

TRACY S. TRAN, Ph.D.

CONTACT INFORMATION

Work Address: **University of Vermont (UVM)**
Department of Biology
Marsh Life Sciences, Rm 334
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EDUCATION

September 2000-June 2003 University of California, Los Angeles (UCLA)
Molecular, Cellular and Integrative Physiology, Ph.D. conferred
Thesis: GABAergic Spinal Commissural Neurons Project to Brainstem Targets

September 1998-June 2000 University of California, Los Angeles (UCLA)
Physiological Science, M.S. conferred

September 1994-June 1998 University of California, Los Angeles (UCLA)
Double major: Neuroscience and Physiological Science, B.S. conferred

EMPLOYMENT HISTORY AND PROFESSIONAL DEVELOPMENT

August 2026 – present University of Vermont, College of Arts and Sciences
Professor (tenured), Department of Biology (*primary*)
University of Vermont, Larner College of Medicine
Professor, Department of Neurology (*secondary*)
Research:

- To investigate the molecular and cellular mechanisms governing neuronal wiring during development in the mammalian nervous system
- To investigate the role of guidance molecules and their downstream signaling pathways in controlling cellular morphology, circuit formation, and behavior
- To investigate the molecular, genetic, and behavioral correlates associated with autism spectrum disorder, using mice as a model system

July 2026 – present Rutgers University, College of Arts and Sciences - Newark
Visiting Professor, Department of Biological Sciences

July 2024-June 2026 Rutgers University, College of Arts and Sciences - Newark
Professor (tenured), Department of Biological Sciences

July 2017-June 2026 Rutgers University, College of Arts and Sciences - Newark
Director of Undergraduate Programs in Biology

July 2017-June 2024 Rutgers University, College of Arts and Sciences - Newark
Associate Professor (with tenure), Department of Biological Sciences

September 2010-June 2017 Rutgers University, College of Arts and Sciences - Newark
Assistant Professor (tenure track), Department of Biological Sciences

November 2004-July 2010 Johns Hopkins University School of Medicine
Post-doctoral Fellow, The Solomon H. Snyder Department of
Neuroscience, Howard Hughes Medical Institute
Mentors: Drs. Alex L. Kolodkin and David D. Ginty
Research:

- To investigate the role of Semaphorin guidance cues in central nervous system synaptogenesis and spine development
- To investigate the role of Semaphorin guidance cues in sensory-motor circuitry during embryonic spinal cord development

August 2003-November 2004 National Institutes of Health
Post-doctoral Fellow, NINDS, Neurogenetics Branch
Mentor: Dr. Brian W. Howell

Research:

- To understand the Reelin-DAB1 signaling pathway and identified interactions with downstream signaling molecules during central nervous system development
- To understand how Reelin-DAB1 signaling affects trafficking and processing of the amyloid precursor protein (APP)

June 2003 – August 2003 University of California Los Angeles (UCLA)
Lecturer, Department of Integrative Biology and Physiology (Formerly
Dept of Physiological Science)

OTHER RESEARCH AND PROFESSIONAL APPOINTMENTS

2010-present Rutgers University
Graduate Faculty, Biology Graduate Program

2018-2026 New Jersey Institute of Technology (NJIT)
Associate Faculty, Institute for Brain & Neuroscience Research

2017-2024 Rutgers University
Faculty Advisor for the Clinical Laboratory Sciences and Medical Imaging Sciences
Undergraduate Programs

2012-2026 Rutgers University
Associate Graduate Faculty, Behavioral and Neural Sciences Graduate Program

1998-2003 University of California, Los Angeles (UCLA)
Graduate Research Assistant, Department of Integrative Biology and Physiology
(Formerly Dept of Physiological Science)
Mentor: Dr. Patricia E. Phelps
Research:

- To investigate the development and projection of GABAergic spinal commissural neurons in the spinal cord using both *in vitro* and *in vivo* approaches

1996-1998 University of California, Los Angeles (UCLA)
Undergraduate Research Assistant, Department of Integrative Biology and
Physiology (Formerly Dept of Physiological Science)
Mentor: Dr. Patricia E. Phelps
Research:

- Undergraduate Honors Thesis: To identify the neurotransmitter phenotype of ventromedially located commissural neurons in the developing spinal cord

1996 and 1997 City of Hope National Medical Center
Undergraduate Research Assistant, The Beckman Research Institute
Mentor: Dr. Arlene Chiu
Research:

- To investigate motor neuron survival in the hypoglossal nucleus following nerve crush injury in wild type and *nitric oxide synthase* (NOS) mutant mice

- To study the role of the extracellular matrix protein laminin at the neuromuscular junction.

PUBLICATIONS (In reverse chronological order)

NCBI URL: https://www.ncbi.nlm.nih.gov/myncbi/1pmYQ_tT-4MAw/bibliography/public/

KEYS:

It is accepted in the Cell, Molecular, Neuroscience community, in which the candidate's research falls within, the first or co-first and last or co-last author positions hold the most responsibility and authority for the study.

All key personnel in the candidate's laboratory that participated in the project are underlined, including undergraduate and graduate students, postdoctoral fellows, and research assistants. If designated "#", then the key personnel also served as co-first author.

PUBLISHED/ACCEPTED/PREPRINT:

Joseph I, Han J, Bianchi-Smak J, Yang J, Bhupana JN, Flores J, Delucia J, **Tran TS**, Goldenring JR, Bonder EM, Gao N. (2025). Rab11b is necessary for mitochondrial integrity and function in gut epithelial cells. *Front Cell Dev Biol.* 13:1498902. Doi: 10.3389/fcell.2025

Subramanian, D[#], Eisenberg, C[#], Huang, A, Baek, J, [¶]Naveed, H, Komatireddy, S, Shiflett, MW, **Tran, TS***, Santhakumar, V*. (2025). Dysregulation of Neuropilin-2 Expression in Inhibitory Neurons Impairs Hippocampal Circuit Development and Enhances Risk for Autism-Related Behaviors and Seizures. *Molecular Psychiatry*, doi: <https://doi.org/10.1038/s41380-024-02839-4>
[#]*Equal contribution/co-first authors*; [¶]*Undergrad Student*; **Co-corresponding authors*

Tran TS, Yaron A, editors. Wiring the Nervous System: Mechanisms of Axonal and Dendritic Remodelling in Health and Disease. 1st edition. Abingdon: River Publishers; 2024 Jan 31. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK602209/> doi: 10.1201/9781032632698; ISBN 9788770228527; eBook ISBN 9781032632698.

Abushalbak O, Baek J, Yaron A, **Tran TS**. (2024). [Balancing act of small GTPases downstream of plexin-A4 signaling motifs promotes dendrite elaboration in mammalian cortical neurons.](#) *Sci Signal.*; 17(819): eadh7673. doi: 10.1126/scisignal.adh7673. Epub 2024 Jan 16. PubMed PMID: 38227686.

Harreguy, MB, Shah, E, Tanvir, Z, Simprevil, B, **Tran, TS**, Haspel, G. (2022). Semaphorin signaling restricts neuronal regeneration in *C. elegans*. *Front. Cell Dev. Biol.* 10:814160, DOI: 10.3389/fcell/2022.814160

Khdour, HY, Kondabolu, K, Khadka, A, Assous, M, Tepper J, **Tran, TS***, Polack, P-O*. (2022) Neuropilin 2/Plexin-A3 Receptors regulate the functional connectivity in the excitability in the layers 4 and 5 of the cerebral cortex. *J. Neurosci.* 42:4828-4840 DOI: [10.1523/JNEUROSCI.1965-21.2022](https://doi.org/10.1523/JNEUROSCI.1965-21.2022) **Co-corresponding authors*

Szczurkowska J, Guo A, Martin J, Lee S-I, Martinez E⁵, Chien CT, Khan TA, Singh R, Dadson D, **Tran TS**, Pautot S, Shelly M. (2022). Semaphorin3A/PlexinA3 association with the Scribble scaffold for cGMP increase is required for apical dendrite development. *Cell Rep.* 38:110483 <https://doi.org/10.1016/j.celrep.2022.110483>

Harreguy MB, **Tran TS**, Haspel G. (2022). Neuronal Microsurgery with an Yb-Doped Fiber Femtosecond Laser. In: Haspel, G., Hart, A.C. (eds) *C. elegans. Methods in Molecular Biology*, vol 2468. Humana, New York, NY. https://doi.org/10.1007/978-1-0716-2181-3_17

Eisenberg C[#], Subramanian D[#], Afrasiabi M[#], [¶]Ziobro P, DeLucia J, Hirschberg PR, Shiflett MW, Santhakumar V*, **Tran TS***. (2021). Reduced Hippocampal Inhibition and Enhanced Autism-Epilepsy Comorbidity in Mice Lacking Neuropilin 2. *Transl Psychiatry* 11:537 Doi: <https://doi.org/10.1038/s41380-021-01100-0>

10.1038/s41398-021-01655-6 (Impact Factor 7.973, 2021 5-yr) **#Equal contribution/co-first authors; [⌘]Undergrad Student; *Co-corresponding authors**

Danelon V[#], Goldner R[#], Martinez E, Gokhman I, Wang K, Yaron A*, **Tran TS^{1,*}**. (2020). Modular and Distinct Plexin-A4/FARP2/Rac1 Signaling Controls Dendrite Morphogenesis. *J Neurosci.* **40:5413-5430**. (featured Cover Article, Impact Factor 6.709, 2021 5-yr) **#Equal contribution/co-first authors; *Co-corresponding authors**

Assous M[#], Martinez E[#], Eisenberg C, Shah F, [⌘]Kosc A, [⌘]Varghese K, [⌘]Espinoza D, [⌘]Bhimani S, Tepper J, Shiflett MW, **Tran TS**. (2019). Neuropilin 2 signaling mediates corticostriatal transmission, spine maintenance, and goal-directed learning in mice. *J. Neurosci.* **39:8845-8859** Doi: 10.1523/JNEUROSCI.1006-19.2019. **#Equal contribution/co-first authors; [⌘]Undergrad Students**

Kung F, Wang W, **Tran TS**, Townes-Anderson E. (2017) Semaphorin 3A reduces sprouting of adult rod photoreceptors in vitro. *Invest Ophthalmol Vis Sci.* **58:4318-4331**.

Shiflett MW, Martinez E, Khdour H, **Tran TS**. (2017). Functions of Neuropilins in wiring the nervous system and their role in neurological disorders. Gera Neufeld and Ofra Kessler (eds.), **The Neuropilins: Role and Function in Health and Disease**. Chpt 8, pages 125-149. Springer Publishing Group. ISBN 978-3-319-48824-0. **Invited contributor**

Peng S-S, **Tran TS**. (2016). Regulation of Cortical Dendrite Morphology and Spine Organization by Secreted Semaphorins: A primary Culture Approach. Jonathan R. Terman (ed.), **Semaphorin Signaling: Methods and Protocols**, Methods in Molecular Biology; Chpt 15, pages 209-222. Humana Press, Springer Publishing Group. ISBN 978-1-4939-6446-8. Doi 10.1007/978-1-4939-6446-8_15. **Invited contributor**

Hernandez-Enriquez B[#], Wu Z[#], Martinez E, Olsen O, Kaprielian Z, Maness PF, Yoshida Y, Tessier-Lavigne M, **Tran TS**. (2015). Floor plate-derived Neuropilin 2 functions as a Semaphorin 3B sink to Facilitate commissural axon midline crossing. *Genes&Dev* **29:2617-2632** (Impact Factor 12.89, 2021 ranked #2 among Developmental Biology research journals, ISI Journal Citation Reports)

Shiflett MW, [⌘]Gavin M, **Tran TS**. (2015). Altered hippocampal-dependent memory and motor function in Neuropilin 2 deficient mice. *Transl Psychiatry* **5, e521; pages 1-7**. Doi: 10.1038/tp.2015.17 (Impact Factor 5.620, 2015 Thomson Reuters Journal Citation Reports; ranked 16 out of 140 journals in Psychiatry) **[⌘]Undergrad Student**

Martinez E, **Tran TS**. (2015). Vertebrate spinal commissural neurons: a model system for studying axon guidance beyond the midline. *Wiley Interdisciplinary Reviews Dev Biol*; pages 1-15. Doi:10.1002/wdev.173 **Invited Review**

Yu S, Yehia G, Wang J, Stypulkowski E, Sakamori R, Jiang P, Hernandez-Enriquez B, **Tran TS**, Bonder EM, Guo W, Gao N. (2014). Global ablation of the mouse Rab11a gene impairs early embryogenesis and matrix metalloproteinase secretion. *J. Biol Chem.* **289:32030-32043**. Doi: 10.1074/jbc.M113.538223.

Demyanenko GP, Mohan V, Zhang X, Brennaman LH, Dharbal KES, **Tran TS**, Manis PB, Maness PF. (2014). Neural cell adhesion molecule NrCAM regulates semaphorin 3F-induced dendritic spine remodeling. *J. Neurosci.* **34:11274-11287**.

Mlechkovich G[#], Peng S-S[#], Shacham V, Martinez E, Gokhman I, **Tran TS***, Yaron A*. (2014). Distinct cytoplasmic domains in Plexin-A4 mediate diverse responses to semaphorin 3A in developing mammalian neurons. *Sci Signal.* **7, ra24; pages 1-13**. (Impact Factor 7.4, 2015

Thomson Reuters Journal Citation Reports) #**Equal contribution/co-first authors**; ***Co-corresponding authors**

Tran TS^{*,#}, Carlin E[#], Lin R, Martinez E, Johnson JE, Kaprielian Z^{*}. (2013). Neuropilin2 regulates the guidance of post-crossing spinal commissural axons in a subtype-specific manner. *Neural Dev* 8:15 doi:10.1186/1749-8104-8-15 [#]**Co-first authors**, ^{*}**Co-corresponding authors**

de Anda FC, Rosario AL, Durak O, **Tran TS**, Graff J, Meletis K, Rei D, Soda T, Mdabushi R, Ginty DD, Kolodkin AL, Tsai L-H. (2012). An autism spectrum disorder susceptibility gene, TAO2, is important for basal dendrite formation in the neocortex. *Nature Neurosci.* 15:1022-1031.

Becker PM, **Tran TS**, Delannoy MJ, He C, Shannon JM, McGrath-Morrow S. (2011). Semaphorin 3A Contributes to Distal Pulmonary Epithelial Cell Differentiation and Lung Morphogenesis. *PLoS ONE*, 6(11): e27449; pages 1-11. doi:10.1371/journal.pone.0027449.

Demyanenko GP, Riday TT, **Tran TS**, Dalal J, Darnell EP, Brennaman LH, Sakurai T, Grumet M, Philpot BD, Maness PF. (2011). NrCAM deletion causes topographic mistargeting of thalamocortical axons to the visual cortex and disrupts visual acuity. *J. Neurosci.* 31:1545:1558.

Tran TS, Rubio ME, Clem RL, Johnson D, Case L, Tessier-Lavigne M, Huganir RL, Ginty DD, Kolodkin AL. (2009). Secreted semaphorins control spine distribution and morphogenesis in the postnatal CNS. *Nature* 462:1065-1069. Faculty of 1000 "Must Read".

Kolk SM, Gunput RF, **Tran TS**, van den Heuvel DMA, Prasad AA, Hellemons AJGM, Adolfs Y, Ginty DD, Kolodkin AL, Burbach PH, Smidt MP, Pasterkamp RJ. (2009). Semaphorin 3F is a bifunctional guidance cue for dopaminergic axons and controls their fasciculation, channeling, rostral growth and intracortical targeting. *J. Neurosci.* 29:12542-12557.

Wright AG, Demyanenko GP, Powell A, Schachner M, Enriquez-Barreto L, **Tran TS**, Polleux F, Maness PF. (2007). Close Homolog of L1 and Neuropilin 1 mediates guidance of thalamocortical axons at the ventral telencephalon. *J. Neurosci.* 27:13667-13679.

Tran TS, Kolodkin AL, Bharadwaj R. (2007). Semaphorin regulation of cellular morphology. *Ann. Rev. Cell Dev. Biol.* 23:263-292. *Invited Review*

Hoe H-S, **Tran TS**, Matsuoka Y, Howell BW, Rebeck GW. (2006). DAB1 and Reelin effects on amyloid precursor protein and ApoE receptor 2 trafficking and processing. *J. Biol. Chem.* 281:35176-35185.

Huber AB, Kania A, **Tran TS**, Gu C, De Marco Garcia N, Lieberam I, Johnson D, Jessell TM, Ginty DD, Kolodkin AL. (2005). Distinct roles for secreted semaphorin signaling in spinal motor axon guidance. *Neuron*, 48:949-964.

Chen K, Ochalski PG, **Tran TS**, Sahir N, Schubert M, Pramatarova A, Howell BW. (2004). Interaction between Dab1 and CrkII is promoted by Reelin signaling. *J. Cell Sci.* 117:4527-36.

Tran TS, Phelps PE. (2004). Embryonic GABAergic spinal commissural neurons project rostrally to mesencephalic targets. *J. Comp. Neurol.* 475:327-339.

Tran TS, Alijani A, Phelps PE. (2003). Unique developmental patterns of GABAergic neurons in rat spinal cord. *J. Comp. Neurol.* 456:112-126.

Tran TS, Phelps PE. (2000). Axons crossing in the ventral commissure express L1 and GAD65 in developing rat spinal cord. *Dev. Neurosci.* 22:228-236.

Phelps PE, Alijani A, **Tran TS**. (1999). Ventrally located commissural neurons express the GABAergic phenotype in developing rat spinal cord. *J. Comp. Neurol.* 409:285-298.

IN PREPARATION:

Martinez, E [#], Delucia, J [#], Joseph, I, Baek, J, [⌘]Bazile, M, [⌘]Naveed, H, Shiflett, MW, Gao, N, **Tran, TS. (2026)** Rab11a/b small GTPases are required for cerebellar granule cells development and anterior lobules organization. (*in preparation*) [⌘]**Undergrad Students**, [#]**Co-first authors**

Eisenberg, C [#], Subramanian, D [#], Huang, A, Baek, J, [⌘]Naveed, H, Delucia, J, Santhakumar, V, **Tran, TS***, Shiflett, MW*. (2026) Specific deletion of Neuropilin 2 in deep layer cortical neurons during early postnatal and adult ages alter dendritic spine density, synaptic transmission and distinct behaviors in mice. (*in preparation*) [⌘]**Undergrad Student**, [#]**Co-first authors**, ^{*}**Co-corresponding authors**

Baderinwa, A [#], Danelon, V, Martinez, E, Wu, Z, **Tran, TS. (2026)** Neuropilin-2/Plexin-A1 receptors are required for distinct dorsal spinal commissural subtype development and axon guidance *in vivo*. (*in preparation*)

RESEARCH FUNDING

ACTIVE:

07/15/21-09/30/26 (No Cost Extension)	NSF/IOS (2034864) Role: PI Total Award (direct + indirect): \$1,072,235 “Uncovering the specific mechanisms of spine and axonal pruning mediated by Semaphorin-Plexin signaling”
07/15/25-07/14/27	NJ Governor’s Council for Medical Research and Treatment of Autism (CAUT26BRP005) Role: Multi-PI (with Drs. Michael Shiflett and Elizabeth Holly) Total Award (direct + indirect): \$200,000 “The effects of adolescent social isolation in neuropilin-2 deficient mice as a model of gene-environment interactions”

PENDING/IN PREPARATION:

2026-2031	NIH/NINDS 1R01NS148495-01 (resubmission: Impact Score 37, Percentile 19) Role: multi-PI (with Drs. Michael Shiflett, Rutgers & Viji Santhakumar, UC Riverside) Status: resubmit in October 2026 cycle Amount Requested (direct+indirect): \$4,04,405 (non-modular) “Spatiotemporally specific Neuropilin 2 signaling impacts hippocampal circuits and autism-epilepsy behaviors”
2026-2030	NIH/NINDS Role: PI Status: Submission for Oct 2026 cycle Amount Requested: \$1,250,000 (modular) “Small Rab GTPases regulate distinct cellular processes during cerebellum Development <i>in vivo</i> ”

COMPLETED:

11/01/21-10/31/24 (no cost extension)	NIH/NINDS (NS125565) Role: Multi-PI with Dr. Gal Haspel (NJIT) Total Award (direct + indirect): \$454,319 (Tran lab: funding support for a graduate student) “Role of semaphorin signaling in neuronal recovery from dendritic injury: a comparative case study in-vitro and in-vivo”
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2021-2024	NSF (2117484) Role: Co-PI with Edward Bonder, Haesun Kim, Radek Dobrowolski, Ching-On Wong Total Award (direct + indirect): \$558,654 “MRI: Acquisition of a Zeiss LSM980 laser scanning confocal microscope with airyscan 2 for Microscopy Core Facility”
2016-2022	NSF/IOS (1556968) Role: PI Total Award (direct + indirect): \$674,894 “Plexin-A4 signaling regulates diverse cellular morphologies in the developing nervous system”
2016-2021	New Jersey Commission on Spinal Cord Research (CSCR16IRG013) Role: PI Total Award: \$599,716 (direct only) “Novel cell autonomous and non-cell autonomous mechanisms of semaphorin-neuropilin/plexin signaling regulate spinal commissural axon pathfinding in the mammalian CNS”
2016-2021	NJ Governor’s Council for Medical Research and Treatment of Autism (CAUT17BSP022) Role: PI Total Award: \$400,000 (direct only) “A role for semaphorin functions in cortico-basal ganglia development, repetitive behavior, and autism spectrum disorder”
2016-2021	NJ Governor’s Council for Medical Research and Treatment of Autism (CAUT17BSP011) Role: Co-PI with Dr. Vijayalakshmi Santhakumar, NJ Med School Total Award: \$400,000 (Tran Lab: \$200,000 direct only) “Developmental dysregulation of inhibitory neuron migration as an experimental model to analyze mechanisms of pediatric autism-epilepsy syndromes”
2016-2018	Rutgers University-Newark, Chancellor’s Seed Grant Role: Co-PI with Pierre-Olivier Polack, CMBN Total Award: \$80,000 (Tran Lab: \$20,000 direct only) “Development and maintenance of a functional neuronal connectivity in the cerebral cortex”
2016-2017	BHI/RU-N/NJIT Pilot Grant Program – Rutgers University Role: PI Total Award: \$40,000 (direct only) “Novel model targeting Semaphorin-Neuropilin Signaling in Inhibitory Circuit Development to examine mechanisms of Pediatric Epilepsy-Autism Comorbidity”
2015-2017	Rutgers University-Newark, Initiative for Multidisciplinary Research Teams (IMRT) Award. Role: PI Total Award: \$160,000 (direct only) “A novel model for autism spectrum disorders: Semaphorin signaling regulates neuronal morphology leading to altered brain circuitry and behavioral output”
2015-2016	BHI/RU-N/NJIT Pilot Grant Program – Rutgers University

	Role: Co-PI with Viji Santhakumar, NJ Med School Total Award: \$40,000 (Tan Lab: \$20,000 direct only) “Role of Semaphorin-Neuropilin Signaling in Hippocampal Interneurons and Epilepsy”
2015-2016	Rutgers University-Newark, Chancellor’s Seed Grant Role: Co-investigator with PI: Elizabeth Tricomi, Dept of Psychology Total Award: \$49,482 (direct only) “Investigating the neural mechanisms underlying attention deficit/hyperactivity disorder (AD/HD)”
2011-2015	The New Jersey Commission on Spinal Cord Research – Individual Research Grant (CSCR11IRG011) Role: PI Total Award: \$599,880 (direct only) “Molecular Mechanisms that Control the Long-range Pathfinding of Dorsal & Ventral Spinal Commissural Axons in the Developing CNS”
2011-2013	The Charles and Johanna Busch Memorial Biomedical Research Award (659169-21000) \$35,000 (direct only) Role: PI “Differential Semaphorin Signaling Controls Dendritic Spine Morphogenesis”

AWARDS/FELLOWSHIPS/HONORS

2017	Board of Trustees Research Fellowship for Scholarly Excellence and Tenure Promotion, Rutgers University
2011-2013	The Charles and Johanna Busch Memorial Biomedical Research Award, Rutgers University
2011- 2012	Co-author of a mini-grant, funded by RU FAIR support group for junior tenure-track women assistant professors, Rutgers University
2010	The Alfred Blalock Young Investigator Research Award, Johns Hopkins University School of Medicine
2005-2008	Ruth L. Kirschstein Fellowship, Individual Postdoctoral NRSA (NIH-NINDS F32NS051003)
2002-2003	Edith Hyde Memorial Fellowship in Physiology for Pre-doctoral Research, Department of Physiological Sciences, University of California, Los Angeles (UCLA)
2001-2002	Pre-doctoral Training Program in Neural Repair Research Fellowship, NIH (T32), University of California, Los Angeles (UCLA)
1998	Undergraduate Honors Thesis, Department of Physiological Science, University of California, Los Angeles (UCLA)
1997, 1998	Dean’s List, Departments of Physiological Science and Neuroscience, University of California, Los Angeles (UCLA)
1996, 1997	Undergraduate Summer Research Fellowship, The Beckman Research Institute, City of Hope National Medical Center

SELECTED INVITED TALKS/SEMINARS

January 2027	Sagol School of Neuroscience Seminars, Tel-Aviv University, Tel-Aviv, Israel <i>“Balancing Act of Small GTPases Downstream of PlexinA4 Distinct Signaling Motifs Control Dendrite Elaboration of Mammalian Cortical Neurons.”</i>
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January 2027	Molecular Neuroscience Forum Seminars, The Weizmann Institute of Science, Rehovot, Israel <i>“Small Rab GTPases Regulate Distinct Cellular Processes During Cerebellum Development in vivo.”</i>
September 2026	NJACE/RUCARES Annual Autism Symposium, Rutgers University, New Brunswick, NJ <i>“Dysregulation of Neuropilin-2 Functions Impairs Neural Circuits Development and Enhances Risk for Autism-Related Behaviors and Seizures”</i>
August 2025	Okinawa Institute of Science & Technology (OIST), Okinawa, Japan <i>“Balancing act of small GTPases promotes dendrite elaboration in mammalian cortical neurons during circuit assembly and disassembly.”</i>
July 2025	IDG/McGovern Institute for Brain Research, Peking University, Beijing, China <i>“Balancing act of small GTPases promotes dendrite elaboration in mammalian cortical neurons during circuit assembly and disassembly.”</i>
April 2025	University of Vermont, Department of Biology Seminar Series <i>“Neuronal Wiring Mechanisms: Balancing Acts of Small GTPases Control Neuronal Morphogenesis and Function.”</i>
October 2024	University of Virginia, Department of Biology Seminar Series <i>“Small Rab GTPases Regulate Distinct Cellular Processes During Cerebellum Development in vivo.”</i>
April 2024	The 54 th Annual American Society for Neurochemistry Meeting Invited Speaker for the Symposium: Making and Breaking the Nervous System: Molecular Approaches to Neural Circuit Assembly and Disassembly <i>“Balancing act of small GTPases promotes dendrite elaboration in mammalian cortical neurons during circuit assembly and disassembly.”</i>
October 2022	NJACE/RUCARES 2 nd Annual Autism Symposium, Rutgers University, New Brunswick, NJ <i>“The Role of Neuropilin 2 in Excitatory and Inhibitory Neuron Development, Morphogenesis, and Function.”</i>
April 2022	The 52 nd Annual American Society for Neurochemistry Meeting Invited Speaker for the Symposium: Emerging Roles of Signaling at the Synapse in Goal-Directed Behavior <i>“The Role of Neuropilin-2 in Corticostriatal Synaptic Transmission and Function.”</i>
August 2021	University of California, Riverside (UCR), Department of Molecular, Cell and Systems Biology <i>“Small Rab GTPases Regulate Distinct Cellular Processes in Cerebellar Granule Cell Development.”</i>
February 2020	Children’s Hospital of Philadelphia, at the Hospital of the University of Pennsylvania <i>“Modular and Distinct Plexin-A4/FARP2/Rac1 Signaling Controls Dendrite Morphogenesis.”</i>

April 2019	Memorial Sloan Kettering Cancer Center, Neurodevelopmental Meeting (Organizer: Alexandra Joyner) <i>“Distinct Roles of Rab11 in mediating granule and purkinje cell development in the mammalian cerebellum.”</i>
March 2019	University of California, Riverside (UCR), Department of Molecular, Cell and Systems Biology <i>“Molecular Control of Neuronal Wiring: PlexinA4 Signaling Specificity in Dendrite Morphogenesis.”</i>
February 2019	Burke Neurological Institute, Weill Cornell Medicine <i>“Molecular Control of Neuronal Wiring: PlexinA4 Signaling Specificity.”</i>
June 2018	Memorial Sloan Kettering Cancer Center, Neurodevelopmental Meeting (Organizer: Alexandra Joyner) <i>“The role of Rab11 during mammalian cerebellar development”</i>
February 2018	International Center for Public Health, Rutgers, New Jersey Medical School, Department of Microbiology, Biochemistry and Molecular Genetics Seminar <i>“Diverse Signaling Mechanisms of Semaphorin Guidance Molecules in the Mammalian Nervous System Development.”</i>
November 2017	Molecular Neuroscience Forum Seminars, The Weizmann Institute of Science, Rehovot, Israel <i>“Diverse Functions of Semaphorin-Neuropilin Signaling during Development and in the Adult Mammalian Nervous System.”</i>
June 2017	Memorial Sloan Kettering Cancer Center, Neurodevelopmental Meeting (Organizer: Alexandra Joyner) <i>“Specific cytoplasmic domains of the PlexinA4 receptor regulate dendritic morphologies in the developing mouse CNS”</i>
April 2017	NJIT, Department of Biomedical Engineering <i>“Diverse Functional Mechanisms of Semaphorin Signaling during Mammalian Nervous System Development.”</i>
December 2016	Second Annual Rutgers Brain Health Institute Symposium <i>“The role of Neuropilin 2 in Excitatory versus Inhibitory Neuron Development and Contribution to Autism Spectrum Disorders.”</i>
May 2016	Brain Health Institute <i>NeuroTalk Exchange Seminar</i> , Rutgers University-NJ Medical School, Newark, NJ. <i>“Roles for Neuropilin 2 signaling in hippocampal- and corticostriatal-dependent behaviors and neurological disorders.”</i>
March 2016	Mechanisms of Neuronal Remodeling, EMBO (international) meeting, Seeon, Germany <i>“Mechanisms of Neuropilin 2 Function in Commissural Axon Guidance During Embryonic Spinal Cord Development.”</i>
February 2016	Stony Brook University, Department of Neurobiology & Behavior Departmental Seminar <i>“Mechanisms of Neuropilin 2 Functions in Spinal Commissural Axon Guidance.”</i>

- January 2015 Seton Hall University, Department of Biological Sciences Seminar
“Floor Plate-Derived Neuropilin 2 Functions as a Sema3B Sink to Facilitate Spinal Commissural Axon Guidance at the Midline.”
- March 2014 Mechanisms of Neuronal Remodeling, EMBO (international) meeting, Kibbutz Ein-Gedi, Israel
“Plexin-A4 Control Diverse Cellular Responses in Developing Mammalian Neurons Through Distinct Signaling Cytoplasmic Domains.”
- January 2013 Albert Einstein College of Medicine, the Dominick P. Purpura Department of Neuroscience Seminar.
“Secreted Semaphorins and Their Receptors Control Spinal Distribution and Morphogenesis in the Postnatal CNS.”

TEACHING AND CURRICULUM DEVELOPMENT

University of Vermont:

- 2026-fall **Course Instructor**, Department of Biology
Course: *Topics in General Biology, BIOL 5030 (1 credit)*, Graduate course, up to 15 students)
Responsibilities: Prepared and administered all lectures and exams; led and guided in-class discussions; and evaluated all students' in-class presentations and writing assignments.

Rutgers University:

- 2026-spring **Course Instructor**, Department of Biological Sciences
Course: *Neuroanatomy: Structure and Function, 501 (3 credits)*, Graduate course, up to 20 students)
Responsibilities: Prepared and administered all lectures and exams; led and guided in-class discussions; and evaluated all students' in-class presentations.
- 2025-fall **Course Instructor**, Department of Biological Sciences
Course: *Molecular Cell Biology, 455 (3 credits)*, undergrad course, up to 20 students, fulfill writing-intensive course requirement)
Responsibilities: This upper-level biology course involved both lectures and small-group discussions on the latest scientific research, during which students were first taught cutting-edge techniques and methodologies in molecular and cell biology. Then, students are taught to read and analyze primary research articles in the field of molecular and cell biology, write summaries of the research papers, and present the main findings to the class. The course director/professor guides and leads the classroom discussions and answers questions, grade the in-class exams, writing assignments, and give constructive feedback on student presentations.
- 2024-fall **Co-course Instructor**, Department of Biological Sciences
Course: *Topics in Biology: Scientific Reasoning and Research Design, 616 (3 credits)*, graduate course, up to 20 students)
Responsibilities: Lead small group discussions on topics in the process and guidelines for creating and writing an NIH format grant proposal for graduate students. This course will help the students develop scientific thinking and writing skills through the formulating specific aims and research strategies by (1) classroom instruction and discussions, (2) writing a draft research proposal, (3) read and critiquing peer/fellow classmate proposals, and (4) editing/revising the draft proposal to general a final proposal by the end of the semester. The course director/co-director will read all student proposals, evaluate, and provide feedback to the students.

- 2023-fall **Co-course Instructor**, Department of Biological Sciences
Course: *Growth Factors in the Nervous System*, 697 (**3 credits**, graduate course, up to 20 students)
Responsibilities: Lead small group discussions on topics in nervous system growth factors involved in various cellular processes (proliferation, differentiation, migration, signaling, cell death, and injury/disease), curated reading materials (including primary research papers, reviews) for students to read and writing assignments. Teach students to properly analyze, interpret and discuss research data and evaluate the student's performance in a written format and oral presentation.
- 2022-fall **Co-course Instructor**, Department of Biological Sciences
(New) Course: *Cellular Neurobiology*, 589 (**3 credits**, graduate course, up to 20 students)
Responsibilities: A combination of lectures and small group discussions on topics in cellular neurobiology, curated reading materials (including primary research papers, reviews) for students to read and writing assignments. Teach students to properly analyze, interpret and discuss research data and evaluate the student's performance in a written format and oral presentation.
- 2019, 2021 (fall) **Course Instructor**, Department of Biological Sciences
Course: *Topics in Biology – Molecular Mechanisms of Neurodevelopment*, 616 (**3 credits**, graduate course, 10-12 students)
Responsibilities: Lead small group discussions on topics in neurodevelopment, curated reading materials (including primary research papers, reviews) for students to read and writing assignments. Teach students to properly analyze, interpret, and discuss research data and evaluate the students' performance in a written format and oral presentation.
- 2016-present (spring) **Course Instructor**, Department of Biological Sciences
Course: *Neuroanatomy: Structure and Function*, 404 (**4 credits**, undergraduate course, 20-40 students)
Responsibilities: I have taught this course for 9 semesters; this is the first such course offered at Rutgers – Newark campus and I developed this course from the ground-up. I designed and coordinated all laboratory sessions, prepared and administered all lectures, exams and lab practicum, coordinated and evaluated all student in-class presentations. This course is mainly taken by juniors and seniors in the biology and neuroscience majors, particularly popular with pre-meds, pre-biomedical careers focused students. It has a writing-intensive component where the students are required to learn how to write scientific style reviews from the literature, with instructor feedback, and revision. Additionally, students are divided into small-group learning to perform literature search, reading and presentation to the class.
- 2011-2018 **Guest lecturer**, Center for Molecular and Behavioral Neuroscience
Course: *Foundations in Neuroscience I* (graduate course, 5-8 students)
- 2018-fall **Co-course Instructor**, Department of Biological Sciences
Course: *Cell Biology*, 355 (**3 credits**, undergraduate course, 80+ students)
Responsibilities: Designed and coordinated half of the course lectures, prepared one and a half midterm and half of the final exam.
- 2016 (Spring) **Guest lecturer**, Rutgers/NJIT Department of Biological Sciences
Course: *Systems Neurobiology* (undergraduate course, 20-25 students)
- 2012-2015 (fall) **Co-course Instructor**, Department of Biological Sciences
Course: *Mammalian Physiology*, 340 (**4 credits**, undergraduate course, 80+ students)
Responsibilities: Designed and coordinated half of the course laboratory sessions and lectures, prepared one midterm and half of the final exam, and one lab practical.

2011-2015(fall) **Co-course Instructor**, Department of Biological Sciences
Course: *Cell, Molecular, and Developmental Biology* (**3 credits**, graduate course, 5-12 students)
Responsibilities: Prepared and delivered 1/3 of the course lectures and in-class discussions, including midterms and final exams and graded class assignments.

2011-2013 **Co-course Instructor**, Department of Biological Sciences
Course: Seminars/Colloquium in Biology for graduate students
Responsibilities: Coordinated all cell molecular biology research presentations given by graduate students, postdoctoral fellows and invited speakers from other institutions, and discussed relevant primary research articles.

Other Institutions:

2015-2021 (fall) New Jersey Medical School – Newark, Rutgers Biomedical and Health Sciences
Guest lecturer, Department of Neurology
Course: *Cell/Developmental Neuroscience CBNP5150Q* (graduate course)

2012-2015 Albert Einstein College of Medicine
Guest lecturer, Dominick P. Purpura Department of Neuroscience
Course: *Developmental Neuroscience* (graduate course)

2003 University of California, Los Angeles (UCLA)
Course Instructor, Department of Integrative Biology and Physiology
(Formerly Dept of Physiological Science)
Course: *Introduction to Human Anatomy, Physiological Science 13 lecture/laboratory* (undergraduate course)
Responsibilities: Designed and coordinated all laboratory sessions, prepared and delivered all lectures, exams and lab practicum.

2001 University of California, Los Angeles (UCLA)
Laboratory Manager, Department of Integrative Biology and Physiology
(Formerly Dept of Physiological Science)
Course: *Gross Human Anatomy Dissection* (undergraduate course)
Responsibilities: Prepared all human specimens for laboratory dissection, prepared and delivered brief lectures before each laboratory session.

1999-2001 University of California, Los Angeles (UCLA)
Graduate Teaching Assistant, Department of Integrative Biology and Physiology
(Formerly Dept of Physiological Science)
Courses: *Systems Anatomy (Physiological Science 107)*; *Cells, Tissues and Organs (Life Sciences 2)* (undergraduate courses)

SERVICE/MENTORING/OUTREACH

SERVICE:

Federal & International Funding Agencies Reviewer Panelist

July 2026	NIH, SEP ZRG1 BN-F (90)S Study Section, reviewer
May 2026	US – Israel Binational Science Foundation grant application reviewer
November 2025	NSF, BIO/IOS, review panelist
June 2025	NIH, NDPR Study Section, reviewer
December 2024	NSF, BIO, Innovation – Instrumentation & Research Methods (IIRM) review panelist
October 2023	NIH, SMN Study Section, reviewer

TRACY S. TRAN, CV

July 2022	FWF, Austrian Science Fund, reviewer
May 2022	NSF, MRI, review panelist
April 2020	NSF, BIO/IOS, review panelist
October 2016	NSF, BIO/IOS, review panelist
March 2016	NSF, BIO/IOS, review panelist
February 2016	US – Israel Binational Science Foundation grant application reviewer

Regional Funding Agency Grant Reviewer

2019	New Jersey Alliance for Clinical and Translational Science Pilot Grant Program
2019	Initiative for Multidisciplinary Research Teams Awards, Rutgers – Newark
2018	Member: Committee on Faculty and Student Review, Rutgers – Newark Graduate School, TA/GA fellowships
2012 – 2015	Member: Busch Biomedical Grant Advisory Committee

Editor/Editorial Boards

2026 – 2027	Co-editor: <i>Frontiers in Endocrinology, Special Topics Issue in Membrane Signaling in Neuroendocrine Developmental</i> , (IF: 4.6 as of 2025)
2026 – present	Editor-in-Chief: <i>Molecular, Cellular Therapy and Mechanism</i> , River Publishers Journals, Denmark
2023 – 2024	Co-editor for the book: “ <i>Wiring the Nervous System: Mechanisms of Axonal and Dendritic Remodeling in Health and Disease</i> ”, River Publishers, Denmark
2022 – present	Associate Editor, <i>Frontiers in Cellular Neuroscience</i> (IF: 6.147 as of 2022), specialty section Cellular Neurophysiology
2020 – present	Topic Board Editor for Molecular Biology: <i>International Journal of Molecular Sciences</i> (IF: 5.542 as of 2022)

Reviewer for Peer-reviewed Journals

Cell; Nature Communications; Genes & Development; Biomaterials; Science Signaling; Cell Reports; PLoS Biology; Journal of Neuroscience; Cerebral Cortex; European Journal of Neuroscience; Journal of Neuroinflammation; Journal of Comparative Neurology; Journal of Neuroscience Research; Molecular and Cellular Neuroscience; Frontiers in Neuroscience; Frontiers in Cellular Neuroscience; Frontiers in Cell and Developmental Biology; Scientific Reports; Neural Development; PLoS ONE; eNeuro; Brain Research; BMC Neuroscience.

Rutgers/Regional Committees

2022 – 2026	Member of the Rutgers Brain Health Institute (BHI) Neurodevelopment Workgroup
2022 – 2024	Advisory Board Member, Rutgers University Center for Autism Research, Education, and Services (RUCARES)
2022 – 2023	Chair, Dept of Biological Sciences tenure-track faculty search committee, Rutgers - SASN
2021 – 2024	Chair, External Affairs Committee on the Newark Faculty Council
2021 – 2022	Member of the Appointment and Promotion Committee - Rutgers Newark Campus
2021 – 2022	Member of the Executive Cabinet on the Newark Faculty Council
2019/2020, 2023/2024	Member of the Faculty Compensation Program/Merit Process Component committee for the Dept. of Biological Sciences
2018 – 2026	Chair, Undergraduate Biology Major/Minor Curriculum Committee
2018 – 2020	Rutgers – Newark Honors College Faculty Advisory Board Member
2018 – 2020	Rutgers University Mentoring Executive Committee Member
2017 – 2026	Director of Undergraduate Programs in Biology

2017 – 2026	Rutgers University IACUC Member
2015 – 2023	Biological Sciences Department Non-Tenure Track Faculty Search committee
2015 – 2017 (Chair)	Biological Sciences Department Graduate Program Standards Committee
2015	Federated Biological Sciences Department Federation Review Committee
2014	OASIS Leadership and Professional Development Program for Career Development and Advancement of Academic Women in STEM Fields, Rutgers, Newark, NJ
2011-2012; 2017-2019 & 2024-2025	Member of the Biological Sciences Department Tenure-Track Faculty Search Committee

MENTORING:

******Since starting my own independent research group in fall 2010, I have been or currently mentoring *8 PhD students' theses work in my lab* (6 have successfully defended, 1 is on track to defend in Aug. 2026, and 1 scheduled to defend in spring 2027); *supervised 4 master students' theses* (2 have continued on to obtain the PhD degree working in my lab); and *4 postdoctoral fellows*. In addition, I have served on *12 PhD thesis committees* and *4 master's student thesis committees*. Moreover, I advised *12 grad student lab rotations*; *31 undergrad students working in the lab* (5 admitted to grad PhD programs, 7 admitted to professional school programs in a biomed field); *6 post-baccs/research assistants* (1 admitted to a grad PhD program at Thomas Jefferson, and 2 admitted medical schools); and advised *15 high school students* (all belonging to an URM group).

OUTREACH:

Professional memberships

2025-present	Co-chair, Membership Committee, American Society for Neurochemistry (ASN)
2021-2025	Council Member, ASN
2016-present	Member, The International Society of Neurochemistry (ISN)
2013-present	Member, ASN
2011-present	Member, New York Academy of Sciences
1997-present	Member, Society for Neuroscience (SfN)

Symposium Chair/Co-chair for scientific conferences

April 2022	American Society for Neurochemistry (ASN), the 50 th Annual ASN Meeting, Roanoke, VA. **Symposium Co-Chair: “Emerging Views On Molecular and Cellular Mechanisms of Neural Circuit Establishment”.
March 2016	American Society for Neurochemistry (ASN), the 47 th Annual ASN Meeting, Denver, CO. **Symposium Co-Chair: “Neural Development and Regeneration”.
March 2015	American Society for Neurochemistry (ASN), the 46 th Annual ASN Meeting, Atlanta, GA. **Symposium Chair: “Wiring of the Nervous System: From Molecular Mechanisms to Complex Behaviors”.

Other outreach activities

2016-present (Academic year)	Collaboration with North Star Academy Charter High School, Newark, to organize biological science laboratory internships for high school students during the academic year, over 100+
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	students participated in the program, student participants received 1 science credit toward their science curriculum.
2017-2020 (Spring semester)	Founder and director of the “ <i>Think Scientifically</i> ” workshop series for local junior and senior high school students from North Star Academy, Newark. Total of 5 workshops (each 2-3 hours) per semester for 20 students each academic year in a biology-teaching lab at Rutgers University – Newark campus. The goal of the workshops is to provide the opportunity to expose the high school student to the broad field of biological sciences and the give them a hands-on experience/demonstrate of a concept/technique/experiment in a university setting.
2019 (May)	Founder and organizer for the <i>Networking and Mentoring for Women in STEM</i> Event, Over 35+ attendees, supported by the RU-N Graduate School and RU SciWomen Office.
2018 (November)	Academic Career Panelist, Rutgers University Office of Postdoctoral Affairs, Workshop for postdoctoral fellows and preparation for academic careers, 40+ attendees.

In the News Media

2022: Rutgers – School of Arts & Sciences – Newark, Faculty Spotlights:

<https://www.youtube.com/watch?v=OvB8Bxpl-jA>

2021: UC Riverside News – “How are epilepsy and autism linked? UC Riverside and Rutgers University Scientists explore this question in a study on mice”, by Iqbal Pittalwala

<https://news.ucr.edu/articles/2021/11/08/how-are-epilepsy-and-autism-linked>)

2017: Promoting STEM Education – “An urban charter school achieves a fivefold increase in the percentage of its black and Latino graduates who major in STEM”, by Stuart Miller, The Hechinger Report (<https://hechingerreport.org/urban-charter-school-achieves-fivefold-increase-percentage-black-latino-graduates-major-stem/>)

2016: “Probing How a Gene and Some Proteins Might Point a Brain toward Autism”, by Robert Forman. (<http://www.newark.rutgers.edu/news/probing-how-gene-and-some-proteins-might-point-brain-toward-autism#.WA561euGavg.email>)

2015: “Recipients of RU-N Initiative for Multidisciplinary Research Teams Awards Announced”, by Ferlanda Fox Nixon. (<https://www.newark.rutgers.edu/news/recipients-ru-n-initiative-multidisciplinary-research-teams-awards-announced>)

SELECTED ABSTRACTS AND PRESENTATIONS (In reverse chronological order)

KEYS:

It is accepted in the Cell, Molecular, Neuroscience community, in which the candidate’s research falls within, the first or co-first and last or co-last author positions hold the most responsibility and authority for the study.

All key personnel in the candidate’s laboratory that participated in the project are underlined, including undergraduate and graduate students, postdoctoral fellows, and research assistants. All superscripts indicate the same definitions as in the above “Publications” section. If designated “#”, then the key personnel also served as co-first author.

PUBLISHED/ACCEPTED:

Delucia J, Martinez E, [#]Naveed H, Shiflett MW, **Tran TS. (2026).** The small GTPases Rab11a and Rab11b are required for Purkinje neuron development and survival leading to proper

cerebellar adaptive motor function in mice. The 56th Annual American Society for Neurochemistry (ASN) meeting, April 2026, St. Charles, MO. *Poster Presentation* **⌘ Undergrad Student**

Baderinwa A, Danelon V, **⌘Zahir Hussain S**, **⌘Chuquino V**, Gal Haspal, **Tran TS. (2026)**. Neuropilin-2 regulates spinal commissural dI2 progenitor and neuron development and survival by maintaining apical adhesion and basal lamina stability. The 56th Annual American Society for Neurochemistry (ASN) meeting, April 2026, St. Charles, MO. *Poster Presentation* **⌘ Undergrad Student**

⌘Chuquino V, Baderinwa C, Danelon V, **⌘Zahir Hussain S**, **⌘Ahmad R**, **Tran TS. (2026)**. Plexin-A1 is required for spinal cord commissural neuron survival and axon guidance. Rutgers – Newark Research Week, April 8, 2026. **⌘ Undergrad Student; (1st Prize Undergrad Poster Presentation winner)**

Delucia J, Martinez E, **⌘Naveed H**, Shiflett MW, **Tran TS. (2025)**. Purkinje cell development, survival, and adaptive motor behavior in mice require the redundant function of the small GTPase Rab11a and Rab11b. The 55th Annual American Society for Neurochemistry (ASN) meeting, Aug. 2025, New York, NY, *Poster Presentation* **⌘ Undergrad Student**

Baderinwa A, Danelon V, **⌘Zahir Hussain S**, **⌘Bailey M**, **Tran TS. (2025)**. Neuropilin-2 receptor is required for spinal cord commissural progenitor neuron survival by maintaining apical cell adhesion and extracellular matrix stability. The 55th Annual American Society for Neurochemistry (ASN) meeting, Aug. 2025, New York, NY, *Poster Presentation* **⌘ Undergrad Student**

Baderinwa A, Danelon V, **⌘Ansari I**, **Tran TS. (2024)**. The guidance cue receptor, PlexinA1, plays differential roles in the development of the mouse embryonic spinal commissural neurons. The 10th Annual Rutgers University – Brain Health Institute (BHI) Symposium, Nov. 2024, New Brunswick, NJ, *Poster Presentation (1st Prize winner)* **⌘ Undergrad Student**

DeLucia J, Martinez E, Baek J, Joseph I, **⌘Bazile M**, **⌘Shafik J**, Shiflett MW, Gao N, **Tran TS. (2024)**. Small GTPase Rab11 is required for proper cerebellar granule cell development, anterior lobule formation, and adaptive motor function in mice. The 54th Annual American Society for Neurochemistry (ASN) meeting, Apr. 2024, Portland, OR. *Oral Presentation* **⌘ Undergrad Student**

Baderinwa A, Danelon V, **⌘Ansari I**, **Tran TS. (2024)**. The guidance cue receptor, PlexinA1, plays differential roles in the development of the mouse embryonic spinal commissural neurons. The 54th Annual American Society for Neurochemistry (ASN) meeting, Apr. 2024, Portland, OR. *Poster Presentation* **⌘ Undergrad Student**

Baek J, **⌘Naveed H**, **⌘Muyingo L**, **⌘Romero AJ**, Delucia J, Eisenberg C, **Tran TS. (2023)**. Secreted semaphorin signaling regulates aging-associated dendritic modifications and cognitive function. Society for Neuroscience Annual meeting, Nov. 2023, Washington D.C. *Poster Presentation* **⌘ Undergrad Student**

Eisenberg C, Subramanian D, Huang A, Baek J, Shiflett MW, Santhakumar V, **Tran TS. (2023)**. Interneuron specific deletion of Neuropilin-2 is associated with autism-like behaviors and seizure susceptibility in mice. Society for Neuroscience Annual meeting, Nov. 2023, Washington D.C. *Poster Presentation*

Baek J, **⌘Romero AJ**, Eisenberg C, **⌘Naveed H**, Delucia J, **Tran TS. (2023)** Secreted Semaphorins are Regulators of Aging-Associated Dendritic Modifications and Cognitive Function. American Society for Neurochemistry Annual meeting 2023, Lexington, KY. *Poster Presentation* **⌘ Undergrad Student**

Eisenberg C, Subramanian D, Afrasiabi M, Delucia J, Shiflett MW, Santhakumar V, **Tran TS**. (2022). Neuropilin 2 regulation of excitatory and inhibitory circuit function and its impact on behaviors associated with autism and epilepsy. Fragile X and Autism-Related Disorders Gordon Research Conference. Lucca (Barga), Italy. *Poster Presentation*

Eisenberg C, Subramanian D, Afrasiabi M, [✉]Ziobro P, Delucia J, Shiflett M, Santhakumar V, **Tran TS**. (2021). Reduced hippocampal inhibition and enhanced autism-epilepsy comorbidity in mice lacking Neuropilin 2. American Society for Neurochemistry 2021 Virtual Meeting. Poster 10351/D26. *Poster Presentation* [✉]**Undergrad Student**

Goldner R, Danelon V, Martinez E, **Tran TS**, Yaron A. (2020). Modular and Distinct Plexin-A4/FARP2/Rac1 Signaling Controls Dendrite Morphogenesis. Molecular Mechanisms of Neuronal Connectivity—Cold Spring Harbor Laboratory Virtual meeting, Abstract Book Page xiii/45. Cold Spring Harbor, NY. *Oral Presentation*

Eisenberg C, Assous M, Martinez E, Shah F, Kosci A, [✉]Varghese K, Espinoza D, Bhimani S, Tepper J, Shiflett MW, **Tran TS**¹. (2019). Neuropilin 2 mediates striatal neuron excitability, cortical neuron spine density, corticostriatal short-term plasticity and learning in mice. Center for Molecular and Behavioral Neuroscience Annual Research Symposium, Rutgers University, Newark, NJ. *Poster Presentation* [✉]**Undergrad Student**

Danelon V, Martinez E, Haspel, **Tran TS**. (2019). Neuropilin2/PlexinA1 signaling complex is required for dI2 interneurons migration and axonal projection in the developing mouse spinal cord. Center for Molecular and Behavioral Neuroscience Annual Research Symposium, Rutgers University, Newark, NJ. *Poster Presentation*

Danelon V, Goldner R, Martinez E, Gokhman, I, Wang K, Yaron A, **Tran TS**. (2018). Dissecting the specificity of Semaphorin 3A-PlexinA4 signaling that controls cortical dendrite elaboration and axon guidance events *in vivo*. Molecular Mechanisms of Neuronal Connectivity--Cold Spring Harbor Laboratory meeting, Abstract Book Page. Cold Spring Harbor, NY. *Poster Presentation*

Martinez E, Gao N, **Tran TS**. (2018). Rab11a/b are required for the proper development and organization of the mammalian cerebellum *in vivo*. Molecular Mechanisms of Neuronal Connectivity--Cold Spring Harbor Laboratory meeting, Abstract Book Page. Cold Spring Harbor, NY. *Poster Presentation*

Danelon V, Goldner R, Martinez E, Gokhman, Wang K, Yaron A, **Tran TS**. (2018). Dissecting the specificity of Semaphorin 3A-PlexinA4 signaling that controls cortical dendrite elaboration and axon guidance events *in vivo*. Molecular and Cellular Neurobiology Gordon Research Conferences, Hong Kong, China. *Poster Presentation*.

Martinez E, Danelon V, Wu Z, **Tran TS**. (2017). Analysis of Developing Axonal Projections To and From the Mammalian Spinal Cord Using the iDisco Tissue Clearing Protocol. Annual Society for Neuroscience Meeting, Program No. 33.04/C10, Washington DC, *Poster Presentation*

Tran TS, Kosci A, Pacelli S, Yang S, Shiflett MW. (2017). The effects of MPEP on learning, sensorimotor and emotional behavior in Plexin-A3-deficient mice. Annual Society for Neuroscience Meeting, Program No. 119.07/C48, Washington DC, *Poster Presentation*

Martinez E, Flores J, Gao N, **Tran TS**. (2017). The small GTPase Rab11 is required for spinal cord afferent projections and cerebellum development. Neurotrophic Factors Gordon Research Conferences, Newport, RI. *Poster Presentation*

Hernandez-Enriquez B, Wu Z, Martinez E, Olsen O, Tessier-Lavigne M, **Tran TS**. (2016). Mechanisms of Neuropilin 2 function in commissural axon guidance during embryonic spinal cord development. EMBO Workshop: Mechanisms of neuronal remodeling meeting, Abstract Book Page OP13/13. Seon, Germany. *Selected Oral presentation*

Tran TS, Hernandez-Enriquez B, Wu Z, Martinez E, Olsen O, Kaprielian Z, Maness PF, Yoshida Y, Tessier-Lavigne M. (2016). Floor plate-derived Neuropilin 2 functions as a Sema3B sink to facilitate commissural axon midline crossing. American Society for Neurochemistry (ASN), the 47th Annual ASN Meeting, Page C03/31. Denver, CO. *Selected Oral presentation*.

Shiflett MW, Assous M, Martinez E, Choe E, Tepper J, **Tran TS**. (2015). Loss of Neuropilin 2 induces aberrant corticostriatal circuit activity and impairs goal-directed instrumental behavior in mice. Annual Society for Neuroscience Meeting, Program No. 708.04/U5. Chicago, IL. *Poster Presentation*

Martinez E, [⌘]Gavin M, Shiflett MW, **Tran TS**. (2015). Altered hippocampal-dependent memory and motor function in Neuropilin 2 deficient mice. Wiring the Brain--Cold Spring Harbor Laboratory meeting, Abstract Book Page 67. Cold Spring Harbor, NY. *Poster Presentation*
[⌘]*Undergrad Student*

Tran TS, [⌘]Gavin M, Shiflett MW. (2015). Roles for Neuropilin 2 signaling in hippocampal and cortico-striatal-dependent learning and memory. American Society for Neurochemistry (ASN), the 46th Annual ASN Meeting, Page S08/21. Atlanta, GA. *Selected Oral presentation*
[⌘]*Undergrad Student*

Peng S-S[#], Mlechkovich G[#], Shacham V, Martinez E, Yaron A*, **Tran TS^{2*}**. (2014). Plexin-A4 controls diverse cellular responses in developing mammalian neurons through distinct signaling domains. EMBO Workshop: Mechanisms of neuronal remodeling, Abstract Book Page ST9. Kibbutz Ein-Gedi, Israel. *Selected Oral presentation* **Co-corresponding authors*

Peng S-S[#], Mlechkovich G[#], Martinez E, Yaron A*, **Tran TS***. (2014). Secreted semaphorin signaling controls neuronal remodeling through distinct PlexinA4 cytoplasmic signaling domains during development. American Society for Neurochemistry (ASN), the 45th Annual ASN Meeting, Page C01-03. Long Beach, CA. *Selected Oral presentation* **Co-corresponding authors*

Shiflett MW, [⌘]Gavin M, **Tran TS**. (2013). Altered learning and novelty-seeking behavior in adult mice lacking the neuropilin 2 gene. Annual Society for Neuroscience Meeting, Program No. 531.19/Q7. San Diego, CA. *Poster Presentation* [⌘]*Undergrad Student*

Peng, S-S[#], Mlechkovich, G[#], Rapadas, C, Yaron, A*, **Tran, TS***. (2013). Plexin-A4 controls neuronal morphology through distinct cytoplasmic signaling domains and the recruitment of Farp2-RacGEF. Wiring The Brain – Cold Spring Harbor Laboratory, Abstract Book Page 100, Cold Spring Harbor, NY. *Poster Presentation* **Co-corresponding authors*

Lin, R[#], Carlin E[#], Kaprielian Z*, **Tran TS***. (2012). Dorsal and ventral spinal commissural axons require neuropilin-2 for their contralateral guidance. Society for Neuroscience Meeting, Program No. 634.01/A46. New Orleans, LA. *Poster Presentation* **Co-corresponding authors*

Lin R[#], Carlin E[#], Kaprielian Z*, **Tran TS***. (2012). GABAergic commissural neurons in the mouse ventral spinal cord require neuropilin-2 for their contralateral axon guidance during development. Axon Guidance, Synapse Formation & Regeneration--Cold Spring Harbor Laboratory meeting, Abstract Book Page 109. Cold Spring Harbor, NY. *Poster Presentation*

Peng S-S[#], Mlechkovich G[#], Shacham V, Martinez E, Yaron A*, **Tran TS***. (2012). Plexin-A4 controls diverse cellular responses in developing mammalian neurons through distinct cytoplasmic signaling domains. Gordon Research Conferences in Neural Development, Newport, RI. *Selected Oral Presentation* **Co-corresponding authors*

Tran TS, Wang Q, Koropouli E, Ginty DD, Kolodkin AL (2010) Secreted Semaphorin Control of Dendrite and Spine Morphology During Development and in the Adult Mouse CNS. Axon Guidance, Synaptic Plasticity & Regeneration--Cold Spring Harbor Laboratory meeting, Abstract Book Page 224. Cold Spring Harbor, NY. *Poster Presentation*

Tran TS, Rubio ME, Clem RL, Huganir RL, Ginty DD, Kolodkin AL (2009) Secreted Semaphorins and Their Receptors Control Spine Distribution and Morphogenesis in the Postnatal CNS. The Solomon H. Snyder Department of Neuroscience Retreat, Baltimore, MD. *Selected Oral Presentation*

Tran TS, Rubio ME, Case L, Tessier-Lavigne M, Ginty DD, Kolodkin AL (2009) Secreted Semaphorins and Their Receptors Control Distinct Aspects of Dendrite and Synapse Formation. Synapses: From Molecules To Circuits & Behavior--Cold Spring Harbor Laboratory, Abstract Book Page 10. Cold Spring Harbor, NY. *Selected Oral Presentation*

Carlin, EM[#], **Tran, TS^{*,*}**, Nakada, Y, Parab, P, Johnson, JE, Kaprielian, Z*. (2008). Npn2 is required for the pathfinding of DII commissural axons on the contralateral side of the floor plate. Axon Guidance, Synaptogenesis and Neural Plasticity, Abstract Book Page 41, Cold Spring Harbor, NY. *Poster Presentation *Co-corresponding authors*

Tran TS, Rubio ME, Case L, Tessier-Lavigne M, Ginty DD, Kolodkin AL (2008) Secreted Semaphorins and Their Receptors Control Distinct Aspects of Dendrite and Spine Development. Axon Guidance, Synaptogenesis and Neural Plasticity--Cold Spring Harbor Laboratory, Abstract Book Page 211. Cold Spring Harbor, NY. *Selected Oral Presentation*

Tran TS, Rubio ME, Case L, Tessier-Lavigne M, Ginty DD, Kolodkin AL (2007) Secreted Semaphorins and Their Receptors Modulate Dendritic Spine Morphology and Synapse Formation in the Adult Mouse CNS. The Assembly and Function of Neuronal Circuits Meeting, Ascona, Switzerland. *Selected Oral Presentation*

Tran TS, Ginty DD, Kolodkin AL (2006) Secreted Semaphorins Modulate Dendritic Morphology and Synaptic Functions in the Adult Mouse CNS. Axon Guidance, Synaptogenesis and Neural Plasticity--Cold Spring Harbor Laboratory meeting, Abstract Book Page 199. Cold Spring Harbor, NY. *Poster Presentation*

Tran TS, Howell BW. Reelin-Dab1 Signaling Regulates APP Processing During Neuronal Development. Society for Neuroscience Annual Meeting, Program No. 492.20. 2004. San Diego, CA. *Poster Presentation*

Tran TS, Phelps PE. Embryonic GABAergic Spinal Commissural Neurons Project Rostrally to Mesencephalic Targets. Society for Neuroscience Annual Meeting, Program No. 142.21. 2003. New Orleans, LA. *Poster Presentation*

Tran TS, Phelps PE. Evidence for the redistribution of GAD65 within developing GABAergic commissural neurons. Society for Neuroscience Annual Meeting, Program No. 589.10. 2001. San Diego, CA. *Poster Presentation*
