



Michael Andrew Fox, PhD
Professor and Director

1. PERSONAL INFORMATION:

Name - Michael Andrew Fox
Titles - Director, School of Neuroscience, Virginia Tech
Director, Fralin Biomedical Research Institute *neuro*SURF Program
Professor, Fralin Biomedical Research Institute, Virginia Tech
Professor, Department of Biological Sciences, Virginia Tech
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210 Drillfield Drive
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ORCID ID - 0000-0002-1649-7782

2. EDUCATION AND PROFESSIONAL HISTORY:

EDUCATION:

Chemistry Major (1995 – 1997) – United States Military Academy, West Point, NY

B.S., Chemistry (1999) – The College of William and Mary, Williamsburg, VA

Graduated Cum Laude *Supervisor: B. Siles*

Honors Research Thesis: "Determination of cell death mechanisms and separation of polymorphic markers with capillary electrophoresis." Awarded Highest Honors.

Ph.D., Department of Anatomy (2004) – Virginia Commonwealth University

Richmond VA. *Supervisor: B. Fuss*

Thesis: Functional Analysis of Phosphodiesterase 1alpha/Autotaxin in the Central Nervous System

Postdoctoral training, Department of Molecular and Cellular Biology (2004-2007), Harvard University, Cambridge, MA. *Supervisor: Joshua R. Sanes*

Neural Development and Genetics of Zebrafish Course, Marine Biological Laboratory (2005), Woods Hole, MA.

PROFESSIONAL SUMMARY:

Primary Research Focus: *Developmental Neurobiology*

Areas of expertise and interest: *neural development, extracellular matrix, synaptogenesis, collagens, reelin, CSPGs, metalloproteinases, retinogeniculate targeting, synaptic targeting, synaptic*

maintenance, neuron, axon guidance, visual system development, lateral geniculate nucleus, Toxoplasma gondii

ACADEMIC APPOINTMENTS:

2020-current Professor and Director, School of Neuroscience, Virginia Tech
2019-current Professor, Fralin Biomedical Research Institute at Virginia Tech Carilion
2019-current Professor, Department of Biological Sciences, Virginia Tech
2019-current Professor, Professor of Health Sciences, Virginia Tech
2020-current Professor, Department of Pediatrics, VTCSOM
2012-2019 Associate Professor, FBRI
2012-2019 Associate Professor of Biological Sciences, Virginia Tech
2013-2019 Associate Professor of Health Sciences, Virginia Tech
2013-2020 Associate Professor of Pediatrics, VTCSOM
2016-2020 Director of the FBRI Center for Neurobiology Research
2016-current Director of the FBRI Neurobiology Summer Undergraduate Research Fellowships (*neuroSURF*)
2007 - 2012 Assistant Professor, Department of Anatomy and Neurobiology, Virginia Commonwealth University Medical Campus
2002 Adjunct Professor, Department of Kinesiology, College of William & Mary

3. HONORS AND AWARDS:

2019 Roanoke Valley Governor School H.E.R.O. Honoree
2018 Outstanding Service Award, Department of Biological Sciences, VT
2017 Outstanding Teaching Award, Translational Biology Medicine and Health Graduate Program, VT
2016 Outstanding Teaching Award, Department of Biological Sciences, VT
2015 Virginia Tech Scholar of the Week (10/2015)
2015 Co-Honoree at Blue Ridge Division of the March of Dimes
2015 **Young Scientist Lectureship**, International Society for Neurochemistry
2014 Outstanding Service Award, Department of Biological Sciences, VT
2013 **Jordi Folch-Pi Award**, American Society for Neurochemistry
2011 Young Investigator Award for the 2011 International Society for Neurochemistry meeting
2011 Outstanding Teacher Award for "Best Teacher" during M1 Neuroscience, School of Medicine, VCU
2010 Outstanding Teacher Award, Department of Anatomy and Neurobiology, VCU
2004 **Marian Kies Award** from the American Society for Neurochemistry
2003 **University Leadership Award**, VCU
2003 H.L. Osterud Award, Department of Anatomy and Neurobiology at VCU
2002 F31 NIH Pre-Doctoral Fellowship
2002 American Society for Cell Biology (ASCB) Travel Award
2002 American Society of Neurochemistry Young Investigator Educational Enhancement Award Recipient
2002 Jack Denning Burke Award in Cell Biology, Department of Anatomy at VCU
2001 C.C. Clayton Award, Department of Anatomy at VCU
1999 Election into Mortar Board Honor And Service Society, The College Of William And Mary
1997 West Point (USMA) Scholar Athlete Award
1997 Patriot League Scholar Athlete Award

4. GRANTS

Grants and Funding: Active

2011-2022 NIH R01 (R01EY021222)

"Molecular mechanisms of retinogeniculate synapse formation"

(This is a renewal of an R01 started in 2011 with a different title)

Role: **PI** (Effort: 25%); Total funds: \$1,924,243 (*\$1,694,143 to Fox lab*)

2018-2022 NIH R25 (R25NS105141)

"VTCRI Translational Neurobiology Summer Undergraduate Research Fellowship"

Role: **PI** (Effort – 2%); Total funds – \$506,535

2016-2021 NIH R01 (R01AI124677)

"Toxoplasma gondii infection and inhibitory circuit dysfunction"

Role: **mPI** (Michael A. Fox and Ira Blader, U.Buffalo) (Effort – 25%);

Total funds – \$2,712,067 (*\$947,245 to Fox lab*)

2016-2021 NIH R01 (R01NS094574)

"The epigenetic role of EGR1 during postnatal brain development and in neuronal activity"

Role: Co-I (Percent Effort: 5%; PI – Xie); Total funds: \$1.7M (*\$30,338 to Fox lab*)

2015-2020 NIH R01 (R01EY024712)

"Investigating the mechanisms of optic nerve hypoplasia associated with CASK mutation."

Role: Co-I (Effort: 10%; PI–Mukherjee); Total funds: \$2M (*\$158,595 to Fox lab*)

2019-2021 NIH-NEI (R21 EY030568)

"Retinal inputs signal through astrocytes to recruit interneurons into visual thalamus"

Role: PI (Effort – 10%); Total direct funds - \$275,000

2019-2020 NIH R21

"Role of Hedgehog Signaling in Parallel Circuit Formation"

Role: Co-I (PI – Jason Triplett (Children’s National Medical Center [CNMC])); Direct funds: \$275,000 (*\$151,822 total funds to Fox lab*)

2019-2023 NIH R01 (R01HL146596)

"Vascular Basement Membrane Composition Regulates Pericyte Investment in Developing Blood Vessels."

Role: Co-I (Effort: 5%; PI–Chappell)

2019-2025 NIH F99/K00 NINDS DSPAN (F99NS113459)

Identification of retinogeniculate circuits in ventral thalamus

Role: **Sponsor** (PI – Ubadah Sabbagh) (Total funds \$392,944)

This is a prestigious training grant for Mr. Sabbagh that pays two years of predoctoral training and 4 years of postdoctoral training at another university.

2020-2026 NIH F99/K00 NINDS DSPAN (F99NS120596)

Toxoplasma induces phagocytosis of perisomatic inhibitory synapses

Role: **Sponsor** (PI – Gabriela Carrillo) (Total funds \$392,944)

This is a prestigious training grant for Ms. Carrillo that pays two years of predoctoral training and 4 years of postdoctoral training at another university.

2020 NIH S10 (S10OD026838)

Serial Block Face Scanning Electron Microscope

Role: PI (Total funds \$600,000)

This proposal seeks to fill an existing need for a Serial Block Face Scanning Electron Microscope as a necessary component of our NIH- and NSF-funded research projects.

Grants and Funding: Past

2013-2018 NIH BEST Award

"Mentorship and development program for biomedical trainees."

Role: Other Senior/Key Personnel (Percent Effort: 1%)(PI-Van Wart/Friedlander)

Total funds: \$1,833,185 (*\$16,755 to Fox lab*)

2015-2017 NARSAD Independent Investigator Grant

"Matricryptin-releasing collagens regulate inhibitory synapse formation and contribute to complex brain disease."

Agency: Brain and Behavior Research Foundation

Role: PI

Total funds: \$100,000 (*all to Fox lab*)

2016-2017 NIH R56 (R56HL133826)

"Flt-VEGF-Cx43 Regulation of Vascular Pericyte Investment"

Role: Co-I

2013-2014 NIH National Center for Advancing Translational

Studies and Virginia Tech; Pilot grant UL1TR000075

"Mechanisms of class-specific targeting and topographic map formation in the visual system"

Role: mPIs – (with Jason Triplett, CNMC)

Total funds: \$50,000 (*\$50,000 to Fox lab*)

2011-2012 VCU Presidential Research Incentive Program (PRIP)

"Regulation of nuclei-specific retinogeniculate targeting"

Role: PI

Total funds: \$25,000 (*all to Fox lab*)

2011 Whitehall Foundation

"Roles of Matricryptins in Directing Synapse Formation in the Brain."

Role: PI (3 year proposal; Total funds – \$225,000)(*all to Fox lab*)

*** Awarded but administratively withdrawn due to RO1 funding**

2010-11 AD Williams Foundation

"The role of Collagen XIX in inhibitory synapse formation."

Role: PI

Total funds: \$15,000 (*all to Fox lab*)

2010-11 Thomas F. Jeffress and Kate Miller Jeffress Memorial Trust

"The role of reelin in retinogeniculate targeting."

Role: PI

Total funds: \$20,000 (*all to Fox lab*)

2009-10 AD Williams Foundation

"Novel roles for collagen XVIII in CNS synapse formation."

Role:PI

Total funds: \$15,000 (*all to Fox lab*)

2002-4 F31 NIH Pre-Doctoral Fellowship

"Functional analysis of Phosphodiesterase Ialpha/autotoxin in the CNS."

Agency: NIH/NINDS

5. SCIENTIFIC AND SCHOLARLY ACTIVITIES

BIBLIOGRAPHY:

Papers (Peer reviewed; Titles link to PubMed pages):

1. Su J, Basso D, Iyer S, Su K, Wei J, **Fox MA**. Paracrine Role for Somatostatin Interneurons in the Assembly of Perisomatic Inhibitory Synapses. **J Neurosci**. 2020 Sep 23;40(39):7421-7435.
2. Sabbagh U, Govindaiah G, Somaiya RD, Ha RV, Wei JC, Guido W, **Fox MA**. Diverse GABAergic neurons organize into subtype-specific sublaminae in the ventral lateral geniculate nucleus. **J Neurochem**. 2020 Jun 4. doi: 10.1111/jnc.15101.
3. Carrillo, G., Ballard, V., Glausen, T., Boone, Z., Teamer, J., Hinkson, C., Wohlfert, E., Blader, I. **Fox, M.A.** "Toxoplasma infection induces microglia-neuron contact and the loss of perisomatic inhibitory synapses." **Glia**. 2020; 1– 19.
4. Su, J., Charalambakis, N.E., Sabbagh, U, Somaiya, R., Monavarfeshani, A., Guido, W*, **Fox, M.A.*** "Retinal Inputs Signal Astrocytes to Recruit Interneurons into Visual Thalamus." **PNAS**. Jan 2020; DOI:10.1073/pnas.1913053117 (* co-corresponding authors).
5. Kerr, A., Patel, P.A., LaConte, L.E.W., Liang, C., Chen, C.K., Shah, V., **Fox, M.A***, Mukherjee, K.* "Non-cell autonomous roles for CASK in Optic Nerve Hypoplasia." **Invest Ophthalmol Vis Sci**. 2019 Aug 1;60(10):3584-3594. doi: 10.1167/iovs.19-27197.
6. He, J., Xu, X., Monavarfeshani, A., Banerjee, S., **Fox, M.A***, Xie, H.* "Retinal input induced epigenetic dynamics in the developing mouse dorsal lateral geniculate nucleus." **Epigenetics and Chromatin** 2019 Feb 14;12(1):13. (* co-corresponding authors)
7. Sabbagh, U., Monavarfeshani, A., Su, K., Zabet-Moghadam, M., Cole, J., Carnival, E., Su, J., Gupta, V., Salekdeh, G.H., **Fox, M.A.** "Distribution and development of molecularly distinct perineuronal nets in visual thalamus" **Journal of Neurochemistry** 2018 Dec;147(5):626-646. (Cover image)
8. Monavarfeshani, A., Stanton, G., Van Name, J., Su, K., Mills, W.A., Swilling, K., Kerr, A., Su, J., **Fox, M.A.** "LRRTM1 underlies synaptic convergence in visual thalamus." **Elife**. 2018 Feb 9;7.
9. Carrillo, G.L., Su, J., Monavarfeshani, A., **Fox, M.A.** "F-Spondin Is Essential For Maintaining Circadian Rhythms." **Frontiers in Neural Circuits**. 2018 Feb 8;12:13.
10. Liang, C.*, Kerr, A.*, Qiu, Y., Cristofoli, F., Van Esch, H., Fox, M.A., Mukherjee, K. "Optic Nerve Hypoplasia Is a Pervasive Subcortical Pathology of Visual System in Neonates". **IOVS**. 2017 Oct 1;58(12):5485-5496.
11. Monavarfeshani, A., Knill, C., Sabbagh, U. and **Fox, M.A.** "Region- and Cell-Specific Expression of Transmembrane Collagens in Mouse Brain" **Frontiers in Integrative Neuroscience**. 2017 Aug 30; 11:20.
12. Araújo, S.E.S., Mendonça, H.R., Wheeler, N.A., Campello-Costa, P., Jacobs, K.M., Gomes, F.C.A., **Fox, M.A.**, Fuss, B. "Inflammatory demyelination alters subcortical visual circuits." **J Neuroinflammation**. 2017 Aug 18;14(1):162.
13. Monavarfeshani, A., Sabbagh, U. Fox, M.A. "Not a one-trick pony: Diverse connectivity and functions of the rodent lateral geniculate complex" **Visual Neuroscience**. 2017 Jan;34: E012.
14. Härönen H., Zainul Z., Tu H., Naumenko N., Sormunen R., Miinalainen I., Shakirzyanova A., Oikarainen T., Abdullin A., Martin P., Santoleri S., Koistinaho J., Silman I., Giniatullin R., **Fox M.A.**, Heikkinen A., Pihlajaniemi T. "Collagen XIII secures pre- and postsynaptic integrity of the neuromuscular synapse" **Human Molecular Genetics**. 2017 Jun 1;26(11):2076-2090.

15. Su, J. Cole, J. and **Fox, M.A.** "Loss of interneuron-derived collagen XIX leads to a reduction in perineuronal nets in the mammalian telencephalon" **ASN Neuro.** 2017 Feb;9(1):1759091416689020.
16. Su, J., Chen, J., Carrillo, G., Lippold, K., Monavarfeshani, A., Jenkins, R., **Fox, M.A.** "Collagen-Derived Matricryptins Promote Inhibitory Nerve Terminal Formation in the Developing Neocortex." **J Cell Biol.** 2016 Mar 14;212(6):721-36.
17. Brooks, J.M., Carrillo, G.L., Su, J., Lindsey, D., **Fox, M.A.***, Blader, I.* "*Toxoplasma gondii* infections alter GABAergic synapses and signaling in the central nervous system." **mBIO.** Oct 2015; 6(6) (***corresponding authors**)
18. Hammer, S., Lemon, T., Monavarfeshani, A., Su, J., **Fox, M.A.** "Multiple retinal axons converge onto relay cells in the adult mouse thalamus." **Cell Rep.** 2015 Sept 8;12(10): 1575-83.
19. El-Danaf, R., Seabrook, T., Krahe, T., **Fox, M.A.**, Guido, W. "Developmental remodeling of relay cells in the dorsal lateral geniculate nucleus in the absence of retinal input." **Neural Dev.** 2015 Jul 15;10(1):19.
20. Chavan, V., Willis, J., Walker, S.K., Clark, H.R., Lui, X., **Fox, M.A.**, Srivastava, S. Mukherjee, K., "Central presynaptic terminals are enriched in ATP but the majority lack mitochondria." **PLoS ONE** 2015 Apr 30; 10(4):e0125185.
21. Levy, C., Brooks, J.M., Chen, J., Su, J., **Fox, M.A.** "Cell-specific and developmental expression of lectican-cleaving proteases in mouse hippocampus and neocortex." **J Comp Neurol.** 2015: 523(4): 629-48.
22. Hammer, S., Carrillo, G., Govindaiah, G., Monavarfeshani, A., Bircher, J.S., Su, J., Guido, W., **Fox, M.A.** "Nuclei-specific differences in nerve terminal distribution, morphology, and development in mouse visual thalamus." **Neural Dev.** 2014 Jul 10;9(1):16.
23. Brooks, J.M., Su, J., Levy, C., Wang, J.S., Seabrook, T.A., Guido, W., **Fox, M.A.** "A molecular mechanism regulating the timing of corticogeniculate innervation." **Cell Rep.** 2013 Nov 14;5(3):573-81.
24. Su, J., Josephson, A.M., **Fox, M.A.** "Contributions of VLDLR and LRP8 in the establishment of retinogeniculate circuits" **Neural Dev.** 2013 Jun 13;8:11.
25. Wang, J., **Fox, M.A.**, Povlishock, J.T. "Diffuse traumatic axonal injury in the optic nerve does not elicit retinal ganglion cell loss." **J Neuropathol Exp Neurol.** 2013 Aug; 72(8):766-81. PMC in process
26. Isaacs, J., Feher, J., Shall, M., Vota, S., **Fox, M.A.**, Mallu, S., Razavi, A., Friebe, I., Shah, S., Spita, N. "Nandrolone does not augment recovery following neurotization of chronically denervated muscle." **J Neurosurg.** 2013 Jul 5.
27. Seabrook, T, El Danaf, R., Krahe, T.E., **Fox, M.A.***, and Guido, W.* "Retinal input regulates the timing of corticogeniculate innervation." **J Neurosci.** 2013. Jun 12;33(24):100845-97. (***corresponding authors**)
28. Chen, S., Chew, KS, McNeill, DS, Keeley, PW, Ecker, JL, Mao, BQ, Pahlberg, J, Kim, B, Lee, SC, **Fox, M.A.**, Guido, W, Wong, KY, Sampath, AP, Reese, BE, Kuruvilla, R, and Hattar, S. "Apoptosis regulates ipRGC spacing necessary for rods and cones to drive circadian photoentrainment." **Neuron.** 2013 Feb 6;77(3):503-15.
29. Fitting, S., Ignatowska-Jankowska, B.M., Bull, C., Skoff, R.P., Lichtman, A.H., Wise, L.E., **Fox, M.A.**, Su, J., Medina, A.E., Krahe, T.E., Knapp, P.E., Guido, W., and Huaser, K.F. "Synaptic dysfunction in the hippocampus accompanies learning and memory deficits in HIV-1 Tat transgenic mice." **Biol Psychiatry.** 2013 Mar 1;73(5):443-53.
30. Fuller, B.F., Cortes, C.F., Landis, M.K., Yohannes, H., Griffin, H.E., Stafflinger, J.E., Bowers, M.S., Lewis, M.H., **Fox, M.A.**, and Ottens, A.K. "Exposure of rats to

- environmental tobacco smoke during cerebellar development alters behavior and perturbs mitochondrial energetics." **Environ Health Perspect.** 2012 Dec; 120(12): 1684-91.
31. Su, J., Stenbjorn, R., Su, K., Gorse, K., Ricard-Blum, S., Pihlajaniemi, T., and **Fox, M.A.** "Target-derived matricryptins organize cerebellar synapse formation through alpha3beta1 integrins." **Cell Rep.** 2012 Aug 30; 2 (2): 223-30.
 32. Valdez, G., Tapia JC, Lichtman JW, **Fox MA**, and Sanes JR. "Shared resistance to aging and ALS in neuromuscular junctions of specific muscles." **PLoS ONE** 2012; 7(4):e34640.
 33. Singh, R., Su, J., Brooks, J.M., Terauchi, A., Umemori, H. and **Fox, M.A.** "Fibroblast growth factor 22 (FGF22) contributes to the development of retinogeniculate synapses" **Front Mol Neurosci.** 2012. Jan 10.
 34. Krahe, T., Seabrook, T.A., Chen, C.K., **Fox, M.A.** and Guido, W. "Modulation of CREB in the dorsal lateral geniculate nucleus of dark reared mice." **Neural Plast.** 2012:426437.
 35. **Fox, M.A.** and Guido W. "Shedding light on class-specific wiring: Development of intrinsically photosensitive retinal ganglion cell circuitry." **Mol. Neurobiol.** 2011. DOI 10.1007/s12035-011-8199-8
 36. **Fox, M.A.***, Tapia, J.C., Kasthuri, N. and Lichtman, J.W. "Delayed synapse elimination in mouse levator palpebrae superioris muscle." **J Comp Neurol.** 2011. 519:2907-2921. (* **corresponding author**) **Cover Image**
 37. Su, J., Haner, C.V., Imbery, T.E., Brooks, J.M., Morhardt, D.R., Gorse, K., Guido, W. and **Fox, M.A.** "Reelin is required for class-specific retinogeniculate targeting." **J Neurosci.** 2011 Jan 11; 31(2):575-586.
 38. Latvanlehto, A., **Fox, M.A.**, Sormunen, R., Tu, H., Oikarainen, T., Koski, A., Naumenko, N., Shakirzyanova, A., Kallio, M., Ilves, M., Giniatullin, R., Sanes, J.R., Pihlajaniemi, T. "Muscle-derived collagen XIII regulates maturation of the Skeletal Neuromuscular Junction." **J Neurosci.** 2010 Sept 15; 30(37): 12230-12241.
 39. Su, J., Gorse, K, Ramirez F., and **Fox, M.A.** "Collagen XIX is expressed by interneurons and contributes to hippocampal synapse formation." **J Comp Neurol.** 2010, 518(2):229-53.
 40. Shroff, S., Pomicter, A., **Fox, M.A.**, Henderson, S.C. Dupree, JL. "Adult sulfatide null mice maintain an increased number of oligodendrocytes." **J Neurosci Res.** 2009 Feb 17.
 41. **Fox, M.A.** "Unconventional roles for collagens in nervous system development." **Curr Opin Cell Biol.** 2008. Oct; 20(5):508-13.
 42. **Fox, M.A.**, Ho, M.S., Smyth, N., Sanes J.R. "A synaptic nidogen: Developmental regulation and role of nidogen-2 at the neuromuscular junction." **Neural Dev.** 2008 Sep 25; 3:24.
 43. Dennis, J., White, M.A., Forrest, A.D., Yuelling, L.M., Nogaroli, L., Afshari, F.S., **Fox, M.A.**, Fuss, B. "Phosphodiesterase-Ialpha/autotaxin's MORFO domain regulates oligodendroglial process network formation and focal adhesion reorganization." **Mol Cell Neurosci** (2007), doi:10.1016/j.mcn.2007.10.018.
 44. **Fox M.A.**, Sanes JR, Borza DB, Eswarakumar VP, Fassler R, Hudson BG, John SW, Ninomiya Y, Pedchenko V, Pfaff SL, Rheault MN, Sado Y, Segal Y, Werle MJ, Umemori H. "Distinct target-derived signals organize formation, maturation, and maintenance of motor nerve terminals." **Cell.** 2007 Apr 6;129(1):179-93. (**Highlighted in Faculty of 1000**)
 45. **Fox, M.A.** and Sanes J.R. "Synaptotagmin I and II are present in distinct subsets of central synapses." **J Comp Neurol.** 2007 Jul 10:503(2):280-96.

46. Gros-Louis, F., Dupree, N., Dion, P., **Fox, M.A.**, Laurent, S., Verreault, S., Sanes, J.R., Bouchard, J.P., and Rouleau, G.A. "Mutations in SYNE1 lead to a novel form of autosomal recessive cerebellar ataxia." **Nat Genet.** 2007 Jan;39(1):80-5.
47. **Fox, M.A.*.** and Umemori, H. "Seeking long-term relationship: Axon and target communicate to organize synaptic differentiation." **J Neurochem.** 2006. **97** (5):1215-31. (***corresponding author**)
48. **Fox, M.A.**, Afshari, F.S., Alexander, J.K., Colello, R.J., Fuss, B. "Growth cone-like sensorimotor structures are characteristic features of post-migratory, premyelinating oligodendrocytes." **Glia**, 2006. **53** (5): 563-566.
49. Flanagan-Steet, H.*, **Fox, M.A.*.**, Meyer, D. and Sanes, J.R. "Neuromuscular synapses can form in vivo by incorporation of initially aneural postsynaptic specializations." **Development**, 2005 Oct;132(20):4471-81. (*** Co-First Authors**) (**Highlighted in Faculty of 1000**)
50. **Fox, M.A.**, Alexander, J.K., Colello, R.J., and Fuss, B. "Phosphodiesterase-1a/Autotaxin controls cytoskeletal organization and FAK phosphorylation during myelination." **Mol Cell Neurosci.** 2004, 27, 140-50.
51. **Fox, M.A.**, Colello, R.J., Macklin W.B., and Fuss, B. "PD-1a/ATX (NPP2): A Counter-adhesive Protein expressed by Oligodendrocytes during Onset of Myelination." **Mol Cell Neurosci.** 2003, 23, 507-519.
52. Colello, R., Fuss, B., **Fox, M.A.**, and Alberti, J. "A Proteomic Approach to Rapidly Identify Oligodendrocyte-Associated Proteins Expressed in the Myelinating Rat Optic Nerve." **Electrophoresis** 2002, 23, 144-151.
53. Siles, B., O'Neil K., **Fox, M.A.**, Anderson D., Kuntz, A., Ranganath S., and Morris, A. "Genetic fingerprinting of grape plant (*Vitis vinifera*) using random amplified polymorphic DNA (RAPD) analysis and dynamic size-sieving capillary electrophoresis." **J.Agric.Food Chem.** 2000, 48, 5903-5912.

Book chapters:

1. **Fox, M.A.** "Development of the vertebrate neuromuscular junction" in *The Sticky Synapse: The role of cell adhesion molecules in synapse formation and maintenance.* Springer Inc.

INVITED PRESENTATIONS:

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| April 2020 | American Society for Neurochemistry annual meeting (<i>cancelled due to Covid19</i>) |
| March 2020 | Central Virginia Chapter of the Society for Neuroscience annual meeting (<i>cancelled due to Covid19</i>) |
| Feb 2020 | Gordon Research Conference: Thalamocortical Interactions, Ventura CA |
| Jan 2020 | Department of Ophthalmology, UCSF |
| Nov 2019 | Department of Neuroscience, WVU SOM |
| Dec 2018 | Department of Pharmacology, Wayne State University School of Medicine |
| Oct 2018 | Department of Biology, University of Virginia |
| Sept 2018 | Virginia-Nordic Precision Neuroscience (VNPN) Conference, Oslo, Norway |
| June 2017 | Gordon Research Meeting: Neuroethology, Les Diablerets, Switzerland. |
| March 2017 | Virginia Tech Center for Autism Research Annual meeting, Blacksburg, VA. |
| March 2017 | Central Virginia Chapter of the Society for Neuroscience Annual meeting, Roanoke, VA |
| March 2017 | University at Buffalo School of Medicine |
| Oct 2016 | Virginia-Nordic Precision Neuroscience (VNPN) Conference at VTCRI |

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| Feb 2016 | VTCAR, Virginia Tech, Blacksburg, VA |
| Feb 2016 | Department of Biological Sciences, North Carolina State University |
| Jan 2016 | Department of Anatomical Sciences and Neurobiology, University of Louisville, Louisville, KY |
| Jan 2016 | University of Tennessee, Knoxville, TN |
| Dec 2015 | University of Pennsylvania and Children's Hospital of Philadelphia, Philadelphia, PA |
| Nov 2015 | Dept of Psychology, Virginia Tech, Blacksburg, VA |
| August 2015 | University of Queensland and Queensland Brain Institute, Brisbane, Australia |
| August 2015 | International Society for Neurochemistry, Cairns, Australia |
| July 2015 | Gordon Research Conference on Collagen, New London, NH |
| Nov 2014 | Department of Anatomical Sciences and Neurobiology, University of Louisville, Louisville, KY |
| Nov 2014 | Department of Anatomical Sciences and Neurobiology, University of Louisville, Louisville, KY (Lecture in their Developmental Neurobiology course) |
| October 2014 | Translational Biology, Medicine, and Health Graduate Program Open House, Virginia Tech, Blacksburg VA |
| March 2014 | American Society for Neurochemistry Annual Meeting, Long Beach, CA |
| February 2014 | Children's National Medical Center, Washington, DC |
| December 2013 | Center for Neuroscience, Georgia Regents University, Augusta, GA |
| Sept 2013 | Center for Matrix Biology, Vanderbilt University, Nashville, TN |
| June 2013 | Duke University Medical Center, Durham, NC |
| April 2013 | American Chemical Society, Blue Ridge Chapter. Radford University |
| Sept 2012 | Biocenter Oulu, Oulu, Finland |
| June 2012 | Georgetown, Department of Pharmacology and Physiology |
| June 2012 | VTCRI, Roanoke, VA |
| April 2012 | VCU, Department of Anatomy and Neurobiology, Richmond VA |
| March 2012 | Department of Neuroscience, Brown University |
| November 2011 | VCU, Vision Science Retreat, Richmond VA |
| November 2011 | Society for Neuroscience, Washington DC |
| August 2011 | International Society of Neurochemistry Annual Meeting, Athens, Greece. |
| February 2011 | University of Virginia |
| January 2010 | VCU, Department of Anatomy and Neurobiology, Richmond, VA |
| October 2009 | Kansas University Medical Center, Department of Anatomy and Cell Biology, Kansas City, MO |
| October 2009 | Kansas University, Department of Molecular Biosciences, Lawrence, KS |
| July 2009 | Gordon Research Conference on Collagen. New London, NH |
| March 2009 | American Society for Neurochemistry Annual Meeting, Charleston, SC |
| October 2008 | Department of Biology, College of William and Mary, Williamsburg, VA |
| February 2008 | Center for Matrix Biology, Vanderbilt University, Nashville, TN |
| January 2008 | Eastern Virginia Medical School, Norfolk, VA |
| July 2007 | Gordon Research Conference on Collagen, New London, NH |
| June 2004 | American Society for Neurochemistry Annual Meeting, Madison, WI |
| Sept. 2003 | Ray and Robert Kroc – UConn Health Center Symposium on Neurology, West Hartford, CT |
| May 2003 | St. Jude Research Hospital |
| May 2003 | American Society for Neurochemistry Annual Meeting. Newport Beach, CA |
| June 2002 | American Society for Neurochemistry Annual Meeting, Palm Beach, FL |

SCHOLARLY ACTIVITIES

Expert Services:

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|---------------------|--|
| 2020 | Reviewer for University of Nebraska internal grants |
| 2019-current | NIH/NINDS F99 (ZNS1 SRB-B) Study Section |
| 2019-current | Reviewer for University of Kansas COBRE fellowships |
| 2017-current | NIH F03A study section |
| 2017 | Ad-Hoc reviewer for Dystonia Medical Research Foundation |
| 2015-current | Editorial Board member for Frontiers in Integrative Neuroscience |
| 2015 | Reviewer for <i>ANR</i> (Agence Nationale de la Recherche) |
| 2015 | <i>Ad-Hoc</i> reviewer for NIH NDPR Study Section Panel |
| 2014 | NIH Special Emphasis Panel (2015/01 ZEY1 VSN (05)) |
| 2014-current | Editorial Board member for Developmental Neuroscience |
| 2012-current | SFN Capital Hill Day Participant |
| 2013 | Reviewer for ARDRAF grants |
| 2011-current | Editorial Board member for PLoS ONE |
| 2009-current | Reviewer for Cell Reports, The Journal of Neuroscience, Developmental Neuroscience, Frontiers in Cellular Neuroscience, Frontiers in Integrative Neuroscience, Frontiers in Molecular Neuroscience, Frontiers in Neural Circuits, Cerebral Cortex, International Journal of Developmental Neuroscience, Cell and Tissue Research, PLoS ONE, Matrix Biology, Journal of Comparative Neurology, Neural Development, Journal of Neurotrauma, <i>Genesis</i> (The Journal of Genetics and Development) |
| 2012 | Reviewer for VCU PRIP grants |
| 2012 | Reviewer for NIH SEP study section (ZRG1 MDCN-E) |
| 2012 | <i>Ad-Hoc</i> reviewer for NIH Neurodifferentiation, Plasticity, Regeneration and Rhythmicity (NDPR) study section |
| 2006 | <i>Ad-Hoc</i> reviewer for National Science Foundation |

6. TEACHING, ADVISING AND MENTORING:

Early Career Faculty

- Dr. Gregorio Valdez**, Assistant Professor, Virginia Tech Carilion Research Institute. Co-mentor on his KO1 NIH grant entitled "Role of target-derived FGFs in maintaining and repairing synapses." (2013-2016)
- Dr. Konark Mukherjee**, Assistant Professor, Fralin Biomedical Research Institute. (2013-present)
- Dr. Jianmin Su**, Research Assistant Professor, Fralin Biomedical Research Institute (2102-present)
- Dr. Sharon Swanger**, Assistant Professor, Fralin Biomedical Research Institute. (2018-present)
- Dr. Shannon Farris**, Assistant Professor, Fralin Biomedical Research Institute. (2018-present)
- Dr. Sora Shin**, Assistant Professor, Fralin Biomedical Research Institute. (2020-present)

Postdoctoral fellows mentored

- Aboozar Monavarfeshani, PhD.** 2018
- Jianmin Su, PhD.** 2007-2012 (now a Research Assistant Professor at Virginia Tech Carilion Research Institute)

Justin M. Brooks, PhD. 2013 – 2014 (now a Postdoctoral fellow at Univ. of Buffalo School of Medicine)

Jiang “John” Chen, PhD. 2013- 2016

Students advised (not including rotations students):

Graduate Students:

Lata Chaunsali, MCB Graduate program, VT (2020-current)

Rachana Somaiya, TBMH program, VT (2017-current)

- *Research!America microgrant (2019)*

- *NIH Broadening Experiences in Scientific Training Travel Award (2019)*

- *International Society for Neurochemistry travel award (2019)*

Gabriella Carrillo, TBMH program, VT (2017-current)

- *James Ferguson Emerging Infectious Disease Research Fellowship (2019)*

- *International Society for Neurochemistry travel award (2019)*

Ubadah Sabbagh, TBMH program, VT (2016-current)

- *ASN Young Investigator Educational Enhancement (YIEE) award (2020)*

- *Society for Neuroscience Early Career Policy Fellow (2020)*

- *Neuroscience Scholars Program, Society for Neuroscience (2018)*

- *(X)po Fellowship award, Roanoke City Works (2017)*

- *Coalition for Life Sciences Capitol Hill Day Travel Award (2017, 2018)*

- *NIH Broadening Experiences in Scientific Training Travel Award (2017)*

- *Finalist for Soros Fellowship for New Americans (77 finalists selected from 1,765 nominees)*

Alicia Kerr, TBMH program, VT (2015-2019)

Aboozar Monavarfeshani, VT Biological Sciences (2012-2017) (*Graduated with PhD degree*)

- *Recipient of the VTCRI Medical Research Scholars Fellowship (2013-14)*

- *Recipient of the VTCRI Medical Research Scholars Fellowship (2014-15)*

- *ASN Young Investigator Educational Enhancement (YIEE) award (2016)*

- *Robert Patterson Memorial Scholarship from the VT Dept of Biological Sciences (2016-2017)*

- *Trainee Professional Development Award from the Society for Neuroscience (2017)*

Justin Brooks - Department of Anatomy and Neurobiology (VCU) 2009-2013. (*Graduated with PhD degree*).

- *Received ASN Neuro Award (2015) for work done during his PhD*

- *Accepted into and attended NIH Clinical and Translation training program*

Anna Josephson - Department of Anatomy and Neurobiology (VCU) 2012. (*Graduated with Masters degree*)

Cheryl Haner - Department of Anatomy and Neurobiology (VCU) 2009-2010. (*Graduated with Masters degree*)

Renee Smith – Department of Anatomy and Neurobiology (VCU) 2008-2009.

Undergraduate Students:

Valerie Ballard, VT (2019-2020)

Carlos Rodriguez, UVA (neuroSURF, 2019)

Pratik Govindaraj, College of William and Mary (neuroSURF, 2019)

Shivani Iyer, VT (2018-present)

Colleen Peters, Biological Sciences major, VT (2018-2020)

Ryan Ha, Neuroscience Major, VT (2018-present)

Chase Amos, UVA (neuroSURF, 2017-2020)

Naomi Carter, Hampton University (neuroSURF, 2018)
Mia Genuario, Neuroscience Major, VT (neuroSURF, 2018)
Danielle Basso, Biology and Psychology double major, VT (2017-2018)
Joseph Teamer, Biology Major, Virginia State University (neuroSURF, 2017)
Jonathan Van Name, Neuroscience Major, W&M (neuroSURF, 2017)
Zack Boone, Neuroscience Major, VT (2016-2018)
Kayla Short, Biology Major, Hollins College (2016-2017)
Andrew Watkins, Neuroscience Major, VT (2016-current)
James Cole, College of William and Mary (neuroSURF, 2016-current)
Jai McClean, Biology Major, Hampton University (2016)
Rachel Jenkins, Biochemistry Major, VT (2015-2016)
David South, Neuroscience Major, VT (2015-6)
Kenya Swilling, Biology Major, Hampton University (2015)
Eric Carnivale, Neuroscience Major, VT (2015)
Tyler Lemon, Stanford University (2014-5)
Alec Klemm, Biology Major, VT (2013)
Carl Levy, Biology Major, VT (2013-2014)
Arthur Buikema and M.Alison Galway Undergraduate Research Award from the VT Dept of Biological Sciences (2014)
Gabriella Carrillo, Scieneer, VT (2013-current)
Zack Printz, Scieneer, VT (2013-2014)
Kumiko Lippold, Scieneer, undergraduate, VT (2013-2014; attending graduate school at VCU Medical Center)
Sarah Hammer, VT (2014-2015)
Rishabh Singh – VCU Honors College. 2011-2012 (Graduated from UVA with MD)
Nathalie Spita - VCU Honors College. 2011-2012 (VCU IMSD scholar)(Currently a graduate student at JHU)
Emily Thomas - VCU Honors College. 2011
Jessica Wang – Duke. 2011
Jesse Robison – Virginia Tech. 2010
Rohini Murthy – Harvard University. 2006 – 2007

High School Students:

Mary Grace Giles Roanoke Valley Governor School (2019-current)
Jessica Wei, Cave Spring High School (neuroSURF; 2019-current)
Valerie Ballard, Roanoke Valley Governor School (2018-2019)
Josh Wainwright, Patrick Henry High School, (2018)
Chase Amos, North Cross, Roanoke VA (2016-2017)
Natalie Huebschman, Roanoke Valley Governor School (2016-2017)
Sarah Hammer, Roanoke Valley Governor School (2013-4)
Ciara Mulchany Roanoke Valley Governor School (2013)
Kaiwen Su, Richmond, VA (2011)

Medical Students:

Meredith Rahman, VTCSOM (2018-current)
Rebecca Parrish, VTCSOM (2018-current)
Michael Shlossman, VTCSOM (2017-current)
Cyrus Hinkson, VTCSOM (2017-2019)
Gail Stanton, VTCSOM (2016-2019)
Courtney Knill, VTCSOM (2015-2018)

Elizabeth Sugg, VTCSOM (2015-2018)
Joseph "Sam" Bircher, VTCSOM (2013-2016)
Haoxuan Anna Xu, VTCSOM (2013-2017)
Ted Imbery –VCU SOM (2009-2010).

Thesis Committees (not including my own students):

Paras Patel, PhD Student (2019-current) Translational Biology Medicine and Health Graduate Program, VT. Advisor: Dr. Konark Mukherjee
Naomi Charambakis, PhD Student (2016-2018). Department of Neurobiology and Anatomical Sciences, University of Louisville. Advisor: Bill Guido
Raymundo Hernandez, PhD Student (2018-current). Translational Biology Medicine and Health Graduate Program, VT. Advisor: Dr. Michelle Olsen
Lara Dahora, Masters Student (2018-current). Department of Biological Sciences, VT. Advisor: Chris Thompson
Jessie Mann, PhD Student (2017-current). Translational Biology Medicine and Health Graduate Program, VT. Advisor: Dr. Stephanie DeLuca
David McGuire: PhD Student (2017-current). Translational Biology Medicine and Health Graduate Program, VT. Advisor: Dr. John Chappell
Randy Strauss: PhD Student (2016-current). Translational Biology Medicine and Health Graduate Program, VT. Advisor: Dr. Rob Gourdie.
William Mills: PhD Student (2015-current). Translational Biology Medicine and Health Graduate Program, VT. Advisor: Dr. Harald Sontheimer.
Patrick Calhoun: PhD Student (2015-current). Department of Biological Sciences, VT. Advisor: Dr. Jamie Smyth.
Ben Heithoff: PhD Student (2015-current). Department of Biological Sciences, VT. Advisor: Dr. Stefanie Robel.
Xiguang Xu, PhD Student (2015-current). Department of Biological Sciences, VT. Advisor: Dr. Hehuang (David) Xie.
Chen Liang, PhD Student (2015-2018). Department of Biological Sciences, VT. Advisor: Dr. Konark Mukherjee.
Sydney Vaughan, PhD Student (2015-2019). Translational Biology Medicine and Health Graduate Program, VT. Advisor: Dr. Greg Valdez.
Vanessa Brayman, PhD Student (2015-2018). Translational Biology Medicine and Health Graduate Program, VT. Advisor: Dr. Greg Valdez.
Lauren Kennedy, PhD Student (2015-2018). Translational Biology Medicine and Health Graduate Program, VT. Advisor: Dr. Sarah Parker.
Shiping (Patrick) Zou, PhD Student (2012-2015). Department of Anatomy and Neurobiology. VCU Medical Center. Advisor – Dr. Pamela Knapp
Raturaj Masvekar, PhD Student (2011-2014). Department of Anatomy and Neurobiology. VCU Medical Center. Advisor – Dr. Pamela Knapp
Karolina Rasi, PhD Student (2010). Department of Medical Biochemistry and Molecular Biology and the Oulu Center for Cell-Matrix Research, University of Oulu, Finland. Advisor – Dr. Taina Pihlajaniemi
Mai Alajaji, PhD Student (2010-2013). Department of Pharmacology and Toxicology, VCU. Advisor – Dr. Imad Damaj
Ahmad Al Tarifi, PhD Student (2010-2013). Department of Pharmacology and Toxicology, VCU. Advisor – Dr. Steve Negus
Mary Sorrell, PhD Student (2010-2014). Department of Pharmacology and Toxicology, VCU. Advisor – Dr. Kurt Hauser
Ben Curtis, Masters Student (2009-2010). Department of Microbiology, VCU.

Advisor – Dr. Joyce Llyod

Taina Seabrook, PhD student (2008-2012). Department of Anatomy and Neurobiology, VCU. Advisor - Dr. Bill Guido

Rana El-Danaf, PhD student (2008-2011). Department of Anatomy and Neurobiology, VCU. Advisor - Dr. Bill Guido

Frank Chen, PhD. Student (2007-2011) Department of Biochemistry, VCU. Advisor – Dr. Jason Chen

Emily Dilger, PhD student (2007-2010). Department of Anatomy and Neurobiology, VCU. Advisor - Dr. Bill Guido

Chantal Ayres, PhD student (2006-2009). Department of Biomedical Engineering, VCU. Advisor - Dr. David Simpson

Seema Schroff PhD student (2004-2008). Department of Anatomy and Neurobiology, VCU. Advisor - Dr. Jeff Dupree

Courses:

- Course director for TBMH 5014 Fundamentals of Molecular Neuroscience (2018-current; 4 credit course)
- Co-Course director for TBMH Neuroscience Track Core Course (2015-2017)
- Co-Course director and lecturer for Research Domain Course VTCSOM (2013)
- Guest Lecturer in the VT TBMH 5004 Gateway Course (2014-2016)
- Guest Lecturer in the VT TBMH 5105 Professional Development and Ethics Course (2014-current)
- Course Director and Lecturer for M1 Neuroscience (VCU) (2010-2012)
- Course Director for ANAT691 – Research Seminar (2008-2010)
- Lecturer in ANAT 610 Neuro-anatomy (VCU) (2010-2012)
- Lecturer in ANAT 609 Cell and Molecular Neuroscience (VCU) (2007-2012)
- Lecturer in ANAT 617 Special topics: Developmental Neuroscience (VCU)(2008-2012)
- Lecturer in ANAT 617 Special topics: Neural Circuits (VCU)(2008-2012)
- Lecturer in ANAT 501 Functional Human Anatomy (Dental) (VCU)(2008-2009)
- Medical Gross Anatomy (VCU) – Laboratory Instructor (2007)
- Lecturer in Medical Embryology (VCU) (2004)
- Lecturer in ANAT 610 Neuro-anatomy (Graduate level) (VCU)(2002-4).
- Lectured in ANAT 505 Neuro-anatomy (Pharmacy) (VCU)(2000, 2001-2003)
- KIN 304 Human Anatomy (The College of William and Mary)(2002) *Course Director*
- Laboratory Instructor, KIN 303 Human Anatomy (The College of William and Mary) (2000-2001).
- Laboratory Instructor, ANAT 502 Histology (Dental) (VCU) –2001
- Laboratory Instructor, ANAT 501 Functional Human Anatomy (Dental) (VCU) –2000

Teaching awards:

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| 2017 | Outstanding Teaching Award, Translational Biology Medicine and Health Graduate Program, VT |
| 2016 | Outstanding Teaching Award, Department of Biological Sciences, VT |
| 2012 | Outstanding Teacher Award for Best Teacher in Medical Neuroscience (VCU SOM) |
| 2012 | Favorite Lecturer Award in Graduate Neuroanatomy (VCU) |
| 2011 | Outstanding Teacher Award for Best Teacher in Medical Neuroscience (VCU SOM) |
| 2004 | Outstanding Teacher Award for Medical Embryology (VCU SOM) |

7. PROFESSIONAL SERVICE

Memberships

International Society of Neurochemistry (2011-current)
American Society for Matrix Biology (2009-2012)
Society for Neuroscience (2004-current)
American Society for Neurochemistry (2002-current)
Central Virginia Chapter of the Society for Neuroscience (2007-current)
Association of Medical School Neuroscience Department Chairpersons (2019-current)

Symposia Organized

- April 2020** America Society for Neurochemistry: Organized Symposia (*Cancelled due to Covid19*)
- March 2017** America Society for Neurochemistry: Chaired Symposia "Oral Session 1." Little Rock, AR. *6 speakers were selected from abstract submissions*
- March 2017** America Society for Neurochemistry: Chaired Symposia "Oral Session 2." Little Rock, AR. *6 speakers were selected from abstract submissions*
- March 2016** America Society for Neurochemistry: Chaired Symposia "Oral Session." Denver, CO. *5 speakers were selected from abstract submissions*
- March 2016** America Society for Neurochemistry: Chaired Symposia "From the synapse to the blood-brain barrier, unique roles for glia in health and disease." Denver, CO. *Speaker list: T. Benveniste, B. Kaspar, A. Prat, P. Haydon*
- March 2014** "The Neuroscience of Aging and Age-Reversal" Central Virginia Chapter of the Society for Neuroscience Annual Symposia. *Speaker list: T. Rando, S. Villeda, G. Valdez, J. Bennett, G. Bloom*
- March 2014** America Society for Neurochemistry: Chaired Symposia "Synaptic organization across the lifespan." Long Beach, CA. *Speaker list: M.A. Fox, S. Cohen-Cory, B. Chen, G. Valdez*
- April 2013** International Society for Neurochemistry: Chaired Symposia "Wiring the Nervous System." Cancun, Mexico. *Speaker list: C. Eroglu, N. Allen, H. Umemori, M. Yuzaki*
- March 2012** Organized the Central Virginia Chapter of the Society for Neuroscience Annual Symposia: "Wiring the nervous system: mechanisms of synaptic targeting and formation." Richmond, VA. *Speaker list: Joshua Sanes, Carol Mason, Alex Kolodkin, Sam Pfaff*
- March 2009** American Society for Neurochemistry: Co-Chaired Symposia "Extracellular Matrices and Neural Development." 2009 ASN Meeting. Charleston, SC. *Speaker list: F. Mercier, W. Brunken, M. Rasband, M.A. Fox*
- June 2004** American Society for Neurochemistry: Chaired Symposia "Wiring the Nervous System." 2005 ASN Meeting. Madison, WI. *Speaker list: A. Chiba, A. Schier, H. Umemori, P. Scheiffele*

Service in International / National / Local Societies:

- 2020** Local Host for the 2021 American Society of Neurochemistry meeting, Roanoke, VA
- 2019-2020** Planning Committee for 2020 American Society of Neurochemistry meeting (*cancelled due to Covid19*)
- 2019-2020** President, Central Virginia Chapter of the Society for Neuroscience
- 2018-current** Co-Chair, Marian Kies Award Committee, American Society of Neurochemistry
- 2017-2018** Planning Committee for 2018 American Society of Neurochemistry meeting

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| 2016-current | International Society for Neurochemistry Travel Grant Committee |
| 2016-current | Public Policy and Education Committee, American Society of Neurochemistry |
| 2015-current | Government and Public Affairs Committee, Society for Neuroscience |
| 2015-current | Council Member for American Society of Neurochemistry |
| 2016-2017 | Program Chair for 2017 American Society of Neurochemistry meeting |
| 2015-2017 | Planning Committee for 2016 American Society of Neurochemistry meeting |
| 2016 | International Scientific Review for faculty at the Institute of Neuroscience, Shanghai, China |
| 2015 | Past-President of the Central Virginia Chapter of the Society for Neuroscience |
| 2013-2014 | President of the Central Virginia Chapter of the Society for Neuroscience |
| 2013-2015 | Alternate Council Member for American Society of Neurochemistry |
| 2012-2014 | Planning Committee for American Society of Neurochemistry meeting in 2014 |
| 2012 | President-elect for the Central Virginia Chapter of the Society for Neuroscience |
| 2011-2016 | Chairman of the Young Investigator Educational Enhancement (YIEE) Award committee for American Society of Neurochemistry |
| 2011-2012 | Planning Committee for American Society of Neurochemistry meeting in 2012 (Baltimore, MD) |
| 2010-2012 | Council member for the Central Virginia Chapter of the Society for Neuroscience |
| 2009-2011 | YIEE committee member for American Society of Neurochemistry |

8. UNIVERSITY SERVICE ACTIVITIES:

Service to VT/FBRI/VTCSOM:

- VT search committee for the Vice President for Research and Innovation (2019-current)
- VT search committee for the Executive Director of the Fralin Life Sciences Institute (2019-2020; hired Dr. M. Hulver)
- Reviewer for COS Deans Discovery Fund awards (2020)
- COS School of Neuroscience search committee (2019-2020; hired Dr. A. Gregus)
- FBRI / ABB search committee for Glial Biology faculty recruit (2019-2020; *postponed due to Covid19*)
- FBRI / ABB search committee for Human Development faculty recruit (2019; hired Dr. B. Howell)
- FBRI / ABB search committee for Neuro-Oncology faculty recruit (2019-2020; hired Dr. R. Parker)
- VT School of Neuroscience Promotion and Tenure committee (2019-current)
- Co-chair of the Adaptive Brain and Behavior Research Committee (2017-current)
- COS Search Committee for the Dept of Biological Sciences Head (2017-2018)
- Co-chair of the FBRI CNR search committee (2 positions; hired Dr. S. Farris and Dr. S. Swanger)
- COS Search Committee for Dept. of Psychology (2017-2018; hired Dr. T. Lee)
- VTCSOM Tenure and Promotion Committee (2017-2020)

- Chair of the VTCRI Frontiers in Biomedical Research Seminar Series selection committee (2015, 2017, 2018)
- VTCRI Search Committee for Infectious Disease hire (2017; no hire made)
- Steering committee for the Health Science and Technology initiative, VT (2017-current)
- Stakeholder for the Adaptive Brain and Behavior Initiative, VT (2016-current)
- Co-chair of the DTNC search committee (2016-2017; hired Dr. Albert Pan)
- VTCRI search committee for Glial Center (2016-2017; no hires made)
- Carilion Clinic search committee for Chief of Neurology (2016-2017; Dr. Aashit Shah hired)
- Organizer of the Research In Progress Seminar Series at VTCRI (2014-current)
- Chair of the VTCRI Retreat committee (2015-2016)
- COS Search Committee for faculty of the Undergraduate Neuroscience Program (2015-6; 6 hires made – Olsen, Clinton, Hodes, Thompson, Bowers, Buczynski)
- Virginia Tech Carilion School of Medicine Search Committee for teaching faculty (2015; hired Drs. U.Kim, S.Barrett, R.LeClair, A.Binks)
- TBMH Qualification Exam Committee (2015- current)
- TBMH Admission Committee (2013- current)
- VTCRI Adjunct Appointment Committee (2014-current)
- VT University Search Committee for University Veterinarian (2013-2014; hired Dr. Barry Roberts)
- COS Search Committee for Director of Undergraduate Neuroscience Program (2013-2015; hired Dr. Harald Sontheimer)
- COS Search Committee for Department of Psychology hire (2013-2016)
- Development committee for Brain Science track of TBMH program (2013-2015)
- Development committee for Development, Aging and Repair track of TBMH Graduate program (2013-2015)
- Executive committee for Department of Biological Sciences (2013 – 2014)
- VTCRI selection committee for Distinguished Lecture Series (2013-2014)
- Committee member for medical student research presentations
- Organizer of biweekly Cell and Molecular Biology Journal Club at VTCRI (2012-2014)

Service to VCU:

- Reviewer for VCU PRIP grants (2012)
- Faculty representative for VCU Honor System (2009-2012)
- Chairman of VCU Honor System, MCV Campus (2002-2003)
- Executive Board of the Student Government Association, MCV Campus (2002-2003)
- Class Representative for the MCV Honor Council (1999-2003)
- MCV Graduate/Professional School Representative for VCU Technology Fee Committee (2000-2001)
- Chaired 7 Oral Examinations (i.e. Dean's Representative)
- Organizer of weekly SYNAPSE Journal Club (2007-2012)
- Department of Anatomy Web Page Committee (2008-current)
- Departmental Scribe (2007-2009)
- Student representative on the Department of Anatomy and Neurobiology Graduate Student Recruitment Committee (2003 - 2004)
- Student representative for Department of Anatomy Web Page Committee (2001-2002)

- Member of the Department of Anatomy Social Committee (1999-2004)

9. PUBLIC SERVICE

- 2019 FBRI Brain School demonstration: The Human Brain!
- 2018 VTCRI Brain School Public lecture "Brain invasion: How small things have big consequences"
- 2018 VTCRI Brain School demonstration: The Human Brain!
- 2017 VTCRI Brain School demonstration: The Human Brain!
- 2016 VTCRI Brain School Public lecture "What our brains don't see!"
- 2015 VTCRI Brain School Public lecture "Brain Assembly: Neuro-embryology"
- 2014 Virginia Science Festival Exhibit, "Untangling the wires of your brain!" (VTCRI, in conjunction with the Science Museum of Western Virginia)
- 2014 Gallery Talk at "The Art of Science and the Science and Art" Outreach Event, VTCRI and VTCRI
- 2014 VTCRI Brain School lecture "Brain Assembly: Making the Right Connections Through Genes and Experience"
- 2013 VTCRI Brain School lecture "The Stuff of Brains"
- 2013 Lecture series (4hr of lecture) to Roanoke Valley School District on "The Brain"
- Carilion Clinic "Bike Month" Planning Committee (2013)
- Judge for Roanoke Valley Governor School science fair (2013, 2015)
- Judge for the Virginia Junior Academy of Science (2013)
- Grader for science projects/papers for Virginia Academy of Science and for Metro Richmond Science Fair (2000-2004, 2008-current)

10. SERVICE TO THE MILITARY

2 years active duty while attending the United States Military Academy, West Point, NY (1995-1997)

Updated: 05/06/2020