

Curriculum Vitae

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Contact Information

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Education

1997 Ph.D. University of Otago. Anatomy and Structural Biology.
1991 B.Sc. (Honours) Neuroscience. Second Class, Division I. University of Otago, Dunedin, New Zealand.

Post Graduate Training

1997 – 2000 Postdoctoral Associate, Dr Michael W. Miller, Dept. Psychiatry,
University of Iowa, Iowa City, IA

Professional Experience

2018 – current Associate Professor with tenure, Nutrition Research Institute and
Department of Nutrition, UNC Chapel Hill
2015 – 2018 Associate Professor with tenure, Department of Pediatrics, UMSOM
2014 – 2018 Regular Member, Graduate Program in Life Sciences, UMSOM
2012 – 2017 Co-Director Neonatology Program, Department of Pediatrics, UMSOM
2011 – 2015 Associate Professor, Department of Pediatrics, UMSOM
2005 – 2011 Assistant Professor, Dept. Neuroscience and Physiology, SUNY
Upstate Medical University, Syracuse, NY
2001 – 2005 Research Assistant Professor, Dept. Neuroscience and Physiology,
SUNY Upstate Medical University, Syracuse, NY
2000 – 2001 Research Scientist, Dept. Neuroscience and Physiology, SUNY Upstate
Medical University, Syracuse, NY
1996 Laboratory Demonstrator, Dept. Anatomy and Structural Biology,
University of Otago, Dunedin, New Zealand
1995 Teaching Fellow, Dept. Anatomy and Structural Biology, University of
Otago, Dunedin, New Zealand
1991 - 1994 Laboratory Demonstrator, Dept. Anatomy and Structural Biology,
University of Otago, Dunedin, New Zealand

Honors/Awards

2017 Travel Award to attend the 7th Annual Conference on Fetal Alcohol
Spectrum Disorders, Vancouver, Canada
2013 Nominated for Clinical Research Forum's 2014 Top 10 Clinical
Research Achievement Awards
1996 University of Otago Postgraduate Scholarship
1995 University of Otago Divisional Teaching Assistantship
1994 University of Otago Postgraduate Scholarship
1994 Alcohol Advisory Council Travel Award
1994 NZ Neurological Foundation Travel Award

1993	New Zealand Federation of University Women Travel Award
1992	HRC Young Investigators International Travel Award
1992	Royal Society of New Zealand Young Scientists Fund Award
1991 - 1993	Blair Postgraduate Scholarship

Professional Society Memberships

2020 – current	American Society for Nutrition
2015 – current	Society for Experimental Biology and Medicine
2013 - 2016	Society for Pediatric Research
2012 - 2015	International Society for Neurochemistry
1998 - current	Society for Neuroscience
1995 - current	Research Society on Alcohol
1995 – current	Fetal Alcohol Spectrum Disorders Study Group

Bibliography

Book Chapters

(Italics denote trainees)

1. *A.H. Mahnke*, R.C. Miranda, and **S.M. Mooney**. Ch. 7. Fetal alcohol spectrum disorder. In: Neurodevelopmental Disorders, First Edition, Comprehensive Developmental Neuroscience. (J. Rubenstein and P. Rakic ed.s). Oxford, UK: Elsevier. 2020:159-178.
2. A.J. Falck, **S.M. Mooney**, C.F. Bearer. Ch 14. Adverse Exposures to the Fetus and Neonate. In: Fanaroff and Martin's Neonatal-Perinatal Medicine, 11th Edition. 2020:239-259.
3. A.J. Falck, **S.M. Mooney**, C.F. Bearer. Ch 15. Adverse Exposures to the Fetus and Neonate. In: Fanaroff and Martin's Neonatal-Perinatal Medicine, 10th Edition. 2015:211-226.
4. **S.M. Mooney**, P.J. Lein, and M.W. Miller. Ch. 28. Fetal alcohol spectrum disorder: Targeted effects of ethanol on cell proliferation and survival. In: Neural Circuit Development and Function in the Healthy and Diseased Brain. Comprehensive Developmental Neuroscience. (J. Rubenstein and P. Rakic ed.s). Oxford, UK: Elsevier. 2013:521-537.
5. **S.M. Mooney**, M.W. Miller, and G.I. Henderson. Intracellular events in ethanol-induced neuronal death. In: Brain Development: Normal Processes and the Effects of Alcohol and Nicotine (Miller MW ed) New York, NY: Oxford UP. 2006:267-278.
6. **S.M. Mooney** and G.I. Henderson. Intracellular pathways of neuronal death. In: Brain Development: Normal Processes and the Effects of Alcohol and Nicotine (Miller MW ed) New York, NY: Oxford UP. 2006:91-103.
7. **S.M. Mooney** and M.W. Miller. Ethanol and neuronal death in the developing brain. In: Recent Research Developments in Neurochemistry Vol. 2. 1999:573-586.

Peer-reviewed Journal Articles

*(Italics denote trainees, * denotes students, #co-first or co-corresponding)*

1. **S.M. Mooney**, E.I. Varlinskaya. Dendritic morphology of neurons in prefrontal cortex and medial amygdala: effects of age, sex, and acute ethanol exposure. (in preparation for Alcohol)
2. *K.K. Helfrich**, R. Hodges, J.W. Baulch, **S.M. Mooney**, S.M. Smith. Iron supplementation selectively improves behavior in rats prenatally exposed to alcohol (in preparation)
3. **S.M. Mooney**. Prenatal ethanol exposure alters growth factor response in cultured thalamic neurons. (in preparation)
4. S.M. Smith, *K.R. Walter*, **S.M. Mooney**. Prenatal alcohol exposure alters the metabolic phenotype in a mouse model of Alzheimer's Disease. (in preparation for

- Alcohol: Clinical and Experimental Research)
5. *N. Duckworth**, **S.M. Mooney**, S.M. Smith. Prenatal alcohol exposure alters mouse cecal microbiome. (in preparation).
 6. S.M. Smith, C.A. Munson, **S.M. Mooney**. Prenatal choline mitigates deficits in growth, metabolic, and behavioral outcomes caused by prenatal alcohol exposure in the C57BL/6J mouse. (in preparation for Alcoholism: Clinical and Experimental Research)
 7. **S.M. Mooney**, *K.R. Walter*, S.M. Smith. Age-dependent effects of prenatal alcohol exposure in a mouse model of Alzheimer's Disease. (in preparation)
 8. *N. Saini*, **S.M. Mooney**, S.M. Smith. Dysregulated lipid metabolism in alcohol exposed placentas is associated with reduced fetal brain weight in a mouse model of prenatal alcohol exposure. (in preparation).
 9. *J.P. Alexander*, **S.M. Mooney**. Analgesia during paw prick in the neonatal rat: effect on social behavior and pressure thresholds in adolescence. (in preparation for Behavioral Brain Research)
 10. *J.P. Alexander*, **S.M. Mooney**. Neonatal paw pricking alters behavior in a sex-dependent manner. (submitted to Physiology and Behavior)
 11. *Y. Huang*, G.R. Flentke, *O.C. Rivera*, *N. Saini*, **S.M. Mooney**, S.M. Smith. Alcohol exposure induces nucleolar stress and apoptosis in mouse neural stem cells and late-term fetal brain. *Cells*, 2024, 13, 440. <https://doi.org/10.3390/cells13050440>.
 12. *N. Saini*, **S.M. Mooney**, S.M. Smith. Alcohol blunts pregnancy-mediated insulin resistance and reduces fetal brain glucose despite elevated fetal gluconeogenesis, and these changes associate with fetal weight outcomes. *FASEB J.*, 2023, 37(10):e23172. doi: 10.1096/fj.202300788R.
 13. **S.M. Mooney**, E. Billings, M. McNew, C.A. Munson, S.R. Shaikh, S.M. Smith. Loss of receptors for specialized pro-resolving mediators FPR2/ALX and ChemR23 alter behavior in a mouse model of Fetal Alcohol Spectrum Disorders. *Frontiers in Neuroscience*, 2023, 17, doi: 10.3389/fnins.2023.1187220.
 14. *K.K. Helfrich**, *N. Saini*, *S.T.C. Kwan*, *O.C. Rivera*, **S.M. Mooney**, S.M. Smith. Fetal anemia and elevated hepcidin in a mouse model of Fetal Alcohol Spectrum Disorder. *Pediatric Research*, 2023, 94(2):503-511. doi: 10.1038/s41390-023-02469-6.
 15. *K.R. Walter*, D.K. Ricketts, B.H. Presswood, S.M. Smith, **S.M. Mooney**. Prenatal alcohol exposure causes persistent microglial activation and age- and sex-specific effects on cognition and metabolic outcomes in an Alzheimer's Disease mouse model. *The American Journal of Drug and Alcohol Abuse*, 2023, 49:302-320. doi: 10.1080/00952990.2022.2119571
 16. *J.M. Hasken*, M.M. de Vries, A-S. Marais, P.A. May, C.D.H. Parry, S. Seedat, **S.M. Mooney#**, S.M. Smith#. Untargeted metabolome analysis of alcohol-exposed pregnancies reveals metabolite differences that are associated with infant birth outcomes. *Nutrients*, 2022, 14, 5367. <https://doi.org/10.3390/nu14245367>. #co-senior
 17. **S.M. Mooney**, C. Petrenko, K. Hamre, J. Brigman. Proceedings of the 2021 Annual Meeting of the Fetal Alcohol Spectrum Disorders Study Group. *Alcohol*, 2022, 102:23-33. doi: 10.1016/j.alcohol.2022.04.006
 18. S.M. Smith, W.B. Friday, E. Pjetri, B.H. Presswood, *K.R. Walter*, **S.M. Mooney**. Aging-related behavioral, adiposity, and glucose impairments and their association following prenatal alcohol exposure in the C57BL/6J mice. *Nutrients*, 2022, 14, 1438. <https://doi.org/10.3390/nu14071438>
 19. *N. Saini*, M.S. Virdee, *K.K. Helfrich**, *S.T.C. Kwan*, **S.M. Mooney**, S.M. Smith. Untargeted metabolome analysis reveals reductions in maternal hepatic glucose and amino acid content that correlate with fetal organ weights in a mouse model of Fetal

- Alcohol Spectrum Disorder. *Nutrients*, 2022, 14, 1096. <https://doi.org/10.3390/nu14051096>
20. S.T.C. Kwan, D.K. Ricketts, B.H. Presswood, S.M. Smith, **S.M. Mooney**. Prenatal choline supplementation during mouse pregnancy has differential effects in alcohol-exposed fetal organs. *Alcoholism: Clinical and Experimental Research*, 2021, 45:2471-2484. doi: 10.1111/acer.14730.
 21. **S.M. Mooney**, E. Pjetri, W.B. Friday, S. M. Smith. Growth and behavioral differences in a C57BL/6J mouse model of prenatal alcohol exposure. *Alcohol*, 2021, 97:51-57. doi: 10.1016/j.alcohol.2021.09.031.
 22. C.A. Dannenhoffer, M.M. Robertson, V.A. Macht, **S.M. Mooney**, C.A. Boettiger, D.L. Robinson. Chronic alcohol exposure during critical developmental periods differentially impacts persistence of deficits in cognitive flexibility and related circuitry. *International Review of Neurobiology*, 2021, 160:117-173. doi: 10.1016/bs.irn.2021.07.004.
 23. M. Virdee, N. Saini, S.T.C. Kwan, C.D. Kay, K.K. Helfrich*, **S.M. Mooney**, S.M. Smith. An enriched biosignature of gut microbiota-dependent metabolites characterizes maternal plasma in a mouse model of Fetal Alcohol Spectrum Disorder. *Scientific Reports*, 2021, 11(1):248.
 24. J. Waddell, E. Hill, S.Y. Tang, L. Jiang, S. Xu, **S.M. Mooney**. Choline plus working memory training improves prenatal alcohol-induced deficits in cognitive flexibility and functional connectivity in adulthood in rats. *Nutrients*, 2020, 12(11):3513. doi: 10.3390/nu12113513.
 25. S.T. Kitchen, N. Tang, M. He, E. Ly, **S.M. Mooney**, J. Watchko, C.F. Bearer. Bilirubin inhibits lipid raft dependent functions of L1 cell adhesion molecule in rat pup cerebellar granule neurons. *Pediatric Research*, 2021, 89(6):1389-1395.
 26. S.T.C. Kwan, B.H. Presswood, K.K. Helfrich*, J.W. Baulch, **S.M. Mooney**, S.M. Smith. An interaction between fetal sex and placental weight and efficiency predicts intrauterine growth in response to maternal protein insufficiency and gestational exposure window in a mouse model of FASD. *Biology of Sex Differences*, 2020, 11(1):40.
 27. D.A. Hamilton, **S.M. Mooney**, C. Petrenko, K. Hamre. Proceedings of the 2019 Annual Meeting of the Fetal Alcohol Spectrum Disorders Study Group. *Alcohol*, 2020, 86:25-33.
 28. S. Tang*, S. Xu, R.P. Gullapalli, **S.M. Mooney**. Alterations in brain network organization in rats after prenatal alcohol exposure. *European Journal of Neuroscience*, 2020, 51:2110-2118.
 29. N.L. Davis, T.O. Akinboni, **S.M. Mooney**. Quantifying medication exposure in Very Low Birthweight neonates. *American Journal of Perinatology*, 2021, 38(4): 383-391.
 30. A.Y. Klintsova, D.A. Hamilton, **S.M. Mooney**, C. Petrenko. Proceedings of the 2018 Annual Meeting of the Fetal Alcohol Spectrum Disorders Study Group. *Alcohol*, 2019, 81:47-55.
 31. S. Tang*, S. Xu, J. Waddell, W. Zhu, R.P. Gullapalli, **S.M. Mooney**. Functional connectivity and metabolic alterations in medial prefrontal cortex in a rat model of Fetal Alcohol Spectrum Disorder: a resting state functional MRI and *in vivo* proton MR spectroscopy study. *Developmental Neuroscience*, 2019, Apr 18:1-12.
 32. **S.M. Mooney**, E.I. Varlinskaya. Acute prenatal exposure to ethanol on gestational day 12 enhances sensitivity to socially facilitating and anxiolytic effects of ethanol in adolescent Sprague Dawley rats. *Alcohol*, 2018, 69:25-32.
 33. J.R. Wozniak, A.Y. Klintsova, D.A. Hamilton, **S.M. Mooney**. Proceedings of the 2017 Annual Meeting of the Fetal Alcohol Spectrum Disorders Study Group. *Alcohol*, 2018, 69:7-14.

34. T.O. Akinmbon[#], N.L. Davis[#], A.J. Falck, C.F. Bearer, **S.M. Mooney**. Excipient exposure in very low birth weight preterm neonates. [#]*Akinmboni and Davis both first authors*. Journal of Perinatology, 2018, 38:169-174.
35. J. Waddell, **S.M. Mooney**. Choline and working memory training improve cognitive function deficits caused by prenatal exposure to ethanol. Nutrients, 2017, Sep 29;9(10). pii: E1080.
36. M. Camargo Moreno*, **S.M. Mooney**, F.A. Middleton. Heterogeneity of p53 dependent genomic responses following ethanol exposure in a developmental mouse model of fetal alcohol spectrum disorder. PLoS ONE, 2017, 12:e0180873.
37. N.S. Pulimood*, W. Rodrigues Jr., **S.M. Mooney**, D. Atkinson, A.E. Medina. The role of CREB, SRF and MEF2 in activity-dependent neuronal plasticity in the visual cortex. Journal of Neuroscience, 2017, 37:6628-6637.
38. J. Waddell, E. Ho, T. Yang, K.A. Wellmann, **S.M. Mooney**. Prenatal ethanol exposure and whisker clipping disrupt ultrasonic vocalizations and play behavior in adolescent rats. Brain Sciences, 2016, 28:6(4). pii: E43.
39. M.R. Diaz, **S.M. Mooney**, E.I. Varlinskaya. Acute prenatal exposure to ethanol on gestational day 12 elicits opposing deficits in social behaviors and anxiety-like behaviors in Sprague Dawley rats. Behavioral Brain Research. 2016, 310:11-19.
40. A.J. Falck, **S. Mooney**, S.S. Kapoor, K.M.R. White*, C. Bearer, D. El Metwally, Developmental Exposure to Environmental Toxicants. Pediatric Clinics of North America. 2015, 62:1173-1197.
41. C.F. Bearer, K.A. Wellmann, N. Tang, M. He, **S.M. Mooney**. Choline ameliorates deficits in balance caused by acute neonatal ethanol exposure. Cerebellum. 2015, 14:413-420.
42. K.A. Wellmann, F. George, F. Brnouti, **S.M. Mooney**. Docosahexaenoic acid partially ameliorates deficits in social behavior and ultrasonic vocalizations caused by prenatal ethanol exposure. Behavioral Brain Research. 2015, 286:201-211.
43. K.A. Wellmann, **S.M. Mooney**. Unilateral whisker clipping exacerbates ethanol-induced behavioral deficits. Physiology and Behavior. 2015, 148:166-175.
44. N. Tang, P. Bamford, J. Jones, M. He, M. Kane, **S.M. Mooney**, C.F. Bearer. Choline partially prevents the impact of ethanol on the lipid raft dependent functions of L1 cell adhesion molecule. Alcoholism: Clinical and Experimental Research. 2014, 38:2722-2730.
45. C.M. Ignacio*, **S.M. Mooney**[#], F.A. Middleton[#]. Effects of acute prenatal exposure to ethanol on microRNA expression are ameliorated by environmental manipulation. Frontiers in Pediatrics. 2014, 2:103. *Mooney and Middleton both senior authors*
46. K.A. Wellmann, E.I. Varlinskaya, **S.M. Mooney**. D-cycloserine ameliorates communication and social behavior deficits in a valproic acid model of autism. Brain Research Bulletin. 2014, 108:1-9.
47. E.I. Varlinskaya and **S.M. Mooney**. Acute exposure to ethanol on gestational day 15 affects social motivation of female offspring. Behavioral Brain Research. 2014, 261:106-109.
48. O. Cohen*, E.I. Varlinskaya, C.A. Wilson, S.J. Glatt, **S.M. Mooney**. Acute prenatal exposure to a moderate dose of valproic acid increases social behavior and alters gene expression in rats. International Journal of Developmental Neuroscience. 2013, 31:740-750.
49. F.A. Middleton, E.I. Varlinskaya, **S.M. Mooney**. Molecular substrates of social avoidance seen following prenatal ethanol exposure and its reversal by social enrichment. Developmental Neuroscience. 2012, 34:115-128.
50. **S.M. Mooney** and M.W. Miller. Role of neurotrophins in postnatal neurogenesis in thalamus. Neuroscience. 2011, 179:256-266.

51. **S.M. Mooney** and E.I. Varlinskaya. Acute prenatal exposure to ethanol and social behavior: effect of age, sex, and timing of exposure. *Behavioral Brain Research*. 2011, 216:358-364.
52. **S.M. Mooney** and M.W. Miller. Prenatal exposure to ethanol affects postnatal neurogenesis in thalamus. *Experimental Neurology*. 2010, 223:566-573.
53. **S.M. Mooney** and M.W. Miller. Vulnerability of macaque brainstem to ethanol is time- and site-dependent. *Alcohol*. 2009, 43:323-331.
54. F.A. Middleton K. Carrierfenster, **S.M. Mooney**, S.L. Youngentob. Gestational ethanol exposure alters the behavioral response to ethanol odor and the expression of neurotransmission genes in the olfactory bulb of adolescent rats. *Brain Research*. 2009, 1252:105-116.
55. **S.M. Mooney** and M.W. Miller. Time-specific effects of ethanol exposure on cranial nerve nuclei: gastrulation and neuronogenesis. *Experimental Neurology*. 2007, 205:56-63.
56. **S.M. Mooney** and M.W. Miller. Postnatal generation of neurons in the ventrobasal nucleus of the rat thalamus. *Journal of Neuroscience* 2007, 27:5023-5032.
57. **S.M. Mooney** and M.W. Miller. Nerve growth factor neuroprotection of ethanol-induced neuronal death in rat cerebral cortex is age-dependent. *Neuroscience* 2007, 149:372-381.
58. M.W. Miller, **S.M. Mooney**, F.A. Middleton. Transforming growth factor β 1 and ethanol affect transcription of genes for cell adhesion proteins in B104 neuroblastoma cells. *Journal of Neurochemistry* 2006, 97:1182-1190.
59. **S.M. Mooney**, R.M.A. Napper. Early postnatal exposure to alcohol reduces the number of neurons in the occipital but not the parietal cortex of the rat. *Alcoholism: Clinical and Experimental Research* 2005, 29:683-691.
60. **S.M. Mooney**, J.A. Siegenthaler, and M.W. Miller. Ethanol induces heterotopias in organotypic cultures of rat cerebral cortex. *Cerebral Cortex* 2004, 14:1071-1080.
61. M.W. Miller and **S.M. Mooney**. Chronic exposure to ethanol alters neurotrophin expression in the basal forebrain-cortex system in the mature rat: effects on autocrine/paracrine mechanisms. *Journal of Neurobiology* 2004, 60:490-498.
62. **S.M. Mooney** and M.W. Miller. Ethanol-induced neuronal death in organotypic cultures of rat cerebral cortex. *Developmental Brain Research* 2003, 147:135-141.
63. **S.M. Mooney** and M.W. Miller. Effects of prenatal exposure to ethanol on the expression of bcl-2, bax and caspase 3 in the developing rat cerebral cortex and thalamus. *Developmental Brain Research* 2001, 911:71-81.
64. **S.M. Mooney** and M.W. Miller. Episodic exposure to ethanol during development differentially affects brainstem nuclei in the macaque: a model of fetal alcohol syndrome and autism. *Journal of Neurocytology* 2001, 30:973-982.
65. **S.M. Mooney** and M.W. Miller. Expression of bcl-2, bax, and caspase-3 in the brain of the developing rat. *Developmental Brain Research* 2000, 123:103-117.
66. **S.M. Mooney** and M.W. Miller. Effects of prenatal exposure to ethanol on systems matching: The number of neurons in the ventrobasal thalamic nucleus of the mature rat. *Developmental Brain Research* 1999, 117:121-125.
67. **S.M. Mooney**, R.M.A. Napper and J.R. West. Long-term effect of postnatal alcohol exposure on the number of cells in the neocortex of the rat: A stereological study. *Alcoholism: Clinical and Experimental Research*. 1996, 20:615-623.

Published Abstracts

National

1. H.G. Petry, N. Saini, S.M. Smith, and **S.M. Mooney**. Maternal plasma metabolites that correlate with fetal body weight in a mouse model of prenatal alcohol exposure and choline supplementation. *Alcoholism: Clinical and Experimental Research Suppl*. 2024.

2. J.M. Hasken, P.A. May, M.M. de Vries, A.S. Marais, **S.M. Mooney**, S.M. Smith. A comparison of the metabolite profiles among pregnant women who use alcohol and tobacco, tobacco only, and abstain. *Alcoholism: Clinical and Experimental Research Suppl.* 2024.
3. S.M. Smith, **S.M. Mooney**, L. Wetherill, S. Krupenko, T.D. Weathers, and the CIFASD Consortium. Functional polymorphisms in the choline modulatory gene *aldh111* are associated with behavioral outcomes in those with prenatal alcohol exposure (PAE). *Alcoholism: Clinical and Experimental Research Suppl.* 2024.
4. **S.M. Mooney**, H.G. Petry, C.A. Munson, S.M. Smith. Metabolic deficits from prenatal alcohol exposure predict offspring cognitive performance and are mitigated by prenatal choline. *Alcoholism: Clinical and Experimental Research Suppl.* 2023.
5. M.L. McNew, C.A. Munson, S.R. Shaikh, S.M. Smith, **S.M. Mooney**. Mice lacking the inflammation-related receptor, ALX/FPR2, have worsened behavioral deficits after prenatal alcohol exposure. *Alcoholism: Clinical and Experimental Research Suppl.* 2022.
6. N. Saini, M.S. Virdee, K.K. Helfrich, S.T.C. Kwan, **S.M. Mooney**, S.M. Smith. Untargeted metabolome analysis reveals reduced maternal hepatic glucose and amino acid content that correlate with fetal organ weights in a mouse model of FASD. *Alcoholism: Clinical and Experimental Research Suppl.* 2022.
7. O.C. Rivera, G. Flentke, **S.M. Mooney**, S.M. Smith. Prenatal alcohol exposure suppresses ribosomal protein gene expression but does not alter nucleolar structure or number in mouse neural stem cells. *Alcoholism: Clinical and Experimental Research Suppl.* 2022.
8. B.H. Presswood, W.B. Friday, E. Pjetri, **S.M. Mooney**, S.M. Smith. Prenatal alcohol exposure increases aging-related disease: findings through age 18 months in a mouse model of FASD. *Alcoholism: Clinical and Experimental Research Suppl.* 2021.
9. W.B. Friday, E. Pjetri, B.H. Presswood, S.M. Smith, **S.M. Mooney**. Sex- and age-specific effects of prenatal alcohol exposure on behavior in aging C57BL/6J mice. *Alcoholism: Clinical and Experimental Research Suppl.* 2020.
10. J. Waddell, E. Hill, L. Jiang, S. Xu, S.Y. *Tang**, **S.M. Mooney**. Choline plus working memory training improves prenatal alcohol-induced deficits in cognitive flexibility and functional connectivity in adulthood. *Alcoholism: Clinical and Experimental Research Suppl.* 2020.
11. **S.M. Mooney**, D. Ricketts, E. Ho, E.I. Varlinskaya. Dendritic morphology of the prefrontal cortex neurons: impact of age, sex, and acute ethanol exposure on gestational day 12. *Alcoholism: Clinical and Experimental Research Suppl.* 2019.
12. J. Waddell, E. Ho, **S.M. Mooney**. Choline plus working memory training improves fetal ethanol-induced deficits in cognitive flexibility in adulthood but not expression of synaptic proteins. *Alcoholism: Clinical and Experimental Research Suppl.* 2019
13. S. *Tang**, S. Xu, J. Waddell, M. Hanscom, W. Zhu, **S.M. Mooney**. Prenatal ethanol exposure alters brain connectivity in adult rats: a resting state functional MRI study. *Alcoholism: Clinical and Experimental Research Suppl.* 2017
14. J. Jones, M. Kane, **S.M. Mooney**. Prenatal ethanol exposure and/or postnatal exposure to docosahexaenoic acid alters lipid profiles in the prefrontal cortex of the rat. *Alcoholism: Clinical and Experimental Research Suppl.* 2017
15. **S.M. Mooney**, E.I. Varlinskaya. Prenatal ethanol exposure enhances sensitivity to socially facilitating and anxiolytic effects of ethanol in adolescent Sprague Dawley rats. *Alcoholism: Clinical and Experimental Research Suppl.* 2016.

16. J. Waddell, **S.M. Mooney**. Prenatal ethanol-induces deficits in working memory in adolescence; improvement with choline. *Alcoholism: Clinical and Experimental Research Suppl.* 2016.
17. *K. A. Wellmann*, E. Ho, L. Guo, and **S. M. Mooney**. Postnatal supplementation with docosahexaenoic acid reduces prenatal ethanol-induced attentional set shifting cognitive deficits in adolescent rats. *Alcoholism: Clinical and Experimental Research Suppl.* 2015.
18. *M.D. Camargo**, **S.M. Mooney**, *S.D. Hicks**, F.A. Middleton. Examination of p53 dependent and independent changes in somatosensory cortex and hippocampus of neonatal mice following ethanol exposure. *Alcoholism: Clinical and Experimental Research Suppl.* 38:153A. 2014.
19. *K. A. Wellmann*, *F. George*, *F. Brnouti*, **S.M. Mooney**. Reversal of prenatal ethanol-induced behavioral deficits by postnatal treatment with docosahexaenoic acid persists throughout adolescence. *Alcoholism: Clinical and Experimental Research Suppl.* 38:259A. 2014.
20. *K.A. Wellmann*, *F. George*, **S.M. Mooney**. Unilateral whisker clipping exacerbates ethanol-induced social and somatosensory behavioral deficits in a sex-and age-dependant manner. *Alcoholism: Clinical and Experimental Research Suppl.* 38:113A. 2014.
21. **S.M. Mooney**, F.A. Middleton, E.I. Varlinskaya. Sex, age, and timing of alcohol exposure define behavioral and molecular outcomes. *Alcoholism: Clinical and Experimental Research Suppl.* 38:325A. 2014.
22. *F. Brnouti*, N.D. Nguyen, M.C. McKenna, **S.M. Mooney**. Postnatal administration of docosahexaenoic acid ameliorates alterations in brain energy metabolism caused by prenatal ethanol exposure. *Alcoholism: Clinical and Experimental Research Suppl.* 37:111A. 2013.
23. *M.D. Camargo**, *S.D. Hicks**, **S.M. Mooney**, F.A. Middleton. The role of p53 in apoptotic and DNA repair processes induced by developmental ethanol exposure. *Alcoholism: Clinical and Experimental Research Suppl.* 37:127A. 2013.
24. *F. George*, *K.A. Wellmann*, **S.M. Mooney**. Docosahexaenoic acid can mitigate some ethanol-induced behavioral changes during adolescence. *Alcoholism: Clinical and Experimental Research Suppl.* 37:111A. 2013.
25. *K.A. Wellmann*, *F. George*, **S.M. Mooney**. Whisker trimming exacerbates the damaging effects of fetal ethanol exposure on rat social behavior and somatosensory performance. *Alcoholism: Clinical and Experimental Research Suppl.* 37:43A. 2013.
26. F.A. Middleton, E.I. Varlinskaya, **S.M. Mooney**. Behavioral and molecular effects of acute prenatal exposure to ethanol are altered by social enrichment. *Alcoholism: Clinical and Experimental Research Suppl.* 36:13A. 2012.
27. **S.M. Mooney**, E.I. Varlinskaya. Behavioral effects of acute prenatal exposure to ethanol are time- and sex-dependent. *Alcoholism: Clinical and Experimental Research Suppl.* 34:98A. 2010.
28. *S.M. Britton**, W.A. Bondi, **S.M. Mooney**, M.W. Miller. Does up-regulation of active caspase 3 caused by postnatal exposure to ethanol presage neuronal death in cerebral cortex? *Alcoholism: Clinical and Experimental Research Suppl.* 33:132A. 2009.
29. **S.M. Mooney**, S.L. Youngentob, E.I. Varlinskaya. Behavioral effects of acute exposure to ethanol are time-dependent. *Alcoholism: Clinical and Experimental Research Suppl.* 33:35A. 2009.
30. **S.M. Mooney**, D.J. Stelzner. Effect of ethanol on thalamocortical afferents. *Alcoholism: Clinical and Experimental Research* 31:67A. 2007.
31. **S.M. Mooney**, *S.M. Britton**, M.W. Miller. Brainstem motor nucleus neurons are vulnerable to ethanol during gastrulation and neuronal generation. *International Society for Biomedical Research on Alcoholism.* 2006.

32. **S.M. Mooney**, C. Griffin*, M.W. Miller. Specificity of brainstem vulnerability to ethanol. *Alcoholism: Clinical and Experimental Research* 30:228A. 2006.
33. **S.M. Mooney**, R.C. Mezza, and M.W. Miller. Thalamus is protected from prenatal exposure to ethanol. *Alcoholism: Clinical and Experimental Research* 29:128A. 2005.
34. C.M. Fisher, **S.M. Mooney**, R.C. George, F.A. Middleton, S.L. Youngentob. Analysis of gene expression in the olfactory bulb and epithelium of adult rats prenatally exposed to ethanol. *Alcoholism: Clinical and Experimental Research* 28:9A. 2004.
35. S.L. Youngentob, P.F. Kent, **S.M. Mooney**, N.E. Spear, J.C. Molina. In utero ethanol experience and olfactory plasticity. *Alcoholism: Clinical and Experimental Research* 28:94A. 2004.
36. **S.M. Mooney** and M.W. Miller. Neuroprotective effect of nerve growth factor is age-dependent. *Alcoholism: Clinical and Experimental Research* 27:81A. 2003.
37. **S.M. Mooney** and M.W. Miller. Ethanol causes the apoptotic death of cells in the fetal cortical plate in organotypic slice cultures. *Alcoholism: Clinical and Experimental Research* 25:149A. 2001.
38. **S.M. Mooney** and M.W. Miller. Effect of prenatal exposure to ethanol on the ventrobasal nucleus of the thalamus: a longitudinal study. *Alcoholism: Clinical and Experimental Research* 25:394. 2001.
39. **S.M. Mooney** and M.W. Miller. Ethanol differentially affects the developmental expression of caspase 3 in the rat trigeminal system. *Alcoholism: Clinical and Experimental Research* 24:149A. 2000.
40. **S.M. Mooney** and M.W. Miller. Gestational exposure to ethanol disrupts the bcl-2: bax ratio. *Alcoholism: Clinical and Experimental Research* 23:63A. 1999.

International

41. **S.M. Mooney**, F. Brnouti, F. George, K.A. Wellmann, N. Nguyen, M.C. McKenna. Neuroprotective effect of docosahexaenoic acid on brain metabolism and behavior in a model of fetal alcohol syndrome. *Journal of Neurochemistry* 125 (S1):161. Mexico. 2012.
42. **S.M. Mooney**, M.W. Miller, E.I. Varlinskaya. Acute exposure to ethanol affects social behavior and amygdala structure in a time-dependent manner. *International Society of Developmental Biologists Congress. Mechanisms of Development* 126:S193. Scotland. 2009.
43. **S.M. Mooney**, R.M.A. Napper. A reduced number of neurons in the occipital cortex of the 10 day-old rat following postnatal alcohol exposure. *Alcoholism: Clinical and Experimental Research* 20:28A. USA. 1996.
44. **S.M. Mooney**, R.M.A. Napper, J.R. West. The effect of postnatal exposure to alcohol on the rat parietal cortex. *Alcoholism: Clinical and Experimental Research* 18:436A. USA. 1994.
45. **S.M. Mooney**, R.M.A. Napper. The effects of postnatal alcohol exposure on the rat cerebral cortex: A stereological study. *Alcoholism: Clinical and Experimental Research* 17:484A. USA. 1993.

Major Invited Communications Local

1. **S.M. Mooney** Does choline mitigate effects of prenatal alcohol exposure across the lifespan? NGx and Precision Nutrition in Clinical Practice, 2024.
2. **S.M. Mooney** Prenatal alcohol exposure; effects on neuroanatomy, behavior, and gene expression. Grand Rounds, UMSOM, seminar, 2012.
3. **S.M. Mooney** Prenatal exposure to ethanol alters social behavior in a timing-, sex, and age-dependent manner. Summer Undergraduate Research Foundation, SUNY Upstate Medical University, Syracuse NY, seminar, 2010.

4. **S.M. Mooney** Differential effects of ethanol on the somatosensory system. CNY Neurofest, Skaneateles NY, invited speaker, 2010.
5. **S.M. Mooney** Behavioral effects of acute exposure to ethanol: an autism-like phenotype? Neurosurgery Research Day, SUNY Upstate Medical University, Syracuse NY, invited speaker, 2009.
6. **S.M. Mooney** Alcohol and brain development. What's different about the thalamus? Summer Undergraduate Research Foundation program, SUNY Upstate Medical University, Syracuse NY, seminar, 2009.
7. **S.M. Mooney** Ethanol, neurotrophins, and thalamocortical matching. Neuroscience Program, SUNY Upstate Medical University, Syracuse NY, seminar, 2009.
8. **S.M. Mooney** Autism and Alcohol. What's the Connection? Asa Gray Seminar series, Utica College, Utica NY, seminar, 2008.
9. **S.M. Mooney** Fetal Alcohol Syndrome; what is it and how does it happen. Summer Undergraduate Research Foundation, SUNY Upstate Medical University, Syracuse NY, seminar, 2007.
10. **S.M. Mooney** A second period of neuronogenesis in the thalamus. Neurosurgery Research Day, SUNY Upstate Medical University, Syracuse NY, invited speaker, 2006.

National

11. **S.M. Mooney**, E. Billings, C.A. Munson, S.M. Smith. Novel actions of essential fatty acid interventions in FASD. Research Society on Alcohol, Minneapolis, MN, 2024.
12. **S.M. Mooney**, H.G. Petry, C.A. Munson, S.M. Smith. Metabolic deficits from prenatal alcohol exposure predict offspring cognitive performance and are mitigated by prenatal choline. Research Society on Alcohol, Bellevue WA, 2023.
13. W.B. Friday, E. Pjetri, B.H. Presswood, S.M. Smith, **S.M. Mooney**. Sex- and age-specific effects of prenatal alcohol exposure on behavior in aging C57BL/6J mice. Fetal Alcohol Spectrum Disorders Study Group, Virtual Event 2021.
14. **S.M. Mooney** Sex and Age-specific Effects of Prenatal Alcohol Exposure on Behavior and Aging-related Disease in Mice. Precision Nutrition and Brain Health Symposium. Virtual Event, 2021.
15. **S.M. Mooney** Prenatal exposure to ethanol alters functional connectivity and cognition in rats. Texas A&M University, College Station TX, seminar, 2018
16. **S.M. Mooney** Prenatal exposure to ethanol: structural and functional consequences. Temple University / Shriner's Children's Hospital, Philadelphia PA, seminar, 2017.
17. **S.M. Mooney** Prenatal ethanol exposure alters brain structure and behavior: can nutritional interventions improve outcomes? Annual Meeting of the American Society for Neurochemistry, Little Rock AR, Symposium co-organizer and speaker, 2017.
18. **S.M. Mooney** Nutritional interventions as treatments for Fetal Alcohol Spectrum Disorder: DHA and choline. UNC Nutritional Research Institute, Kannapolis NC, seminar, 2017.
19. **S.M. Mooney** Prenatal ethanol exposure alters brain structure and behavior: can interventions improve outcomes? University of Kentucky, Lexington KY, seminar, 2017.
20. **S.M. Mooney** Prenatal exposure to ethanol alters functional connectivity in rats. University of Kentucky, Lexington KY, seminar, 2017.
21. **S.M. Mooney** Prenatal exposure to ethanol: structural and functional consequences. University of New Mexico, Albuquerque NM, seminar, 2016.
22. **S.M. Mooney** What animal models tell us about FASDs and interventions. University of New Mexico, Albuquerque NM, keynote speaker for FASD Awareness Day, 2016.

23. **S.M. Mooney** Omega 3 fatty acid reversal of ethanol-induced behavior deficits. Annual Meeting of the Children's Environmental Health Network, Austin TX, invited speaker, 2015.
24. **S.M. Mooney** Prenatal alcohol exposure; effects on neuroanatomy and behavior. Children's National Health System, Washington DC, seminar, 2015.
25. **S.M. Mooney** Nutritional mechanisms in the prevention and treatment of fetal alcohol spectrum disorders. Annual Meeting of the Research Society on Alcoholism, San Antonio TX, Symposium co-organizer and Discussant, 2015.
26. **S.M. Mooney** Omega 3 fatty acid reversal of ethanol-induced behavior deficits. Annual Meeting of the Research Society on Alcoholism, San Antonio TX, invited speaker, 2015.
27. **S.M. Mooney** Prenatal exposures shape neuroanatomy and behavior. Children's National Health System, Washington DC, seminar, 2015.
28. **S.M. Mooney** Sex, age, and timing of alcohol exposure define behavioral and molecular outcomes. Annual Meeting of the Research Society on Alcoholism, Bellevue WA, invited speaker, 2014.
29. **S.M. Mooney** Prenatal ethanol alters brain anatomy and behavior: does an omega 3 fatty acid improve outcomes? University of Arkansas Medical School, Little Rock AR, seminar, 2014.
30. **S.M. Mooney** Differential effects of prenatal exposure to ethanol on the trigeminal-somatosensory system. NIAAA Laboratory for Integrative Neuroscience, Rockville MD, seminar, 2012.
31. **S.M. Mooney** Prenatal alcohol exposure; effects on neuroanatomy, behavior, and gene expression. University of Delaware, Newark DE, seminar, 2012.
32. **S.M. Mooney** Differential effects of prenatal exposure to ethanol on the trigeminal-somatosensory system. Albany Medical College, Albany NY, seminar, 2011.
33. **S.M. Mooney** Acute exposure to ethanol: structural and functional consequences. University of Illinois, Chicago IL, seminar, 2010.
34. **S.M. Mooney** Differential effects of ethanol on and within sensory systems. Annual Meeting of the Research Society on Alcoholism, Baltimore MD, invited speaker, 2006.

International

35. **S.M. Mooney**, S.M. Smith. Sex- and Age-Specific Effects of Prenatal Alcohol Exposure on Body Weight and Behavior in Aging C57BL/6J Mice 9th International Research Conference on Adolescents and Adults with FASD, Vancouver, Canada, invited speaker, 2020.
36. **S.M. Mooney**. Nutritional Interventions Ameliorate Cognitive Behavior Deficits in a Model of Fetal Alcohol Spectrum Disorders
37. **S.M. Mooney**. Functional Connectivity in a Rat Model of Fetal Alcohol Spectrum Disorder (FASD): Pilot Study Using Resting State Functional MRI. 8th International Conference on Fetal Alcohol Spectrum Disorder, Vancouver, Canada, invited speaker, 2019.
38. **S.M. Mooney** Prenatal Ethanol Exposure Induces Deficits in Cognitive Function in Adulthood; Improvement with Choline and Behavior Training. 7th International Conference on Fetal Alcohol Spectrum Disorder, Vancouver, Canada, invited speaker, 2017.
39. **S.M. Mooney** Apoptosis, Fetal Alcohol Syndrome Study Group, Vancouver, Canada, panel discussant, 2004.

Teaching Record

University of North Carolina at Chapel Hill

2023 - Directed Readings in Nutrition (NUTR696), Course Instructor, residential (5-7 PhD students)
 2022 Nutritional Metabolism (NUTR845), Course Instructor (6 PhD students)
 2022 - Course Lead Instructor for Human Nutrition (NUTR705), MPH@UNC
 2022 – Nutrition Research (NUTR 910), 1 PhD student
 2021 Research Rotations (NUTR920), 1 semester (1 PhD student)
 2021 Nutritional Metabolism (NUTR845), 1 session (5 PhD students)
 2020 - Human Nutrition (NUTR705), Course Instructor, residential (6 - 21 MPH students)

Mentor / Student Committee

2019 Parker Holman, University of British Columbia, Canada, Ph.D. student, External Examiner
 2019 – 2023 Kathleen Walter Ph.D., postdoctoral fellow primary mentor
 2018 – 2021 Kaylee Helfrich, UNC Chapel Hill Ph.D. student, thesis committee member and co-mentor
 2019 – 2023 Nipun Saini, UNC Chapel Hill, postdoctoral fellow secondary mentor
 2019 – 2021 Sze Ting (Cecilia) Kwan, UNC Chapel Hill, postdoctoral fellow secondary mentor
 2020 – 2022 Olivia Rivera, UNC Chapel Hill, postdoctoral fellow secondary mentor
 2020 – current Faustina Jeyaraj, UNC Chapel Hill Ph.D. student, thesis committee member
 2021– 2023 Practicum faculty mentor for MPH students
 2023 Nayali Duckworth, BSPH student, co-mentor
 2022 – current Hannah Petry, Ph.D. student primary mentor

University of Maryland

2017 Placenta & Respiratory Development lecture to MS1 students (~170 medical students)
 2016 Foundations of Research and Critical Thinking (FRCT), paper discussion (12 participants – students and fellows).
 2016 Responsible Conduct of Research (RCR, CIPP907) Session #4 Publications, grants, and the peer review system (10 participants – students and fellows).
 2015, 2017 How to write a scientific abstract and poster (8 participants – clinical fellows)
 2015 Responsible Conduct of Research (RCR, CIPP907) Session #9 Animal subjects (9 participants – students and fellows).
 2014 Developmental Neurobiology course (GPILS 627), Developmental Neurotoxicology lecture (~12 graduate students)
 2014 Behavioral Neuroscience course (GPLS 735), Neurobehavioral Developmental Disorders (autism) & animal behavioral models lecture (~12 graduate students)
 2012- 2017 Structure and Development lab to MS1 students (~170 medical students)
 2012-2017 Co-Director of the Neonatal-Perinatal Medicine Fellowship Program
 2012 Pathophysiology, Effects of alcohol on development (8 clinical fellows)

Mentor / Student Committee

2017 – 2019 Abhinav Parikh, University of Maryland Neonatology Fellow, scholarly oversight committee member
 2017 – 2018 Shiyu Tang, University of Maryland Ph.D. student, thesis committee member

2015 – 2016	Marie Hanscom, University of Maryland, Ph.D. rotation student, Molecular Medicine program
2015 – 2015	Kaila Noland, University of Maryland, Ph.D. rotation student, Toxicology program
2014 – 2017	Sruthi Polavarapu, University of Maryland Neonatology Fellow, scholarly oversight committee member
2014 – 2017	Nisha Pulimood, University of Maryland, Ph.D. student, thesis committee member
2014 - 2014	Maithri Kondapaka, PRISM Student, University of Maryland, summer student (medical student)
2014 - 2014	Matthew Stefanik, summer student (high school)
2014 - 2014	Max Gold, summer student (high school)
2013 - 2016	Jennifer Alexander MD, University of Maryland Neonatology Fellow, scholarly activity advisor
2013 - 2016	Temitope Akinmboni MD, University of Maryland Neonatology Fellow, scholarly activity advisor
2013 - 2015	Shilpa Das, University of Maryland, Masters student in Molecular Medicine program, laboratory advisor
2013 - 2013	Kay Kulason, Praxis Fellow, Smith College (summer student)
2013 - 2013	Emily Boerger, Smith College (summer student)
2012 – 2014	Jacob Smith, University of Maryland, Ph.D. thesis committee member
2011- 2015	Kristen Wellmann Ph.D., postdoctoral fellowship advisor
2011 - 2014	Finney George MD, University of Maryland Neonatology Fellow, scholarly activity advisor
2011 - 2014	Fares Brnouti MD, University of Maryland Neonatology Fellow, scholarly activity advisor

SUNY Upstate Medical University

Medical Student Teaching

2007-2011	Lecturer MSI Physiology, 1 st year medical students - 8 contact hours/yr, ~170 first year medical students (6 lectures, mostly in Gastrointestinal Physiology + review).
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Graduate School Teaching

2006 - 2007	Co-ordinator of GS892 Introduction to the Presentation and Analysis of Scientific Literature: Journal Club. (15 contact hours/yr, 10 graduate students).
2001- 2011	Course founder, coordinator, and lecturer, 610N Topics in Developmental Neurobiology (40 contact hours/yr, 4-10 1 st and 2 nd year graduate students). Offered odd years.

Mentor/Committee

2010	Sara Green, SUNY Upstate, Summer Undergraduate Research Fellow
2010	Anthony Yuhas, SUNY Upstate, Ph.D. candidate (left program due to family reasons)
2009 - 2009	Jessica Ouderkirk, SUNY Upstate, Summer Undergraduate Research Fellow
2008 - 2008	Susanne Pritchard, SUNY Upstate, Summer Undergraduate Research Fellow
2008 - 2011	Lua Jafari, Syracuse University, Capstone Honors thesis
2007 - 2008	Masters committee for M.S. student Danielle Williams
2007 - 2009	Shannon Pickup, Syracuse University, Capstone Honors thesis
2007	Qualifying committee for Ph.D. student Amber Eade

2006	Thesis committee for Ph.D. student Melinda Tyler
2005	Thesis committee for Ph.D. student Michelle Mader
2004	Qualifying committee for Ph.D. student Melinda Tyler
2003	Qualifying committee for Ph.D. student Michelle Mader
2002	Qualifying committee for Ph.D. student Julie Siegenthaler

University of Otago

Medical Student Teaching

1995-1996	Gross Anatomy lab- to 1 st year students, 2 contact hr/wk (150 students)
1995	Histology (4 lectures) to 2 nd year Dentistry and Physiotherapy students (120 students)
1990-1996	Histology lab to 2 nd year Medical, Dentistry and Physiotherapy students, 4 contact hr/wk (200 students per year) Microscopic Anatomy (practical classes)- to 2 nd and 3 rd year Anatomy students, 4 contact hr/wk (30 students per year)

Grants/Awards

Active

3/1/2024 – 2/28/2026 (Contact PI: Robinson Co-PI)
 “Modeling alcohol exposure in gestation and adolescence”
 NIH/NIAAA R03-AA031378
 Total direct costs: \$100,000

Completed

2/1/2017 – 1/31/2024 (PI)
 “Model of Fetal Alcohol Spectrum Disorder”
 NIH/NIAAA R01 AA024980
 Total direct costs: \$1,250,000

9/1/2019 – 1/31/2024 (PI)
 “Does PAE Increase Susceptibility to ADRD in Later Life?”
 NIH/NIAAA R01 AA024980-S1
 Total direct costs: \$200,000

9/13/2019 – 1/31/2024 (PI)
 “Nutrient combination to mitigate Fetal Alcohol Spectrum Disorder”
 NIH/NIAAA R01 AA024980-S2
 Total direct costs: \$100,000

7/1/2021 – 6/30/2023 (Investigator: Kash (P60 PI); Robinson (Project Lead))
 “Dietary choline mitigation of adolescent alcohol-induced deficits in adult cognitive flexibility”
 NIH/NIAAA P60 AA011605-S1
 Total direct costs: \$100,000

2/1/2022 – 1/31/2023 (Mentor: Walter (PI))
 “Omega-3 supplementation as a therapeutic agent in PAE-induced neuroinflammation”
 NIH/NIAAA F32-AA029287
 Total direct costs: \$218,910

05/05/14 -04/30/21 Mooney (PI)
 “Experimental Factors in Fetal Alcohol Spectrum Disorder”

NIH/NIAAA R01 AA022413
Total direct costs: \$1,125,000

7/01/19-6/30/20 (Co-PI)
“Do PAE and Choline Polymorphisms Alter Maternal-Fetal Choline Requirements?”
NRI
Total direct costs \$60,000

10/01/18-6/30/19 (Co-PI)
“Do PAE and Choline Polymorphisms Alter Maternal-Fetal Choline Requirements?”
NRI
Total direct costs \$100,000

07/01/17-05/31/19 (Co-I: PI Blanchard)
“Collaborative Initiative on Fetal Alcohol Spectrum Disorders: Prenatal alcohol effects on the gut microbiome contributing to failure to thrive and altered immune function”
NIH/NIAAA UH2 AA026109-01
Total costs: \$146,515

09/01/14 - 08/31/19 Project 5 (Co-I: PI Varlinskaya: Center Director Spear)
“Developmental Exposure Alcohol Research Center”
NIH/NIAAA P50 AA017823
Total costs to SMM (direct + indirect): \$314,000

09/01/10 – 08/31/12 (PI) Center Director L. Spear
“Developmental Exposure Alcohol Research Center Pilot Project 3”
NIH/NIAAA P50 AA178231
Total direct costs: \$44,500

07/15/10 – 04/30/16 (Co-PI) Co-PI Middleton
“Experimental Fetal Alcohol Syndrome”
NIH/NIAAA R01 AA006916
Total costs to SMM (direct + indirect): \$400,000

12/05/09-11/30/16 (PI)
“Effects of developmental ethanol exposure on brain development”
NIH/NIAAA R01 AA018693
Total direct costs: \$827,500

09/01/09 - 01/31/11 (Co-PI) Center Director Miller
“Developmental Exposure Alcohol Research Center Neuroanatomy Core Facility”
NIH/NIAAA P50 AA178231
Total direct costs: \$825,000

09/01/09 - 08/31/10 (Co-PI) Center Director Miller
“Developmental Exposure Alcohol Research Center Animal Core Facility”

NIH/NIAAA P50 AA178231
Total direct costs: \$1,000,000

12/01/08 - 3/31/12 (PI)
"Social behavior deficits in autism: role of amygdala"
Autism Speaks 4946
Total direct costs: \$240,000

08/01/05-07/031/08 (PI)
"Ethanol, neurotrophins, and thalamocortical matching"
NIH/NIAAA R21 AA015413
Total direct costs: \$250,000

Pending

6/1/2024 – 5/31/2029 (Co-PI: Smith Contact PI)
"Choline Polymorphisms in Fetal Alcohol Spectrum Disorders"
NIH/NIAAA R01-AA031262A1
Total direct costs: \$1,662,383
Reviewed February 2024, scored 1 percentile.

10/1/2024 – 9/30/2029 (Contact PI: Smith Co-PI)
"Nutritional Intervention for Fetal Alcohol Spectrum Disorder"
NIH/NIAAA R01 AA-032013
Total direct costs: \$1,581,948
Submitted February 2024

12/1/2024 – 11/30/2026 (PI)
"Mouse Model of Fetal Alcohol Spectrum Disorder"
NIH/NIAAA R21 AA-032109
Total direct costs: \$250,000
Submitted February 2024

10/1/2024 – 9/30/2027 (Mentor, Petry (PI))
"Mechanisms of Choline's Improvement in Prenatal Alcohol Exposure"
NIH/NIAAA F31 AA-032145
Total direct costs: \$134,167
Submitted April 2024

6/1/2024 – 5/31/2029 (Co-I: Lila Contact PI)
"Investigating how the gut microbiome mediates effects of flavonoids and physical exercise on age-related changes in cognition"
NIH/NIA
Total direct costs: \$2,032,688
To be submitted June 2024

02/01/2025 – 01/31/2030 (Consultant: Wu Contact PI)
"MuSIC for PAE- Multi-System Imaging Characterization for Prenatal Alcohol Exposure"
NIH/NIAAA
Total direct costs: \$1,250,000

To be submitted June 2024

Administrative Service

Institutional Service

University of North Carolina at Chapel Hill

2023	Member Faculty Search Committee, NRI
2022	Member Ethics Investigation Committee
2021-current	Member Space Committee for NRI
2020-current	Member BSPH/MS Program Committee, Department of Nutrition
2020-current	Member Nutrition Department Academic Promotion and Tenure Committee
2019-current	Member Faculty Development Team, Department of Nutrition
2021	Member Research Working Group for NRI Strategic Planning
2019-2021	Member Organizing Committee for Precision Nutrition and Brain Health Symposium
2019-2020	Member Strategic Planning Committee, Department of Nutrition
2019-2020	Member Curriculum Committee, Department of Nutrition
2019	Member Search Committee for Business Manager, NRI

University of Maryland School of Medicine

2016 – 2018	Member Internal Advisory Board McKenna P01 Grant
2015	Inquiry Committee, University of Maryland Office of Research Integrity
2014 – 2018	Member Department of Pediatrics Research Committee
2014	Judge, Medical Student Research Day
2013 - 2018	Judge, Pediatric Research Day
2012 – 2018	Member Department of Pediatrics Scholarly Oversight Committee

SUNY Upstate Medical University

2009 – 2011	Member Rules and Regulations committee, SUNY Upstate
2007 - 2010	Curriculum Review committee for Department of Neuroscience and Physiology, SUNY Upstate
2005 - 2007	Chair Neurofest committee
2003 - 2010	Space/Equipment committee for Department of Neuroscience and Physiology, SUNY Upstate

Local Service

2022	Reviewer UNC NORC grant pilot project program
2012	Session moderator at the Baltimore, Washington, and Virginia Perinatal Club annual meeting.
2005 – 2010	Member Subcommittee for Animal Studies (IACUC) at Syracuse VAMC

National Service

2024	Abstract reviewer, American Society for Nutrition
2023	Abstract reviewer, American Society for Nutrition
2023	Reviewer, ZAA1 CC (52) 1, NIH Special Emphasis Panel
2022	Abstract reviewer, American Society for Nutrition
2022	Member Rosett Award review committee for Fetal Alcohol Spectrum Disorders Study Group
2021	Reviewer, ZRG1 IFCN-C (02) M, NIH Special Emphasis Panel
2021	Reviewer, ZRG1 IFCN-C (02) M, NIH Special Emphasis Panel
2021 – current	Member Advisory Board for Fetal Alcohol Spectrum Disorders Study Group
2021	Chair, ZRG1 IFCN-C (02) M, NIH Special Emphasis Panel

2020 Co-chair, ZRG1 IFCN-C (02) M, NIH Special Emphasis Panel
2020 Chair, ZRG1 IFCN-C (02) M, NIH Special Emphasis Panel
2019 Reviewer, ZAA1 CC (04) 1, NIAAA Special Emphasis Panel
2018 Reviewer, ZAA1 CC (04) 1, NIAAA Special Emphasis Panel
2018 Reviewer, ZAA1 AA (30), NIAAA Special Emphasis Panel
2018 Chair, ZRG1 NAL-Z (07) S, NIH Special Emphasis Panel
2017 - 2018 Member Program Committee, Research Society on Alcoholism
2017 Reviewer, ZAA1 AA (30), NIAAA Special Emphasis Panel
2017 Reviewer, ZNS1 SRB-M (01), NINDS Special Emphasis Panel
2017 Reviewer, ZES1 LAT-D (K1) 1, NIEHS Special Emphasis Panel
2016 – 2021 Member Executive Committee for Fetal Alcohol Spectrum Disorders Study Group (President 2019 – 2021)
2016 - 2018 Chair, NIH Study Section Neurotoxicology and Alcohol (NAL)
2016 External Reviewer for the Southwest National Primate Research Center (SNPRC) Pilot Research Program
2016 Reviewer, ZES1 LWJ-D (K) 1, NIEHS Special Emphasis Panel
2015 – current Member Neuroscience Editorial Board, Experimental Biology and Medicine
2015 Abstract Reviewer for the Pediatric Academic Societies' Annual Meeting
2015 - 2016 Member Program Committee, Research Society on Alcoholism
2014 Reviewer, ZAA1 EE (30) 1 NIAAA Special Emphasis Panel
2013 – 2016 Member Advisory Board for Fetal Alcohol Spectrum Disorders Study Group
2013 - 2016 Standing Member NIH Study Section Neurotoxicology and Alcohol (NAL)
2013 – 2015 Chair of Sub-committee for Student Lunch at Research Society on Alcoholism
2013 Ad-hoc Member NIAAA Study Section AA-4
2012 Ad-Hoc Member NIH Study Section Neurotoxicology and Alcohol
2012 Ad-Hoc Member NIAAA Study Section AA-4
2011 Ad-Hoc Member NIH Study Section Neurotoxicology and Alcohol
2011 Ad-Hoc Member NIAAA Study Section AA-4
2009 Reviewer, ZAA1 CC (03) R "The Effects of Alcohol on Glial Cells (RFA-AA-09-003/004)" NIAAA Special Emphasis Panel
2007 – 2015 Member Education Committee, Research Society on Alcoholism
2007 – 2015 Abstract Reviewer for Enoch Gordis Research Recognition Awards for Graduate Students and Postdoctoral Fellows, Research Society on Alcoholism
2007 – 2015 Judge for Enoch Gordis Research Recognition Awards for Graduate Students and Postdoctoral Fellows, Research Society on Alcoholism

International Service

February 2024 Grant review for Israel Science Foundation (ISF)
June 2023 Grant review for Fondazione Cariplo, Milan Italy
February 2023 Grant review for University of Sharjah, UAE
April 2021 Grant review for Israel Science Foundation (ISF)
November 2019 Grant review for the Natural Sciences and Engineering Research Council of Canada (NSERC)
April 2016 Grant review for Israel Science Foundation (ISF)
March 2015 Grant review for Research Grants Council (RGC) of Hong Kong

Ad Hoc Reviewer

2024 American Journal of Drug and Alcohol Abuse

2023
Molecular Neurobiology
Antioxidants
Current Neuropharmacology (x2)
Birth Defects Research (x2)
British Journal of Pharmacology
International Journal of Molecular Sciences
Alcohol: Clinical and Experimental Research (x4)
Scientific Reports (x2)
Cells (x3)
Frontiers in Neuroscience (x2)
Journal of Integrative Neuroscience (x2)

2022
Children
Frontiers in Neuroscience
Reproductive Toxicology
Alcohol Research: Current Reviews
Psychopharmacology
Alcohol (x2)
Brain Sciences (x2)
Molecular Neurobiology
The American Journal of Drug and Alcohol Abuse (x4)
Food & Function (x2)
Alcoholism: Clinical and Experimental Research (x3)
Nutrients (x4)

2021
Molecular Neurobiology
Frontiers in Neuroscience
eNeuro (x2)
International Journal of Developmental Neuroscience
Science Progress
Alcohol
Alcoholism: Clinical and Experimental Research (x3)
Brain Sciences
Neuropharmacology (x2)
Behavioral Brain Research
The FASEB Journal
American Journal of Clinical Nutrition (x2)

2020
Genes and Nutrition (x2)
Experimental Biology and Medicine
The FASEB Journal (x2)
Behavioral Brain Research
Science Progress
Brain Connectivity
Cellular and Molecular Neurobiology (x2)
Journal of Neuroscience Research (x2)
Brain Plasticity (x2)
Alcoholism: Clinical and Experimental Research (x3)
Alcohol (x2)
Brain Sciences (x3)

2019
Alcoholism: Clinical and Experimental Research
Psychopharmacology
Journal of Developmental Origins of Health and Disease (x2)
Scientific Reports (x2)
Neurobiology of Disease
Alcohol (x2)

2018
 Experimental Biology and Medicine (x2)
 Birth Defects Research
 Pediatric Research
 Birth Defects Research
 Psychopharmacology
 Hormones and Behavior
 eNeuro
 Drug and Alcohol Dependence
 Hippocampus
 Neurotoxicology (x2)
 Genes, Brain and Behavior (x3)
 Cerebral Cortex (x2)
 The FASEB Journal
 2017
 Journal of Neuroinflammation (x2)
 International Journal of Developmental Neuroscience
 Learning and Motivation
 Acta Physiologica
 International Journal of Environmental Research and Public Health (x2)
 Behavioral Brain Research
 Alcoholism: Clinical and Experimental Research (x4)
 Biochemistry and Cell Biology
 Journal of Neurophysiology
 2016
 Autism Research
 Acta Physiologica
 Journal of Neuroscience Research (x2);
 Behavioral Brain Research (x2);
 Neurotoxicology
 Alcohol (x4)
 Brain Sciences
 2015
 Physiology and Behavior
 Behavioral Brain Research (x2)
 Alcoholism: Clinical and Experimental Research
 Journal of Comparative Neurology (x3)
 Acta Physiologica
 Neurotoxicology and Teratology
 Alcohol (x5)
 Brain Research
 Neurochemistry International (x2)
 International Journal of Developmental Neuroscience (x2)
 Frontiers in Integrative Neuroscience
 Neural Regeneration Research
 Neurotoxicology
 2014
 Experimental Biology and Medicine (x2)
 Journal of Neuroscience Research
 Alcoholism: Clinical and Experimental Research (x3)
 Neuroscience (x 3)
 Behavioral Brain Research
 Pharmacology, Biochemistry, and Behavior (x2)
 Brain Research
 2013
 Journal of Neuroscience Research
 Alcohol
 Journal of Neurochemistry (x 5)
 Neuroscience

Neurotoxicology and Teratology
Cerebral Cortex
Alcoholism: Clinical and Experimental Research
2012 Neuroscience (x 3)
Alcohol (x 4)
Journal of Neurodevelopmental Disorders (x 2)
Behavioral Brain Research (x 2)
Journal of Neuroscience
Neurotoxicology
2011 Brain Research
International Journal of Developmental Neuroscience
Alcoholism: Clinical and Experimental Research
Alcohol