
Curriculum Vita
Susan Barron

Current Address:

Department of Psychology
Kastle Hall
University of Kentucky
Lexington, KY 40506-0044
(859) 257-5401 (office)
(859) 323-1979 (fax)
sbarron@uky.edu (e-mail)

Education:

State University of New York at Albany	Ph.D. Experimental Psychology	1987
State University of New York at Albany	B.S. Biology/Chemistry	1981

Employment:

University of Kentucky Department of Psychology	Associate Professor Behavioral Neuroscience and Psychopharmacology Coordinator	1997 -
University of Kentucky Department of Psychology	Assistant Professor	1991-1997
San Diego State University Psychology Department	Adjunct Assistant Professor	1989-1991
San Diego State University Psychology Department	Postdoctoral Research Fellow	1988-1989
State University of New York at Albany Psychology Department	Postdoctoral Research Fellow	1987-1988

Additional University Affiliations

Center for Drug and Alcohol Research
Center for the Advancement of Women's Health

Offices Held and Research Related Committee Work (outside University)

Ad hoc reviewer, NIH, Developmental Brain Disorders Subcommittee (DBD), 2004, 2005
 National Advocacy and Publication Education Committee, Research Society on Alcoholism, 2005
 Education Committee, Research Society on Alcoholism, 2005
 Secretary, Research Society on Alcoholism, 2003 – 2005
 Executive Committee, Research Society on Alcoholism, 2003-2005
 President, Fetal Alcohol Syndrome Study Group, 2002-2003
 Vice President, Fetal Alcohol Syndrome Study Group, 2001-2002
 Secretary/Treasurer, Fetal Alcohol Syndrome Study Group, 2000/2001
 ILSI Risk Science Institute: Direct Dosing of Neonatal Animals in Toxicity Studies Workgroup, 2000-2003
 Chairperson, Research Society on Alcoholism Membership Committee, 1997-2001.
 Chairperson, Student Travel Award Committee, Women in Neuroscience, 1999.
 Substance Abuse and Pregnancy Work Group - Governor-appointed work group through the Cabinet for Human Resources, Commonwealth of Kentucky, 1992-1998.
 "Tobacco Team" - member of committee implementing grass roots efforts related to addressing local issues related to smoking and health under auspice of American Cancer Society, 1995 - 1997
 Organizing Member for San Diego Toxicology Society, 1990

Extramural Grants

Currently Funded:

AA 014032 (R21) 6/01/03 – 5/31/06.

Polyamines in neonatal alcohol neurotoxicity. National Institute on Alcohol Abuse and Alcoholism. **Total Direct Cost:** 300,000. **Role:** Principal Investigator.

AA 013561 (RO1). 2/10/04 - 1/31/09.

Ethanol withdrawal and HIV-1 Neurotoxicity. National Institute on Alcohol Abuse and Alcoholism. **Total Direct Cost:** \$875,000. **Role:** Co-Investigator. (Mark Prendergast)

DA 07304 (T32) 8/1/98-7/30/08

Research Training in Drug Abuse Behavior. National Institute on Drug Abuse. **Total Direct Cost:** \$789,866. **Role:** Training Faculty (T. Garrity)

AA 12600 (RO1) 8/01/04 – 07/30/08

Development of screens for drugs in alcohol dependence. National Institute on Alcohol Abuse and Alcoholism. **Total Direct Cost:** \$1,900,374. **Role:** Co-Investigator. (John Littleton)

Completed:**AA 09723** 5/1/96 - 4/30/99Neonatal ethanol exposure and drug interactions. National Institute of Alcohol Abuse and Alcoholism. **Total Direct Cost:** \$262,437. **Role:** Principal Investigator.**AA 05521 (T32)** 1999-2000The Effects of Neonatal Exposure to Alcohol and/or cocaine on cognitive functioning in rodents. National Institute of Alcohol Abuse and Alcoholism. **Role:** Supervisor/Mentor (J. Willford).**DA 06049 (R29)** 3/1/90 - 2/28/95.Third Trimester Model of Prenatal Cocaine Exposure. National Institute of Drug Abuse. **Total Direct Costs:** \$349,972. **Role:** Principal Investigator.Kentucky Spinal Cord and Head Injury Trust - Chronic ethanol in traumatic brain injury- **Total Direct Costs:** \$295,059. **Role:** Co-Investigator. (Renuka Prasad)

BRSG S07 RR07114-23 1992

The Effects of Third Trimester Cocaine Exposure on the Central Nervous System National Institute of Drug Abuse **Total Direct Costs:** \$4300 **Role:** Principal Investigator.**AA 6902** 1989-1991Behavioral Effects of Neonatal Alcohol Exposure National Institute of Alcohol Abuse and Alcoholism. **Total Direct Costs:** **Role:** Co-Investigator. (Edward Riley)**AA Postdoctoral Training Grant** 1987-1989Neonatal Alcohol Exposure - Sexually Dimorphic Effects Neonatal Alcohol Exposure - Sexually Dimorphic Effects. National Institute of Alcohol Abuse and Alcoholism. **Role: Postdoctoral Fellow.** (Edward Riley, Sponsor).**Funded student awards (non-federal):**

Doctoral Dissertation Year Fellowship - Lynne Hansen-Trench, 1996-1997.

Doctoral Dissertation Year Fellowship - Jennifer Willford, 1998-1999

Research Society on Alcoholism Student Travel Award, Tracy Segar, 1997, 1998

Research Society on Alcoholism Student Travel Award, Jennifer Willford, 1997, 1998

International Society for Biomedical Research on Alcoholism Student Travel Award, Jennifer Willford, 1998

Commonwealth Research Award, 1998, Jennifer Willford

Research Society on Alcoholism Student Travel Award, Becky Gilbertson, 2002, 2003

Research Society on Alcoholism Student Travel Award, Dennis Morrell, 2003
Research Society on Alcoholism Student Travel Award, Kristen Wellman, 2004

Departmental Research Challenge Trust Fund Fellowships:

1998, Tracy Segar

2003, Rebecca Gilbertson

Publications: (*denotes graduate student or postdoctoral fellow)

1. Riley, E.P., **Barron, S.**, Driscoll, C.D., and Chen, J.S. (1984) Taste aversion learning in preweanling rats exposed to alcohol prenatally. *Teratology*, 29:325-332.
2. **Barron, S.**, and Riley, E.P. (1985) Pup-induced maternal behavior in adult and juvenile rats exposed to alcohol prenatally. *Alcoholism: Clinical and Experimental Research*, 9:360-365.
3. Riley, E.P., **Barron, S.**, Driscoll, C.D., Hamlin, R.T. (1986) The effects of physostigmine on open-field behavior in rats exposed to alcohol prenatally. *Alcoholism: Clinical and Experimental Research*, 10:50-53.
4. **Barron, S.**, Riley, E.P., and Smotherman, W.P. (1986) The effects of prenatal alcohol exposure on umbilical cord length in fetal rats. *Alcoholism: Clinical and Experimental Research*, 10:493-495.
5. Smotherman, W.P., Woodruff, K.S., Robinson, S.R., del Real, C., **Barron, S.**, and Riley, E.P. (1986) Spontaneous fetal behavior after maternal exposure to ethanol. *Pharmacology, Biochemistry, and Behavior*, 24:165-170.
6. **Barron, S.**, Jaccard, J., and Riley, E.P. (1986) Methods for testing hypotheses across studies: Applications for teratologists and toxicologists. *Teratology*, 34:113-118.
7. Riley, E.P., **Barron, S.**, and Hannigan, J.H. (1986) Response inhibition deficits following prenatal alcohol exposure: A comparison to the effects of hippocampal lesions in rats. In: *Alcohol and Brain Development*, J. West (ed). pp. 71-104.
8. **Barron, S.**, Zimmerberg, B., Rockwood, G.A., and Riley, E.P. (1987) Prenatal alcohol exposure: Recent work on behavioral dysfunctions in preweanling rats. *Advances in Alcohol and Substance Abuse*, 6:59-72.
9. **Barron, S.**, Tieman, S.B., and Riley, E.P. (1988) The effects of prenatal alcohol exposure on the sexually dimorphic nucleus of the preoptic area of the hypothalamus in male and female rats. *Alcoholism: Clinical and Experimental Research*, 12:59-64.

10. **Barron, S.**, Gagnon, W., Mattson, S.M., Kotch, L.E., Meyer, L.S. and Riley, E.P. (1988) The effects of prenatal alcohol exposure on odor associative learning in rats. *Neurotoxicology and Teratology*, 10:333-339.
11. Riley, E.P. and **Barron, S.** (1989) The behavioral and neuroanatomical effects of prenatal alcohol exposure in animals. *Prenatal Abuse of Licit and Illicit Drugs. Annals of New York Academy of Sciences*, 562:173-177.
12. **Barron, S.** and Riley, E.P. (1990) Passive avoidance performance following neonatal alcohol exposure. *Neurotoxicology and Teratology*, 12:135-138.
13. McGivern, R.F., **Barron, S.** (1991) Influence of prenatal alcohol exposure on the process of neurobehavioral sexual differentiation. *Alcohol Health and Research World* 15:115-125.
14. **Barron, S.**, Kelly, S.J. and Riley, E.P. (1991) Neonatal alcohol exposure alters suckling performance in rat pups. *Pharmacology, Biochemistry and Behavior* 39: 423-427.
15. **Barron, S.**, Foss, J.A. and Riley, E.P. (1991) The effect of prenatal cocaine exposure on umbilical cord length in fetal rats. *Neurotoxicology and Teratology*, 13:503-506.
16. **Barron, S.**, and Riley, E.P. (1992) The effects of prenatal alcohol exposure on behavioral and neuroanatomical components of olfaction. *Neurotoxicology and Teratology*, 14:291-297.
17. Riley, E.P., **Barron, S.**, Melcer, T., Gonzalez, D., Li, T.K. (1993) Alterations in activity following alcohol administration during the third trimester equivalent in P and NP rats. *Alcoholism: Clinical and Experimental Research*, 17:1240-1246.
18. Melcer, T., Gonzalez, D., **Barron, S.**, Riley, E.P. (1993) Hyperactivity in preweanling rats following postnatal alcohol exposure. *Alcohol* 11:41-45.
19. **Barron, S.**, and Irvine, J.* (1994) The effects of neonatal cocaine exposure on two measures of balance and coordination. *Neurotoxicology and Teratology* 16:89-94.
20. **Barron, S.**, Kaiser, D.H.*, Hansen, L.S.* (1994) Neonatal cocaine exposure, activity and responsivity to cocaine in a rodent model. *Neurotoxicology and Teratology* 16:401-409.
21. **Barron, S.**, Irvine, J.* (1995) Behavioral effects of neonatal cocaine exposure using a rodent model. *Pharmacology, Biochemistry and Behavior* 50:107-114.

22. **Barron, S.**, Razani, L.J.*, Gallegos, R.A.*, Riley, E.P. (1995) The effects of neonatal alcohol exposure on saccharin consumption. *Alcoholism: Clinical and Experimental Research* 19:257-261.
23. Belcheva, M.M., **Barron, S.**, Ho, M.T., Barg, J., Coscia, C.J. (1995) Cross-linking studies on buprenorphine-exposed neonatal rat brain. *Analgesia* 1:290-293.
24. **Barron, S.**, Hansen, L.S.*, Kaiser, D.H.* (1996) Neonatal cocaine exposure and activity rhythms in rats. *Behavioural Brain Research* 74:167-174.
25. **Barron, S.**, Hansen-Trench, L.S.*, Kaiser, D.H. *and Segar, T.* (1996) Problem solving following neonatal exposure to cocaine, ethanol or cocaine/ethanol in combination in rats. *Pharmacology, Biochemistry and Behavior* 53:197-203.
26. Hansen-Trench, L.S.*, Segar, T.M.*, and **Barron, S.** (1996) Neonatal cocaine and/or ethanol exposure: Effects on a runway task with suckling reward. *Neurotoxicology and Teratology* 18: 651-657.
27. **Barron, S.** and Chung, V.M.* (1997) The effects of prenatal buprenorphine exposure on sexual differentiation in rats. *Pharmacology, Biochemistry and Behavior*. *Pharmacology, Biochemistry and Behavior*, 58:337-343.
28. Prasad R.M., Laabich A., Dhillon, H.S., Zhang L., Maki A., Clerici W.J., Hicks R., Butcher J. and **Barron, S.** (1997) Effects of six weeks of chronic ethanol administration on lactic acid accumulation and high energy phosphate levels after experimental brain injury in rats. *J Neurotrauma* 14:919-930.
29. **Barron, S.**, Staton, C.M.*, and Trench, L.H.* (1998) The effects of clonidine on rat pups neonatally exposed to cocaine. *Neurotoxicology and Teratology* 20:401-409.
30. Belcheva, M.M.*, Bohn, L.M., Ho, M.T., Johnson, F.E., Yanai, J., **Barron, S.**, and Coscia, C.J. (1998) Brain opioid receptor adaptation and expression after prenatal exposure to buprenorphine. *Developmental Brain Research* 111:35-42..
31. Willford, J.A.*, Segar, T.M.*, Hansen-Trench, L.S.*, and **Barron, S.** (1999) The effects of neonatal cocaine exposure on a play-rewarded spatial discrimination task in juvenile rats. *Pharmacology, Biochemistry and Behavior* 62:137-143.
32. Segar, T.M.*, Klebauer, J.E.*, Bardo, M.T. and **Barron, S.** (1999) Acquisition of a fixed ratio schedule in adult male rats neonatally exposed to ethanol and/or cocaine. *Alcoholism: Clinical and Experimental Research* 23:7-11.
33. Zhang, L., Maki, A., Dhillon, H.S., **Barron, S.**, Clerici, W.J., Hicks, R., Kraemer, P.J., Butcher, J., Prasad, R.M. (1999) Effects of six weeks of chronic ethanol administration

on the behavioral outcome of rats after lateral fluid percussion brain injury. *J Neurotrauma*. 16:243-254.

34. Willford, J.A.*, Segar, T.M.*, and **Barron, S.** (1999) The behavioral response to novelty is altered in rats neonatally exposed to cocaine. *Developmental Psychobiology* 1999 35(4):343-351.

35. Zhang L., Dhillon, H.S., **Barron, S.**, Hicks, R.R., Prasad, R.M., Seroogy, K.B. (2000) Effects of chronic ethanol administration on expression of BDNF and trkB mRNAs in rat hippocampus after experimental brain injury. *Molecular Brain Research*. 79:174-179.

36. **Barron S.**, Segar T.M.*, Yahr J.S.*, Baseheart B.J., Willford J.A.* (2000) . The effects of neonatal ethanol and/or cocaine exposure on isolation-induced ultrasonic vocalizations. *Pharmacology, Biochemistry and Behavior*, 67:1-9.

37. **Barron S.**, Baseheart B.J., Segar T.M.*, Deveraux T.*, Willford J.A.* (2000) The behavioral teratogenic potential of fenbendazole. *Neurotoxicology and Teratology*, 22:871-877.

38. Masse J.*, Billings, B., Dhillon, H.S., Mace, D., Hicks, R., **Barron, S.**, Kraemer, P.J., Dendle, P., and Prasad RM (2000) Three months of chronic ethanol administration and the behavioral outcome of rats after lateral fluid percussion brain injury. *Journal of Neurotrauma*. 17:421-430.

39. Steingart, R.A., Silverman, W.F., **Barron, S.**, Slotkin, T.A., Award, Y. and Yanai, J. (2000) Neural grafting reverses prenatal drug-induced alterations in hippocampal PKC and related behavioral deficits. *Developmental Brain Research* 125:9-19.

40. Littleton J.M., Lovinger D., Liljequist S., Ticku R., Matsumoto I., **Barron S.** (2001) Role of polyamines and NMDA receptors in ethanol dependence and withdrawal. *Alcohol Clin Exp Res*. 25(Suppl):132S-136S.

41. Prendergast, M.A., Rogers, D.T., **Barron, S.**, Bardo, M.T., Littleton, J.M. (2002) Ethanol and nicotine: A pharmacologic balancing act? *Alcoholism: Clin Exp Res*; 26:1917-1918.

42. Rogers, D.T., **Barron, S.** and Littleton, J.M. (2004) Neonatal ethanol exposure produces a hyperalgesia that extends into adolescence, and is associated with increased analgesic and rewarding properties of nicotine in rats. *Psychopharmacology* 171:204-211.

43. **Barron S.**, Gilbertson R.* (2005) Neonatal ethanol exposure but not neonatal cocaine selectively reduces specific isolation-induced vocalization waveforms in rats.

Behavior Genetics 35:93-102.

44. Hansen-Trench L.S.*, **Barron S.** (2005) Effects of neonatal alcohol and/or cocaine exposure on stress in juvenile and adult female rats. *Neurotoxicology and Teratology* 27:55-63.

45. Gilbertson R.J.*, **Barron S.** (2005) Neonatal ethanol and nicotine exposure causes locomotor activity changes in preweanling animals. *Pharmacology, Biochemistry and Behavior*. 81:54-64.

46. **Barron, S.**, White, A., Swartzwelder, A., Bell, R.L., Rodd, Z.A., Slawecki, C.J., Ehlers, C.L., Levin, E.D., Rezvani, A.H. and Spear, L.P. Adolescent vulnerabilities to chronic alcohol or nicotine exposure: Findings from Rodent Models. *Alcoholism: Clinical and Experimental Research*. *In press*.

Current Memberships and Affiliations

Fetal Alcohol Spectrum Disorders Study Group
 International Society for Biomedical Research on Alcoholism
 Neurobehavioral Teratology Society
 Research Society on Alcoholism
 Society for Developmental Psychobiology
 Society for Neuroscience

Offices held (University of KY)

UK Society for Neuroscience - Activities Coordinator, 1995-1997,
 President-elect, 2000
 President, 2001

Ad Hoc Journal Reviewer

Alcohol
 Alcoholism: Clinical Experimental Research
 Animal Learning and Behavior
 Behavioral Neuroscience
 Developmental Psychobiology
 Infant Behavior and Development
 Life Sciences
 Neurotoxicology and Teratology - Editorial Board, 1998-2004
 Pharmacology, Biochemistry and Behavior – Editorial Board, 2004-
 Physiology and Behavior

Teaching Experience:

Undergraduate Level Courses Taught

Evolutionary Psychology
 Introductory Psychology
 Behavioral Neuroscience, Brain and Behavior
 Drugs and Behavior
 Behavioral Endocrinology
 Developmental Psychobiology
 Clinical Psychopharmacology

Graduate Level Courses Taught

Clinical Psychopharmacology
 Proseminar in Physiological Psychology
 Topical Seminar in Neurotoxicology
 Hormones and Behavior
 Directed Readings in Neuroscience

University and Regional Service

Mentor, Girls in Science, NSF funded grant operated through Women's Institute on Alcohol and Drug Studies, 2003.

Mentor, Young Women in Science, NIDA funded grant operated through Women's Institute on Alcohol and Drug Studies, 2000-2002.

Moderator, National Conference on Undergraduate Research, 2001, University of Kentucky.

Maxwell Elementary School, presentation to 2nd graders on CNS and brain function, 2000 – 2002

Co-Chair of Judges, Social and Behavioral Sciences Area, International INTEL ISEF Fair, Louisville, 2002

Chair of Judges, Social and Behavioral Sciences Area, KY INTEL ISEF Fair, Richmond, 2003

Posters at the Capital, February 2003, Undergraduate Student Poster Presentations for the Governor and Legislature.

Kentucky Young Scientist Summer Research Program (KYSS) Departmental Coordinator, 2000-2003.

Current Laboratory Members

Postdoctoral Scientists

Dr. Justin Farook

Dr. Ali Krazem

Dr. Maribel Rubin

Graduate Students

Kristen Wellmann

Ben Lewis

Dennis Morrell