05-06/07 \$398,750</p>

Summary: This 2-year project will refine protocols for comparing the effects of alcohol (ethanol) exposure during adolescence and early adult life on two-bottle alcohol preference. The response of two closely related BALB sub-strains will be compared.

Role: Co-Investigator (5% effort contributed)

R01 HD38075 (Petrill, PI) 04/01/02-03/31/07
NIH/NICHD \$2,013,617

Title: Environmental Influences on Early Reading: A Twin Study

Summary: This project will examine the effect of environmental influences on the acquisition of reading in a genetically sensitive design.

Role: Co-Investigator, 5% effort

P01 AG14731 (McClearn, PI) 12/01/98-01/31/06
NIH/NIA \$7,180,317

Title: QTL Analysis of Age-Related Phenotypes

Summary: Multiple biomarkers of aging will be analyzed longitudinally in a mouse QTL study.

Role: Co-Investigator, 15% effort

Penn State Seed Grant (Co-PI: Whitfield/**Vandenbergh**) 07/01/05-12/31/05
Social Sciences Research Institute \$20,000

Title: Genetic Analysis of Smoking in African-Americans

Summary: This project will address the role of alleles in the *DRD2* and *ANKK1* genes in smoking in an African-American sample.

R01 AG21559-01 (Sharkey, PI) 9/30/2-08/31/06
NIH/NIA \$770,541

Title: Bone Quality: A Composite of Complex Phenotypic Traits

Summary: This grant will examine the genetic architecture of bone quality.

Role: Co-investigator, 5% effort

Penn State Seed Grant, (Vogler, PI) 01/05-12/05
Children Youth and Families Consortium \$19,580

Title: Conduct Problem Prevention: Gene-Environment Interaction

Summary: Supports DNA collection from research volunteers in the Fast Track program in anticipation of NIH (NIDA) funding for a proposal of the same title.

Role: Co-Investigator 10% effort (contributed)

T32 AG00048 (Zarit, PI) 5/1/01 – 4/30/06
NIH/NIA \$1,596,310

Title: Interdisciplinary Training in Gerontology

Summary: This proposal will train gerontologists in multiple methodologies of health and aging.

Role: Faculty (contributed)

Commonwealth of Pennsylvania (Vandenbergh, PI) 07/01/02-06/30/05
Dept. of Health Tobacco Formula Funds \$210,000

Title: Genetics and Genomics of Nicotine

Summary: The ability of nicotine-regulated gene expression in mice to nominate candidate genes for human genetic studies of smoking will be explored.

Role: Principal Investigator, 10% effort

AA08125-09A1 (McClearn, PI)

12/01/98-06/30/04

NIH/NIA

\$3,662,954

Title: Genetic Markers and Alcohol-related Behavior in Mice

Summary: Developmental change in alcohol preference will be studied with QTL methods.

Role: Co-investigator, 10% effort

RO3 DA15114-01 (Klein, PI)

2001-2003

NIH/NIDA

\$68,630

Title: Oral Nicotine Preference by Periadolescent Mice.

Summary: This project will test the effect of pre- and post-natal exposure on periadolescent nicotine preference.

CA81639-0 (Kozlowski, PI)

1999-2001

NIH/NCI

\$239,001

Title: RDD (Random Digit Dialing) Surveys & Molecular Genetics of Smoking.

Role: Co-investigator (5% effort)

Penn State Seed Grant (Vandenbergh, PI:)

1999-2000

Life Sci. Consort. Innovative Biotechnology Research Fund

\$33,000

Title: Identifying Cocaine-Regulated Genes by SAGE.

Penn State Seed Grant (Vandenbergh, PI)

1998-1999

College of Health & Human Dev. Interdisciplinary Seed Grant

\$4,958

Title: Collecting DNA in a Painless Way.

Scientific Director's Award (Vandenbergh, PI)

1994

NIH/NIDA, Division of Intramural Research

\$15,000

Title: Molecular Genetic Examination of Learning and Memory Factors in Drug Addiction.

Familial Dysautonomia Foundation (Anderson, PI)

1989-1990

Research Grant

\$20,000

Role: Postdoctoral fellow (100% effort)

National Research Service Award (NRSA) (Vandenbergh, PI)

1987-1989

NIH

\$40,000

Sponsor: Dr. David Anderson, Division of Biology, California Institute of Technology

LECTURES, CONFERENCE PAPERS, PRESENTATIONS, POSTERS

Symposium Organized

Vandenbergh, D.J. (2003) Changes in Gene Expression in Response to Nicotine: Molecular and Genetic Approaches. Co-presenters: M. Picciotto, M. Li, J. Stitzel. Organized for the *Society for Research on Nicotine and Tobacco*, 9th Annual Conference, New Orleans.

Invited lectures, International

1. **Vandenbergh DJ**, Rodriguez LA, Hivert E, Huang-Schiller J, Villareal G, Pugh EW, Lachman H, and Uhl GR (1998) "Molecular Genetics of Drug Abuse - Alleles that Alter the Function of Catecholamine-O-Methyltransferase (COMT) in Drug Abusers and Controls." Hoffman-LaRoche, Basil, Switzerland, October 1998.
2. **Vandenbergh DJ**, Bennett CJ, Grant MD, Strasser AA, O'Connor R, Vogler GP, Kozlowski LT. (2002) "Genetic Analysis of the Dopamine Transporter in Smokers and True Non-Smokers (The SANS Study)." 5th International Institute on Developmental Science May 14.
3. **Vandenbergh DJ.** (2008) "The Role of the Dopamine Transporter Gene in Smoking and Other Addictive Behaviors," The Paul Ehrlich II Conference on Magic Bullets, Nurnberg Germany, Oct 4-6.

Invited lectures, National

1. **Vandenbergh DJ**, Cleveland HH, Schlomer GS. (2013) "The Big Step of Bringing Function to Genetic Associations: Taking Advantage of the ENCODE Project." Fourth Annual Integrating Genetics and Social Sciences (IGSS) Meeting, University of Colorado, Boulder, October 11.
2. **Vandenbergh DJ.** (2013) "Ah, The Smell of It: Olfaction and Alcohol Consumption in Mice." Vandenbergh DJ; Presented to the Neuroscience Research Interest Group, The Jackson Laboratory, September 23.
3. **Vandenbergh DJ.** (2010) "Agouti Mice, Epigenetics, and Nicotine Consumption," Department of Cell & Molecular Physiology, Penn State University College of Medicine, October 28.
4. **Vandenbergh DJ**, Grant MD, O'Connor RJ, Jefferson AL, Vogler GP, Strasser AA, Kozlowski LT. (2006) "Evidence for Epistasis Among the D2 Family of Dopamine Receptor Genes in Smoking-Related Behaviors" Presented in a Symposium entitled "Human phenotypes, animal models and the particularity of experimentation: challenges and opportunities." Behavior Genetics Association 36th Annual Conference, Storrs CT, USA, June 20-25.
5. **Vandenbergh, D.J.**, Mong, J., Klein, L.C., Stine, M.M., Pfaff, D., Vogler, G.P., Callegari F., & Chiaromonte, F. (2004) "Sex-Specific Patterns of Gene Expression in Response to Nicotine in Neonatal Mouse Brains," Transdisciplinary Tobacco Use Research Center, University of Pennsylvania, April 8.

6. **Vandenbergh, D.J.**, Mong, J., Klein, L.C., Stine, M.M., Pfaff, D., Vogler, G.P., Callegari F., & Chiaromonte, F. (2003) "Sex Differences Dominate Patterning of Gene Expression in Neonatal Mouse Brains Following Prenatal Exposure to Nicotine," Presented at the Fourth Annual Sex and Gene Expression Conference, Graylyn Conference Center, Winston-Salem, NC, March 20-23.
7. **Vandenbergh DJ.** (1997) "Cloning the Dopamine Transporter and Genetic Analysis." Penn State Department of Biobehavioral Health, April.
8. **Vandenbergh DJ.** (1995) "Cloning the Dopamine Transporter and Genetic Analysis." Department of Neuroscience and Anatomy, The Pennsylvania State College of Medicine
9. **Vandenbergh DJ.** (1995) "Cloning the Dopamine Transporter and Genetic Analysis." Department of Psychiatry, University of Mississippi School of Medicine, June.
10. **Vandenbergh DJ.** (1995) "Molecular Biology of the Dopamine Transporter." Department of Neuroscience, Albert Einstein College of Medicine, March.
11. **Vandenbergh DJ.** (1994) "Dopamine Transporter- Some Molecular and Genetic Aspects." Department of Psychiatry, Yale University School of Medicine, October.
12. **Vandenbergh DJ.** Persico A, Uhl GR. (1994) "Dopamine Transporter/Cocaine Receptor: A Molecular Substrate of Substance Abuse." Department of Physiology, University of Maryland Medical School, October.
13. **Vandenbergh DJ,** Wang XB, Uhl GR. (1993) "Differential Display PCR: A Method to Identify Transcription Changes and its Application to Amphetamine Withdrawal." Department of Biological Science, University of Maryland, Baltimore County, October.
14. **Vandenbergh DJ,** Persico A, Uhl GR. (1992) "The Human Dopamine Transporter/Cocaine Receptor- Molecular Biology and Genetics." Department of Biology, University of Notre Dame, November 1992.
15. **Vandenbergh DJ,** Mori N, Anderson DJ. (1991) "Expression of Cholinergic Phenotype Early in Development of the Sympathoadrenal Lineage." Nat. Inst. on Childhood Health and Disease, Lab. of Developmental Biology, March 1991.

Invited lectures, Local

1. Vandenbergh DJ (2018) Molecular Basis of Addiction. Presentation to the Mechanisms of Mind Interest Group, Arts & Design Research Incubator (ADRI), Pennsylvania State University, March 23.

2. Vandenberg DJ and Cleveland HH. (2016) The gPROSPER Study – Bringing Candidate Gene Research to an Adolescent Substance Misuse Prevention Intervention. Prevention Research Center Seminar Series, Pennsylvania State University, Oct 12.
3. **Vandenberg DJ** and Cleveland HH. (2016) Barriers and Bridges to Meaningful Candidate Gene Research – The Interaction of Genes and Environment on Adolescent Substance Misuse Outcomes. Noll Seminar Series, Department of Kinesiology, The Pennsylvania State University, Sept 23.
4. **Vandenberg DJ**, (2015) The Twists and Turns of my Career. For “Inside the Scientist's Studio” series, Graduate Women in Science, The Pennsylvania State University, Dec. 2.
5. Cleveland HH & **Vandenberg DJ** (2015) “Applying adolescent intervention design and longitudinal data to understand interactions between genotype and environment.” Penn State - Geisinger Biomedical Informatics Symposium, Geisinger Health System and Penn State University, University Park, Sept 8-9.
6. Byrska-Bishop M & **Vandenberg DJ**. (2013) “Impact of functional information on understanding (genetic) variation: ENCODE thread 12 + a bit more. Part 2,” Penn State ENCODE Journal Club, Center for Systems Genomics, Penn State, Jan 29.
7. **Vandenberg DJ** & Byrska-Bishop M. (2013) “Impact of functional information on understanding (genetic) variation: ENCODE thread 12 + a bit more. Part 1,” ENCODE Journal Club, Center for Systems Genomics, Penn State, Jan 8, 2013
8. **Vandenberg DJ**, Hair KL, & Dingman MA. (2012) “Vandenberg Lab Research.” Penn State Center for Brain Behavior and Cognition, November.
9. **Vandenberg DJ**. (2009) “Nicotine’s Effects on Agouti Mice,” Penn State Center for Developmental and Health Genetics, January 25.
10. **Vandenberg DJ**. (2008) “Using Nicotine to Change the Coat Color of Agouti Mice: Why in the World Would we want to do that?” Penn State Central Biological Laboratory staff, December 17.
11. **Vandenberg DJ**. (2008) “Cloning the Dopamine Transporter (SLC6A3) Gene and Identifying Variants” Biomedical Sciences Undergraduate Club, Penn State, November 12.
12. **Vandenberg DJ**. (2008) “Bioinformatics and Genomics of KIF1A: Molecular Understanding as a Basis for Health” Presented to the Department of Biobehavioral Health, Penn State, January 28.
13. **Vandenberg DJ**, Yao X, Anthony KA. (2005) “New Findings at the Taq A Polymorphic Site of the Dopamine Receptor D2 Gene,” Presented to the Genetics Colloquium, Intercollege Program in Genetics, Penn State, March 31.

14. **Vandenbergh DJ.** (2000) "Gene Expression Profiling Techniques in Neurobiological Responses to Addictive Drugs." Department of Pharmacology, Pennsylvania State College of Medicine, October.
15. **Vandenbergh DJ.** (2000) "Exploring Cocaine-Related Gene Expression in the Frontal Cortex of the Mouse by SAGE" Genetics Program, Penn State University, April 5.
16. **Vandenbergh DJ.** (1998) "Serial Analysis of Gene Expression" Life Sciences Consortium DNA Interest group, The Pennsylvania State University, October
17. **Vandenbergh DJ.** Rodriguez LA, Hivert E, Huang-Schiller J, Villareal G, Pugh EW, Lachman H, and Uhl GR (1998) "Catecholamine-O-Methyltransferase Alleles in Drug Abusers and Controls." Penn State Neuroscience Program, February

Presentations and Posters, International

1. Garvin N, Hayes J, Vandenbergh D, and Pawelczyk J. (2018) Novel Gene Variant Associated with Exercise Pressor Reflex Responsiveness. American College of Sports Medicine (ACSM) National Meeting, Minneapolis, MN, May 30
2. Hernandez A, Carbonetto P, **Vandenbergh DJ**, Gregory JS, Blizard DA, Lionikas A. (2016) Natural genetic diversity alters transcriptional profile of skeletal muscle. Genetics Society, The Royal Society, London 10-11 November 2016.
3. Schlomer GL, Cho H, **Vandenbergh DJ**, (2017) The Effect of Father Absence on Age at Menarche is Moderated by LIN28B Genetic Variation. Society for Research in Child Development Biennial Meeting, (Abstract ID: 1191499), Austin, Texas, April 6-8, 2017.
4. Schlomer GL, Cleveland HH, Feinberg ME, Greenberg M, Spoth R, Redmond C, **Vandenbergh DJ.** (2015) A Substance Use Prevention Intervention Reduces the Association between OPRM1 and Alcohol Use among High School Students. 24th Biennial Meeting of the International Society for the Study of Behavioural Development (ISSBD), Vilnius, Lithuania, July 10-14.
5. **Vandenbergh DJ**, Schlomer GL, Griffin AM, Wolf PSA, Cleveland HH, Feinberg ME. (2015) Analyzing Population Stratification Based on Sample Population and Genotype Parameters. 24th Biennial Meeting of the International Society for the Study of Behavioural Development (ISSBD), Vilnius, Lithuania, July 10-14.
6. Blizard DA, **Vandenbergh DJ**, Gyekis JP, Hettinger TP, Koide T and Frank ME. (2015) Reciprocal crosses between C57BL/6J and DBA/2J reveal chromosomal and epigenetic taste-preference signatures in laboratory mice. Association for Chemoreception Sciences AChemS 37th Annual Meeting, Fort Meyers, Florida, April 22-25. CHEMICAL SENSES 40 (7), 619-619, 2015
7. Cleveland HH, Schlomer GL, **Vandenbergh DJ**, Feinberg ME, Greenberg MT, Spoth RL,

- Redmond C, Griffin A. "Differential intervention effects on early- and mid-adolescent alcohol use by 5-HTTLPR," Biennial Meeting, Society for Research in Child Development, Philadelphia. March 19-21.
8. Griffin A, Cleveland HH, Schlomer GL, **Vandenbergh DJ**, Feinberg ME, Greenberg MT, Spoth RL, Redmond, C. "Evidence of Differential Susceptibility: Individual Differences in Intervention Effectiveness on Sensation Seeking," Biennial Meeting, Society for Research in Child Development, Philadelphia. March 19-21.
 9. Schlomer GL, Cleveland HH, **Vandenbergh DJ**, Feinberg ME, Greenberg MT, Spoth RL, Redmond, C. "False Positives in GxE Research? A Replication Attempt of Brody, et al. (2009)," Biennial Meeting, Society for Research in Child Development, Philadelphia. March 19-21.
 10. Griffin A, Schlomer GL, Cleveland HH, **Vandenbergh DJ**. (2014) Differential Trajectories of Early to Mid Adolescence Alcohol Use. Annual Meeting of the Behavior Genetics Association, Charlottesville VA, June 18-21 (BEHAVIOR GENETICS 44 (6), 660-661).
 11. Schlomer GL, Cleveland HH, **Vandenbergh DJ**, Feinberg ME, Greenberg MT, Spoth RL. (2013). *DRD4 repeat polymorphism X maternal insensitivity on externalizing behavior modified by a school based prevention/intervention: The gPROSPER project*. Presentation given at the Jacobs Foundation workshop on Genetic Moderation (and Mediation) of Intervention Efficacy. Öhningen, Germany, April.
 12. Cleveland, **Vandenbergh DJ**, Schlomer GL, Feinberg ME, Greenberg MT, Spoth RL. (2013). Recent findings from gPROSPER. Presentation given at the Jacobs Foundation workshop on Genetic Moderation (and Mediation) of Intervention Efficacy. Öhningen, Germany, April.
 13. Dingman MA, Gyekis JP, **Vandenbergh DJ** (2012) Effect of nicotine concentration and number of nicotine bottles on oral nicotine consumption in adult and adolescent C57BL/6J mice of both sexes. Society for Neuroscience 41st Annual Meeting, New Orleans, LA
 14. Gyekis JP, Dingman MA, Revitsky AR, Bryant BP, **Vandenbergh DJ**, Frank ME, Blizard DA (2012) Gustatory, trigeminal, and olfactory aspects of nicotine intake in three mouse strains. International Behavioural and Neural Genetics Society, Genes, Brain & Behavior 14th Annual Meeting, Boulder CO, May 15-19.
 15. Dingman MA, Gyekis JP, **Vandenbergh DJ**. (2011) Age-Specific Locomotor Responses to Nicotine in Agouti Mice. Society for Neuroscience 40th Annual Meeting, Washington, D.C.
 16. Gyekis J, Dingman M, Klein LC, **Vandenbergh DJ**. (2011) Perinatal methyl donor supplementation reduced adolescent nicotine consumption and ethanol drinking in the dark. Society for Neuroscience 40th Annual Meeting, Washington, D.C.

17. Ragan CM, Gyekis JP, Cavigelli SA, **Vandenbergh DJ**. (2010) Within litter variance in pup-maternal interactions predicts adult sibling variance in anxiety-related behaviors in inbred mice. Society for Neuroscience 40th Annual Meeting, San Diego
18. Gyekis JP, Ragan CM, Dingman MA, Cavigelli SA, **Vandenbergh DJ**. (2010) Adolescent nicotine consumption predicts anxiety-related behavior in agouti mice. Society for Neuroscience 40th Annual Meeting, San Diego
19. Gyekis JP, Blizard DA, Stout JT, Vogler GP, Griffith JW, Lakoski JM, **Vandenbergh DJ**, and McClearn GM. (2010) Influence of parent of origin on pre-weaning offspring mortality in reciprocal crosses of F1 C57BL/6J and DBA/2J hybrid mice. International Behavioral And Neurogenetics Society (IBANGS) Annual Meeting, Halifax, Nova Scotia, May 12-16.
20. Gyekis J, Foreman JE, Anthony K, Klein LC, **Vandenbergh DJ**. Locomotor predictors of nicotine consumption in C57B6 mice prenatally exposed to nicotine. (2009) Society for Neuroscience 39th Annual Convention, Chicago, IL, October 17-21
21. Krench ME, **Vandenbergh DJ**. (2008) Nicotinic receptor subunit expression patterns change during differentiation of SK-N-BE2c neuroblastoma cells. Society for Neuroscience 38th Annual Convention, Washington, DC, November 15-19.
22. Blizard DA, **Vandenbergh DJ**, Lionikas A, Colby M, and McClearn GE. (2007) GXE interactions related to age of alcohol exposure: bidirectional effects. Annual Meeting of the Behavior Genetics Association, Amsterdam, The Netherlands, June 3-6.
23. Foreman JE, Klein LC, Stine MM, and **Vandenbergh DJ**. (2006) Network analysis of nicotine regulated genes in adolescent mice. Society for Neuroscience 36th Annual Convention, Atlanta, GA, October 14-18.
24. Blizard, David A., Gerald E. McClearn, Nelson Adams, **David J. Vandenbergh**. (2006) Transitivity of Genetic Architecture. Symposium entitled "Human phenotypes, animal models and the particularity of experimentation: challenges and opportunities. Behavior Genetics Association 36th Annual Conference, Storrs CT, USA, June 20-25.
25. **Vandenbergh, David J.**, Michael D. Grant, Richard J. O'Connor, Akilah L. Jefferson, George P. Vogler, Andrew A. Strasser, and Lynn T. Kozlowski. (2006) Evidence for Epistasis among the D2 Family of Dopamine Receptor Genes in Smoking-Related Behaviors. Symposium entitled "Human phenotypes, animal models and the particularity of experimentation: challenges and opportunities. Behavior Genetics Association 36th Annual Conference, Storrs CT, USA, June 20-25.
26. Mong JA, Devidze N, **Vandenbergh DJ** and Pfaff DW. (2005) Lipocalin Prostaglandin D Synthase (L-PGDS) is Sexually Differentiated in the Hypothalamus (Hyp) and Preoptic Area of Neonatal Mice. Society for Neuroscience 35th Annual Convention, Washington DC, Nov 12-16.

27. Klein LC, Stine MM, **Vandenbergh DJ**, Whetzel C. (2005) Voluntary Nicotine Consumption is Dependent on Sex and Age. Society for Research on Nicotine and Tobacco, 11th Annual Meeting, Prague, Czech Rep, March
28. **Vandenbergh DJ**, Anthony K, Foreman JE, Klein LC. (2005) Prenatal Nicotine Exposure Feminizes Male Mouse Genitalia. Society for Research on Nicotine and Tobacco, 11th Annual Meeting, Prague, Czech Republic, March 20-23
29. McGraw, A.P., Szapacs, M.E., Unger, E.L., **Vandenbergh, D.J.**, Andrews, A.M., (2004) BDNF mRNA and Protein Levels in SERT Knockout Mice as a Function of Age and Cellular and Environmental Stress Factors. Society for Neuroscience 34th Annual Convention, San Diego, CA, Oct 23-27.
30. Foreman, J.E., Klein, L.C., Stine, M.M., **Vandenbergh, D.J.**, (2004) Nucleus Accumbens Gene Expression in Nicotine-Preferring Periadolescent Mice. Society for Neuroscience 34th Annual Convention San Diego, CA, Oct 23-27.
31. Blizard D.A., **Vandenbergh D.J.**, Lionikas A., Gerhard, G.S., Griffith J., Klein L.C., Stout J. T., Mack H.A., Lakoski J., Larsson L., Spicer J., Vogler G., McClearn G.M. (2004) QTL Influencing Standard Deviation of Heart Rate and Blood Pressure in the Mouse. Behavior Genetics Assoc. 34th annual meeting, Aix en Provence, France, Behavior Genetics 36(6):632
32. Klein, L.C., Stine, M.M., & **Vandenbergh, D.J.** (2003) Nicotine consumption in mice is influenced by age and sex. Presented at the 111th annual meeting of the American Psychological Association, Toronto, Canada. Invited symposium presentation supported by the National Institute on Drug Abuse.
33. Gerhard, G.S., M.A. Grundy, J. Abraham, T.J. Stout, D. Blizard, **D.J. Vandenbergh**, Z.K. Shihabi, J. Spicer, G. Vogler, J. Griffith, J. Lakoski, N. Sharkey, L. Larsson, J. Strauss, R. Mitchell, L. Klein, S. Hofer, G.M. McClearn, N. Gorman, P.R. Sinclair, M.J. Chorney. (2003) Different Quantitative Trait Loci (QTL) Influence Serum, Liver, and Cerebellum Iron Levels in C57BL/6J X DBA/2J F2 Mice. The International Bioiron Society, World Congress on Iron Metabolism, Bethesda, Maryland, May 4-9.
34. **Vandenbergh, D.J.**, Tara K. Kerin, and Laura Cousino Klein (2001) Nicotine-Regulated Gene expression in Reward-Relevant Brain Regions in Mice Detected by Microarrays. *Society For Neuroscience Abstract 222.8*, 31st Annual Meeting, San Diego, Nov. 10-15.
35. **Vandenbergh, D.J.**, Tara K. Kerin, and Laura Cousino Klein (2001) Microarray Analysis of Nicotine-Regulated Gene Expression in Reward-Relevant Brain Regions in Mice. *Society for Research on Nicotine and Tobacco Europe 3rd Conference* Paris, France. Sept. 20-22.
36. Mack, H. A., Grant, M. D., Kerin, T. K., Fernandez, J. R., Vogler, G. P., **Vandenbergh, D.J.**, and McClearn, G. E. (2001). Quantitative Trait Loci (QTL) analysis of body weight in F2 and recombinant inbred mice. 31st Annual Meeting, Behavior Genetics Society, Cambridge, U.K. July 8 – 11.

37. **Vandenbergh, D.J.**, K. Anthony, T.K. Kerin, and T. Gibbard (2000) Identifying Cocaine-Regulated Genes in The Mouse Cortex using SAGE. *Society for Neuroscience*, New Orleans.
38. Wang J.Z., P.S. Johnson, I. Sora, J-B Wang, **Vandenbergh, D.J.**, and G.R. Uhl (1997) Human Mu Opiate Receptor Gene Structure. *Society for Neuroscience*.
39. Rodriguez L.A., **Vandenbergh, D.J.**, E. Pugh, E. Bendahhou, G. Villareal, H. Lachman, and G.R. Uhl (1997) Dopaminergic Gene Variants in Polysubstance Abusers and Controls. *Society for Neuroscience*.
40. **Vandenbergh, D.J.**, M. Thompson, E. Cook, J. Schaeffer, S. George, E. Bendahhou, J.T. You, M. Hazama, D. Comings, B. O'Dowd, and G.R. Uhl (1997) High Conservation of Dopamine Transporter Sequences Among Human Individuals. *Society for Neuroscience*.
41. Rodriguez, L.A., **Vandenbergh, D.J.**, E. Bendahhou, and G.R. Uhl (1996) DRD3 and DRD4 Gene Marker Frequencies in Polysubstance Abusers and Controls. *Society for Neuroscience Abstracts* **22(1)**:171.
42. Numachi, Y., **Vandenbergh, D.J.**, E. Bendahhou, and G.R. Uhl (1996) The Human Dopamine Transporter Gene 3'-Flank Contains a New Gene Expressed in Brain and Peripheral Tissues. *Society for Neuroscience Abstracts* **22(3)**:1787.
43. **Vandenbergh, D.J.**, E. Bendahhou, Y. Numachi, E. Cook, and G.R. Uhl (1996) New Polymorphisms and Linkage Disequilibrium in the Human Dopamine Transporter Gene. *Society for Neuroscience Abstracts* **22(3)**:1787.
44. **Vandenbergh, D.J.**, L.A. Rodriguez, and G.R. Uhl (1996) Genetic Analysis of Dopamine D4 and D3 Receptor Genes in a Sample of Polydrug Users. 26th Annual Meeting, Behavioral Genetics Association. *Behavioral Genetics* **26(6)**:600.
45. **Vandenbergh, D.J.**, E. Bendahhou, G. Bird, E. Cook, J. Gelernter, and G.R. Uhl (1995) Human Dopamine Transporter Gene 5' and 3' Structures and Molecular Genetics. *Society for Neuroscience Abstracts* **21(1)**:374.
46. Takahashi, N., **Vandenbergh, D.J.**, and G.R. Uhl (1995) Mouse Synaptic Vesicular Monoamine Transporter: DNA and Genomic Structure. *Society for Neuroscience Abstracts* **21(1)**:93.
47. Patel, A.P., J.-C. Martel, **Vandenbergh, D.J.**, G.R. Uhl, and M.J. Kuhar (1995) Cell Lines Expressing Human and Rat Dopamine Transporter cDNAs: Different Ligands Yield Different Radiolabeling Patterns. *Society for Neuroscience Abstracts* **21(1)**:781.
48. Uhl, G.R., **Vandenbergh, D.J.**, A. Persico, M. Van den Bree, P. Johnson, R. Pickens (1995) Strategies for Identifying Genes that Enhance Drug Abuse Vulnerability. *Bell Howe Conferences (World Congress on Psychiatric Genetics)* Cardiff, Wales

49. Uhl, G.R., **Vandenbergh, D.J.**, D.M. Donovan, S. Davis, and J.-B. Wang. (1994) Dopamine Transporter: Localized Expression, Gene Structure and Function. *Dopamine 94*, Quebec City, Quebec, Canada.
50. Martel, J.-C., **Vandenbergh, D.J.**, N. Takahashi, and G.R. Uhl. (1994) Expression Studies of Human Dopamine Transporter cDNAs with 3'-Untranslated Region Variants. *Society for Neuroscience Abstracts*, 20: 381.4.
51. Wang X.B, **Vandenbergh, D.J.**, and G.R. Uhl. (1994) Amphetamine Regulation of Genes Encoding Cellular Regulators. *Society for Neuroscience Abstracts*, 20: 663.4.
52. **Vandenbergh, D.J.**, G.S. Bird, R. Ingersoll, E. Nanthakumar, and G.R. Uhl. (1994) Human Dopamine Transporter Gene Structure and 5'-Flank. *Society for Neuroscience Abstracts*, 20:381.7.
53. Lossie, A.C., **Vandenbergh, D.J.**, G.R. Uhl, B.A. Eipper, and S.A. Camper (1994) Genetic Mapping of *Dat1* and *Pam* in the Mouse. *Third International Chromosome 5 Workshop, Laguna Beach, California*.
54. Persico, A.M., **Vandenbergh, D.J.**, Bird, G.S., Crowe, R.R., Surratt, C.K., Hurko, H. Singer, and G.R. Uhl, (1993) Dopamine and Vesicular Transporter Gene Markers in Dopaminergic Neuropsychiatric Disorders. *World Congress of Psychiatric Genetics, New Orleans*.
55. Persico, A.M., **Vandenbergh, D.J.**, and G.R. Uhl, (1993) Differential Display PCR Identifies Altered Prefrontal Cortex Gene Expression During Amphetamine Withdrawal. *Society for Neuroscience Abstracts* 19, 821.
56. Kaddis, F.G. C.R. Freed, M.J. Weber, C.K. Surratt, **Vandenbergh, D.J.**, J. Mallet, P. Horellou, G.R. Uhl, (1993) Human Dopamine Gene Expression in Cos Cells. *Society for Neuroscience Abstracts* 19, 1317.
57. **Vandenbergh, D.J.**, A.M. Persico, J. Gelernter, G.S. Bird, R. Crowe, C. Surratt, R. Kurlan, D. Pauls, O. Hurko, H. Singer, K.K. Kidd, and G.R. Uhl. (1993) Dopamine and Vesicular Transporter Gene Markers in Neuropsychiatric Disorders. *Society for Neuroscience Abstracts* 19, 201.
58. **Vandenbergh, D.J.**, A.M. Persico, A.M. Gonzales, and G.R. Uhl (1992) Human Dopamine Transporter cDNAs: Structure and Expression. *Society for Neuroscience Abstracts* 18(1):663.
59. Uhl, G.R., S. Shimada, S. Kitayama, J. Boja, M. Kuhar, A. Patel, **Vandenbergh, D.J.**, and P. Gregor (1992) Cloning and Properties of Wild-Type and Mutant Dopamine Transporter cDNAs. *7th International Catecholamine Symposium, Amsterdam*.
60. **Vandenbergh, D.J.** and D.J. Anderson (1990) Detection of Low Level CHAT Gene Expression in Adult Chromaffin Cells and in Their Embryonic Precursors. *Society for Neuroscience Abstracts* 16, 644 (#272.2).

Presentations and Posters, National

1. Schlomer GL, Cleveland HH, Vandenberg D, Feinberg M. (2019) *Longitudinal Peer Influences on Adolescent Externalizing Behavior Problems are Moderated by a Genetic Susceptibility Gene Score*. Society for Research on Child Development, 2019 SRCD Biennial Meeting, Baltimore, Maryland, March 21-23.
2. Gajos JM, Russell MA, Cleveland HH, Feinberg ME, Greenberg MT, Spoth RL, Redmond C, and **Vandenberg DJ**. (2018) Romantic Partner Effects on Young Adult Alcohol Misuse by *GABRA2* Genotype and PROSPER Intervention. Biennial Meeting of the Society for Research on Adolescence in Minneapolis MN, April 12-14
3. Rock J, Griffin A, Cleveland HH, Schlomer GL, Feinberg, M, Vandenberg D, (2018) Relationships Among Alcohol Dehydrogenase Genes, Early Adolescent Alcohol Use, and Young Adult Problem Behaviors. Society for Research on Adolescence Biennial Meeting, Minneapolis MN, April 12-14.
4. Schlomer, G. L., Cleveland, H. H., Deutsch, A., Feinberg, M., Greenberg, M., Spoth, R., Redmond, C., & **Vandenberg, D. J.** (April, 2018). *Developmental change in adolescent delinquency: Modeling time-varying effects of a preventative intervention and GABRA2 genotype*. Society for Research on Adolescence (SRA). Minneapolis, MN, April 12-14.
5. Cleveland, H. H., Schlomer, G. L., Feinberg, M., Greenberg, M., Spoth, R., Redmond, C., & Vandenberg, D. J. (April, 2018). *Alcohol dehydrogenase genes and alcohol use across early and mid-adolescence: Moderation by preventative intervention*. Society for Research on Adolescence (SRA). Minneapolis, MN, April 12-14.
6. Schlomer GL, Cleveland HH, Feinberg ME, Greenberg MT, Spoth R, & Redmond C. **Vandenberg DJ**. (2016) *5-HTTLPR Moderates Intervention Effects on Early Adolescent Aggressive Behavior Problems – Extending Previous cGxE Findings*. Society for Research on Adolescence Biennial Meeting, Baltimore, MD, March 31-April 2.
7. Griffin A, Cleveland HH, Schlomer GL, **Vandenberg DJ**, Feinberg M, Greenberg M, Spoth R, & Redmond C. (2016) The Interactive Effects of Expectation of Alcohol Use, Prevention Programs & Polygenetic Genetic Sensitivity. Society for Research on Adolescence Biennial Meeting, Baltimore, MD, March 31 - April 2.
8. Russell, M.A., Schlomer, G. L., Cleveland, H. H., Feinberg, M., Greenberg, M., Spoth, R. L., Redmond, C., & **Vandenberg, D. J.** (April, 2016). *Adolescent alcohol use, GABRA2 genotype, and developmental stage: A gene-intervention-development interaction*. Society for Research on Adolescence (SRA). Baltimore, MD, March 31 - April 2.
9. Wolf, P. S. A., Cleveland, H. H., **Vandenberg, D. J.**, Schlomer, G. L., Feinberg, M. E., Greenberg, M. T., & Spoth, C. (April, 2016). *The role of oxytocin receptor gene (OXTR), average peer drug use, and alcohol use in the PROSPER intervention study*. Society for Research on Adolescence (SRA). Baltimore, MD

10. Wolf, P. S. A., Cleveland, H. H., **Vandenbergh, D. J.**, Schlomer, G. L., & Feinberg, M. E. (April, 2016). *Relations among OXTR gene score, peer drug use, and alcohol use in 9th graders*. Society for Research on Adolescence (SRA). Baltimore, MD.
11. **Vandenbergh DJ**, Schlomer GL, Cleveland HH, Schink AE, Feinberg ME, Neiderhiser JM, Greenberg MT, Spoth RL, Redmond C. (2015) Interaction between genotypes at OPRM1 and CHRNA5 and an adolescent substance prevention intervention on smoking during high school. American Society for Human Genetics, Baltimore, Oct 6-10.
12. Griffin A, Cleveland HH, Schlomer GL, **Vandenbergh DJ**, Hair KL, others??? (2015) Gene × Intervention: Differential Intervention Effects on Sensation Seeking and Substance Use Based on Genotype. 23rd Annual Meeting, Society for Prevention Research, Washington, DC, May 26-29.
13. Schlomer GL, Cleveland HH, **Vandenbergh DJ**, Hair KL, Griffin A, (2015) Recent Findings from the gPROSPER Project. 23rd Annual Meeting, Society for Prevention Research, Washington, DC, May 26-29.
14. Cleveland HH, Schlomer GL, **Vandenbergh DJ**, Hair KL, Griffin A, and Wolf P. (2015) From Buccal to Bonferroni in Genetically Informative Prevention Research III: Operationalizing and analyzing genetic variance from SNP to GWAS and in-between. 23rd Annual Meeting, Society for Prevention Research, Washington, DC, May 26-29.
15. **Vandenbergh DJ**, Hair KL, Cleveland HH, Schlomer GL, Griffin A. From Buccal to Bonferroni in Genetically Informative Prevention Research II: Execution of Genotyping and Preliminary Analysis of Genetic Data. 23rd Annual Meeting, Society for Prevention Research, Washington, DC, May 26-29.
16. Hair KL, **Vandenbergh DJ**, Schlomer GL, Cleveland HH, Griffin A. (2015) From Buccal to Bonferroni in Genetically Informative Prevention Research I: The initial stage for development, execution, and analysis of a genetically informed prevention study. 23rd Annual Meeting, Society for Prevention Research, Washington, DC, May 26-29.
17. Cleveland HH, Schlomer GL, **Vandenbergh DJ**, Feinberg ME, Greenberg M, Spoth R, Redmond C, & Griffin A. Differential intervention effects on early- and mid-adolescent alcohol use by 5-HTTLPR. Society for Research on Child Development Biennial Meeting, Philadelphia, PA, March 19 - 21, 2015.
18. Cleveland H, Schlomer GL, **Vandenbergh DJ**, (2015) Strengthening Candidate Gene x Environment Interaction Research. Society for Research on Child Development Biennial Meeting, Philadelphia, PA, March 19 - 21, 2015.
19. Schlomer GL, Cleveland HH, **Vandenbergh DJ**, Feinberg ME, Greenberg M, Spoth R, & Redmond C. False Positives in GxE Research? A Replication Attempt of Brody, et al. (2015) Society for Research on Child Development Biennial Meeting, Philadelphia, PA, March 19 - 21.

20. Griffin A, Cleveland HH, Schlomer GL, **Vandenbergh DJ**, Feinberg ME, Greenberg M, Spoth R, & Redmond C. Evidence of Differential Susceptibility: Individual Differences in Intervention Effectiveness on Sensation Seeking. Society for Research on Child Development Biennial Meeting, Philadelphia, PA, March 19 - 21, 2015.
21. Vandenbergh DJ, Schlomer GL, Cleveland HH, Schink AE, Feinberg ME, Neiderhiser JM, Greenberg MT, Spoth RL, Redmond C. (2015) CHRNA5 Genotype Interacts with School-Based Intervention to Reduce High-School Smoking. 21st Annual Meeting, Society for Research on Nicotine & Tobacco, Philadelphia, PA, February 25-28.
22. Griffin A, Schlomer G, Cleveland H, **Vandenbergh DJ**, (2014) Differential Susceptibility to Effects of Peer Pressure and Positive Friend Support on Alcohol Expectation During Adolescence, Society for Research on Adolescence Biennial Meeting, Austin TX, March 20-22.
23. Zheng Y, Cleveland HH, **Vandenbergh DJ**, Feinberg M, Spoth R, Greenberg M (2014) A dynamical systems analysis of adolescent alcohol use and delinquency: Investigating genetic moderation of intervention effects. Society for Research on Adolescence Biennial Meeting, Austin TX, March 20-22.
24. Schlomer GL, Fosco, GM, Feinberg M, Cleveland H, **Vandenbergh DJ** (2014) Differential Susceptibility to Interparental Relationships on Adolescent Internalizing: Different Processes for Different Genotypes. Society for Research on Adolescence Biennial Meeting, Austin TX, March 20-22.
25. Cleveland, H. H., **Vandenbergh, D.** Schlomer GL. (2013) Practical issues with adding candidate genes to a large intervention study. *Integrating Genetics and the Social Sciences* conference. Sponsored by the Population Association of America and the University of Colorado Population Center. Boulder, Colorado. October 10-12.
26. Schlomer GL, Cleveland HH, **Vandenbergh DJ**. (2013) Population Stratification is More than Ethnicity: A Description and Empirical Example using gPROSPER. Integrating Genetics and Social Sciences Conference, Boulder, CO, October 10-12.
27. **Vandenbergh DJ**, Schlomer GS, Cleveland HH. (2013) The Big Step of Bringing Function to Genetic Associations: Taking Advantage of the ENCODE Project. Integrating Genetics and Social Sciences Conference, Boulder, CO, October 10-12.
28. Schlomer G Cleveland HH, **Vandenbergh DJ**, Greenberg M, Feinberg ME, Spoth R. (2013) DRD4 Repeat Polymorphism X Maternal Insensitivity on Externalizing Behavior Modified by a School-Based Prevention/Intervention: The gPROSPER Project, Society for Research in Child Development, Seattle WA, April 18-20.
29. Cleveland HH, **Vandenbergh DJ**, Schlomer G, Greenberg M, Feinberg ME, Spoth R. (2013) An examination of differential intervention effects on substance use by specific genetic variance among rural American adolescents. Society for Research in Child Development, Seattle WA, April 18-20.

30. Zheng Y, Cleveland HH, **Vandenbergh D**, Feinberg M, Spoth RL, Greenberg MT. (2013) Preventing Adolescent Alcohol Use and Delinquency: A Dynamical Systems Analysis of Genetic Moderation of Intervention Effects. Society for Prevention Research Annual Meeting, San Francisco CA, May 28-31.
31. Heiderstadt KM, Blizard DA, **Vandenbergh DJ** (2011) Communal Nesting in Mice: Strain-Dependent Metabolic and Neurobehavioral Effects. AALAS 62nd National Meeting, San Diego CA, October 2-6.
32. Gyekis J, Klein L, **Vandenbergh D**. No effect of Maternal Oral Nicotine Consumption on the Coat Color Spectrum of Agouti Viable Yellow (*A^{vy/a}*) Offspring. Environmental Epigenomics and Disease Susceptibility, Keystone Symposia on Molecular and Cellular Biology, Asheville NC, March 27-31, 2011.
33. Bower, AL; Lang, DH; Vogler, G P; **Vandenbergh, DJ**; Blizard, DA; Stout, JT; McClearn, GE; Sharkey, NA (2010) QTL Influencing Age-Related Changes of Bone Microarchitecture. Orthopaedic Research Society 56th Annual Meeting,
34. Bower AL, Lang DH, Vogler GP, **Vandenbergh DJ**, Blizard DA, Stout JT, McClearn GE, Sharkey NA. (2009) QTL of Trabecular Bone in 500- and 800-Day-Old F₂ and RI Mice. Orthopaedic Research Society 55th Annual Meeting, Las Vegas NV
35. Whitfield, K.E., Hayward, M., Guo, G., Cai, T., **Vandenbergh, D.J**, Yao, X., Vogler G. & Edwards, C.L. (2008) Main Effects and Interactions: An examination of genetic and environmental influences on blood pressure indices in African Americans. *Annals of Behavioral Medicine* 35:S184-S184, Springer, Society for Behavioral Medicine, 29th Annual Meeting, San Diego, CA, March 26-29
36. Lang DH, Sharkey NA, Conroy DE, Lionikas A, Mack H, Larsson L, Vogler G, **Vandenbergh DJ**, Blizard D, Stout J, McClearn GE. (2007) Bone Quality, Muscle Mass and Activity-Related Behavior: Structural Equation Modeling of Their Relationships and Genetic Influence. 53rd Annual Meeting of the Orthopaedic Research Society, San Diego, CA, February 11-14.
37. Foreman JE, Klein LC, Stine MM, and **Vandenbergh DJ**. (2005) "Global Patterning of Nicotine Regulated Gene Expression is Different Between Males and Females Directly After Birth and Remains into Adolescence" Sixth Annual Conference on Sex and Gene Expression, Winston-Salem, NC, March 17-2.
38. Bower AL, Sharkey NA, Lang DH, Vogler GP **Vandenbergh DJ**, Blizard DA, Stout T, McClearn GE. (2005) Genetic Determinants of Trabecular Bone Density and Architecture. Orthopaedic Research Society. Washington DC February.
39. Lang DH; Sharkey NA; Vogler GP; **Vandenbergh DJ**; Blizard DA; Stout T; and McClearn GE. (2005) Quantitative Trait Loci Influencing Age Related Changed in Bone Quality. Orthopaedic Research Society. Washington DC February.

40. Lionikas, D.A. Blizard, G.S. Gerhard, **D.J. Vandenberg**, J.T. Stout, G.P. Vogler, G.E. McClearn and L. Larsson. (2004) X, Y and Autosomal Determinants of Genetic Architecture of Fast- and Slow-Twitch Skeletal Muscle Weight in 500-day Old Mice of the C57BL/6J and DBA/2J Lineage. 3rd Annual Conference Complex Trait Consortium, Bar Harbor, Maine, July 6-9.
41. **Vandenberg**, D.J., Grant, M.D., O'Connor, R.J., Jefferson, A.L., Strasser, A.A. Vogler, G.P. Kozlowski, L.T. (2004) The dopamine D2 receptor Family (DRD2, DRD3, & DRD4) and genetic analysis of smoking-related behaviors. Society for Research on Nicotine and Tobacco, 10th Annual Meeting, Scottsdale AZ, February.
42. Klein, L.C. Stine, M.M., **Vandenberg**, D.J., Kamens, H.M., Whetzel, C. (2004) Age and Sex Influence Voluntary Nicotine Consumption in Mice. Society for Research on Nicotine and Tobacco, 10th Annual Meeting, Scottsdale AZ, February.
43. Callegari, F., Chiaromonte, F., **Vandenberg**, D.J., Vogler, G.P. (2003) A statistical method to identify genes influencing the global association level between two experimental conditions in microarray data. The 2003 Affymetrix GeneChip Microarray Low-Level Workshop, Berkeley, California, Aug 7-8.
44. Griffith, J.W., Blizard, D.A., Hofer, S.M., Stout, J.T., **Vandenberg**, D.J., Spicer, J.M., Vogler, G.P., McClearn, G.E. (2003) Cystic Endometrial Hyperplasia Uterine Adenomyosis in Young BXD RI Mice. American College of Veterinary Pathologists Meeting, Banff, Alberta, Canada, Nov 16-19
45. Callegari, F., Chiaromonte, F., **Vandenberg**, D.J., Vogler, G.P. (2003) Identification of genes impacting on the association level between two experimental conditions in microarray data. Applied Statistics Symposium, San Diego, June 22-24
46. Callegari, F., Chiaromonte, F., **Vandenberg**, D.J., Vogler, G.P. (2003) A method to characterize the association level of two experimental conditions in microarray data. Joint Statistical Meeting, American Statistical Association, San Francisco, CA, August 3-7.
47. Klein L.C., Ceballos R.M., Stine, M.M., **Vandenberg**, D.J., Kamens, H. Ellis, C. (2003) Choice Oral Nicotine Consumption Decreases Body Weight in Adult but not Adolescent C57BL/6 Mice. Society for Research on Nicotine and Tobacco, 9th Annual Conference, New Orleans.
48. **Vandenberg**, D.J., Grant M.D., O'Connor R.J., Strasser A.A., Virginia Severns, Vogler, G.P., Kozlowski, L.T. (2003) The influence of dopamine receptor genes (DRD2, DRD3, & DRD4) on smoking status: smokers and non-smokers study (SANS). Society for Research on Nicotine and Tobacco, 9th Annual Conference, New Orleans.
49. **Vandenberg**, D.J., Mong J., Klein, L.C., Stine M.M., Pfaff D., Vogler, G.P., Callegari F., Chiaromonte F. (2003) Sex differences in Genome-wide Transcriptional Response to Nicotine Exposure in Utero. Symposium presentation for the Society for Research on Nicotine and Tobacco, 9th Annual Conference, New Orleans.

50. Lang, D.H., Sharkey, N.A., Lionikas, A., Vogler, G.P., **Vandenbergh, D.J.**, Larsson, L.G., Blizard, D.A., Stout, J.T., McClearn, G.E. (2003) Bone Quality, Muscle Mass, and Activity: Relationships and Genetic Influence. 49th Annual Meeting of the Orthopaedic Research Society, New Orleans, LA, February.
51. Gerhard G.S., Grundy M.A., Abraham J., Stout T.J., **Vandenbergh D.**, Spicer J., Vogler G., Griffith J., Lakoski J., Sharkey N., Larsson L., Strauss J., Mitchell R., Hofer S., and McClearn G.E. (2002) Hepatic Lipid Peroxidation Potential is Influenced by Two Quantitative Trait Loci (QTL) in C57BL/6J and DBA/2J Mice. The Gerontological Society of America, 55th Annual Meeting November, Boston.
52. Klein, L.C., Stine, M.M., & **Vandenbergh, D.J.** (2002) Establishing a mouse model of adolescent nicotine consumption. Society for Biological Psychiatry, Annual Meeting Philadelphia, PA. *Biological Psychiatry*, 51, 39S-40S. Invited presentation.
53. **Vandenbergh, D.J.**, Andrew A. Strasser, Richard J. O'Connor, Mike D. Grant, George P. Vogler, Lynn T. Kozlowski. (2002) The Influence of DAT and DRD4 on Smoking Status: Results from the Smokers and Non-Smokers Study. *Society for Research on Nicotine and Tobacco*, 8th Annual Conference, Savanna
54. **Vandenbergh, David J.**, Stephanie Cerceo, Kathrine Heron, Kate Anthony, and Laura Cousino Klein. (2002) Nicotine's Effects on Expression of EST #40744 – A Product of the Genome Projects. *Society for Research on Nicotine and Tobacco*, 8th Annual Conference, Savanna
55. Klein, L.C., Stine, M.M., & **Vandenbergh, D.J.** (2002) A mouse model of adolescent nicotine consumption. Symposium Presentation, *Society for Research on Nicotine and Tobacco*, 8th Annual Conference, Savanna.
56. Klein, L.C., Stine, M.M., Pfaff, D.W., & **Vandenbergh, D.J.** (2002) Maternal nicotine exposure in mice alters health outcomes and later nicotine preference in adolescent offspring. *Society for Research on Nicotine and Tobacco*, 8th Annual Conference, Savanna.
57. Sharkey, N.A., Lang, D.H., Vogler, G.P., **Vandenbergh, D.J.**, Larsson, L.G., Blizard, D.A., Stout, J.T., McClearn, G.E. (2001) Genetic determinants of skeletal strength, composition, and morphology. 31st International Sun Valley Hard Tissue Workshop, August 2001, Sun Valley, ID. *Journal of Musculoskeletal & Neuronal Interactions*, 2(1): 89.
58. **Vandenbergh, D.J.** and Laura C. Klein (2001) Oral Nicotine Exposure Induces Gene Expression Changes in Reward-Relevant Brain Regions in Mice. *Society for Research on Nicotine and Tobacco*. 7th Annual Meeting, Seattle.
59. Kozlowski, L.T., **Vandenbergh, D.J.**, George P. Vogler, Andrew A. Strasser, Michael D. Grant, Christina J. Bennett, and Richard J. O'Connor (2001) Use of Random Digit Dialing Telephone Interviews to Attain DNA Samples Through the Mail. *Society for Research on Nicotine and Tobacco*. 7th Annual Meeting, Seattle.

60. **Vandenbergh, D.J.**, Andrew A. Strasser, Michael D. Grant, Christina J. Bennett, George P. Vogler, and Lynn T. Kozlowski (2001) Differentiating Never and Non Smokers in Genetic Studies of Cigarette Smoking: An example using the Dopamine Transporter. *Society for Research on Nicotine and Tobacco*. 7th Annual Meeting, Seattle.
61. E. Bendahhou, **Vandenbergh, D.J.**, E. Pugh, L.A. Rodriguez, I Miller, H. Lachman and G.R. Uhl (1997) Dopaminergic Gene Alleles in Polysubstance Abusers and Controls: Effects of COMT and DRD4 Allelic Status are at Least Additive. *Am. Soc. for Human Genet. Am. J. Hum. Genet.* **61**(4):A304.
62. **Vandenbergh, D.J.**, M. Thompson, E. Cook, J. Schaeffer, S. George, E. Bendahhou, J.T. You, M. Hazama, D. Comings, B. O'Dowd, and G.R. Uhl (1997) High Conservation of Dopamine Transporter Sequences Among Human Individuals. *Am. J. Hum. Genet.* **61**(4):A382.
63. **Vandenbergh, D.J.**, L.A. Rodriguez, E. Bendahhou, H. Lachman, and G.R. Uhl (1996) COMT DRD3, and DRD4 Gene Marker Frequencies in Polysubstance Abusers and Controls. *Committee on Problems of Drug Dependence*, Nashville, June.
64. Cook, E.H., **Vandenbergh, D.J.**, M.A. Stein, N.J. Cox, S. Yan, M.D. Krasowski, G.R. Uhl, and B.L. Leventhal (1995) Molecular Genetic Analysis of the Dopamine Transporter in Attention-Deficit/Hyperactivity Disorder. *American Society for Human Genetics* 57(4)s:A189.
65. Uhl, G.R., P. Johnson, C. Surratt, L. Sharpe, L. Miner, D. Donovan, **Vandenbergh, D.J.**, and J.-B. Wang (1995) Morphine-preferring Mu Opiate Receptor: Structure, Function and Expression in the Nervous System. *120th Annual Meeting of the American Neurological Association*, Washington, D.C., October 1995. [Annals of Neurology 38(2):327-335]
66. Uhl, G.R., **Vandenbergh, D.J.**, J. You, and X.B. Wang (1995) Addiction Mechanisms: Psychostimulant- and Opiate-Regulated Gene Expression. *Committee on Problems of Drug Dependence*, Palm Beach, FL, June.
67. Freed, C., **Vandenbergh, D.J.**, D. Walther, N. Takahashi, D.M. Donovan, and G.R. Uhl (1994) Dopamine Transporter and Parkinsonism. *2nd PERC Symposium*, Santa Cruz, CA.
68. Emilien B., C.B. Goodman, C.M. Dersch, J.S. Partilla, J.L. Cadet, **Vandenbergh, D.J.**, J.-B. Wang, G.R. Uhl, F.I. Carroll, B. Blough, K.P. Constable, and R.B. Rothman. (1994) Discovery of a Novel Chiral Benzazepine Derivative, RTI-4793-41, whose Enantiomers bind Potently and with Moderate Enantioselectivity to PCP Site 2 and Cloned DA transporters. *Proceedings of the 56th Annual Meeting of The College on Problems in Drug Dependence. NIDA Res. Monogr.* **153**:510.
69. C.M. Dersch, M.L. Silverthorn, J.S. Partilla, G.R. Uhl, J.-B. Wang, **Vandenbergh, D.J.**, J.L. Cadet, J.R. Glowa, F.I. Carroll, and R.B. Rothman. (1994) A Comparative Study of [¹²⁵I]RTI-55 Binding to the DA Transporters of Rat-, Monkey-, and Human-Caudate Membranes and the Cloned Rat and Human DA Transporters Expressed in COS and CHO Cells.

Proceedings of the 56th Annual Meeting of The College on Problems in Drug Dependence. *NIDA Res. Monogr.* **153**:360.

70. Donovan D.M., **Vandenbergh, D.J.**, L.L. Miner, M.P. Perry, G.R. Bird, R. Ingersoll, L.G. Sharpe, and G.R. Uhl. (1994) Dopamine Transporter: Human and Mouse Gene Structure and Overexpression in Transgenic Mice. Mouse Molecular Genetics Symposium, Cold Spring Harbor.
71. Emilien, B., C.B. Goodman, C.M. Dersch, J.S. Partilla, J.L. Cadet, **Vandenbergh, D.J.**, J-B. Wang, G.R. Uhl, F.I. Carroll, B. Blough, R.B. Rothman (1994) Discovery of a Novel Chiral Benzazepine Derivative, RTI 4793-41, Whose Enantiomers Bind Potently and With Moderate Enantioselectivity to PCP Site 2 and Cloned DA Transporters. Committee for Problems on Drug Dependence, Palm Beach, FL.
72. Uhl, G.R., J-B. Wang, **Vandenbergh, D.J.**, D.M. Donovan, S. Davis, and L. Minor (1994) Ion Dependent Neurotransmitter Uptake: Serial Activities of Plasma Membrane and Vesicular Transporters. Porter Symposium, Stowe, Vermont.
73. Uhl, G.R., **Vandenbergh, D.J.**, P.S. Johnson, C. Surratt, G.S. Bird, D. Surratt, A.L. Hawkins, C.A. Griffin, K.C. Rice, H. Kayakiri, H. Xu, R.B. Rothman, and J.-B. Wang (1994) Human Opiate and Cocaine Receptor cDNAs and Genes: Molecular and Pharmacologic Studies. Committee for Problems on Drug Dependence, Palm Beach, FL.
74. **Vandenbergh, D.J.**, A.M. Persico, J. Gelernter, G.S. Bird, R. Crowe, R. Kurlan, D. Pauls, O. Hurko, H. Singer, K.K. Kidd, and G.R. Uhl. (1993) Human Dopamine Transporter cDNA and Genomic Clones: Structure, Chromosomal Location, Allelic Variants, and Relationship to Dopaminergic Disorders. *Gordon Research Conference on Catecholamines*, Proctor Academy, N.H.
75. **Vandenbergh, D.J.** and D. J. Anderson (1989) A Molecular Correlate of Chromaffin Cell Plasticity: Regulation of Neural Specific Gene Expression in Chromaffin Cells and its Relationship to Phenotypic Plasticity. UCLA Symposia on Molecular and Cellular Biology-Developmental Biology. *J. Cell Biochem.* **13C** (Sup) 281.
76. James-Pederson M, **Vandenbergh, D.**, Hardison R. (1988) DNA-Sequences in the 3' Flanks of Globin and SV40-Genes Involved in the Attenuation of Transcription by RNA Polymerase-II. *FASEB Journal*, **2**(5) A1029.
77. **Vandenbergh, D.J.** and R.C. Hardison, (1986) Transcription of the Rabbit Alpha1-Globin Gene. *Federation Proceedings* **45**, 1584. (Abst. #603: Amer. Soc. Biol. Chem., Amer. Chem. Soc.).

Presentations and Posters, Local

1. Add Powers K, et al. and others of undergrad research exposition???

2. Murray, J., Schlomer, G. L., **Yates, B., & **Vandenbergh, D. J.** (May, 2017). *The effects of the CAG and GGC androgen receptor gene polymorphisms on age at menarche, father absence, and risky sexual behaviors.* Educational and Counseling Psychology Research Graduate Student Organization 16th Annual Poster Session. Albany, NY.
3. Cleveland HH, **Vandenbergh DJ**, Schlomer GL, Griffin AM (February, 2017) Strategies to operationalize specific genetic variance for behavioral science. The Center for Family Resilience, Stillwater, OK
4. Schlomer GL, Cleveland HH, Feinbergh ME, Greenberg MT, Spoth RL, Redmond C, **Vandenbergh D.** (September, 2016) A substance use prevention intervention reduces the association between OPRM1 and alcohol use among high school adolescents. The 2nd Annual School of Education Day, University at Albany, Albany, NY.
5. Schlomer, G. L., Cleveland, H. H., **Vandenbergh, D. J.**, Feinberg, M. E., Greenberg, M. T., Spoth, R., Redmond, C. (Sept, 2016). *5-HTTLPR moderates intervention effects on early adolescent aggressive behavior problems – extending previous cGxE findings.* The Annual School of Education Day, University at Albany, Albany, NY.
6. **Yates, B. A., Schlomer, G. L., & **Vandenbergh, D. J.** (April, 2016). *Gene-environment interactions between the androgen receptor gene and parent spousal status on age at menarche and risky sexual behavior in college-age women.* Biobehavioral Health First Annual Founder's Endowment for Excellence and Innovation Research Day. University Park, PA.
7. **Yates, B. A., Schlomer, G. L., & **Vandenbergh, D. J.** (April, 2016). *Gene-environment interactions between the androgen receptor gene and parent spousal status on age at menarche and risky sexual behavior in college-age women.* Penn State Undergraduate Research Exhibition. University Park, PA. [3rd Place Award: John Sr. and Kimlyn Patishnock University Libraries Award for Information Literacy]
8. Cleveland HH, **Vandenbergh DJ.** G x E interactions involving a large scale substance use intervention: Analytic strategies and early findings. First Annual Penn State Addiction Symposium, Hershey PA, Jan15-16, 2015.
9. **Vandenbergh DJ**, Schlomer GL, Cleveland HH, Schink AE, Feinberg ME, Neiderhiser JM, Greenberg MT, Spoth RL, Redmond C. (2015) A School-Based Intervention Reduces High-School Smoking Based on Genotype at the Alpha5 Nicotinic Receptor Subunit Gene (CHRNA5). First Annual Penn State Addiction Symposium, Hershey PA, Jan15-16.
10. Tricou EP, Hair KL, **Vandenbergh DJ** (2014) Genotyping a Functional SNP in the *Chrna4* Gene in the Agouti Mouse. Undergraduate Research Exhibition, Penn State, University Park, PA April 9, 2014
11. Snyder SP, Hair KL, **Vandenbergh, DJ** (2014) Inexpensive and Fast Technique for Genotyping the -141C Ins/Del Polymorphism. Undergraduate Research Exhibition, Penn State, University Park, PA April 9, 2014

12. Gyekis J, Dingman M, **Vandenbergh DJ**. (2011) Effects of Perinatal Methyl Donor Supplementation on Adolescent Nicotine Consumption in Mice. Graduate Exhibition, Penn State University, University Park, March 27.
13. Foreman JE, Klein LC, Stine MM, and **Vandenbergh DJ**. (2006) A Network of Nicotine Regulated Genes in Adolescent Mouse Nucleus Accumbens. Neuroscience Day, Penn State University, Sept. 16.
14. Foreman, J.E., Klein, L.C., Stine, M.M., and **Vandenbergh D.J.** (2006) Network Analysis of Nicotine Regulated Genes, Genetics Symposium, Penn State University, April 22.
15. **Vandenbergh, David J.**, Jessica Mong, Laura Cousino Klein, Michele M. Stine, Donald Pfaff, George P. Vogler, Francesca Callegari, & Francesca Chiaromonte. (2004) Sex Differences Dominate Patterning of Gene Expression in Neonatal Mouse Brains Following Prenatal Exposure to Nicotine. Huck Institutes of the Life Sciences, Neuroscience Option Journal/Research Club, August 25.
16. Lang, D., Sharkey, N.A., Vogler, G.P., Blizard, D., **Vandenbergh, D.J.**, Larsson, L.G., and McClearn, G.E. (2001) Genetic Determinants of Skeletal Strength and Architecture. Sixteenth Annual Graduate Exhibition, The Pennsylvania State University, University Park, PA, March.
17. Mack, H. A., Grant, M. D., Kerin, T. K., Fernandez, J. R., Vogler, G. P., **Vandenbergh, D.J.** and McClearn, G. E. (2001). Quantitative Trait Loci (QTL) analysis of body weight in F2 and recombinant inbred mice. Sixteenth Annual Graduate Exhibition, The Pennsylvania State University, University Park, PA, March.

TEACHING & MENTORING

Formal Classroom Teaching

1. *Neuroanatomy, Behavior, and Health* (BBH 368, 3 credit hours)
Role: Instructor
Offered: 1 semester – present
Enrollment: 25 students
Description: The relationships between the structures of the human nervous system and their roles in monitoring and controlling body functions, in regulating behavior, and in health and disease are presented.
2. *Functional and Integrative Neuroscience*, (BBH/BIOL 470, 3 credit hours)
Role: Instructor
Offered: 1 semester – present
Enrollment: 80 students

Description: This course presents a systems-level analysis of Sensory, Motor, and Regulatory systems, and consider how these systems are integrated and altered throughout the life span in both health and disease.

3. *Developmental and Health Genetics*, (BBH 410, 3 credit hours)
Role: Instructor (2010-present)
Prior Role: Co-Instructor (1998-2009)
Offered: **15 semesters, 20 lectures as Co-Inst., 45 Lectures as Inst. per semester**
Enrollment: 35-60 students
Description: This course focuses on genetic influences on complex traits that are relevant to health and development, covering molecular genetics, genetic epidemiology and quantitative genetics.
4. *Pharmacological Influences on Health* (BBH 451, 3 credits)
Role: Instructor
Offered: **7 semesters, 45 lectures per semester**
Enrollment: 50-100 students
Description: This course uses psychopharmacology to introduce students to the integration of pharmacology and biobehavioral health
5. *Research and Applications in Biobehavioral Health* (BBH411W, 3 credits)
Role: Instructor
Offered: **1 semester, 45 lectures per semester**
Enrollment: 25
Description: This course is a designated **writing**-intensive class with limited-enrollment in which the students import a national database (e.g. NHANES), choose variables to analyze and prepare a major paper on the results. It allows practice in the application of research skills under close supervision.
6. *Biobehavioral Systems in Health and Development: Processes and Integration* (BBH 503, 3 credits)
Role: Instructor
Offered: **7 semesters, approximately 15 lectures per semester**
Enrollment: 6-10 graduate students
Description: This course is a survey of the biological bases of health, including pharmacology, neurobiology, endocrinology, and immunology, allowing the students to apply basic biological knowledge to aid in the design of intervention strategies for promoting healthy development.
7. *Grant Writing in Aging Research* (BBH 597A, 3 credits)
Role: Co-instructor
Offered: **1 semester, 5 lectures per semester**
Enrollment: 3 graduate students
Description: This course was designed to allow students in an NIH-funded training grant to prepare data for publication and grant submission.
8. *Neuroscience Seminar* (IBIOS 598a, 1 credit)

Role: Instructor

Offered: **11 semesters, 15 10-min lectures per semester**

Enrollment: 6-10 graduate students

Description: This course guided the student in methods to review neuroscience presentations for content and style, and was taught in tandem with IBIOS 598C.

9. *Current Topics in Neuroscience* (IBIOS 598C, 1 credit)

Role: Instructor

Offered: **11 semesters, 15 lectures per semester**

Enrollment: 6-10 graduate students

Description: This course used papers sent by upcoming neuroscience seminar speakers to prepare presentations on the upcoming seminar to give the students the necessary background for understanding the presentation. It was taught in tandem with IBIOS 598A.

10. *Neurobiology of Addiction* (BBH 597G, 3 credits)

Role: Instructor

Offered: **3 semesters, 45 lectures per semester**

Enrollment: 3-5 graduate students

Description: This course guided students to examine the neurobiology of addiction as a focus to achieve a greater understanding of: 1) current theories of addiction's definition; 2) the neurobiological pathways that are altered by addictive drugs; and 3) molecular, cellular, physiological, and behavioral responses to these drugs. This course was cross-listed as IBIOS 597C in the first 2 semesters (*Molecular and Biobehavioral Aspects of Drug Abuse*).

Guest Lectures in Class (as of 2015)

"Neurogenetics," BBH/BIOL 470 Systems Neurobiology, Dr. Kamens (instructor) April 16, 2015

"Pharmacodynamics," BBH 503 Biobehavioral Systems in Health and Development: Processes and Integration, Dr. Cavigelli (instructor) Feb 14, 2015

"Pharmacokinetics," BBH 503 Biobehavioral Systems in Health and Development: Processes and Integration, Dr. Cavigelli (instructor) Feb 12, 2015

Doctoral Dissertation Supervision

1. Foreman, Jennifer E., "Prenatal Nicotine Exposure Alters Gene Expression in a Sexually Dimorphic Manner," Ph.D dissertation, Intercollege Program in Genetics, (Dissertation Advisor, Committee chaired by Dr. Guy Barbato), Penn State, 2007
2. Yao, Xiaopan, "Investigation of the Genetic and Environmental Effects of Hypertension (High Blood Pressure) in African Americans," Ph.D dissertation, Intercollege Program in Genetics, (Dissertation Advisor, Committee chaired by Dr. George Vogler), Penn State, 2007

3. Gyekis, Joseph, "Three Approaches to Investigating an Epigenetic Basis to Nicotine Consumption in Adolescent Mice: *Agouti Viable* Yellow Programming, Methyl Donor Supplementation, and Maternal Care," Ph.D dissertation, Biobehavioral Health (Dissertation Advisor), Penn State, 2011
4. Altieri, Stefanie, "Developmental Perspectives on Serotonin and Susceptibility to Mood and Anxiety Disorders," Ph.D dissertation, Integrative Biosciences-Neuroscience, (Co-advisor with Dr. Anne Andrews,) Penn State, February 8, 2013
5. Dingman, Marc, Predictors of Nicotine Drinking in C57BL/6J Mice: An Evaluation of the Voluntary Oral Nicotine Consumption Method, Integrative Biosciences-Neuroscience (Dissertation Advisor), Penn State, May, 2013
6. Beikman, Brendan, Serotonin Transporter Function in Peripheral Blood Cells as a Biomarker for Depression Treatment Responsiveness, Integrative Biosciences-Neuroscience (Co-advisor with Dr. Anne Andrews), Penn State, December 6, 2013
7. Alam, Gelareh, Host Susceptibility to Environmental Toxicants. Biobehavioral Health, (Co-Adviser with Dr. Byron Jones), August, 2015

Masters Thesis Supervision

1. Kerin Tara, "Influence of Intrauterine Position on Blood Chemistry Variables and Weight in Adult Mice" Masters Thesis, Biobehavioral Health, Penn State, 2001
2. Schink, Alisa, "Genetic Analysis of Smoking-Based Phenotypes Using Polygenic Risk Score Methodology through Identification of Risk Alleles within the Direct and Indirect Striatal Pathways," Molecular Cellular and Integrative Biosciences, August, 2015

Chair of Graduate Degree Candidate Committees, but Not Advisor

1. Pearson, Laurel; Genetics Program; Advisor: Shriver, Anthropology, Dissertation: "Genetic and Environmental Contributions to Disparities in Preterm Birth Among African-American Women," 2012.
2. Megan Rogers, Genetics Program; Advisor: Shriver, Anthropology, Masters Thesis: "Using Genomic Ancestry and Demographic Variables to Study Perception in Human Faces," 2012.

Doctoral Dissertation Committee Member

1. Borriello, Giulia, "The Intergenerational Transmission of Mathematics Achievement: A Genetically Informed Study," Psychology, (Adviser: Neiderhiser), 2017-2018 July
2. Griffin, Amanda, "Resilience in the face of homelessness: Investigating the within-day emotional and academic processes of homeless youth," Human Development and Family Studies, (Adviser: Cleveland) 2014-2018

3. McSweeney, Colleen, "RBM8a is required for normal cortical development," Integrative Biosciences-Neuroscience, Mao, 2014-Dec 2017
4. Caruso, Michael, "The impact of Adolescent Social Experiences on Adult Adreocortical Activity, Affect-Related Behavior, and Nicotine Responses," Biobehavioral Health, Cavigelli, June 13, 2017
5. Tam, Helen, Early Negative Emotional Reactivity, Cognitive Control, and Structured Home Environments on ADHD Outcomes. Child Clinical Psychology, Huang-Pollock, May 2016.
6. Chaby, Lauren, Long-Term Behavioral and Cognitive Changes Following Stress in Adolescence. Integrative Biosciences-Neuroscience, Braithwaite December, 2015
7. Yertutanol, Sezen, Conditioning Discrete Visual Cues to Aversive Interoceptive Stimuli in the Mouse. Biobehavioral Health, Blizard, August, 2015
8. Melissa Mercincavage, Nicotine Content Description Effects on Subjective Responses to Smoking and Smoking Behaviors: Implications for Nicotine Reduction Strategies. Biobehavioral Health, Branstetter, May, 2015
9. Li, Xiaofan, Evolutionary Origins and PIP₂ Modulation of Voltage-Gated K⁺ Channels. Integrative Biosciences-Cell & Developmental Biology, Jegla December, 2015
10. Revitsky, Alicia, The Neurobiological Underpinnings of Nicotine Exposure on Limited Access Ethanol Consumption in Periadolescent Female C57BL/6J Mice. Integrative Biosciences-Neuroscience, Klein, August, 2014
11. Morrissey, Christopher, "Understanding the Epigenetics of Erythroid Differentiation Through the Power of Deep Sequencing." Bioinformatics and Genomics (Advisors: Hardison & Miller), 2013
12. Gilman, T. Lee, "How Serotonin System Alterations Influence Emotion- and Cognition-Related Behaviors," Neuroscience (Advisors: Andrews & Vrana), 2013
13. DuPuis, David, "Development of the Error-Related Negativity and Behavioral Variability in Childhood: Clarification of Neural Processes Using Wavelet Analysis," Integrative Biosciences-Neuroscience (Advisor: Gatzke-Kopp), 2013
14. Cheunkar, Sarawut, "Molecular Self-Assembly for Biological Investigations and Nanoscale Lithography," Chemistry (Advisors: Weiss & Andrews), 2013
15. Krishnan, Mera, "Statistical Methods for Identifying Novel DNA Sequence Variants Associated with Atherosclerosis," Biobehavioral Health (Vogler), 2012
16. Yin, Lina, "Genetic-Based, Differential Susceptibility to Paraquat Neurotoxicity in Mice," Integrative Biosciences-Neuroscience (Advisor: Jones), 2012
17. Yousef, Wael Mohammed, "Neurobehavioral Sequelae of Early Iron Deficiency in Rats," Integrative Biosciences-Neuroscience (Advisor: Jones), 2011

18. Liberton, Denise “An Investigation into Genes Underlying Normal Variation in Facial Morphology in Admixed Populations,” Anthropology (Advisor: Shriver), 2011
19. Bressler, Amanda, “Assessing Gene, Environment, and Gene x Environment Effects on Anxiety-Related and Learning Behaviors in Mouse Models,” Chemistry (Advisor: Andrews), 2011
20. Ragan, Christina, “Sibling Variance in Early Live Social Interactions Predicts Adult Anxiety-Related Behavior and Physiology In Rodents,” Integrative Biosciences-Neuroscience (Advisor: Cavigelli), 2011
21. Kartikeyan, Ramya, “Regulation of JC Virus Early mRNA Alternative Splicing,” Biochemistry & Molecular Biology (Advisor: Frisque), 2011
22. Kapelewski, Christine, “Effects of Age on Nicotine Consumption and Enzyme Activity Following Methoxsalen Administration in C57BL/6J Male Mice.” Integrative Biosciences-Neuroscience, Klein), 2010
23. Jones, Leslie, “Genetics and Genomics of Iron Homeostasis in the Brain,” Integrative Biosciences-Neuroscience (Advisor: Jones), 2010
24. Bennett, Jeanette, “Nicotine modulation of anti-viral immunity in periadolescent male and female C57BL/6J mice,” Biobehavioral Health, Klein), 2010
25. Quillen, Ellen, “Investigating Genes Related to the Evolution of Indigenous American Skin Pigmentation,” Anthropology, (Advisor: Shriver), 2010
26. Vasilopoulos, Theresa, “Genetic and Environmental Contributions to the Relationship Between Cognitive and Physical Function,” Biobehavioral Health (Advisor: Vogler), 2009
27. Ramesh, Saradha, “Developmental Aspects of Task Persistence and its Relationship with Reading Skills” Biobehavioral Health (Advisor: Petrill), 2008
28. Hollingshead (Marin), Holly, “The role of peroxisome proliferator-activated receptor beta in colon carcinogenesis” Biochemistry and Molecular Biology (Advisor: Peters), 2007
29. Johannes, Frank, “Mapping Temporally Varying Quantitative Trait Loci in Time-to-Failure Experiments,” Biobehavioral Health (Advisor: Vogler), 2006
30. Finnegan, Tom, “Opioid Regulation of Synaptic Transmission in the Brain,” Pharmacology, Penn State College of Medicine (Advisor: Pan), 2005
31. Ramadoss, Preeti, “Divergent Behavior of Mouse and Human Aryl-Hydrocarbon Receptors,” Biochemistry, Microbiology & Molecular Biology (Advisor: Vanden Heuvel) 2005

32. Kim, Dae Joon, "The Role of Peroxisome Proliferator Activated-Receptor Beta in Skin Carcinogenesis and Homeostasis," Veterinary Science, (Advisor: Peters), 2004
33. Mathews, Tiffany, "In vivo microdialysis to investigate serotonin and dopamine neurotransmission in mouse models of psychiatric and degenerative diseases," Chemistry, (Advisor: Andrews), 2003
34. Mack, Holly A., "Heritability Estimates For Functional Capacity Measures in an Elderly Swedish Twin Sample," Biobehavioral Health, (Advisor: Vogler), 2003
35. Grant, Michael D., "Genetic and Environmental influences of Plasma Levels of Homocysteine in an Octogenarian Swedish Twin Population: Homocysteine and Cognitive Function," Biobehavioral Health (Advisor: McClearn), 2003
36. Quirk, Jeffery, "A Co-Twin Control Study of the Effects of Smoking on Blood Pressure in Elderly Swedish Twins," Biobehavioral Health (Advisor: Vogler), 1999

Doctoral Dissertation (In progress)

Silva Gallardo, Constanza, Candidacy Committee (2016-17), Comprehensive committee (2018-??), Biobehavioral Health, (Kamens, advisor) 2016

Caulfield, Jasmine. (Cavigelli, advisor) Doctoral Comprehensive Exam Committee Member July 2018-present

Baker, Allison, Neuroscience Doctoral Committee (Hayes, advisor) July, 2018-present

Zeid, Dana. Doctoral Comprehensive Exam Committee Member, Biobehavioral Health (Gould, advisor) Oct, 2018

Masters Thesis Committee Member

1. Roby, Alison, "The Functional Connectivity Changes In the Rat Brain Following Acute and Chronic Nicotine Administration" simultaneous Honors Thesis, Biomedical Engineering (Adviser Zhang), May, 2018
2. Griffin, Amanda, "Differential Susceptibility to the Effects of Peer Pressure and Positive Friend Support on Alcohol Use" Human Development and Family Studies, (Adviser: Cleveland), December 2015
3. Jenkins, Brenita, "Examining the Role of $\alpha 6\beta 2^*$ Nicotinic Acetylcholine Receptors on Ethanol-Induced Behavioral Responses in Adolescent C57BL/6J Mice," Molecular, Cellular & Integrative Biosciences, (Adviser: Kamens), December, 2015
4. Harrison, Michelle, "Investigating the role of RNA-binding Motif 8A (RBM8A), also known as Y14, in Schizophrenia," Integrative Biosciences-Cell & Developmental Biology (Adviser: Mao), 2013

5. Mathes, Kerri, "A Preliminary Genetic Investigation of Normal Variation in Facial Features," *Genetics*, (Advisor: Shriver), 2008
6. Geraghty, Jeff T., "A Review of the Genetics of Alcoholism and a Confirmatory Study of an Acute Alcohol Withdrawal Quantitative Trait Locus in Mice," *Genetics* (Advisor: McClearn), 1998

Undergraduate Honors Theses Advisor

1. Sally Shan Li, "Discovery and Implications of a New Variable Tandem Repeat in the Dopamine Transporter Gene," *Biology*, May, 2017.
2. Bethany Latten, "Testing a Gateway to Addiction: Behavioral and Neurophysiological Effects of Early Exposure to Saccharin, Caffeine and Nicotine in Adolescent Mice." *Biobehavioral Health*, May, 2016
3. Brianna Yates, "Gene-Environment Interactions Between The Androgen Receptor Gene and Father Absence on Age at Menarche and Risky Sexual Behavior in College-Age Women." *Biobehavioral Health*, May, 2016
4. Rachel Witowski, "Methylation of the Glial Derived Neurotrophic Factor Gene Promoter in the Mesolimbic Pathway," *Biology/Psychology*, December 2013
5. Erin Lathrop, "The Effect of pH on Taste and Nicotine Consumption in B6 Adolescent Mice," *Biobehavioral Health*, May 2012
6. Samir Patel, "The Effects of Nicotine on DNA Methylation Patterns of the Peroxisome Proliferator-Activated Receptor Alpha Gene," *Biology*, May 2012
7. Elisabet Eppes, "The Ethical and Historical Implications of Biological Reductionism in Psychiatric Perspectives on Social Anxiety Disorder and the Case for Explanatory Pluralism," *Biobehavioral Health*, May 2009
8. Megan Krench, "The Effects of Eye Opening on Excitatory Synapse Formation in Layers II/III of the Visual Cortex," *Life Science*, May 2009
9. Kathryn Gilbert, "Exploring the Development and Behavior of Children with FXS Intermediate Alleles." *Biobehavioral Health*, May 2008
10. Andrew Ward, "Prophylactic Effects of a Novel Peptide on the Incidence and Severity of Experimental Autoimmune Encephalomyelitis in SJL/J Mice Fed a High Fat Diet," *Biobehavioral Health*, May 2007
11. Dana Webster, "Examining the Relationship Between Visual Processing and Early Reading Development," *Biobehavioral Health*, May 2007

12. Jeffery Markowitz, "Autonomy, Love, and Bioethics," Biobehavioral Health, May 2006
13. Melissa Jung, "Gene Expression in Mice Following Prenatal Nicotine Exposure," Biology, May 2004
14. Stephanie Cerceo, "A Molecular Characterization of a Mouse EST" Biology, May 2003
15. Adriana Quinones, "Identification of Highly Polymorphic Introns in the Human Dopamine Transporter Gene" Premedicine, May 2003
16. Christina Bennett, "Analysis of Polymorphism in the Dopamine Transporter Gene," Biology, May 2000

Undergraduate Honors Theses Advisor (in progress)

None at this time

Undergraduate Honors Thesis Reader (Committee)

Alexandre Bourcier, "To be determined???" Biology, Nichole Crowley, advisor, Date???

Mentoring Post-Graduate Scientists

1. Gabriel Schlomer, Post-doctoral fellow, Co-advised with H. Harrington Cleveland on NIH (NIDA) R01 grant, "Implications of Genetic Variance for Substance Use Interventions in Adolescence" June 2012 to present
2. Helen Kamens, K01 award recipient and assistant professor in the Department of Biobehavioral Health. Grant title: "Genetics of Alcohol and Nicotine Behavior." August 2013 to present
3. Chad Shenk, KL2 award recipient (Penn State's CTSI), and assistant professor in the Department of Human Development and Family Studies. Grant Title: "Genetic Variation in Abused Children with PTSD." December 2013 to present
4. Anne-Marie Chang, K01 award recipient and assistant professor in the Department of Biobehavioral Health. Grant title: Effect of circadian gene variants on sleep, obesity, and metabolic phenotypes. June 2014 to present.

SERVICE

Service to the profession

Reviewer for National Institute on Drug Abuse, Identification of Gene Variants for Addiction Related Traits by Next-Gen Sequencing in Model Organisms Selectively Bred for Addiction Traits (UH2/UH3) program

Reviewing Editor, *Frontiers in Toxicogenomics* (April, 2014 to present)

Ad-hoc reviewer for Conference abstracts, Society for Research on Nicotine & Tobacco, Preclinical Program Committee, Sept. 2014, & Sept. 2018

Member, Society for Research on Nicotine & Tobacco, Program Committee, 2004-2005

Manuscript Reviewer (>26 journals since 1995, in alphabetical order)

Acta Neuropsychiatrica, *Aging Clinical and Experimental Research*, *Alcohol*, *American Journal of Medical Genetics Part B: Neuropsychiatric Genetics*, *American Journal of Psychiatry*, *Behavior Genetics* (2 in 2014), *Biological Psychiatry* (2016), *BioTechniques*, *BMC Medical Genetics* (2016), *Endocrine* (2017); *Genes Brain & Behavior* (2017), *Genomics*, *Health Psychology*, *International Journal of Neuropsychopharmacology*, *Journal of Aging Clinical and Experimental Research*, *Journal of the American Geriatric Society*, *Journal of Biological Chemistry*, *Journal of Neurochemistry*, *Journal of Neurophysiology* (2014), *Journal of Neuroscience*, *Molecular Brain Research*, *Molecular Psychiatry*, *Neuropharmacology*, *Neuropsychopharmacology*, *Neuroscience Letters*, *Nicotine & Tobacco Research* (2017), *Nutritional Neuroscience* (1 in 2014, 1 in 2016), *Physiology & Behavior*, *PLoS One* (2015, 2 in 2016, 1 in 2017) *Proceedings of the National Academy of Science (PNAS)*, *Pharmacogenomics Journal* (2014, 2016), *Toxicological Sciences*

Co-signatory, World Scientists' Warning to Humanity: a second notice" by Ripple et. al. *BioScience*, (2017)

Service to the Commonwealth

Presentation to Commonwealth of Pennsylvania Representatives, Senators, and Aides on Molecular Genetics of Addiction related to disbursement of Tobacco Settlement Funds, Pennsylvania State College of Medicine. Oct. 4, 2000

Service to the university, college, department, or institute

Member, Advisory Board for the Social Behavioral Neuroscience Dual Title Degree Program, Jan 2019-present

Member, Evaluation and Assessment Committee for the Penn State Biomedical Big Data to Knowledge (B2D2K) Training Program, Jan 2018-present

Co-chair, BBH Faculty Search Committee for Genetic Epidemiology July 2017 – March 2018

Grant proposal reviewer, Huck Graduate Research Innovation, Huck Institutes of the Life Sciences, May 2017 and May 2018

Judge, Life Science Symposium Poster Session, Life Science Symposium Planning Student Committee, Huck Institutes for the Life Sciences, May 18-19, 2017

Member, Promotion and Tenure Committee, Biobehavioral Health 2017-2019

Chair, Organizing Committee, The Dr. Gerald E. "Jerry" McClearn Memorial Symposium, Department of Biobehavioral Health, January 2017 – July 21, 2017

Member, College of Health and Human Development, Task Force to Envision a Personalized Health Center, January – July 2017

Member, New BBH Faculty Search Committee, November, 2016 – May, 2017

Member, University Task Force to Establish Freezer Farm, October, 2016 – 2017

Member, Genomics Core Facility Director Search Committee, Huck Institutes for the Life Sciences, April-May 2016

Judge, Undergraduate Research Exhibition, April 18, 2018

Judge, Graduate Research Exhibition, 2014-2018

Chair, BBH Research Committee, August 2015-2016

Member, Biological & Life Sciences Interest Group, College of Health & Human Development, Subcommittee on Huck & Hershey Communications, November 2014-2017

Member, Dual-Title Neuroscience Faculty Committee, College of Health & Human Development, August 2014-August 2017

Member, Sustainability and Diversity Committee, Biobehavioral Health, 2013-2015

Member, Graduate Admissions Committee, Biobehavioral Health, 2013-2014

Advisor, Genetics Awareness Project (Student Club), Spring 2013-Fall 2014

Member, Child Maltreatment Faculty Search Committee, Biobehavioral Health, 2013

Member, Promotion and Tenure Committee, Biobehavioral Health 2012-2013

Associate Director, Penn State Institute for the Neurosciences, 2012-present

Chair, Green Team Committee, Biobehavioral Health 2011-2013

Chair, Genetics Faculty Search Committee, Biobehavioral Health 2011-2012

Member, Building Dedication Committee, Biobehavioral Health, 2011

Member, Social/Graduation Committee, Biobehavioral Health 2009-2013

Member, Diversity Committee, Biobehavioral Health 2007-2013

Member, Bioinformatics & Genomics Option-IBIOS Steering Committee, 2005-2012

Member, Genomics Core Facility of the Huck Institute for Life Science Advisory Committee
2003-present

Alternate Member, Institutional Review Board, 6/1/09-present

Member, Institutional Review Board, 1/1/07-5/30/09

Alternate Member, Institutional Review Board, 7/1/00-12/30/06

Member, Social Sciences Research Institute Bio-Bases Vision Committee, 2007-2008

Advisor Honors Scholar Program, Biobehavioral Health, 2005-2011

Member, Seminar Committee, Neuroscience Institute, Huck Institutes for Life Sciences,
2004-2012

Member, Senior Neuroscience Faculty Search Committee, Eberly Col. of Science/Huck
Institutes for Life Sciences, 2003

Member, Faculty Search Committee Environmental Consortium/Biobehavioral Health/Center
for Developmental and Health Genetics co-hire, 2002-2003

Member, Life Sciences Consortium Committee on Infrastructure for Genomics, Proteomics,
and Bioinformatics, 2002

Reviewer, Tobacco-Related Disease Research Program (TRDRP), State of California 2001-
2006

Member, Senior Environmental Faculty Search Committee, College of Agricultural Sciences,
2001

Member, Joint Biobehavioral Health/Life Sciences Consortium Faculty Search Committee for
Toxicogenetics, 2001

Co-Chair, Annual BBH Scientific Research Poster Sessions, 2001-2002

Member, Intellectual Property Committee, College of Health & Human Development, 2000

Environmental & Health Safety Faculty Coordinator, Dept. of Biobehavioral Health, PSU,
2000-2001

Chair, Colloquium Committee, Dept. of Biobehavioral Health, PSU, 1999-2001

Member, Colloquium Committee, Dept. of Biobehavioral Health, PSU, 1998

Member, Compensation (for Research Volunteers) Committee, Intramural Research Program, National Institute on Drug Abuse, 1996

Member, Promotion and Tenure Committee, Intramural Research Program, National Institute on Drug Abuse, 1997

Professional Affiliations

American Association for the Advancement of Science, Member 1984-present
Society for Neuroscience, Member 1988-present, Secretary of Baltimore Chapter '94
Society for Nicotine and Tobacco Research, Member 2000-present
American Society of Human Genetics, Member 2015-present

Consulting

Universidad Pontificia Bolivariana Medical School, Medellin, Colombia to review and advise on genetic data collection and candidate gene selection for ongoing drug abuse studies, February 23-March 1, 1999.

International Biogerontological Research Institute (IBRI) to represent Dr. McClearn at the Board of Directors and Scientific Advisors Meeting to review and advise on establishment of a molecular genetic laboratory on site in San Pietro, Italy, April 28-29, 1999.

Tourette's Syndrome Association; Pharmacogenetics in Tourette Syndrome: Predicting a Therapeutic Response; \$75,000; Harvey Singer (JHMI), PI; Role: Consultant. Provide advice on genotype production and analysis. June 2002-May 2003.

NIH/NCI; Gene by Environment Factors in Smoking Cessation; Andrew Hyland (Roswell Park Cancer Institute), PI; Role: Consultant. Provide advice on selection of candidate genes for genotype analysis and purification of DNA samples from research volunteers. July 2004-June 2008.

PATENTS

Uhl GR, Vandenberg DJ, and Persico AM. Sequence of Dopamine Transporter cDNA. International Patent # PCT/US93/05179, Ref # 1173-406P Sept. 20, 1991.

Uhl GR, Vandenberg DJ, and Persico AM. Sequence of Human Dopamine Transporter cDNA. US Patent 08/301722, May 26, 1998.