**James Dee Higley**

Professor

Department of Psychology

1042 SWKT

Brigham Young University,

Provo, Utah 84602

(301) 467-8906 (cell)

801-422-7139 (BYU Office)

Fax: 801-422-0602

Research Specialization: Developmental Psychobiology and Psychopathology

**Curriculum Vitae for James Dee Higley**

Educational History

Bachelor of Science – 1980, Brigham Young University

Master of Science – 1983, University of Wisconsin -- Madison

Doctor of Philosophy –1985, University of Wisconsin -- Madison

Relevant Work Experience

1. Psychiatric Aide at the Utah State Hospital (1975-1977) –Counseled patients suffering from various psychiatric disorders including: alcoholism, drug dependency, psychosis, antisocial personality, and schizophrenia
2. Correctional Counselor at the Utah State Prison Alcohol Rehabilitation Unit (1977-1980)–Provided counseling and maintained security
3. Research Assistant for the University of Wisconsin Psychology Department, Primate Laboratory (1980-1983)
4. Research Psychologist for the National Institutes of Health (1983-1985)
5. Awarded National Research Service Award (1985-1987) by the National Institute on Alcohol Abuse and Alcoholism
6. Staff Fellow, National Institute on Alcohol Abuse and Alcoholism – 1987-1990
7. Senior Staff Fellow, National Institute on Alcohol Abuse and Alcoholism – 1990-January, 1995
8. Awarded Tenure, January, 1995
9. Research Psychologist and Director Laboratory of the Laboratory for the Study of Primate Models of Psychopathology, National Institute on Alcohol Abuse and Alcoholism – 1995-2004
10. Section Chief for the Section for the Study of Primate Models of Psychopathology, National Institutes of Health, NIAAA, LCTS, 2004-June 2006
11. Professor of Psychology, Brigham Young University, June 2006 – present.

Research and Publication Vitae

1. Higley, J. D. (1984) The illustrated squirrel monkey (Review of Squirrel Monkeys in a Seminatural Environment). American Journal of Primatology, 6, 253-254.
2. Higley, J.D. & Suomi, S.J. (1986) Parental behavior in non-human primates. In W. Sluckin (Ed.), Parental Behavior in Animals and Humans. Oxford, England: Blackwell Press. pp. 152-207
3. Higley, J.D., Hopkins, W. D., Hirsch, R. M., Marra, L. M., & Suomi, S.J. (1987) Infantile coloration as a releasing stimulus of maternal behavior in rhesus macaques (Macaca mulatta). Developmental Psychobiology, 20, 7-18.
4. Higley, J.D., & Suomi, S.J. (1989) Temperamental reactivity in nonhuman primates. In D. Kohnstamm, J. E. Bates, & M. K. Rothbart (Eds.), Temperament in Childhood. West Sussex, England: John Wiley & Sons Limited. pp. 153-167.
5. Higley, J. D., & Suomi, S. J. (1989) Day care and the promotion of emotional development: Lessons from a monkey laboratory. In J. Lande, S. Scarr, & N. Gunzenhauser (Eds.), Caring for Children: A Challenge to America. Hillsdale, New Jersey: Lawrence Erlbaum & Associates. pp. 77-91.
6. Champoux, M., Higley, J. D., & Suomi, S. J. (1989) Rehousing nonreproductive rhesus macaques with weanlings: II. Reformation by Weanlings. Laboratory Primate Newsletter, 28, 4-6.
7. Suomi, S.J., Scanlan, J. M., Rasmussen, K.L.R., Davidson, M., Boinski, S., Higley, J.D., & Marriott, B. (1989) Pituitary--adrenal response to capture in Cayo Santiago--derived group M rhesus monkeys. Puerto Rico Health Sciences Journal, 8 171-176.
8. Higley, J.D., Suomi, S.J., & Linnoila, M. (1990) Parallels in aggression and serotonin: Development, rearing history, and sex differences. In H. M. Van Praag, R. Plutchik, and A. Apter (Eds.), Violence and Suicidality: Perspectives in Clinical and Psychobiological Research: Monograph No. 3. Clinical & Experimental Psychiatry New York: Brunner/Mazel Publishers. pp. 245-256.
9. Higley, J.D., Suomi, S.J., & Linnoila, M. (1990) Serotonin in nonhuman primates: gender, rearing, and developmental correlates with behavioral timidity and affective psychopathology. In E. F. Coccaro, & D. L. Murphy (Eds.), Serotonin in Major Psychiatric Disorders. APA Press Progress in Psychiatry Monograph Series. Washington, DC: American Psychiatric Press, Inc. pp. 29-46.
10. Suomi, S. J., & Higley, J. D. (1991) Rationale and methodologies for developing nonhuman primate models of prenatal drug exposure. Methodological Issues in Controlled Studies on Prenatal Effects of Drugs of Abuse: National Institute of Drug Abuse Research Monograph Series. 114, 291-302.
11. Higley, J.D., Suomi, S.J., Linnoila, M. (1991) Development, rearing history, and sex differences in CSF monoamine metabolites. Psychopharmacology, 103, 551-556.
12. Higley, J. D., Hopkins, W.D., Thompson, W. W., Byrne, E. A., Hirsch, R. M., Suomi, S. J. (1992) Peers as primary attachment sources in yearling rhesus monkeys (Macaca mulatta). Developmental Psychology, 28, 1163-1171.
13. Higley, J.D., Hasert, M.F., Suomi, S.J., & Linnoila, M. (1991) A new nonhuman primate model of alcohol abuse: Effects of early experience, personality, and stress on alcohol consumption. Proceedings of the National Academy of Science USA, 88, 7261-7265.
14. Higley, J.D., Suomi, S.J., & Linnoila, M. (1992a) A longitudinal study of CSF monoamine metabolite and plasma cortisol concentrations in young rhesus monkeys: Effects of early experience, age, sex and stress on continuity of interindividual differences. Biological Psychiatry, 32, 127-145.
15. Higley, J.D., Mehlman, P., Taub, D., Higley, S.B., Vickers, J.H., Suomi, S.J., & Linnoila, M. (1992b) Cerebrospinal fluid monoamine and adrenal correlates of aggression in free-ranging rhesus monkeys. Archives of General Psychiatry, 49, 436-441.
16. Suomi, S. J., Rasmussen, K. L., & Higley, J. D. (1993) Primate models of behavioral and physiological change in adolescence. In McAnarney, E.R., Kreipe, R.E., Orr, D.P., Comerci, G.D. (Eds.), Textbook of Adolescent Medicine. W.B. Saunders: Philadelphia. pp. 135-140.
17. Higley, J.D., Thompson, W.T., Champoux, M., Goldman, D., Hasert, M.F., Kraemer, G. W., Suomi, S.J., & Linnoila, M. (1993) Paternal and maternal genetic and environmental contributions to CSF monoamine metabolite concentrations in rhesus monkeys (Macaca mulatta). Archives of General Psychiatry, 50, 615-623.
18. Linnoila, M., Virkkunen, M., George, T., & Higley, J. D. (1993) Impulse control disorders. International Clinical Psychopharmacology, 8 (Supplement), 53-56.
19. Shoaf, S.E., Higley, J.D., & Linnoila, M. (1993) Pharmacokinetics of ipsapirone in rhesus-monkeys following IV and oral-administration. Clinical Pharmacology & Therapeutics, 53, 212-212.
20. Higley, J. D., Linnoila, M., & Suomi, S. J. (1994) Ethological contributions: Experiential and genetic contributions to the development of social competence, the expression and inhibition of aggression. In M. Hersen, R.T. Ammerman, L.A. Sisson (Eds.), Handbook of Aggressive and Destructive Behavior in Psychiatric Patients. New York: Plenum Press. pp. 17-32.
21. Mehlman, P., Higley, J.D., Faucher, I., Lilly, A.A., Taub, D., Vickers, J.H., Suomi, S.J., & Linnoila, M. (1994) Low CSF 5-HIAA concentrations and severe aggression and impaired impulse control in nonhuman primates. American Journal of Psychiatry. 151, 1485-1491.
22. Linnoila, M., Virkkunen, M., George, T., Eckardt, M., Higley, J. D., Nielsen, D., & Goldman, D. (1994) Serotonin, violent behavior and alcohol. Experientia, 71, 155-163.
23. Higley, J.D., Mehlman, P.T., Taub, D., Suomi, S.J., Higley, S.B., Vickers, J.M., Linnoila, M. (1994) Are stress hormones and serotonin related to aggression in primates - In reply. Archives of General Psychiatry, 51, 73.
24. Mehlman, P., Higley, J.D., Faucher, I., Lilly, A.A., Taub, D., Vickers, J.H., Suomi, S.J., Linnoila, M. (1995) Correlation of CSF 5-HIAA concentration with sociality and the timing of emigration in free-ranging primates. American Journal of Psychiatry, 152, 907-913.
25. Doudet, D., Hommer, D., Higley, J. D., Andreason, P. J., Moneman, R., Suomi, S. J., and Linnoila, M. (1995) Cerebral glucose metabolism, csf 5-hiaa levels, and aggressive behavior in rhesus monkeys. American Journal of Psychiatry, 152, 1782-1787.
26. Champoux, M.B., Kriete, M.F., Higley, J. D., Suomi, S. J. (1996) CBC and serum chemistry differences between Indian-derived and Chinese-Indian hybrid rhesus monkey infants. American Journal of Primatology, 39, 79-84.
27. Higley, J. D. (1996) Use of nonhuman primates in alcohol research. Alcohol, Health & Research World, 19, 213-216.
28. Higley, J.D. (1996) Juvenile primate behavior: Diversity, Development, and Evolutionary Underpinnings. American Journal of Primatology, 37, 77-82.
29. Higley, J. D., & Suomi, S. J. (1996) Effect of reactivity and social competence on individual responses to severe stress in children: Investigations using nonhuman primates. In C.R. Pfeffer, (Ed.) Intense Stress and Mental Disturbance in Children. New York: American Psychiatric Press. pp. 3-57.
30. Higley, J.D., King, S.T., Hasert, M.F., Champoux, M., Suomi, S.J., & Linnoila, M. (1996a) Stability of interindividual differences in serotonin function and its relationship to aggressive wounding and competent social behavior in rhesus macaque females. Neuropsychopharmacology, 14, 67-76.
31. Higley, J.D., Mehlman, P.T., Taub, D.T., Higley, S.B., Fernald, B., Vickers, J., Lindell, S.G., Suomi, S.J., Linnoila, M. (1996b) Excessive mortality in young male nonhuman primates with low CSF 5-HIAA concentrations. Archives of General Psychiatry, 53, 537-543.
32. Higley, J.D., Suomi, S.J., Linnoila, M. (1996c) A nonhuman primate model of Type II excessive alcohol consumption? Part 1. Low cerebrospinal fluid 5-hydroxyindoleacetic acid concentrations and diminished social competence correlate with excessive alcohol consumption. Alcoholism: Clinical and Experimental Research, 20, 629-642.
33. Higley, J.D., Suomi, S.J., Linnoila, M. (1996d) A nonhuman primate model of Type II alcoholism? Part 2. Diminished social competence and excessive aggression correlates with low cerebrospinal fluid 5-hydroxyindoleacetic acid concentrations. Alcoholism: Clinical and Experimental Research, 20, 643-650.
34. Boyce, T., Higley, J.D., Jemerin, J.J., Champoux, M.B., Suomi, S.J. (1996) Tympanic temperature assymetry and stress behaviors in rhesus macaques and children. Archives of Pediatrics & Adolescent Medicine, 150, 518-523.
35. Higley, J.D., Mehlman, P.T., Poland, R.E., Faucher, I., Taub, D.T., Vickers, J., Suomi, S.J., Linnoila, M. (1996e) A nonhuman primate model of violence and assertiveness: CSF 5-HIAA and CSF testosterone correlate with different types of aggressive behaviors. Biological Psychiatry, 40, 1067-1082.
36. Higley, J.D., Suomi, S.J., & Linnoila, M. (1997) A nonhuman primate model of excessive alcohol intake: Personality and neurobiological parallels of Type I- and Type II-like alcoholism. Recent Developments in Alcoholism, 13, 191-219.
37. Champoux, M.B., Higley, J.D., Suomi, S.J. (1997) Behavioral and physiological characteristics of Indian and Chinese-Indian hybrid rhesus macaque infants. Developmental Psychobiology. 31, 49-63.
38. Higley, J.D., Mehlman, P.T., Poland, R.E., Taub, D.T., Suomi, S.J., Linnoila, M. (1997) Aggression, social dominance, serotonin, and causal relationships. Biological Psychiatry. 42, 306-307.
39. Higley, J.D., Suomi, S.J., & Linnoila, M. (1997) Progress toward developing a nonhuman primate model of alcohol abuse and alcoholism. Journal of the Alcoholic Beverage Medical Research Foundation. 7 (Supplement 2), 67-78.
40. Higley, J.D., Suomi, S.J., & Linnoila, M. (1997) Low CNS serotonergic activity is trait-like and correlates with impulsive behavior: A nonhuman primate model investigating genetic and environmental influences on neurotransmission. Annals of the New York Academy of Sciences, 836, 39-56.
41. Mehlman, P.T., Higley, J.D., Fernald, B.J., Sallee, F.R., Suomi, S.J., & Linnoila, M. (1997) CSF 5-HIAA, testosterone, and sociosexual behaviors in free-ranging male rhesus macaques in the mating season. Psychiatry Research, 72, 89-102.
42. Zajicek, K., Higley, J.D., Suomi, S.J., & Linnoila, M. (1997) Rhesus macaques with low CSF 5-HIAA concentrations are unlikely to fall asleep early. Psychiatry Research, 73, 15-25.
43. Higley, J.D., Hasert, M.F., Suomi, S.J., & Linnoila, M. (1998) The serotonin reuptake inhibitor sertraline reduces excessive alcohol consumption in nonhuman primates. Neuropsychopharmacology, 18, 431-443.
44. Lilly, A.A., Mehlman, P.T., Higley, J.D. (1999) Trait-like immunological and hematological measures in female rhesus across varied environmental conditions. American Journal of Primatology, 48, 197-223.
45. Shoaf, S.E., Carson, R., Hommer, D., Williams, W., Higley, J.D., Schmall, B., Herscovitch, P., Eckelman, W., & Linnoila, M. (1998) Brain serotonin synthesis rates in rhesus monkeys determined by [11C]alpha-methyl-L-tryptophan and positron emission tomography compared to CSF 5-hydroxyindole-3-acetic acid concentrations. Neuropsychopharmacology, 19, 345-353.
46. Weld, K., Mench, J.A., Woodward, R.A., Bolesta, M.S., Suomi, S.J., Linnoila, M., & Higley, J.D. (1998) Effect of tryptophan treatment on self-biting and central nervous system serotonin metabolism in rhesus monkeys (Macaca mulatta). Neuropsychopharmacology, 19, 314-321.
47. Heinz, A., Higley, J.D., Gorey, J.G., Saunders, R.C., Jones, D.W. Hommer, D., Zajicek, K., Suomi, S.J., Lesch, K.P., Weinberger, D.R., & Linnoila, M. (1998) In vivo association between alcohol intoxication, aggression, and serotonin transporter availability in non-human primates. American Journal of Psychiatry, 155, 1023-1028.
48. Shoaf, S.E., Carson, R.E., Hommer, D., Williams, W.A., Higley, J.D., Schmall, B., Herscovitch, P., & Eckelman, W.C. (1999) The validity of the PET/alpha-[C-11]methyl-L-tryptophan method for measuring rates of serotonin synthesis in the human brain - Reply. Neuropsychopharmacology, 21, 156-157.
49. Westergaard, G.C., Mehlman, P.T., Shoaf, S.E., Suomi S.J., & Higley, J.D. (1999) CSF 5-HIAA and aggression in female primates: Species and interindividual differences. Psychopharmacology, 146, 440-446.
50. Lindell, S.G., Shoaf, S.E., Suomi, S.J., Linnoila, M., & Higley, J.D. (1999) Salivary prolactin as a marker for central serotonin turnover. Biological Psychiatry, 46, 568-572.
51. Vivian, J.A., Liang, J., Higley, J.D., Linnoila, M., & Woods, J.H. (1999) Oral ethanol self-administration in rhesus monkeys: behavioral and neurochemical correlates. Alcoholism: Clinical and Experimental Research, 23, 1352-1361.
52. Vivian, J.A., Liang, J., Higley, J.D., Linnoila, M., & Woods, J.H. (1999) Oral self-administration of ethanol, phencyclidine, methadone, pentobarbital and quinine in rhesus monkeys. Psychopharmacology, 147, 113-124.
53. Higley, J.D. & Bennett, A.J. (1999) CNS serotonin and personality as variables contributing to excessive alcohol consumption in nonhuman primates. Alcohol and Alcoholism, 34, 402-418.
54. Westergaard, G.C., Izard, M.K., Drake, J.H., Suomi, S.J., & Higley, J.D. (1999) Rhesus macaque (Macaca mulatta) group formation and housing: wounding and reproduction in a specific pathogen free (SPF) colony. American Journal of Primatology, 49, 339-347.
55. Mehlman, P.T., Westergaard, G.C., Hoos, B.J., Sallee, F.R., Marsh, S., Suomi, S.J., Linnoila, M., & Higley, J.D. (2000) CSF 5-HIAA and nighttime activity in free-ranging primates. Neuropsychopharmacology, 22, 210-218.
56. Fahlke, C., Lorenz, J.G., Long, J., Champoux, M., Suomi, S.J., Linnoila, M., & Higley, J.D. (2000) Rearing experiences and plasma cortisol as early predictors for alcohol consumption in nonhuman primates. Alcoholism: Clinical and Experimental Research, 24, 644-650.
57. DePetrillo, P.B., Bennett, A.J., Speers, D., Suomi, S.J., Shoaf, S.E., & Higley, J.D. (2000) Effects of ketamine and naturally occurring CNS serotonin differences on cardiac signal dynamics of EKG interbeatinterval time series in rhesus monkeys using the Hurst constant. European Journal of Pharmacology, 391, 113-119.
58. DePetrillo, P.B., Bennett, A.J., Speers, D., Suomi, S.J., Shoaf, S.E., Karimullah, K., & Higley, J.D. (2000) Ondansetron modulates pharmacodynamic effects of ketamine on electrocardiographic signals in rhesus monkeys. European Journal of Pharmacology, 39, 113-119.
59. Zajicek, K.B., Price, C., Shoaf, S.E., Mehlman, P.T., Suomi, S.J., Linnoila, M., & Higley, J.D. (2000) Seasonal variation in CSF 5-HIAA concentrations in male rhesus macaques. Neuropsychopharmacology, 22, 240-250.
60. Shoaf, S.E., Carson, R.E., Hommer, D., Williams, W.A., Higley, J.D., Schmall, B., Herscovitch, P., & Eckelman, W.C. (2000) The suitability of [11C]-a-Methyl-L-tryptophan as a tracer for serotonin synthesis: Studies with dual administration of [11C] and [14C] labeled tracer. Journal of Cerebral Blood Flow and Metabolism, 20, 244-252.
61. Westergaard, G.C., Chavanne, T.J., Lussier, I.D., Suomi, S.J., & Higley, J.D. (2000) Hormonal correlates of hand preference in free-ranging primates. Neuropsychopharmacology, 23, 502-507.
62. Habib, K.E., Weld, K.P., Rice, K.C., Pushkas, J., Champoux, M., Listwak, S., Webster, E.L., Atkinson, A., Schulkin, J., Contreggi, C., Chrousos, G.P., McCann, S.M., Suomi, S.J., Gold, P.W., & Higley, J.D. (2000a) Oral administration of a CRH receptor antagonist significantly attenuates behavioral, neuroendocrine, and autonomic responses to stress in primates. Proceedings of the National Academy of Science USA, 97, 6079-6084.
63. Westergaard, G.C., Lussier, I.D., Suomi, S.J., & Higley, J.D. (2001) Stress correlates of hand preference in rhesus macaques. Developmental Psychobiology, 38, 110-115.
64. Westergaard, G.C., Lussier, I.D., & Higley, J.D. (2001) Between-species variation in the development of hand preference among macaques. Neuropsychologia, 39, 1373-1378.
65. Bennett, A.J., Sponberg, A.C., Graham, T., Suomi, S.J., Higley, J.D., & DePetrillo, P.B. (2002) Initial ethanol exposure results in decreased heart rate variability in ethanol-naive rhesus monkeys. European Journal of Pharmacology, 433, 169-172.
66. Higley, J.D. (2001) Difficulties in studying alcohol-induced aggression in humans. Alcohol Research & Health, 25, 13.
67. Higley, J.D. (2001) Individual differences in alcohol-induced aggression: A non-human primate model. Alcohol Research & Health, 25, 12-20.
68. Champoux, M., Hibbeln, J.R., Shannon, C., Majchrzak, S., Suomi, S.J., Salem, N., & Higley, J.D. (2002) Fatty acid formula supplementation and neuromotor development in rhesus monkey neonates. Pediatric Research, 51, 273-281.
69. Gerald, M.S., Higley, S.B., Lussier, I.D., Westergaard, G.C., Suomi, S.J., & Higley, J.D. (2002) Variation in Reproductive Outcomes for Captive Male Rhesus Macaques (*Macaca mulatta*) Differing in CSF 5-Hydroxyindoleacetic Acid Concentrations. Brain, Behavior and Evolution, 60, 117-124.
70. Gerald, M.S., & Higley, J.D. (2002) Evolutionary Underpinnings of Alcoholism. Addiction, 97, 415-425.
71. Anderson, G.M., Bennett, A.J., Weld, K.P., Pushkas, J.G., Ocame, D.M., & Higley, J.D. (2002) Serotonin in cisternal cerebrospinal fluid of rhesus monkeys: Basal levels and effects of sertraline administration. Psychopharmacology, 161, 95-99.
72. Habib, K.E., Higley, J.D., Rice, K.C., Cai, J., Listwak, S.J., Chrousos, G.P., Suomi, S.J., & Gold, PW. (2000b) CRH type-1 receptor antagonism attenuates behavioral, endocrine and autonomic responses to stress in primates. Hormones, Brain &Neuropsychopharmacology, 2, 119.
73. Roudebush, W.E., Gerald, M.S., Canos, J.A., Lussier, I.D., Westergaard, G.C., & Higley, J.D. (2002) Relationship between platelet-activating factor concentration in rhesus monkey (Macaca mulatta) spermatozoa and sperm motility. American Journal of Primatology, 56, 1-7.
74. Westergaard, G.C., Lussier, I.D., & Higley, J.D. (2001) Familial influences on hand preference: Genotypic variation between closely related primate species. Developmental Neuropsychology, 20, 605-617.
75. Lesch, K.P., Greenberg, B.D., Higley, J.D., Bennett, A., & Murphy, D.L. (2002) Serotonin transporter, personality, and behavior: toward dissection of gene-gene and gene-environment interaction. In: Benjamin, J., Ebstein, R., Belmaker, R.H. (Eds.) Molecular Genetics and the Human Personality. American Psychiatric Press. Washington, D.C. pp. 109-136.
76. Dvoskin,R., Lindell, S.G., Shoaf, S.E., Suomi, S.J., Linnoila, M., & Higley, J.D. (2001) Reply, Salivary prolactin following fenfluramine stimulation in the macaque. Biological Psychiatry, 51, 817-818.
77. Bastian,M.L., Sponberg, A.C., Suomi, S.J., & Higley, J.D. (2002) Long-Term Effects of Infant Rearing Condition on the Acquisition of Dominance Rank in Juvenile and Adult Rhesus Macaques *(*Macaca mulatta) Developmental Psychobiology, 41, 1–8.
78. Fahlke, C., Garpenstrand, H., Oreland, L., Suomi, S.J., & Higley, J.D. (2002) Platelet Monoamine Oxidase Activity in a Nonhuman Primate Model of Type 2 Excessive Alcohol Consumption. American Journal of Psychiatry, 159, 2107-2109.
79. Westergaard, G.C., Suomi, S.J., & Higley, J.D. (2002) Immune functioning and fearful behavior are associated with left-handedness in rhesus macaques. Laterality, 7, 351-361.
80. Champoux, M., Bennett, A., Shannon, C., Higley, J.D., Lesch, K.P., Suomi, S.J. (2002) Serotonin transporter gene polymorphism, differential early rearing, and behavior in rhesus monkey neonates. Molecular Psychiatry, 7, 1058-1063.
81. Bennett, A.J., Lesch, K.P., Heils, A., Long, J.C., Lorenz, J.G., Shoaf, S.E., Champoux M., Suomi, S.J., Linnoila, M.V., & Higley, J.D. (2002) Early experience and serotonin transporter gene variation interact to influence primate CNS function. Molecular Psychiatry, 7, 118-122.
82. Higley, J.D. (2003) Aggression in Old World primates: causes, cures, and functions. In: Maestripieri, D. (Ed.) Primate Psychology. The Mind and Behavior of Human and Nonhuman Primates. Harvard University Press Cambridge, MA. pp. 17-41.
83. Barr, C.S., Becker, M.L., & Higley, J.D. (2003) Impaired central serotonin function and a low level of response to alcohol contribute to alcohol-related aggression in rhesus macaques. Aggressive Behavior, 29, 288-301.
84. Strome, E.M., Higley, J.D., Loriaux, D.L., Suomi, S.J., Doudet, D.J., & Wheler, G.H.T. (2003) Intracerebroventricular corticotropin-releasing factor has behavioral effects in non-human primates dependent on the social context, and increases cerebral glucose metabolism in limbic regions. Proceedings of the National Academy of Science, USA, 99, 15749-15754.
85. Heinz, A., Jones, D.W., Gorey, J.G., Bennet, A.J. Suomi, S.J., Weinberger, D.R., & Higley, J.D. (2003) Serotonin transporter availability correlates with alcohol intake in non-human primates. Molecular Psychiatry, 7, 231-234.
86. Barr, C.S., Newman, T.K., Shannon, C., Becker, M.L., Champoux, M., Lesch, K.P., Suomi, S.J., Goldman, D., & Higley, J.D. (2003) Serotonin transporter gene variation is associated with alcohol sensitivity in rhesus macaques exposed to early-life stress. Alcoholism: Clinical and Experimental Research, 27, 812-817.
87. Gustavsson, G., Träskman-Bendz, L., Higley, J.D., & Westrin, Å. (2003) CSF Testosterone in 43 Male Suicide Attempters. European Neuropsychopharmacology, 13, 105-109.
88. Barr, C.S., Newman, T.K., Becker, M.L., Parker, C.C., Champoux, M., Lesch, K.P., Goldman, D. Suomi, S.J., & Higley, J.D. (2003) The utility of the non-human primate; model for studying gene by environment interactions in behavioral research. Genes, Brain and Behavior, 2, 336-340.
89. Westergaard, G.C., Suomi, S.J., Chavanne, T.J., Houser, L., Hurley, A., Cleveland, A., Snoy, P.J., & Higley, J.D. (2003) Physiological correlates of aggression and impulsivity in free-ranging female primates. Neuropsychopharmacology, 28, 1045-1055.
90. Davenport, M.D., Novak, M.A., Meyer, J.S., Tiefenbacher, S., Higley, J.D., Lindell, S., Champoux, M., Shannon, C., & Suomi, S.J. (2003) Continuity and change in emotional reactivity in rhesus monkeys throughout the prepubertal period. Motivation and Emotion, 27, 57-76.
91. Westergaard, G.C., Cleveland, A., Trenkle, M.K., Lussier, I.D., & Higley, J.D. (2003) CSF 5-HIAA concentration as an early screening tool for predicting significant life history outcomes in female specific-pathogen-free (SPF) rhesus macaques (Macaca mulatta) maintained in captive breeding groups. Journal of Medical Primatology, 32, 1-10.
92. Heinz, A., Schafer, M., Higley, J.D., Krystal, J.H., & Goldman, D. (2003) Neurobiological correlates of the disposition and maintenance of alcoholism. Pharmacopsychiatry.36, Supplement, 255-258.
93. Westergaard, G.C., Chavanne, T.J., Lussier, I.D., Houser, L., Cleveland, A., Suomi, S.J., & Higley, J.D. (2003) Left-handedness is correlated with CSF monoamine metabolite and plasma cortisol concentrations, and with impaired sociality, in free-ranging adult male rhesus macaques (Macaca mulatta). Laterality. 8, 169-187.
94. Barr, C.S., Newman, T.K., Lindell, S., Becker, M.L., Shannon, C.S., Champoux, C., Suomi, S.J., & Higley, J.D. (2004) Early experience and sex interact to influence LHPA-axis function following both acute and chronic alcohol administration in rhesus macaques (Macaca mulatta). Alcoholism: Clinical and Experimental Research, 28, 1-5.
95. Cleveland A., Westergaard G.C., Trenkle, M.K., & Higley, J.D. (2004) Physiological predictors of reproductive outcome and mother-infant behaviors in captive rhesus macaque females (*Macaca mulatta*). Neuropsychopharmacology, 29, 901-910.
96. Barr, C.S., Newman, T.K., Schwandt, M., Shannon, C., Dvoskin, R.L., Lindell, S.G., Taubman, J., Thompson, B., Champoux, M., Lesch, K.P., Goldman, D., Suomi, S.J., & Higley, J.D. (2004a) Sexual dichotomy of an interaction between early adversity and the serotonin transporter gene promoter variant in rhesus macaques. Proceedings of the National Academy of Science USA, 101, 12358-12363.
97. Barr, C.S., Schwandt, M.L., Newman, T.K., & Higley, J.D. (2004) The use of adolescent nonhuman primates to model human alcohol intake: Neurobiological, genetic, and psychological variables. Annals of the New York Academy of Sciences, 1021, 221-233.
98. Heinz, A., Jones, D.W., Zajicek, K., Gorey, J.G., Juckel, G., Higley, J.D., & Weinberger, D.R. (2004) Depletion and restoration of endogenous monoamines affects beta-CIT binding to serotonin but not dopamine transporters in non-human primates. Journal of Neural Transmission (Supplement), 68, 29-38.
99. Westergaard, G.C., Chavanne, T.J., Houser, L., Cleveland, A., Snoy, P.J., Suomi, S.J., & Higley, J.D. (2004) Biobehavioural correlates of hand preference in free-ranging female primates. Laterality, 9, 267-285.
100. Barr, C.S., Newman, T.K., Lindell, S., Shannon, C., Champoux, M., Lesch, K.P., Suomi, S.J., Goldman, D., & Higley, J.D. (2004b) Interaction between serotonin transporter gene variation and rearing condition in alcohol preference and consumption in female primates.Archives of General Psychiatry, 11, 1146-1152.
101. Barr, C.S., Newman, T.K., Shannon, C., Parker, C., Dvoskin, R., Becker, M.L., Schwandt, M., Champoux, M., Lesch, K.P., Goldman, D., Suomi, S.J., & Higley, J.D. (2004c) Rearing condition and rh5-HTTLPR interact to influence LHPA-axis response to stress in infant macaques. Biological Psychiatry, 55, 733-738.
102. Angeloni, S.V., Glynn, N., Ambrosini, G., Garant, M.J., Higley, J.D., Suomi, S.J., & Hansen, B.C. (2004) Characterization of the rhesus monkey ghrelin gene and factors influencing ghrelin gene expression and fasting plasma levels. Endocrinology, 145, 2197-2205.
103. Ayala, A.R., Pushkas, J., Higley, J.D., Ronsaville, D., Gold, P.W., Chrousos, G.P., Pacak, K., Calis, K.A., Gerald, M., Lindell, S., Rice, K.C., & Cizza, G. (2004) Behavioral, adrenal, and sympathetic responses to long-term administration of an oral corticotropin-releasing hormone receptor antagonist in a primate stress paradigm. The Journal of Clinical Endocrinology & Metabolism, 89, 5729-5737.
104. Shannon, C., Schwandt, M.L., Champoux, M., Shoaf, S.E., Suomi, S.J., Linnoila, M., & Higley, J.D., (2005) Maternal absence and stability of individual differences in CSF 5-HIAA concentrations in rhesus monkey infants, American Journal of Psychiatry, 162, 1658-1664.
105. Anderson, G.M., Barr, C.S., Lindell, S.G., Durham, A.C., Shifrovich, I., & Higley, J.D. (2005) Time course of the effects of the SSRI sertraline on central and peripheral serotonin neurochemistry in the rhesus monkey. Psychopharmacology, 178, 339-346.
106. Newman, T.K., Syalgailo, Y., Barr, C.S., Champoux, M., Graessle, M., Suomi, S.J., Higley, J.D., & Lesch, K.P. (2005) Monoamine oxidase a gene polymorphism and infant rearing experience interact to influence aggression and injuries in rhesus monkeys (Macaca mulatta). Biological Psychiatry, 15, 167-172.
107. Maestripieri, D., Lindell, S.G., Ayala, A., Gold, P.W., & Higley, J.D. (2005) Neurobiological characteristics of rhesus macaque abusive mothers and their relation to social and maternal behavior. Neuroscience & Biobehavioral Reviews, 29, 51-57.
108. Fontenot, M.B., Padgett, E.E., 3rd, Dupuy, A.M., Lynch, C.R., De Petrillo, P.B, & Higley, J.D. (2005) The effects of fluoxetine and buspirone on self-injurious and stereotypic behavior in adult male rhesus macaques. Comparative Medicine, 55, 67-74.
109. Erickson, K., Gabry, K.E., Schulkin, J., Gold, P., Lindell, S., Champoux, M., Suomi, S.J., & Higley, J.D. (2005) Social withdrawal behaviors in nonhuman primates and changes in neuroendocrine and monoamine concentrations during a separation paradigm. Developmental Psychobiology, 46, 331-339.
110. Kumar, R., Perez-Casanova, A.E., Tirado, G., Noel, R.J., Torres, C., Rodriguez, I., Martinez, M., Staprans, S., Kraiselburd, E., Yamamura, Y., Higley, J.D., & Kumar, A. (2005) Increased viral replication in simian immunodeficiency virus/simian-HIV–infected macaques with self-administering model of chronic alcohol consumption. Journal of Acquired Immune Deficiency Syndrome, 39, 386–390.
111. Roma, P.G., Wesley, W., Flint, W.W., Higley, J.D., & Riley, A.L. (2006) Assessment of the aversive and rewarding effects of alcohol in Fischer and Lewis rats. Psychopharmacology, 89, 187-199.
112. Roma, P.G. Ruggiero, A.M., Schwandt, M.L., Higley, J.D., & Suomi, S.J. (2006) The kids are all right: Maternal behavioral interactions and stress reactivity in infants of differentially reared rhesus monkeys. The Journal of Developmental Processes, 1, 103-122.
113. Jaffe, B., Evans, T., Howell, S., Westergaard, G., Snoy, P., & Higley, J.D. (2006) Left vs. right nipple preference in free-ranging infant rhesus macaques (Macaca mulatta). Developmental Psychobiology, 48, 266-272.

BYU Publications

1. Lorenz, J.G., Long, J.C., Linnoila, M., Goldman, D., Suomi, S.J., & Higley, J.D. (2006) Genetic and other contributions to alcohol intake in rhesus macaques (Macaca mulatta). Alcoholism: Clinical And Experimental Research, 30, 1-9.
2. Flory, G.S., Chen, S.A., Woltz, L.A., Magleby, S., & Higley, J.D. (2006) A computerized apparatus designed to automatically dispense, measure, and record alcohol consumption by individual members of a rhesus macaque social group: Trait-like drinking across social- and single-cage conditions. Methods, 38, 178-184.
3. Maestripieri, D., McCormack, K., Lindell, S.G., Higley, J.D., & Sanchez, M.M. (2006a) Influence of parenting style on the offspring's behaviour and CSF monoamine metabolite levels in crossfostered and noncrossfostered female rhesus macaques. Behavior and Brain Research, 175, 90-95.
4. Maestripieri, D., Higley, J.D., Lindell, S.G., Newman, T.K., McCormack, K.M., & Sanchez, M.M. (2006b) Early maternal rejection affects the development of monoaminergic systems and adult abusive parenting in rhesus macaques (Macaca mulatta). Behavioral Neuroscience, 120, 1017-1024.
5. Ichise, M., Vines, D.C., Gura, T., Anderson, G.M., Suomi, S.J., Higley, J.D., & Innis, R.B. (2006) Effects of early life stress on [11C]DASB positron emission tomography imaging of serotonin transporters in adolescent peer- and mother-reared rhesus monkeys. Journal of Neuroscience, 26, 4638–4643.
6. Schwandt, M.L., Barr, C.S., Suomi, S.J., & Higley, J.D. (2007) Age-dependent variation in behavior following acute ethanol administration in male and female adolescent rhesus macaques (Macaca mulatta). Alcoholism: Clinical and Experimental Research, 31, 228-237.
7. Macrı, S., Spinelli, S., Adriani, W., Higley, J.D., & Laviola, G. (2007) Early adversity and alcohol availability persistently modify serotonin and hypothalamic-pituitary-adrenal-axis metabolism and related behavior: what experimental research on rodents and primates can tell us. Neuroscience and Biobehavioral Reviews, 31, 172-180.
8. Howell, S., Westergaard, G., Hoos, B., Chavanne, T.J., Shoaf, S.E., Cleveland, A., Snoy, P.J., Suomi, S.J., & Higley, J.D. (2007) Serotonergic influences on life history outcomes in free-ranging male primates. American Journal of Primatology, 69, 851-865.
9. Barr, C.S., Schwandt, M., Lindell, S.G., Chen, S.A., Goldman, D., Suomi, S.J., Higley, J.D., & Heilig, M. (2007) Association of a functional polymorphism in the mu-opioid receptor gene with alcohol response and consumption in male rhesus macaques. Archives of General Psychiatry, 64, 369-376.
10. Maestripieri, D., Lindell, S.G., & Higley, J.D. (2007) Intergenerational transmission of maternal behavior in rhesus macaques and its underlying mechanisms. Developmental Psychobiology, 49, 165-171.
11. Izquierdo, A., Newman, T.K., Higley, J.D., & Murray, E.A. (2007) Genetic modulation of cognitive flexibility and socioemotional behavior in rhesus monkeys. Proceedings of the National Academy of Science, USA, 104, 14128-14133.
12. Spinelli, S., Schwandt, M.L., Lindell, S.G., Newman, T.K., Heilig, M., Suomi, S.J., Higley, J.D., Goldman, D., Barr, C.S. (2007) Association between the recombinant human serotonin transporter linked promoter region polymorphism and behavior in rhesus macaques during a separation paradigm. Development and Psychopathology, 19, 977-987.
13. Howell, S., & Higley, J.D. (2007) The biological correlates of hand preference in rhesus macaques. In Selected Topics in Primatology, Volume 5: The Evolution of Hemispheric Specialization in Primates, William. D. Hopkins (Ed.). New York: Wiley Press. pp. 253-276.
14. Higley, J.D., & Barr, C.S. (2008) Neurochemistry and behavior. In Nonhuman Primate Models of Children's Health and Developmental Disabilities, Edited by Thomas M. Burbacher, Gene P. Sackett, Kimberly S. Grant (Eds.). Academic Press: New York. pp. 161-200.
15. Erickson, K., Higley, J.D., & Schulkin, J. (2008) Emotion, temperament, vulnerability, and development: Evidence from nonhuman primate models. In Developmental Psychophysiology: Theory, Systems, and Methods*,* Schmidt, L.A. and Segalowitz, S.J., (Eds.) Cambridge University Press: New York. pp. 319-343.
16. Schwandt, M.L., Higley, J.D., Suomi, S.J., Heilig, M., Barr, C.S. (2008) Rapid tolerance and locomotor sensitization in ethanol-naïve adolescent rhesus macaques. Alcoholism: Clinical and Experimental Research, 32, 1217-1228.
17. Barr, C.S., Schwandt, M.L., Lindell, S.G., Higley, J.D., Maestripieri, D., Goldman, D., Suomi, S.J., and Heilig, M. (2008) Variation at the mu-opioid receptor gene (*OPRM1*) influences attachment behavior in infant primates. Proceedings of the National Academy of Science, USA, 105, 5277-5281.
18. Barr, C.S., Dvoskin, R.L., Yuan, Q., Lipsky, R.H., Gupte, M., Hu, X., Zhou, Z., Schwandt, M.L., Lindell, S.G., McKee, M., Becker, M.L., Kling, M.A., Gold, P.W., Higley, D., Heilig, M., Suomi, S.J., & Goldman, D. (2008a) CRH haplotype as a factor influencing cerebrospinal fluid levels of corticotropin-releasing hormone, hypothalamic-pituitary-adrenal axis activity, temperament, and alcohol consumption in rhesus macaques. Archives of General Psychiatry, 65, 934-944.
19. Maestripieri, D., Hoffman, C.L., Anderson, G.M., Carter, S., & Higley, J.D. (2009) Mother-infant interactions in free-ranging rhesus macaques: Relationships between physiological and behavioral variables. Physiology & Behavior, 96, 613-619.
20. Spinelli, S., Chefer, S., Carson, R., Jacoda, E., Heilig, M., Suomi, S., Higley, J.D., & Stein, E. (2009) Female gender and early life stress reduce serotonin1A receptor density in juvenile non-human primates.Archives of General Psychiatry, 66, 658-665.
21. McCormack, K., Newman, T.K., Higley, J. D., Maestripieri, D., & Sanchez, M.M. (2009) Serotonin transporter gene variation, infant abuse, and responsiveness to stress in rhesus macaque mothers and infants. Hormones and Behavior, 55, 538-547.
22. Newman, T.K., Parker, C.C., Suomi, S.J., Goldman, D., Barr, C.S., & Higley, J.D. (2009) DRD1 5'UTR variation, sex and early infant stress influence ethanol consumption in rhesus macaques. Genes Brain and Behavior, 8, 626-630.
23. [Barr](http://www.pnas.org/search?author1=Christina+S.+Barr&sortspec=date&submit=Submit), C.S., Dvoskin, R.L., [Gupte](http://www.pnas.org/search?author1=Manisha+Gupte&sortspec=date&submit=Submit), M., [Sommer](http://www.pnas.org/search?author1=Wolfgang+Sommer&sortspec=date&submit=Submit), W., [Sun](http://www.pnas.org/search?author1=Hui+Sun&sortspec=date&submit=Submit), H., [Schwandt](http://www.pnas.org/search?author1=Melanie+L.+Schwandt&sortspec=date&submit=Submit), M.L., [Lindell](http://www.pnas.org/search?author1=Stephen+G.+Lindell&sortspec=date&submit=Submit), S.G., [Kasckow](http://www.pnas.org/search?author1=John+W.+Kasckow&sortspec=date&submit=Submit), J.W., Suomi, S.J., Goldman, D., Higley, J.D., & [Heilig](http://www.pnas.org/search?author1=Markus+Heilig&sortspec=date&submit=Submit), M. (2009) Functional *CRH* variation increases stress-induced alcohol consumption in primates. Proceedings of the National Academy of Science, USA, 106, 14593-14598.
24. Jedema, H.P., Gianaros, P.J., Greer, P.J., Kerr, D.D., Liu, S., Higley, J.D., Suomi, S.J., Olsen, A.S., Porter, J.N., Lopresti, B.J., Hariri, A.R., Bradberry, C.W. (2010) Cognitive impact of genetic variation of the serotonin transporter in primates is associated with differences in brain morphology rather than serotonin neurotransmission. Molecular Psychiatry, 15, 512-522.
25. Schwandt, M.L., Lindell, S.G., Chen, S.A., Higley, J.D. Suomi, S.J., Heilig, M., Barr, C.S. (2010) Alcohol response and consumption in adolescent rhesus macaques: Life history and genetic influences. Alcohol, 44, 67-80.
26. Schwandt, M.L., Lindell, S.G., Sjöberg, R.L., Chisholm, K.L., Higley, J.D., Suomi, S.J., Heilig, M., Barr, C.S. (2010) [Gene-environment interactions and response to social intrusion in male and female rhesus macaques.](http://www.ncbi.nlm.nih.gov/pubmed/20015482) Biological Psychiatry, 67, 323-330.
27. Kay, D.B., Marsiske, M., Suomi, S.J., Higley, J.D. (2010) [Exploratory factor analysis of human infant temperament in the rhesus monkey.](http://www.ncbi.nlm.nih.gov/pubmed/20036777) Infant Behavior and Development, 33, 111-114.
28. Wargelius, H.L., Fahlke, C., Suomi, S.J., Oreland, L., Higley, J.D. (2010) [Platelet monoamine oxidase activity predicts alcohol sensitivity and voluntary alcohol intake in rhesus monkeys.](http://www.ncbi.nlm.nih.gov/pubmed/20187848) U[psala Journal of Medical Sciences](http://journalseek.net/cgi-bin/journalseek/journalsearch.cgi?field=issn&query=0300-9734), 115, 49-55.
29. Lindell, S.G., Schwandt, M.L., Sun, H., Sparenborg, J.D., Bjoerk, K., Kasckow, J.W., Sommer, W.H., Goldman, D., Higley, J.D., Suomi, S.J., Heilig, M., Barr, C.S. (2010) [Functional NPY variation as a factor in stress resilience and alcohol consumption in rhesus macaques.](http://www.ncbi.nlm.nih.gov/pubmed/20368518) Archives of General Psychiatry. 67, 423-431.
30. Spinelli, S., Chefer, S., Carson, R.E., Jagoda, E., Lang, L., Heilig, M., Barr, C.S., Suomi, S.J., Higley, J.D., Stein, E.A. (2010) Effects of early-life stress on serotonin(1A) receptors in juvenile rhesus monkeys measured by positron emission tomography. Biological Psychiatry, 115, 1146-1153.
31. Higley, J.D., Chaffin, A.C., & Suomi, S.J. (2011) Impulsivity and Aggression as Personality Traits in Nonhuman Primates. Weiss, A. and King, J., (Eds.) Springer Press: New York. pp. 257-284.
32. Higley, J.D., Suomi, S.J., & Chaffin, A.C. (2011) Reactivity and Behavioral Inhibition as Personality Traits in Nonhuman Primates. Personality and Behavioral Syndromes in Nonhuman Primates: Developments in Primatology*,* Weiss, A. and King, J., (Eds) Springer Press: New York. pp. 285-312.
33. Schwandt, M.L., Lindell, S.G., Higley, J.D., Suomi, S.J., Heilig, M., Barr, C.S. (2011) OPRM1 gene variation influences hypothalamic-pituitary-adrenal axis function in response to a variety of stressors in rhesus macaques. Psychoneuroendocrinology, 36, 1303-1311.
34. Perera, T.D., Dwork, A.J., Keegan, K.A., Thirumangalakudi, L., Lipira, C.M., Joyce, N., Lange, C., Higley, J.D., Rosoklija, G., Hen, R., Sackeim, H.A., Coplan, J.D. (2011) Necessity of hippocampal neurogenesis for the therapeutic action of antidepressants in adult nonhuman primates. PLoS One, 6, 1-13.
35. Spinelli, S., Schwandt, M.L., Lindell, S.G., Heilig, M., Suomi, S.J., Higley, J.D., Goldman D., Barr C.S. (2012) The serotonin transporter gene linked polymorphic region is associated with the behavioral response to repeated stress exposure in infant rhesus macaques. Developmental Psychopathology. 24, 157-165.
36. Yuan, Q., Zhou, Z., Lindell, S.G., Higley, J.D, Ferguson, B., Thompson, R.C., Lopez, J.F., Suomi, S.J., Baghal, B., Baker, M., Mash, D.C., Barr, C.S., and Goldman, D. (2012) The rhesus macaque is three times as diverse but more closely equivalent in damaging coding variation as compared to the human. BMC Genetics, 13, 52 (12 pages). doi:10.1017/S0954579411000745.
37. Lindell, S.J., Yuan, Q., Zhou, Z. Goldman, D., Thompson, R., Lopez, J.F., Suomi, S.J., Higley, J.D., Barr, C.S. (2012). The serotonin transporter gene is a substrate for age and stress dependent epigenetic regulation in rhesus macaque brain: Potential roles in genetic selection and GxE interactions. Development and Psychopathology, 24, 1391-1400.
38. Espinel, W.F., Higley, J.D. (2013) A nonhuman primate model of serotonin-mediated violence and antisocial behavior—A decade-and-a-half update. In Serotonin: Biosynthesis, Regulation and Health Implications. F.S. Hall Ed. Gazelle Distribution, Lancaster, UK. pp. 69-96.
39. Sorenson, A.N., Sullivan, E.C., Mendoza, S.P., Capitanio, J.P., Higley, J.D.(2013) The serotonin transporter genotype modulates HPA axis output during stress: Effect of stress, dexamethasone test and ACTH challenge. Translational Developmental Psychiatry, 1, 21130 - <http://dx.doi.org/10.3402/tdp.v1i0.21130>.

1. Shively, C.A., Rigister, T.C., Higley, J.D., Willard, S.L.(2014) Sertraline effects on cerebrospinal fluid monoamines and species-typical socioemotional behavior of female cynomolgus monkeys. Psychopharmacology (Berl), 231,1409-1416.

1. Fawcett, G.L., Dettmer, A.M., Kay, D., Raveendran, M. Higley, J.D. Ryan, N.D., Cameron, J.L., Rogers, J. (2014) Genetic effects on response to novelty and other stimuli by infant rhesus macaques across three distinct behavioral assessments. International Journal of Primatology, 53, 325-329.
2. Higley, J.D. Epigenetics. (*2016*) In The SAGE Encyclopedia of Theory in Psychology. H. Miller Ed. Sage Publications, Thousand Oaks, CA. pp. 291-294.
3. Wood, E.K., Kruger, R., Bennion, A., Cooke, B.M., Lindell, S., Schwandt, M., Goldman, D., Barr, C.S., Suomi, S.J., Higley, J.D. (2017) Low Inherent Sensitivity to the intoxicating effects of ethanol in rhesus monkeys with low CSF concentrations of the serotonin metabolite 5-hydroxyindoleacetic acid. Alcoholism: Clinical and Experimental Research, doi: 10.1111/acer.13552.
4. Driscoll, C.A., Lindell, S.G., Schwandt, M.L., Suomi, S.J., Higley, J.D., Heilig, M., Barr, C.S. (2017) OPRM1 genotype interacts with serotonin system dysfunction to predict alcohol-heightened aggression in primates. Addiction Biology, 22, 1655-1664.
5. South M, Taylor KM, Newton T, Christensen M, Jamison NK, Chamberlain P, Johnston O, Crowley MJ, Higley JD. (2017) Psychophysiological and behavioral responses to a novel intruder threat task for children on the autism spectrum. The Journal of Autism and Developmental Disorders, 47, 3704-3713.
6. Baker, M., Lindell., S.G., Driscoll, C.A., Zhou, Z., Yuan, Q., Schwandt, M.L., Miller-Crews, I., Simpson, E.A., Paukner, A., Ferrari, P.F., Sindhu, R.K., Razaqyar, M., Sommer, W.H., Lopez, J.F., Thompson, R.C., Goldman, D., Heilig, M., Higley, J.D., Suomi, S.J., Barr, C.S. (2017) Early rearing history influences oxytocin receptor epigenetic regulation in rhesus macaques. Proceedings of the National Academy of Sciences U S A., 114, 11769-11774.
7. Baxter, A., Wood, E.K., Jarman, P., Cameron, A.N., Capitanio, J.P., Higley, J.D. (2018) Sex differences in rhesus monkeys' digit ratio (2D:4D ratio) and its association with maternal social dominance rank. Frontiers in Behavioral Neuroscience. doi: 10.3389/fnbeh.2018.00213-Already 1252 views, IF 3.13
8. Wood, E.K., Kruger, R., Bennion, A., Cooke, B.M., Lindell, S., Schwandt, M., Goldman, D., Barr, C.S., Suomi, S.J., Higley, J.D. (2018) Low inherent sensitivity to the intoxicating effects of ethanol in rhesus monkeys with low CSF concentrations of the serotonin metabolite 5-hydroxyindoleacetic acid. Alcoholism: Clinical and Experimental Research, 42, 424-431. doi: 10.1111.-IF 3.18
9. Wood, E.K. and Higley, J.D. (2020) Attachment. In Encyclopedia of Animal Cognition and Behavior. Vonk, J., Shackelford, T.K. (Eds.). <https://doi.org/10.1007/978-3-319-47829-6_435-1> Entry: 5500 words
10. Wood, E.K. and Higley, J.D. (2020) Parenting in Primates. In Encyclopedia of Animal Cognition and Behavior. Vonk, J., Shackelford, T.K. (Eds.). <https://doi.org/10.1007/978-3-319-47829-6> Entry: 5800 Words
11. Baxter, A., Wood, E.K., Witczak, L.R., Bales K.L., Higley J.D. (2019) Sexual dimorphism in titi monkeys' digit (2D:4D) ratio is associated with Maternal Urinary Sex Hormones During Pregnancy. Developmental Psychobiology, 62(7):979-991. Aug 1. doi: 10.1002/dev.21899.
12. Wood, E.K., Champoux, M., Lindell, S.G., Barr, C.S., Suomi, S.J., Higley, J.D. (2019) Neonatal temperament and neuromotor differences are predictive of adolescent alcohol intake in rhesus monkeys (*Macaca mulatta*). American Journal of Primatology. Sep 19: doi: 10.1002/ajp.23043.
13. Wood, E.K., **Kruger, R., Cash, E**., Lindell, S.G., Schwandt, M.L., Barr, C.S., Suomi, S.J. & Higley, J.D. (2020) Early life temperamental anxiety is associated with excessive alcohol intake in adolescence: A rhesus monkey (*Macaca mulatta*) model**.** Addiction Biology, doi: 10.1111/adb.12825.
14. **Baxter, A.,** Wood, E.K., Barr, C.S., Kay, D.B., Suomi, S.J., Higley, J.D. (2020) Maternal neglect and the serotonin system are associated with daytime sleep in infant rhesus monkeys. Development and Psychopathology, 31, 1-10. doi:10.1017/S0954579418001359. Impact Factor—3.39
15. Sproul-Bassett, A.M., Wood, E.K., Lindell, S.G., Schwandt, M.L., Higley, J.D. (2020) Intergenerational Effects of Mother’s Early Rearing Experience on Offspring Treatment and Socioemotional Development. *Developmental Psychobiology*, *62*, 920-931. (doi: 10.1002/dev.21959)—Impact Factor—2.02
16. Wood, E.K.,Higley, J.D., Champoux, M., Marsiske, M., Olsen, J.A., Suomi, S.J., Kay, D.B. (2021) Multi-group multi-time point confirmatory factor analysis of the triadic structure of temperament: A nonhuman primate model. *Developmental Psychobiology, 63*, 65-73. doi: 10.1002/dev.21985. Impact Factor—2.02
17. Wood, E.K.\*, **Jarman, P.\*, Cash, E.,** **Baxter, A.,** Capitanio, J.P., & Higley, J.D. (2020) Masculinized second-to-fourth digit ratio (2D:4D ratio) is associated with lower cortisol response in infant female rhesus monkeys (*Macaca mulatta*). *Frontiers in Behavioral Neuroscience*, *14,* 94 doi: 10.3389/fnbeh.2020.00094—Impact factor—2.52
18. Wood, E.K.\*, **Halter, C.M.\*,** Gabrielle, N.\*, Capitanio, J.P, & Higley, J.D. Early plasma cortisol concentrations are associated with later parenting behaviors in large groups of outdoor-living female rhesus macaques (*Macaca mulatta*). *Developmental Psychobiology,* in press [2021]. Impact Factor—2.02
19. Wood, E.K., **Kruger, R., Day, S.M., Day, J.M.,** Hunter, J., **Neville, L.**, Schwandt, M.L., Lindell, S.G., Barr, C.S., Suomi, S.J., Harris, J., & Higley, J.D. A nonhuman primate model of human non-suicidal self-injury: Serotonin-transporter genotype-mediate typologies. *Biological Psychiatry,* accepted with minor revisions. in press [2021]
20. Wood, E.K.,Espinel, W.F., Hunter, J.N., **Emmett, A.,** Skowbo, A.N., Shannon, C., Schwandt, M.L., Lindell, S.G., Barr, C.S., Suomi, S.J., & Higley, J.D. The effects of at-birth adoption on atypical behavior and anxiety: A nonhuman primate model. *Journal of the American Academy of Child and Adolescent Psychiatry,* accepted with minor revisions.
21. Wood, E.K.,Hunter, J.N., Almasy, L., Lindell, S.G., Goldman, D., Barr, C.S., Suomi, S.J., Kay, D.B., & Higley, J.D. Paternal genetic contributions to neonatal temperament in a nonhuman primate (*Macaca mulatta*) model. *Developmental Psychobiology,* accepted with minor revisions.
22. Wood, E.K.,Skowbo, A.N., Gabrielle, N., Hunter, J., Anderson, A., Schwandt, M.L., Lindell, S.G., Barr, C.S., Suomi, S.J., & Higley, J.D. Early rearing conditions and serotonin transporter genotype affect monoamine levels during baseline and periods of social separation stress: A nonhuman primate model (*Macaca mulatta*). *Frontiers in Human Neuroscience,* accepted with minor revisions.
23. Wood, E.K., Waters, S.J., Davies, D.A., Lindell, S.G., Schwandt, M.L., Barr, C.S., Suomi, S.J. & Higley, J.D. (under revision) Variation in Alcohol Intake: A Nonhuman Primate Model Assessing the Interacting Effects of Social Setting, Early Rearing, Sex, and Serotonin Transporter Genotype.
24. Wood, E.K., Lemmon, D.P., Mullen, N.D., Anderson, G.A., Lindell, S.G., Schwandt, M.L., Barr, C.S., Suomi, S.J. & Higley, J.D. (Under revision) Central nervous system monoamine response to alcohol exposure is associated with future alcohol consumption: A nonhuman primate model.
25. Roberg, B.L., Schwandt, M.L., Fairbanks, L.A., Barr, C.S., Lindell, S.G., Suomi, S.J., Higley, J.D. (*under revision*) Resident-Genotype by Intruder-Genotype Mediated Violence: A Primate Model of Gene by Environment Interactions.
26. Howell, S., Westergaard, G., Cleveland, A., Chavanne, T.J., Houser, L., Snoy, P.J., & Higley, J.D. (*under revision*) Physiological correlates of maternal style in free-ranging rhesus macaques (*Macaca mulatta*).
27. Higley, J.D., Iosif, A.M., Stadtlander, Abbot, K.J., Bulechowsky, M., Rogers, J. Devlin, B.J., Williamson, D.E., Cameron, J.L. An endophenotype linked alcoholism: Low motor response to alcohol is heritable in monkeys (*under revision*).

Memberships, OFFICES, service and Honors in Scientific Societies

Member American Society of Primatology – 1986-Present

1998-2000: Member Education Committee

2000-2003: Member of the Research and Development Committee

2003-2005: Chairman of the Research and Development Committee

2003: Nominated to run for Treasurer, 2003 (NIH rules would not allow me to serve)

2004-2006: Member of the Awards Committee

2006-2008: Member of the Education Committee

2007-Present: Member of the Committee for Interdisciplinary Representation

2008-2011: Member of the Finance Committee

2009-Judged student posters and presentations

2009-Nominated to run for Executive Secretary

2010-2015: Chair: Journal and Publication Committee

2015-2018: Member Journal and Publication Committee

2008-Present: Member of the ASP Media and Information Committee

Member: American College Neuropsychopharmacology 1997-2005

Voted to Fellow: American College of Neuropsychopharmacology – 2005-Present

2002-2005: – Member of Animal Research Committee

1999, 2004, 2006-2013 Travel Awardee Mentor

2007-2010 - Member of Animal Research Committee

2007-2010 - Member of Finance Committee

2012-2016 – Member of Ethics Committee

2016-present: Member of the Animal Research Committee

2018-2019: CoChair of the Animal Research Committee

2019-2020: Chair of the Animal Research Committee

2020-2021: Chair of the Animal Research Committee

Member: Society for Neuroscience – 2000-Present

Member: Research Society on Alcoholism – 2007-Present

AWARDS

2010 Presidential Award, American Society of Primatology (Awarded for significant service and mentoring in the society)

2005 Voted to Fellow, American College of Neuropsychopharmacology

Student Awards from my Laboratory

1. 2011 Students won honorable mention at the National Undergraduate Research Symposium for a poster presentation “Rapid recovery from ketamine anesthesia predicts high alcohol intake in rhesus monkeys.” There were between 200 and 300 undergraduates. Andrea Sorenson and Bobbi Sue Padro were awarded second/third place.
2. 2013-2015: Four students were finalists in the national meeting of the American Society of Primatologist’s Poster and Oral Presentation competition:

* Andrea Sorenson was nominated for her poster, “Early rearing conditions affect monoamine metabolite levels during periods of social separation stress: A nonhuman primate model using social separation stress (*Macaca mulatta*)”. American Society of Primatology, San Juan, Puerto Rico. June, 2013.
* Jenna Jackson was nominated for her poster, “Effect of the serotonin transporter genotype and environment (GXE) on infant-mother relationships during reunions in rhesus macaques (*Macaca mulatta*). American Society of Primatology, San Juan, Puerto Rico. June, 2013.
* Daniel Loveland was a finalist for his poster, “MAOa Genotype X Environment Interaction Influences Monoamine Neurotransmitter Functioning in Rhesus Macaques (*Macaca mulatta*) Living in Large Outdoor Corrals”. American Society of Primatology, Decatur, GA September, 2014.
* Andrew Aston was nominated for his poster, “C-to-T SNP in the Promoter Region of the Rhesus Macaque (*Macaca mulatta*) CRH Gene Interacts with Early Rearing Experiences Influencing Anxious Behavior”. American Society of Primatology, Bend, OR, June, 2015.
* Elizabeth Wood, Finalist for her oral presentation, “Anxiety as a Mediator of Alcohol Intake In Laboratory-Living Rhesus Macaques (*Macaca Mulatta*).” American Society of Primatology, Chicago, IL, August, 2017.
* Alexander Baxter, Finalist for his poster, “Serotonin Transporter Genotype and 2D:4D Digit Ratio are Linked to Anxiety in Rhesus Macaques (*Macaca mulatta*).” American Society of Primatology, Chicago, IL, August, 2017.
* Elizabeth Wood and Ryno Kruger—finalists for student research presentation award— American Society of Primatology, Madison, WI, August, 2019.
* Halter, C.M., Jacobsen, N.G., Wood, E.K., Capitanio, J.P., & Higley, J.D. Infant Plasma Cortisol Concentrations are Associated with Later Adult Parenting Deficits in Female Rhesus Macaques (*Macaca* *mulatta*). Student **first place** at the Mary Lou Fulton Student Conference, 2020.

EXTERNAL NIH GRANTS

1. 2010, NIH Pilot Grant, California National Primate Center

awardee - $22,000 seed money to study alcohol intake in anxious monkeys.

BYU GRANTS

1. 2006, 2 Student ORCA Grants, Total $2,800
2. 2007, MEG Grant, $20,000.
3. 2007. FHSS College Research Grant, $7,000
4. 2007, One Student ORCA Grant, Total $1,400
5. 2008, FHSS College Research Grant, $6540.00
6. 2008, 2 Student ORCA Grants, Total $2,800
7. 2008, MEG Grant - $20,000 to support summer internship and ongoing research.
8. 2009, MEG Grant - $20,000 to support summer internship and ongoing research.
9. 2009, FHSS College Research Grant, $6540.00
10. 2009, Graduate Research Fellowship, $4,000
11. 2010, MEG Grant - $20,000 to support summer internship and ongoing research.
12. 2011, FHSS College Research Grant, $6480.00
13. 2011, Graduate Research Fellowship $15,000
14. 2012, FHSS College Research Grant -- $6,480.00 to study the effect of genotypes on alcohol intake and related behaviors in nonhuman primates.
15. 2013, 4 Student ORCA Grants, Total $4.600
16. 2012, 2 Student Field Study Grants. Total, $4,000
17. 2013, 6 Student Field Study Grants Total $10,100
18. 2014, 7 Student Field Study Grants Total $12,000
19. 2014, 3 Student ORCA Grants, Total $4.600
20. 2015, MEG Grant - MEG Grant - $20,000 to support summer internship and ongoing research
21. 2015, 4 Student ORCA Grants, Total, $5600
22. 2015, 6 Student Field Study Grants Total $12,700

EDITORIAL BOARDS

Translational Developmental Psychiatry—Senior Editor

Biology of Mood & Anxiety Disorders – Editorial Board

Invitation to serve on the Editorial Board of the Journal Addiction & Dependence

REVIEWER:

I am also a frequent journal reviewer. I average at least one and often two reviews a month for several high impact journals.

*Frequent Reviewer for* – American Journal of Primatology (Average about three manuscripts a year), Archives of General Psychiatry (now JAMA-Psychiatry), Alcoholism: Clinical and Experimental Research, Biological Psychiatry, Developmental Psychobiology, Neuropsychopharmacology, Translational Developmental Psychiatry, and Psychopharmacology.

*Ad Hoc Reviewer* – Acta Psychiatrica Scandinavica, Aggressive Behavior, Animal Behavior, Brain, Amino Acids, Behavior, and Evolution, Brain Research, Current Biology, European Neuropsychopharmacology, Hormones and Behavior, Frontiers in Behavioral Neuroscience, International Society of Primatology, Medical Primatology, Molecular Genetics, Molecular Psychiatry, Psychosomatic Medicine, PLOS ONE, Proceedings of the National Academy of Sciences, Psychoneuroendocrinology, The ILAR Journal, The International Journal of Neuropsychopharmacology, Translational Psychiatry.

I also perform, on average 1-2 reviews and letters of evaluation a year for advancements in academics and post docs.

I am asked by the American College of Neuropsychopharmacology to write a letter each year recommending membership and advancement.

BYU Graduate Fellowship reviewer (2009, 2013)-Reviewed 3 grants during each cycle.

Other Professional honors and ACTIVITIES—Invited Addresses

1. Invited Participant, Memorial for Dr. Harry F. Harlow, Talk Title: Lessons Harry Harlow taught future students of primatology. Madison, WI, March 1983.
2. Invited Participant, Pennsylvania State University Conference on Coping with Uncertainty: Biological, Behavioral, and Developmental Perspectives. State College, PA, October 1986.
3. Invited Participant, NIDA Workshop on Prenatal Exposure to Drugs of Abuse. Richmond, VA, June 1990.
4. Invited Symposium Participant, Winter Conference on Brain Research: Symposia on Serotonin and Aggression. Talk Title: A nonhuman primate model of inappropriate aggression and impulsive aggression. Vail, CO, January 1991,
5. Invited Participant, Kirby Forensic Psychiatric Center and New York University Forensic Workshop on Consequences of Childhood Victimization in Adult Forensic Patients. Talk Title: Individual differences in serotonin functioning and violence. Wards Island, New York, NY, May 1991.
6. Invited Symposium Participant, American College of Neuropsychopharmacology: Serotonin Symposium. Talk Title: Nonhuman primates as a bridge to understand the role of genetic and environmental factors producing trait-like differences in serotonin and competent social behavior. San Juan, Puerto Rico, December 1992
7. Symposium CoChair and Participant, American Society of Primatologists, Symposium on Serotonin and Social Behavior: Nonhuman Primate Models. Talk Title: The role of serotonin in social competence and inappropriate aggression. Sturbridge, MA, August 1993.
8. Invited Participant, Alcohol Society and the Determinants of Health. Talk Title: A nonhuman primate model of alcohol abuse and alcoholism: Type 1 & 2 alcoholism correlates. Kiawah, SC, November 1993.
9. Invited Symposium Participant, American College of Neuropsychopharmacology: Serotonergic Behaviors: From Genes and Environment to the Clinic I. Talk Title: Inherent and environmental factors influencing central serotonergic activity and behavior in monkeys. Washington, DC, July 1994.
10. Invited Symposium Participant, Research Society on Alcoholism. Talk Title: Nonhuman primate model of human behavioral and biochemical observations. Washington, DC, July 1994.
11. Invited Symposium Participant, IUPHAR Satellite Meeting on Serotonin. Talk Title: Behavioral characteristics of nonhuman primates with low CSF 5-HIAA. Chicago, IL, August 1994.
12. Invited Speaker, Department of Psychology, Berry College. Talk Title: Serotonin influences on social competence and psychopathology: genetic and environmental influences using a nonhuman primate model. Atlanta, GA, November 1995.
13. Invited Symposium Participant, American College of Neuropsychopharmacology: Alcoholism: 25 Years of Research. Talk Title: Type 1-like alcoholic patterns of behavior and alcohol consumption in subjects with low CSF 5-HIAA concentrations. San Juan, Puerto Rico, December 1995
14. Invited Symposium Participant, Winter Conference on Brain Research: Symposia on Serotonin and Aggression. Talk Title: A nonhuman primate model of inappropriate aggression and impulsive aggression. Steamboat Springs, CO, January 1996.
15. Invited Symposium Participant, Society of Behavioral Medicine. Talk Title: Early Experiences and genetic contributions to serotonin functioning and antisocial behavior: A primate psychobiological model. Washington, DC, March 1996.
16. Invited Speaker, Department of Psychology, University of Michigan. Talk Title: Alcohol consumption, aggression, and CNS serotonin: Genetic and environmental influences. Lansing, MI, February 1996.
17. Invited Symposium Participant, Biological Psychiatry. Talk Title: Type 2 alcoholism: A primate neurobiological model. New York, NY, May 1996.
18. Invited Symposium Participant, Research Society in Alcoholism. Progress in Developing a Nonhuman Primate Model of Excessive Alcohol Consumption: Type II-like Patterns of Alcohol Abuse. Washington, DC, June 1996.
19. Invited Symposium Participant, International Society of Psychoneuroendocrinology. Talk Title: CNS Serotonin Functioning and Aggressive Behavior. Cascais, Portugal, August 1996.
20. Invited Conference Participant, Suicide Research Workshop, From the Bench to the Clinic. Talk Title: Low CNS Serotonergic Activity is Trait-like and Correlates with Impulsive Behavior: A Nonhuman Primate Model Investigating Genetic and Environmental Influences on Neurotransmission. Washington DC, November 1996.
21. Invited Symposium Participant, International Society for Developmental Psychobiology. Talk Title: Risk factors for adolescent alcohol abuse: A nonhuman primate model of genetic, environmental, and neuro-biological contributions, October 1997.
22. Invited Speaker, Department of Psychology, Emery University. Talk Title: A nonhuman primate model investigating genetic and environmental influences on CNS serotonin, social behavior and psychopathology. Atlanta, GA, November 1997.
23. Invited Symposium Participant, Winter Conference on Brain Research: Symposium on CNS Catecholamine and Serotonin Function and Aggression. Talk Title: Aggression and alcohol consumption in monkeys selectively bred for low CSF 5-hiaa concentrations: Role of genes and environment. Snowbird, UT, January 1998.
24. Invited Symposium Participant, American Psychological Society Symposium, From Mice to Men: Bridging the Gap Between Personality and Animal Research. Talk Title: A nonhuman primate model relating individual differences in serotonin to antisocial personality. Washington, DC, May 1998.
25. Invited Symposium Participant, Research Society in Alcoholism. Talk Title: Excessive alcohol consumption, serotonin, and violent behavior: Genetic and environmental influences. Hilton Head, SC, June 1998.
26. Invited Symposium Participant, International Society for Biomedical Research on Alcoholism. Talk Title: Cortisol, gustatory, and neurobiological correlates of excessive alcohol consumption. Copenhagen, Denmark, June 1998.
27. Invited Symposium Participant, Society of Biological Psychiatry. Talk Title: molecular genetic and environmental influences on serotonin, behavior, and excessive alcohol consumption. Toronto, Canada, May 1998
28. Organizer and Symposium Participant, Winter Conference on Brain Research: Symposium Serotonin and Behavior: Recent Findings and the Legacy of Markku Linnoila. Talk Title: A nonhuman primate model of impaired serotonin functioning: Genes, environment, and stable responses. Snowmass, CO, January 1999.
29. Co-Organizer, American College of Neuropsychopharmacology: New Directions in the Neurobiology of Violence. Talk Title: Studies of rhesus monkeys with low CSF 5-HIAA concentrations: Molecular genetics, strain differences, neuroimaging, and aggression. San Juan, Puerto Rico, December 1999.
30. Invited Workshop Participant, National Institute on Alcohol Abuse and Alcoholism, Workshop on Future Directions for Research on Alcohol and Sleep. Talk Title: Serotonin and Type 2-like alcoholism deficits—sleep and daily activity: A nonhuman primate model. Bethesda, MD, May 1999.
31. Invited Symposium Participant, Behavior Genetics Association, Behavior Genetics Studies in Non-human Primates. Talk Title: Impaired CNS serotonin functioning, excessive alcohol intake and aggression: A nonhuman primate model genetic and environmental influences. Vancouver, BC, Canada, July 1999.
32. Invited Symposium Participant, American Society for Clinical Pharmacology and Therapeutics. Talk Title: Elucidation of the interactions of genetic and environmental factors in central serotonergic dysfunction using a non-human primate model. San Antonio, TX, March 1999.
33. Invited Symposium Participant, American Society of Addiction Medicine. Talk Title: Genotypic and environmental influences on the neurobiology of excessive alcohol consumption: A nonhuman primate model. Chicago, IL, April 2000.
34. Invited Speaker, Department of Behavioral Medicine, Duke University School of Medicine. Talk Title: Serotonin and behavior: Genetic and environmental influences. Duke University, Raleigh Durham, NC. March 2000.
35. Organizer and Symposium Participant, Society Of Biological Psychiatry. Talk Title: Early rearing & genotypic influences on CNS serotonin & behavior in nonhuman primates. Chicago, IL, May 2000.
36. Organizer and Symposium Participant, American Society of Primatology. Talk Title: Social dominance in nonhuman primates. Boulder, CO, June 2000.
37. Invited Symposium Participant. Research Society in Alcoholism, Satellite Session on Fetal Alcohol Syndrome. Talk Title: Early experience and trauma: Effects on neuropsychobiological development. Denver, CO, June 2000.
38. Invited Symposium Participant, International Congress of Psychology. Talk Title: Impaired CNS serotonin functioning, and antisocial-like personality: A nonhuman primate model of genetic and environmental influences. Stockholm, Sweden, July 21-August 1, 2000.
39. Invited Symposium Participant, American Society of Addiction Medicine. Talk Title: Genotypic and environmental influences on the neurobiology of excessive alcohol consumption: A nonhuman primate model. Chicago, IL, April 2000.
40. Invited Speaker, Department of Psychology and Psychiatry, University of Michigan. Talk Title: Early rearing & genotypic influences on CNS serotonergic functioning & psychopathological behavior: A nonhuman primate model. Ann Arbor, MI, January 2001.
41. Invited Speaker, NIAAA National Research Council. Talk Title: Advances in the Use of the Nonhuman Primate to Investigate Alcoholism. Bethesda, MD, February 2001.
42. Invited to supervise a Doctoral Dissertation Defense. I served as the Expert Proctor. Department of Psychology, Göteborg University, Göteborg, Sweden, June 2001.
43. Featured Speaker, University of Pittsburgh, Pittsburgh Behavior Genetics and Development Conference. The phenotype is a product of gene-environment interactions: A nonhuman primate model. Pittsburgh, PA, October 2001.
44. Invited Participant, NIAAA Institutional Working Group On Alcohol-Mediated Violence, Formulated and drafted a document to recommend research and provided expert opinion as to the state of the field. Washington, DC, November 15, 2001-May 15, 2002.
45. Invited Workshop Participant, NIAAA Sponsored workshop: Gene-Environment Interactions, Genotypic and environmental influences on excessive alcohol consumption: A nonhuman primate model. Bethesda, MD, May 2002.
46. Invited Symposium Participant, RSA Satellite Symposium, Neurobiological Mechanisms of Adolescent Alcohol Abuse: New Findings, New Directions. Talk Title: Adolescent alcohol abuse: A nonhuman primate model of risk factors for Type II-like excessive alcohol intake. San Francisco, CA, June 2002.
47. Invited Speaker, Department of Psychiatry, Yale University. Talk Title: Genetic and environmental influences in the development of the serotonin system and its related phenotypes. West Haven, CT, October 2002.
48. Featured Meeting Speaker, NIAAA Sponsored Meeting, Talk Title: A nonhuman primate model of risk factors for Type II-like excessive alcohol intake and impulse control deficits: Gene-environment interactions. Bethesda, MD, October 2002.
49. Featured Meeting Speaker, Charité Conference on Psychiatric Research – Challenges and Goals. Talk Title: Alcoholism, Animal Models, Charité, Humboldt University of Berlin, Berlin, Germany, October 2002
50. Invited Speaker, University of Wisconsin, Madison. The Harlow Primate Lab Legacy. Talk Title: Nonhuman Primates and Alcohol Consumption: 30 Years of Progress. Madison, WI, October 2002.
51. Invited Speaker, NIMH, Intramural Program, Laboratory of Molecular Pathophysiology, Talk Title: A Nonhuman Primate Model of Psychopathological Behavior. Genes, Environment, and Serotonin. Bethesda, MD, February 2003.
52. Invited Speaker, NIDA, Intramural Research Program. Talk Title: Stress, serotonin, and temperament as predictors of excessive alcohol intake: A gene x environment investigation using a nonhuman primate model. Johns Hopkins, Baltimore, MD, July 2003.
53. Invited Speaker, BIOQUAL, Inc. Talk Title: The use of nonhuman primates to model human excessive alcohol intake and its associated personality traits: Neurobiological genetic, and psychological variables. Washington, DC, August 2003.
54. Invited Speaker, Columbia University and New York State Psychiatric Institute, Talk Title: The use of adolescent nonhuman primates to model human adolescent excessive alcohol intake: Neurobiological genetic, and psychological variables affecting alcohol intake. New York, NY, September 2003.
55. Invited Speaker, New York Academy of Sciences: Adolescent Brain Development: Vulnerabilities and Opportunities. Talk Title: The use of adolescent nonhuman primates to model human adolescent excessive alcohol intake: Neurobiological, genetic, and psychological variables affecting alcohol intake.New York, NY, September 2003.
56. Invited Speaker, Brigham Young University, Department of Psychology. Talk Title: Mother's recipe for well-wired brains: A nonhuman primate model of neurobiological, genetic, & psychological variables affecting adolescent excessive alcohol intake. Provo, UT, October 2003.
57. Invited Speaker, Brigham Young University, Department of Chemistry. Talk Title A nonhuman primate model using biochemical, genetic, and psychological predictors of psychopathology: Moms really do matter? Provo, UT, October 2003.
58. Invited Speaker, University of Maryland, Life Sciences Scholars Program. Talk Title: nonhuman primates as research tools in the study of biomedical science. College Park, MD, November 2003.
59. Symposium Speaker, Human Behavior and Evolution Society Meeting. Talk Title: Potential ultimate and proximal variables contributing to alcoholism: A nonhuman primate model. Berlin, Germany, July 2004.
60. Invited Speaker, University of Oregon, Regional Primate Center. Talk Title: Moms really do count....sometimes: Genotypic and environmental contributions to temperament and psychopathology. Portland, OR, July 2004.
61. Featured Speaker, Marmosets and Macaques in Biological and Biomedical Research: A Primatology Workshop of the European Marmoset Research Group. Talk Title: CNS serotonin deficits are correlated with antisocial personality, violent behavior and removal from the colony for aggression. Zurich, Switzerland, August 2004.
62. Workshop Discussion Leader, Marmosets and Macaques in Biological and Biomedical Research: Discussion Title: Qualitative effects and gene-environment interactions. Zurich Switzerland, August 2004.
63. Symposium Speaker, International Society of Primatology. Talk Title: HPA and CNS serotonin correlates of female maternal behavior and outcomes. Turin, Italy. August 2004
64. Featured Speaker, NIAAA Intramural Retreat. Talk Title: The use of nonhuman primates in the LCS: “But Dr. Heilig, I’m sure I saw a monkey in one of the beds on the ward”. Bethesda, MD. September, 2004.
65. Featured Speaker, Department of Pharmaceutical Biosciences, Division of Pharmacology, Göteborg University. Talk Title: Mothers still matter: Genetic, environmental and CNS influences on normal and psychopathological development. Göteborg, Sweden, September 2004.
66. Invited to oversee and head a Doctoral Dissertation Defense. I served as the Expert Proctor. Department of Psychology, Göteborg University, Göteborg, Sweden, September 2004.
67. Featured Speaker, Neonatal Grand Rounds at Georgetown University Hospital. Talk Title: Genetic and environment influences on development and resulting psychopathology: A nonhuman primate model. Georgetown, DC. September 2004.
68. Invited Speaker, Department of Psychiatry, University of Pittsburgh. Talk Title: mothers still make a difference... sometimes: Genotypic and environmental contributions to temperament and psychopathology. September 2004.
69. Featured Speaker, University of Nebraska Midlands Neuroscience Program. Talk Title: qualitative and quantitative interactions between genotype and the environment: Neurobiology, behavior and psychopathology and resultant developmental outcomes. Omaha, NE, December 2004.
70. Featured Speaker, University of Nebraska Psychology Colloquium. Talk Title: Moms, genes, and behavior: Effect of gene x environment interactions on development. Omaha, NE, December 2004.
71. Invited Workshop Participant, American College of Neuropsychopharmacology. Talk Title: Genotype, environment and phenotype. San Juan, Puerto Rico, December 2004.
72. Featured Speaker, Psychiatric Grand Rounds at Jackson, Mississippi University Hospital. Talk Title: Qualitative vs quantitative genetic x environmental interactions: Effects on neurobiology, behavior and psychopathology and resultant developmental outcomes. Jackson, MS, January 2005
73. Invited presentation, Alphagenesis Research Administration, Research Team, and Veterinarian Staff. Talk Title: Dear Mom, Thanks for Making Me What I Am: Genes, Rearing, Biochemistry and Love. Yemassee, SC, May 2005.
74. Invited participant, Chinese Academy Sciences – Columbia University Joint conference on neuroscience. Talk Title: Neurobiological, & neurogenetic differences between Chinese- and Indian-derived rhesus macaques. Shanghai and Kunming, China. May 2005.
75. Invited symposium participant, American Psychological Society. Talk Title: A nonhuman primate developmental model of alcohol abuse and its associated psychobiology: Qualitative and additive gene x environmental interactions. Los Angeles, CA, May 2005.
76. Invited symposium participant, Animal Behavior Society. Talk title: How gene-environment interactions can shape biobehavioral development in primates. Snowbird, UT, August 2005
77. Featured Speaker, NIAAA Intramural Program: Talk title: Quantitative and qualitative genetic, environmental and CNS influences on alcohol intake in a nonhuman primate model. Rockville, MD, November 2005.
78. Plenary Address, Intermountain Society for Neuroscience Meeting. Talk title: Mom/Dad, When I Grow Up I Want to Be Just Like You: Warm Milk, CNS Genes and Developmental Outcomes. Provo, UT, November 2005.
79. Invited symposium participant, American College of Neuropsychopharmacology: New Directions in the Neurobiology of Violence. “The Warrior/Worrier Paradox: Varying Allelic Effects and Counter Balancing Selection of Phenotypes”. Talk Title: Gene-environmental interactions & developmental outcomes leading to aggression & related behaviors using a nonhuman primate model. Kona, HI, December 2005.
80. Featured Speaker, Oregon National Primate Research Center and the Department of Behavioral Neuroscience. Talk Title: Quantitative & qualitative genetic, and environmental influences on the behavior and neurobiology underlying alcohol intake: A nonhuman primate model, Beaverton, OR, February 2006.
81. Invited symposium participant and co-chair, European Winter Conference on Brain Research. Talk Title: Gene x environment interactions leading to normal & pathological outcomes: A nonhuman primate model. Villars sur Ollon, Switzerland, March 2006.
82. Invited symposium participant, Society of Biological Psychiatry. Talk Title: Choose your parents well: Gene x environment interactions leading to pathological developmental pathways. Toronto, Canada, May 2006.
83. Featured Speaker, University of Chicago, Colloquium. Talk Title: Genotype and behavior outcomes: A nonhuman primate model of gene x environment interactions. Chicago, IL, April 2006.
84. Invited Symposium Speaker, International Society for the Study of Aggression. Talk Title: Phenotypic outcomes in CNS serotonin, & serotonin­mediated aggression is modulated by gene X environment interactions: A nonhuman primate model. Minneapolis, MN, July 2006.
85. Symposium Organizer and Chair, American Society of Primatologists. Talk Title: Phenotypic outcomes in CNS serotonin, & serotonin­mediated aggression is modulated by gene X environment interactions: A nonhuman primate model. San Antonio, TX, August 2006.
86. Symposium Co-Organizer and Co-Chair, American Society of Primatologists, Variables affecting nonhuman primate alcohol intake. Talk Title: Twenty years of experience with alcohol-consuming monkeys. San Antonio, TX, August 2006.
87. Invited symposium participant, International Society for Biomedical Research on Alcoholism. Talk Title: The use of nonhuman primates to longitudinally study interacting influences of genetic & early environmental factors on alcohol intake. Sydney Australia, September, 2006.
88. James Madison University, University Visiting Scholars Program Lecture. Talk Title "New ways of thinking about how we became who we are: A nonhuman primate model of gene x environment interactions. Harrisonburg, VA, February 2007.
89. Primary Speaker, Brigham Young University, Neuroscience Program. Talk Title: A nonhuman primate model of neurobiological, genetic, & psychological variables affecting adolescent social behavior and excessive alcohol intake. Provo, UT, March 2007.
90. Invited Symposium Speaker, American Society of Primatologists. Talk Title:Self-injurious behavior in rhesus macaques: Early history and the role of the serotonin system. Winston-Salem, NC, June 2007.
91. Invited Participant, American Society of Primatologists. Committee on Interdisciplinary Representation, St. Louis, MO, September 2007.
92. Workshop speaker, Association of Mormon Counselors and Psychotherapists. Talk Title: Biochemistry, genetics, and mothers: Factors influencing psychopathology and change. Salt Lake City, UT, [April 2008](http://abc.eznettools.net/D300070/X329923/Conferences/S08Schedule.pdf)
93. Symposium Speaker and Organizer, American Society of Primatology. Talk Title: Successful secrets of simian scripts: Publishing before you perish. Ft. Lauderdale, FL. June 2008.
94. Symposium Speaker, International Society of Primatology. Talk Title: Chaos, and violence: Genes interacting with the environment to influence to produce impulsive personality. Edinburgh, UK, August 2008.
95. Symposium Speaker, International Society of Primatology. Talk Title: Personality, Development and Gene X Environment Interactions in Primates-Anxiety and Reactivity, Edinburgh, UK, August 2008.
96. Featured Speaker, University of California-Davis, Colloquium. Talk Title: Mothers, genotypes and personality: A nonhuman primate model of gene x environment interactions. November 2008, Davis, CA.
97. Workshop Speaker and Organizer, American Society of Primatology. Title: Writing and getting grants-lessons about surviving after graduate school. Ft. Lauderdale, FL. June 2008.
98. Invited Symposium Speaker, Research Society on Alcoholism. Title: Strategies for studying the links between anxiety and alcoholism in non-human primates. San Diego, CA, June 2009.
99. Organizer and Chair of Symposium for the American College of Neuropsychopharmacology, Nonhuman primate models of gene X environment Interactions: New genes and new insights into old ones. Hollywood, FL, December 2009.
100. Symposium Speaker, American College of Neuropsychopharmacology, Situation X gene, and person-genotype X person-genotype interactions: A nonhuman primate model of gene X Environment Interactions. Hollywood, FL, December 2009.
101. Invited Speaker, University of California-Davis. Talk Title: Mothers, genotypes and personality: A nonhuman primate model of gene x environment interactions. November 2008, Davis, CA.
102. Symposium Speaker, Biological Psychiatry, Gene X environment effects on behavioral dysfunction-rearing, genotype of partner by genotype of initiator interactions. A nonhuman primate model. Philadelphia, PA, September 2012.
103. Symposium Speaker, Social Neuroscience, Alcohol in a primate model of anxiety and adoption. New Orleans, LA, October 2012.
104. Symposium Speaker, American Academy of Child and Adolescent Psychiatry, Nonhuman primate models of developmental outcomes: Gene X environment interactions. San Francisco, CA, October 2012.
105. Symposium Speaker, Biological Psychiatry, Gene X environment effects on behavioral dysfunction-rearing, genotype of partner by genotype of initiator interactions. A nonhuman primate model. Philadelphia, PA, April 2012.
106. Plenary Address, World Congress of Psychiatric Genetics, A decade of studies investigating gene X environment interactions and the risk for alcohol abuse and related psychopathology: A nonhuman primate model. Hamburg, Germany, May 2012.
107. Invited Speaker, University of California-Davis, Primate Center. Talk Title: Gene X environment interactions and their effect on development and risk for psychopathology: A nonhuman primate model. Davis, CA, June 2013.
108. Symposium Speaker, American Academy of Child and Adolescent Psychiatry, Nonhuman Primates Models of Developmental Outcomes—Violence: Gene/Environment Interactions. Orlando, FL, October 2013.
109. Workshop Participant, American College of Neuropsychopharmacology, Mental illness, violence and the gun debate: Evidence, policy, privacy, and stigma-On behalf of the ACNP Ethics Committee. Hollywood, FL, December 2013.
110. Invited Speaker, Wake Forest University, Department of Pharmacology, cosponsored by the Department of Psychiatry. Gene X environment effects on behavioral phenotypes and psychopathology-rearing, genotype of partner by genotype of initiator interactions. A nonhuman primate model. Wake Forest, NC, November 2016.
111. Invited Speaker, Heritage Hall Speaker, Brigham Young University, How to Deal with Mental Illness and Suicide, Heritage Hall, BYU, Fall, 2017.
112. Invited Speaker, Women’s Studies, Brigham Young University, Mothers, Genetics: Gene X Environment Interactions. March, 2018.
113. Chair and organizer of Workshop with Elizabeth Wood as CoChair: The Scientific Legacy and Impact of Stephen J. Suomi: Individuals are Different! American Society of Primatology, Madison, WI, August, 2019.
114. CoChair and CoOrganizer of Mini Panel: American College of Neuropsychopharmacology, The Molecular Genetics of Neurodevelopmental Disorders: Insights from Diverse Animal Models., Orlando, FL, December 2019.
115. Chair and Organizer of Workshop: American College of Neuropsychopharmacology, Animal Models (e.g. What Works Well and What Does Not, etc.), Virtual Meeting, December 5-9, 2020.

**Posters and Other Presentations (Since coming to BYU)**

1. Poster— Higley, J.D., Cameron, J.L., Iosif, A.M., Stadtlander, M., Abbott, K.J., Oostman H.E., Papailiou A.P., Loprinzi, P., Thomas, S., Bulechowsky, A., Larson, N.T., Rogers, J., Williamson, D.E. A search for genes underlying risks associated with alcoholism: Development of a nonhuman primate model. Research Society on Alcoholism. Seattle, WA, July 2007.
2. Poster— Higley, J. D., Schwandt, M. L., Suomi, S. J., Barr, C. S. Pathways to alcohol abuse: Genotype, setting, and rearing interactions: A nonhuman primate model. American College of Neuropsychopharmacology, Boca Raton, FL, Dec 9-13, 2007.
3. Poster— Schwandt, M. L., Newman, T. K., Suomi, S. J., Higley, J. D., Heilig, M., Barr, C. S. (2007) Monoamine oxidase A (MAOa) gene promoter variation interacts with early rearing condition to influence the behavioral response to social separation in rhesus macaques (*Macaca mulatta*). American Society Of Primatology, Wake Forest University School of Medicine, Winston-Salem, NC, June 20th to 23rd, 2007.
4. Poster— Chisholm, K., Schwandt, M. L., Higley, J. D., Suomi, S. J. Heilig, M., Barr, C. S. (2007) Age and rearing condition influence behavioral responses to social intrusion in rhesus macaques (*Macaca mulatta*). American Society Of Primatology, Wake Forest University School of Medicine, Winston-Salem, NC, June 20th to 23rd, 2007.
5. Poster— Glover, E. J., Willard, S. L., Davenport, A. T., Thompson, J., Friedman, D. P. Higley, J. D., DePetrillo, P. B. Singley, E. C. A. Shively (2007) 5-HT1a receptor binding is increased in the hippocampus of depressed cynomolgus macaques (*Macaca fascicularis*). American Society Of Primatology, Wake Forest University School of Medicine, Winston-Salem, NC, June 20th to 23rd, 2007.
6. Poster - Schwandt, M.L., Lindell, S.G., Higley, J.D., Suomi, S.J., Heilig, M., Barr, C.S. OPRM1 Gene variation influences HPA Axis function in rhesus macaque (*Macaca mulatta*) mothers. American Society Of Primatology, Ft. Lauderdale, FL, June 2008.
7. Poster - Flygare, R.A., Graham, K. N., Schwandt, M.L., Lindell, S.G., Barr, C.S., Suomi, S. J., Higley, J. D. Biological and adoptive mother-infant relationships across the first six months of life: More dyadic conflict, infant withdrawal, and anxiety in adoptive dyads. American Society Of Primatology, Ft. Lauderdale, FL, June 2008.
8. Poster – Higley, J. D., Bogh, R. A., Sproul-Bassett, A. M., Lindell, S. G., Suomi, S. J., Barr, C. S. Infant behavior and central serotonin are altered in adopted infants: A nonhuman primate model. American College of Neuropsychopharmacology, Miami Beach, FL, December 2010.
9. Presentation— Howell, S., Schwandt, M., Champagne, J. Westergaard, G., Higley, J. Individual differences in biobehavioral profiles may impact drug results. American Society Of Primatology, Ft. Lauderdale, FL, June 2008.
10. Poster— Lindell, S. G., Schwandt, M. L., Sun, H., Suomi, S. J., Heilig, M., Barr, C. S., Higley, J. D. OPRM1 genotype predicts responses to novelty in rhesus macaques. American College of Neuropsychopharmacology, Hollywood, FL, December 2009.
11. Poster—Higley, J., Roberg, B., Schwandt, M., Lindell, S., Barr, C., Suomi S. Violent aggression and the serotonin transporter gene: a personal-genotype x partner-genotype interaction. American Society of Primatology, Louisville, KY, June 2010.
12. Poster–- Higley, J. D., Bogh, R. A., Sproul-Bassett, A. M., Lindell, S. G., Suomi, S. J., Barr, C. S. Infant behavior and central serotonin are altered in adopted infants: A nonhuman primate model. American College of Neuropsychopharmacology, Miami Beach, FL, December 2010.
13. Poster– Stephen G., Lindell, Q., Yuan, Z., Zhou, Suomi, S. J., Higley, J. D., Goldman, D., Barr, C. S. Cross-species genetic variation and stress-induced epigenetic regulation of the BDNF gene: Effects of stress and BDNF genotype on early infant development. American College of Neuropsychopharmacology, Miami Beach, FL, December 2010.
14. Poster– Higley, J. D., Orgad, K., Gibson, M. S., Page, H. E., Schwandt, M. L., Barr, C. S., Suomi, S. J., Higley, J. D. Early temperament predicts alcohol intake in group-housed rhesus macaques. American Society of Primatology, Austin, TX, September 2011.
15. Poster– Higley, J. D., Sorenson, A. N., Padro, B. S., Capitanio, J. P. Low sensitivity or level of response to ketamine predicts high alcohol intake in adolescent rhesus monkeys. American College of Neuropsychopharmacology, Waikoloa, Hawaii, December 2011.
16. Poster–Shively, C. A., Willard, S. L., Higley, J. D., The effects of sertraline HCL on anxious and depressive behavior in adult female nonhuman primates. Society for Neuroscience, Washington, D.C. November 2011.
17. Poster– South, M., Christensen, M. D., Newton, T., Jamison, N. K., Johnston, O., Cooper, A., Van Tassell, S., Higley, J. D. Danger lurking? Dissociation of psychophysiology and behavior in response to provoked anxiety. International Meeting for Autism Research, San Diego, CA, May 2011.
18. Poster— Higley, J. D., Sorenson, A. N., Capitanio, J. P., Mendosa, S. Serotonin transporter genotype modulates HPA axis output during stress: Effect of stress, dexamethasone test and ACTH challenge. American College of Neuropsychopharmacology, Hollywood, FL, December 2012.
19. Poster— Steward, A. L., Sorenson, A. N., Elliot, K., Snarr, J. Capitanio, J. P., Higley, J. D. Variables affecting indoor pairing success in adult rhesus macaques (*Macaca mulatta*). American Society of Primatology, San Juan, Puerto Rico, June 2013.
20. Poster— Clemente, J. G., Lindell, S. G., Higley, J. D., Suomi, S. J., Barr, C. S. Dopamine D4 receptor gene (DRD4) variation predicts increased aggression in rhesus macaques. American Society of Primatology, San Juan, Puerto Rico. June 2013.
21. Poster— M. L. Schwandt, Suomi, S. J., Higley, J. D., Barr, C. S. Extreme and minimal response to early social stress in rhesus macaques (*Macaca mulatta*) predicts the response to social challenge later in life. American Society of Primatology, San Juan, Puerto Rico. June 2013.
22. Poster— O’Connell, P., Jackson, J., Lindell, S. G., Sorenson, A. N., Lindell, C., Schwandt, C. L., Suomi, S. J., Barr, C. S., Higley, J. D. Mother’s 5-HTTLPR Genotype X Infant’s Genotype Interact to Affect Mother-infant Interactions and Developmental Outcomes: Aggression, Anxiety, and Social Behavior. American College of Neuropsychopharmacology, Hollywood, FL, December 2013.
23. Poster— Baker, M. B., Lindell, S. G., Yuan, Q., Zhou, Z., Higley, J. D., Suomi, S. J., Barr, C. S. Disruption of early maternal care results in epigenetic regulation of the oxytocin receptor (OXTR) gene in rhesus macaques. American College of Neuropsychopharmacology, Hollywood, FL, December 2013.
24. Poster—Higley, J. D., Gonzales, C., Capitanio, J. P. Cortisol Patterns of Response to Stress, Dexamethasone, and ACTH predict Extremes in Temperament that are Related to Future Psychopathology: A Nonhuman Primate Model. American College of Neuropsychopharmacology, Phoenix, AZ, December 2014.
25. Poster—Wood, E.K., Capitanio, J.P., del Rosso, L., & Higley, J.D. What Leads to a Second Drink? Anxiety as a Mediator of Initial Alcohol Intake, a Nonhuman Primate Model. December, American College of Neuropsychopharmacology, Palm Springs, CA, 2017.
26. Poster—Barr, C.S., Driscoll, C.A., Lindell, S.G., Suomi, S.J., Higley, J.D. “Whole Exome Sequencing Identifies Aa GABRa6 Variant that Predicts Alcohol Response and Consumption in Rhesus Macaques.” American Society of Primatology, Chicago, IL, August, 2017.
27. Wood, E.K., Suomi, S.J., Higley, J.D. Infant Biobehavioral Foundations of Adolescent Binge Drinking and Alcohol Intake: A Nonhuman Primate Model. American College of Neuropsychopharmacology, Hollywood, FL, December, 2018.
28. Wood, E.K., Suomi, S.J., Wood, E.K., Suomi, S.J., Barr, C.S., Goldman, D., Harris, J.C., Higley, J.D. A Nonhuman Primate Model of Human Non-Suicidal Self-Injury: Serotonin-Transporter Genotype-Mediated Typologies. American College of Neuropsychopharmacology, Virtual Meeting, December 2020.

**Student Posters and Oral Presentations at Professional Meetings (since coming to BYU)**

**2007**

1. Thomas, S. J., Schwandt, M. L., Lindell, S. G., Suomi, S. J., Barr, C. S., & Higley, J. D. Heritability of dominance rank in laboratory housed juvenile nonhuman primates, American Society of Primatology, Winston Salem, NC. June 2007.

**2008**

1. Kay, D. B., Suomi, S. J., and Higley, J. D. Temperament and daytime sleep/wake states in neonatal rhesus macaques. American Society of Primatology, Ft. Lauderdale, FL, June 2008.
2. Flygare, R.A., Graham, K.N., Schwandt, M.L., Lindell, S.G., Barr, C.S., Suomi, S.J. Higley, J.D. Biological and adoptive mother-infant relationships across the first six months of life: more dyadic conflict, infant withdrawal, and anxiety in adoptive dyads. American Society of Primatology, Ft. Lauderdale, FL June 2008.

**2009**

1. B.B. Jones, B. Stringfellow, W. Dennis, T. Tate, M. L. Schwandt, Lindell, S. G., Barr, C. S., Suomi, S. J., Higley, J. D., Biological and adoptive mother-infant relationships of laboratory-reared rhesus monkeys (*Macaca mulatta*) across the first six months of life: Adoptive mothers and their effects on infants' cortisol and ACTH levels. American Society of Primatology, San Diego, CA. September 2009.
2. Bassett, A., Schwandt, M. L., Lindell, S. G., Barr, C. S. Suomi, S. J., Higley, J. D. Effects of premature maternal rejection on the development of laboratory-reared rhesus monkeys (*Macaca mulatta*). American Society of Primatology, San Diego, CA. September 2009.
3. Day, S. M., Pingel, J. M., Schwandt, M. L., Lindell, S. L, Davis, E. Barr, C. S. Suomi, S. J., Higley, J. D. Self-injury and the intruder challenge paradigm: A comparative study examining genotype, hormonal, and behavioral interactions in laboratory rhesus macaques. American Society of Primatology, San Diego, CA. September 2009.
4. Sorenson, A.N., Maxwell, W. F., Schwandt, M. L., Barr, C. S. Suomi, S.J., Higley, J. D. Different developmental outcomes following laboratory rearing by biological or adoptive mothers: Maternal influence on behavioral and physiological responses to separation stress in rhesus macaques (*Macaca mulatta*). American Society of Primatology, San Diego, CA. September, 2009.

**2010**

1. Kay, D. B. Marsiske, M., Suomi, S. J., Higley, J. D. Confirmatory factor analysis of the three-factor model of temperament in the rhesus monkey. American Society of Primatology, Louisville, KY. June 2010.
2. J. W. Kirton, D. J. Blocker, K. Orgad, Suomi, S. J., Higley, J. D., Consistency of temperament of in group-housed infant rhesus monkeys (*Macaca mulatta*) during the first months of life. American Society of Primatology, Louisville, KY. June 2010.
3. Chaffin, A. C., Higley, J. D., Schwandt, M. L. Lindell, S. G., Suomi, S. J. Barr, C. S. Temperamental behaviors measured during the first months of life are predictive of aggression in group housed rhesus macaques (*Macaca mulatta*). American Society of Primatology, Louisville, KY. June 2010.

**2011**

1. Chaffin, A. C., Blocker, D. J., Svetlana, C., Stein, E., Espinel, W. F., Sorenson, A. N., Schwandt, M. L., Barr, C. S., Suomi, S. J., Higley. J. D. Brain structures associated with temperament and social behavior in rhesus monkeys. American Society of Primatology, Austin, TX. September, 2011.
2. Sorenson, A. N., Padro, B. S., Capitanio, J. P., Higley, J. D. Low sensitivity or level of response to ketamine predicts high alcohol intake in adolescent rhesus monkeys. American Society of Primatology, Austin, TX. September, 2011.
3. Hipps, A., Maxwell, W. F., Page, H. E., Schwandt, M. L., Barr, C. S., Suomi, S. J., Higley, J. D. Effect of social separation on mother-daughter relationships in infant rhesus macaques. American Society of Primatology, Austin, TX. September, 2011.
4. M. Jensen M., Chaffin, A. C., Schwandt, M. L., Barr, C. S., Suomi, S. J., Higley, J. D. Mother-infant separation is associated with later pathological behavior. American Society of Primatology, Austin, TX. September, 2011.
5. B. S. Padro, A. N. Sorensen, Higley, J. D., Ketamine recovery time predicts alcohol consumption in adolescent and young rhesus macaques (*Macaca mulatta*). University of California-Davis, National Primate Center, Davis, CA, August 2011.
6. Higley, J. D., Orgad, K., Gibson, M. S., Page, H. E., Schwandt, M. L., Barr, C. S., Suomi, S. J., Higley, J. D. Early temperament predicts alcohol intake in group-housed rhesus macaques. American Society of Primatology, Austin, TX. September, 2011.
7. Oral Presentation (Won 2nd Prize, Nationally) Padro, B. S., Sorenson, A. N., Higley, J. D. Rapid recovery from ketamine anesthesia predicts high alcohol intake in rhesus monkeys. National Undergraduate Research Symposium, Stanford, CA. May 2011.

**2012**

1. Espinel, W.F., Sorenson, A. N., Schwandt, M. L., Lindell, S. G. Fairbanks, L. A., Barr, C. S., Suomi, S. J., Higley, J. D. A longitudinal study of the effect of adoption on anxiety and alcohol intake: A nonhuman primate model. American Society of Primatology, Sacramento, CA. June 2012.
2. Page, H. E., Tuft, H. R., Jackson, J., Espinel, W. F., Sorenson, A.N., Schwandt, M. L., Lindell, S. G., Barr, C. S., Suomi, S. J., Higley, J. D. Effect of the serotonin transporter, genotype, parity, and separation condition (GxE) on infant aggression during mother-infant reunions in rhesus macaques (*Macaca mulatta*). American Society of Primatology, Sacramento, CA. June 2012.
3. Simmons, T., Aldous, I., Espinel, W. F., Chaffin, A. C., Sorenson, A.N., Schwandt, M. L., Barr, C. S., Suomi, S. J., Higley, J. D. Mu opioid genotype, rearing, and sex effects on aggression and antisocial behavior during social challenge in rhesus macaques (*Macaca mulatta*): Gene x Environment x Sex interactions. American Society of Primatology, Sacramento, CA. June 2012.

**2013**

|  |
| --- |
| 1. Jackson, J., Page, H. E., Sorenson, A. N., Schwandt, M. L. Barr, C. S., Suomi, S. J., Higley, J. D. Effect of the serotonin transporter genotype and environment (GXE) on infant-mother relationships during reunions in rhesus macaques (*Macaca mulatta*). American Society of Primatology, San Juan, Puerto Rico. June 2013. 2. Sorenson, A. N., Garcia, D. J., Gartman, P. J., Schwandt, M. L., Barr, C. S., Suomi, S. J., Higley, J. D. Early rearing conditions affect monoamine metabolite levels during periods of social separation stress: A nonhuman primate model using social separation stress (*Macaca mulatta*). American Society of Primatology, San Juan, Puerto Rico. June 2013. |
| 1. O'Connell, P. H., Bennett, M. T., Sorenson, A. N., Schwandt, M. L., Barr, C. S., Suomi, S. J., Higley, J. D. Mother’s 5- HTTLPR Genotype x Infant’s Genotype Affect Mother-Infant Interactions and Outcomes: Aggression, Anxiety, and Social Behavior. American Society of Primatology, San Juan, Puerto Rico. June 2013. |

**2014**

1. Loveland, D. G., Dent, B. E., Skidmore, M. A., Sorenson, A. N., Schwandt, M. L., Barr, C. S., Suomi, S. J., Higley, J. D. MAOa Genotype X Environment Interaction Influences Monoamine Neurotransmitter Functioning in Rhesus Macaques (*Macaca mulatta*) Living in Large Outdoor Corrals. American Society of Primatology, Decatur, GA September 12–15, 2014.
2. Aston, S. A., O'Connell, P. H., Shackett, J., Sorenson, A. N., Schwandt, M. L., Barr, C. S., Suomi, S. J., Higley, J. D. A C-to-T SNP in the Promoter Region of the Rhesus Macaque (*Macaca mulatta*) CRH Gene Interacts with Nursery Rearing Resulting in PTSD-Like Dysregulation of the HPA Axis and Disrupted HPA Axis Habituation to Repeated Stress. American Society of Primatology, Decatur, GA September 12–15, 2014.
3. Glass, K. R., Bennett, M. T., Humbert, B. S., Sorenson, A. N., McCowan, B., Capitanio, J. P., Higley, J. D. 5HTTLPR Gene, Mother’s Social Dominance, and Infant Cortisol in Rhesus Macaques (*Macaca mulatta*) Living in Large Outdoor Enclosures. American Society of Primatology, Decatur, GA September 12–15, 2014.

**2015**

1. Chun, K., Bliss-Moreau, E., Aston, S. A., Barrington, R., Shackett, J., Higley, J. D. Capitanio, J. P. Behavioral Inhibition Characterized in Infancy Predicts Subsequent Sociability in Adult Rhesus Monkeys (*Macaca mulatta*). American Society of Primatology, Bend, OR, June 17–20, 2015.
2. Passey, E., Willoughby, K., Page, H., Waters, M., Schwandt, M. L., Suomi, S. J., Barr, C. S., Higley, J. D. Variations in the Mu-Opioid Receptor Influences Maternal Behavior and Infant Outcomes in Rhesus Macaques. American Society of Primatology, Bend, OR, June 17–20, 2015.
3. Aston, S. A., O'Connell, P. H., Schwandt, M. L., Barr, C. S., Suomi, S. J., Higley, J. D. A C-to-T SNP in the Promoter Region of the Rhesus Macaque (*Macaca mulatta*) CRH Gene Interacts with Early Rearing Experiences Influencing Anxious Behavior. American Society of Primatology, Bend, OR, June 17–20, 2015.
4. Anderson, S. G., Aston, S. A., Higley, J. D., Capitanio, J. P. Social Environment Predicts Temperament of Infant Rhesus Macaques (*Macaca mulatta*). American Society of Primatology, Bend, OR, June 17–20, 2015.

**2016**

1. Wood, E.K., Conradt, E., Lindell, S.G., Schwandt, M.L., Suomi, S.J., Barr, C.S., Higley, J.D. Transgenerational Transmission of the HPA Axis Response to Stress: A Nonhuman Primate Epigenetic Model. American Society of Primatology, Chicago, IL., August 2016.
2. Davies, D.A., Waters, S.J., Page, E.M., Lindell, S.G., Schwandt, M.L., Barr, C.S., Suomi, S.J., Higley, J.D. Effect of Social Setting, Rearing, and Sex on Alcohol Consumption in Rhesus Monkeys (*Macaca mulatta*). American Society of Primatology, Chicago, IL., August 2016.
3. Lange, N.N., Baxter, A., Wood, E.K., Lake, I.M., Capitanio, J.P. del Rosso, L., Kinnally, E.L., Higley, J.D. Effect of Social Setting, Rearing, and Sex on Alcohol Consumption in Rhesus Monkeys (*Macaca mulatta*). American Society of Primatology, Chicago, IL., August 2016.
4. Woods, E.K., Conradt, E.E., Schwandt, M.L., Lindell, S.G., Suomi, S.J. Barr, C.S., Higley, J.D. The Intergenerational Transmission of Early Deleterious Rearing Experiences on the HPA Axis: A Nonhuman Primate Epigenetic Model of HPA Axis Functioning. American College of Neuropsychopharmacology, Hollywood, FL, December 2016.

**2017**

1. Woods, E.K., Skowbo, A.N., Capitanio, J.P., Higley, J.D. Anxiety as a Mediator of Alcohol Intake in Laboratory-Living Rhesus Macaques (*Macaca mulatta*). American Society of Primatology, Washington, DC, August, 2017.
2. Baxter, A., Woods, E.K., Capitanio, J.P., Higley, J.D. “Serotonin Transporter Genotype and 2D:4D Digit Ratio are Linked to Anxiety in Rhesus Macaques (*Macaca mulatta*).” American Society of Primatology, Washington, DC, August, 2017.
3. Page, H.E., Bell, D.M., Wood, E.K., Waters, S.J., Schwandt, M.L., Barr, C.S., Suomi, S.J., Lindell, S.G., Higley, J.D. “Variation in the Mu-Opioid-Receptor Gene Modulates Maternal Behavior in Outdoor-Housed *Macaca mulatta*).” American Society of Primatology, Washington, DC, August, 2017.
4. Woods, E.K., Kruger, A. Bennion, A., Cooke, B.M., Lindell, S.G., Schwandt, M.L. Goldman, D., Barr, C.S., Suomi, S.J., Higley, J.D. “Low Inherent Sensitivity to the Intoxicating Effects of Ethanol in Laboratory-Housed Rhesus Monkeys (*Macaca* *mulatta*) with Low CSF Concentrations of the Serotonin Metabolite 5-Hydroxyindoleacetic Acid.” American Society of Primatology, Washington, DC, August, 2017.

**2018**

1. Wood, E.K., Kruger, R., Capitanio, J.P., Lindell, S., Barr, C.S., Higley, J.D. The Association of Oxytocin Receptor Genotype on Social Behavior in Laboratory-Housed Rhesus Macaques (*Macaca mulatta*). American Society of Primatology, San Antonio, TX, August, 2018.
2. Baxter, A., Wood, E.K., Witczak, L.R., Bales, K.L., Higley, J.D. Sexual Dimorphism in 2d:4d Ratio is Associated with Maternal Urinary Sex Hormones in a Representative New World Monkey (*Calicebus cupreus*). American Society of Primatology, San Antonio, TX, August, 2018.
3. Wood, E.K., Suomi, S.J., Higley, J.D. Neonatal Predictors of Adolescent Alcohol Intake: A Rhesus Monkey (*Macaca mulatta*) Model. American Society of Primatology, San Antonio, TX, August, 2018.
4. Wood, E.K., Suomi, S.J., Higley, J.D. Infant Biobehavioral Foundations of Adolescent Binge Drinking and Alcohol Intake: A Nonhuman Primate Model. American College of Neuropsychopharmacology, Hollywood, FL, December, 2018.

**2019**

1. Wood, E.K., Kruger, R., Cash, E. Lindell, S.G., Schwandt, M.L., Barr, C.S. Suomi, S.J., Higley, J.D. Early Behavioral Indications of an Anxious-Like Temperament are Associated with Excessive Alcohol Intake in Adolescence: A Rhesus Monkey (*Macaca mulatta*) Model. Research Society for the Study of Alcoholism, Minneapolis, Minnesota, June, 2019.
2. Kruger, R., Wood, Day, S.M., Day, J.P., Suomi, S.J., Higley, J.D. Risk for Self-Injurious Behavior and the Response to Stressful Challenges: A Rhesus Macaque (*Macaca mulatta*) Model Examining Genotype, HPA Axis, and Behavioral Interactions. American Society of Primatology, Madison, WI, August, 2019.
3. Wood, E.K., Lemmon, D.P., Mullen, N.D., Lindell, S.G., Schwandt, M.L., Barr, C.S., Suomi, S.J. Higley, J.D. Central Nervous System Monoamine Response to Alcohol is Associated with Future Alcohol Consumption in Laboratory-Housed Rhesus Macaques (*Macaca mulatta*). American Society of Primatology, Madison, WI, August, 2019.
4. Jarman, P., Wood, E.K., Cash, E., Baxter, A., Capitanio, J.P, Higley, J.D. Prenatal Androgen Exposure (2d:4d Ratio) is Associated with Lower Stress-Induced Cortisol Response in Corral-Living Female Rhesus Macaques (*Macaca mulatta*). American Society of Primatology, Madison, WI, August, 2019.
5. Reyelts, J.F., Wood, E.K., Luck, K.L., Z. J. Jager, Capitanio J.P., Higley, J.D. Genotypic Variation in the Serotonin Transporter Gene is Associated with Maternal Restraint and Rejection of Infants: A Nonhuman Primate Model of Corral-Living Rhesus Macaques (*Macaca mulatta*). American Society of Primatology, Madison, WI, August, 2019.

**2019**

1. Wood, E.K., Kruger, R., Cash, E. Lindell, S.G., Schwandt, M.L., Barr, C.S. Suomi, S.J., Higley, J.D. Early Behavioral Indications of an Anxious-Like Temperament are Associated with Excessive Alcohol Intake in Adolescence: A Rhesus Monkey (*Macaca mulatta*) Model. Research Society for the Study of Alcoholism, Minneapolis, Minnesota, June, 2019.

**2020**

1. Halter, C.M., Jacobsen, N.G., Wood, E.K., Capitanio, J.P., & Higley, J.D. Infant Plasma Cortisol Concentrations are Associated with Later Adult Parenting Deficits in Female Rhesus Macaques (*Macaca* *mulatta*). Utah Conference on Undergraduate Research, Logan, UT, February, 2020.
2. Hunter, J., Wood, E.K., Parker, Jarman, P., Lindell, S.G., Schwandt, M.L., Goldman, D., Suomi, S.J., Barr, C.S., & Higley, J.D. Examining the Biological Basis of Aggression in Young Rhesus Macaques (*Macaca mulatta*) with Varying Degree of Chinese Ancestry. Utah Conference on Undergraduate Research, Logan, UT, February, 2020.
3. Higher degree of Chinese Ancestry in Rhesus Monkeys (*Macaca mulatta*) Correlate with Higher Aggression in Adult Females. Utah Conference on Undergraduate Research, Logan, UT, February, 2020.
4. Cash, E., Prenatal Androgen Exposure as Measured by 2D:4D Ratio is Associated with Later Sex-Typical Behaviors in Rhesus Macaques (*Macaca mulatta*). Utah Conference on Undergraduate Research, Logan, UT, February, 2020.
5. Halter, C.M., Jacobsen, N.G., Wood, E.K., Capitanio, J.P., & Higley, J.D. Infant Plasma Cortisol Concentrations are Associated with Later Adult Parenting Deficits in Female Rhesus Macaques (*Macaca* *mulatta*). Student **first place** at the Mary Lou Fulton Student Conference, 2020.

## RELEVANT SERVICE AT BYU

2006-2009: Graduate Student Admission Committee, BYU Psychology Department

2006-2009: New Faculty Hiring Committee, BYU Psychology Department

2007-2010: Coordinator and Co-Coordinator – Team-Taught Course Neuroscience course 601

2009: PsiChi Evening with the scholar (question and answer evening)

2009-Present: Committee for Introductory Psychology, 111—2009

2010: Psychology Club – Presentation on brain changes during therapy

2011: Recruitment Committee Member

2011: Chaired the Ad Hoc Committee to Assess the Plausibility of a nonProfessional Tract Hire

2011: ORCA Grant Reviewer

2011: Mary Lou Fulton Poster Judge

2012-2014: Committee Member Curriculum and Assessment Committee

2013: Neuroscience Club Dinner Speaker

2013: Mary Lou Fulton Poster Judge

2014-2018: Chair, Introductory Psychology Committee

2012-Present: Internship Committee Member

2012-Present: Intuition Faculty Advisor

2018-Present: Member Introductory Psychology Committee

2016-2019: Member College Rank and Status Committee

2012-Present: Ad Hoc Psychology Space Committee Member

2017-Present: Chair Developmental Area

2018-Present: Vivarium Advisory Board Committee Member

2018-Present: Experiential Learning Scholarship Committee

2014-Present: New Faculty Hiring Committee, BYU Psychology Department

2020 Fall: Member College Rank and Status Committee

OTHER LDS SERVICE

1983-1993 LDS Young Men’s President

1993-1995 2nd Counselor in Bishopric

1995-1999 LDS Seminary Teacher

1999-2000 Scoutmaster

2000-2006 LDS Bishop where I acted as paraprofessional counselor 20-30 hours a week.

2006-2009 LDS Primary Teacher, specifically working with children with developmental disorders (Autism, ADHD, and Conduct Disorder)

2010-2011 Gospel Doctrine Teacher

2011-2013 Teenaged Gospel Doctrine Teacher

2011-Present Ward Webmaster and Computer Resource

2011-Present Ward Photographer

2011-2015 Temple Worker (Ordinance Worker)

2015-Present-Sunday School President

SERVICE AND CITIZENSHIP

NIH Service

NIH grant reviewer

1. Member NIH, NIMH Study Section, Grant Reviewer, Use of Nonhuman Primates to Model the Effects of ADHD Medication on the Developing Brain. Bethesda, MD. March 7-9, 2005.
2. Invited participant on advisory board for study grant investigating Anxiety, Fear, and Excessive Alcohol Intake in Rhesus Macaques. Pittsburgh, PA, May 2005.
3. Member NIH, NCRR Primate Center Review Team, Reviewed the Washington, National Primate Center, Seattle, WA. October 25-26, 2006.
4. Member NIH Study Section, Grant Reviewer, Genetics of Heath and Disease Study Section. Bethesda, MD. May 31-June 1, 2007.
5. Member NIH, NCRR Primate Center Review Team, Reviewed the Tulane, National Primate Center, New Orleans, LA. October 30-31, 2007.
6. Member NIH, NCRR Primate Center Review Team, Reviewed the Wisconsin, National Primate Center, Madison, WI. January 23-25, 2008.
7. Member NIH Study Section, Grant Reviewer, Genetics of Heath and Disease Study Section. Bethesda, MD. February 7-8, 2008.
8. Member NIH Study Section, Grant Reviewer, Biobehavioral Regulation, Learning, and Ethology Study Section. Seattle, WA. October 9-11, 2008.
9. Ad Hoc Member NIH Study Section, Grant Reviewer, Genetics of Heath and Disease Study Section. Bethesda, MD. February 2009, reviewing 4-6 grants.
10. NIH Challenge Grant reviewer—reviewed 4-6 grants on primate behavior and genetics—June-August 2009.
11. Introductory Psychology textbook reviewer – April 2010.
12. Ad Hoc Member NIH Study Section, Grant Reviewer, Genetics of Heath and Disease Study Section. Bethesda, MD. February 2010, reviewing 4-6 grants.
13. Member NIH Study Section, Grant Reviewer, INIA Stress Consortium. Bethesda, MD. June 6-7, 2010, reviewing 4-6 grants.
14. Ad Hoc Member NIH Study Section, Grant Reviewer, Genetics of Heath and Disease Study Section. Bethesda, MD. June 8-9, 2010, reviewing 4-6 grants.
15. NIH Director’s Early Independence Award (DP5), Reviewed grants for the emergence and training of potential promising NIH new grantees. March 18, 2011. Bethesda, MD (phone reviewer).
16. Ad Hoc Member NIH Study Section, Grant Reviewer, Comparative Medicine Review Committee (CMRC), Wednesday February 16-17, 2011. Bethesda, MD (phone reviewer).
17. National Center for Research Resources Special Emphasis Panel, Review of the Seattle, Washington National Primate Center for continued funding. November 9, 2011.
18. Member NIH, NCRR Primate Center Site Visit Review Team, Reviewed the Tulane, National Primate Center for continued funding. New Orleans, LA. January 17-20, 2012.
19. Member NIH, NCRR Primate Center Review Committee, Complete the review of the Tulane, National Primate Center for continued funding. Washington, DC, March 11-13, 2012.
20. Member NIH, NCRR Primate Center Review Committee, Reviewed the Wisconsin, National Primate Center for continued funding. Madison, WI. July 10-12, 2012.
21. Member NIH, NCRR Primate Center Review Committee, Reviewed the Yerkes National Primate Center for continued funding. Madison, WI. July 14, 2020.

TEACHING

Teaching History

Fall 1981 -- Teaching assistant for psychology 201 (Introduction to Psychology)

Spring 1982 -- Teaching assistant for psychology 452 (Laboratory for the Study of Primate Behavior)

Fall 1982 -- Teaching assistant for psychology 210 (Introduction to Statistics)

Spring 1983 -- Teaching assistant for psychology 452 (Laboratory in Primate Behavior)

Fall 1983 -- Teaching assistant for psychology 560 (Child Development)

-- Teaching assistant for psychology 202 (Introduction to Psychology)

Spring 1984 -- Teaching assistant for psychology 509 (Abnormal Behavior)

-- Teaching assistant for psychology 560 (Child Development)

Fall 1984 -- Teaching assistant for psychology 202 (Introduction to Psychology)

Spring 1985 -- Teaching assistant for psychology 410 (Advanced Statistics)

Fall 1985 to Summer 1989\* -- Instructor for Department of Psychology: Edgewood College, Madison, Wisconsin

Taught:

Introduction to Psychology

Psychobiology of Sex and Gender Differences

Teaching Since Arriving at BYU

Since January, 2006, I have taught undergraduate courses at Brigham Young University, including, Developmental 320-Psychology, 387-Primate Behavior, Psychology 381-Behavioral Neuroscience, (C.) Psychology 111-Introductory Psychology, and graduate level Neuroscience 601-Neuroscience (team coordinator and team teacher).

Winter 2010, Honors Course—Social Science Principles and Reasoning (a literary approach to Evolutionary Psychology—team taught with Hal Miller and Eric Ellison.

Current Teaching

Winter — (A.) Introductory Psychology (now known as Psychological Science); (B.) Primate Behavior (387); (B.) \*Laboratory Internship–Study of the Psychobiology of Rhesus Monkeys’ Behavior and Psychopathology 499r

Spring/Summer *—* Spring/Summer — Nonhuman Primate Research Internship; 7-10 students are mentored to teach basic research skills for collecting data from nonhuman primates (40-60 hours a week). Internship is at the University of California-Davis, National Primate Center. Students live in Davis and work 8-10 hours a day under mentored supervision.

Fall—(A.) Introductory Psychology (111-now known as Psychological Science); (B.) \*Laboratory Internship–Study of Psychobiology of Rhesus Monkeys Behavior and Psychopathology 499r

*Laboratory Internship—Study of the Psychobiology of Rhesus Monkeys’ Behavior and Psychopathology 499r—this is a practical learning experience where students are allowed access to the NIH Nonhuman Primate Database collected over 20+ years while Dr. Higley was at the NIH. Through a sequential process, students develop a hypothesis, test it using what they have learned in their statistics and methods courses, and then present their findings in a scientific format. Following a series of directed readings, students formulate hypotheses and learn how data are maintained and used to test those hypotheses. It is a two-semester practical research course, with an end-product of a poster or presentation that they give at a scientific meeting or at the Mary Lou Fulton research symposium. Typically, 6-12 students are enrolled.*

Community Outreach

Summer 2011-2015—Taught section of Education Week to present information to general public audience describing the underlying causes of drug, alcohol, and behavioral addictions.

Winter 2010, 2011—Evolutionary Psychology Debate—Attended by about 150 students and professors.