

Curriculum vitae

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Education

Year	Degree (Honors)	Field of Study (Thesis advisor for PhDs)	Institution
2003	B.S. (Summa cum laude)	Biology	St. Mary's University, San Antonio, TX
2009	Ph.D.	Integrative Biology (David Russell, Ph.D., advisor)	UT Southwestern Medical Center

Postdoctoral Training [*Include residency/fellowship*]

Year(s)	Titles	Specialty/Discipline (Lab PI for postdoc research)	Institution
2009-2014	Postdoctoral Fellow	Synaptic transmission (Ege Kavalali, Ph.D., PI)	UT Southwestern Medical Center

Faculty Academic Appointments

Year(s)	Academic Title	Department	Academic Institution
2014	Instructor	Neurology and Neurotherapeutics	UT Southwestern Medical Center
2016	Assistant Professor	Neurology	UT Southwestern Medical Center

Major Administrative/Leadership Positions

Year(s)	Position Title	Institution
2014-2020	Core Manager, Whole Brain Microscopy Facility	UT Southwestern Medical Center
<p><i>As the inaugural Core Manager, I organized the facility's implementation, expansion and ongoing operations. I have spearheaded efforts to bring Whole Slide Imaging (WSI), Serial Two-Photon Tomography (STPT) and automated image analysis methods to UT Southwestern and external investigators and was one of the first wave of UTSW cores to implement the iLab core facility management platform.</i></p>		
2020-Present	Director, Whole Brain Microscopy Facility	UT Southwestern Medical Center
<p><i>The WBMF user base has grown over five-fold to ~200 active clients from 13 external institutions and 32 departments across UTSW under my leadership and is now designated as a UTSW Institutionally Supported Core (ISC) to reflect the importance of the core operations to the campus community. I have trained additional staff to expertly operate our instruments, to cater to the increasing demand while maintaining a high bar for service and scientific discovery.</i></p>		
2020-Present	Director, Neuro-Models Facility	UT Southwestern Medical Center
<p><i>I was appointed as the Director of the Neuro-Models Facility in 2020 to reorganize its operations. The restructured NMF has been successful in maintaining the unique behavioral testing, surgical and EEG recording services critical for our user base (16 client labs and growing), while operating with close to 100% cost recovery.</i></p>		

Committee Service (Member, unless noted otherwise)

Year(s)	Name of Committee	Institution/Organization
2017	Neurology Research Committee	UTSW Dept. of Neurology and Neurotherapeutics
2018-Present	Advanced Imaging Initiative	UTSW Depts. of Cell Biology, Neuroscience, Neurology and TAMU School of Dentistry
2021-Present	OBI BioHPC Administrator	UTSW O'Donnell Brain Institute

Honors and Awards

Year	Name of Honor/Award	Awarding Organization
2004	Institutional Predoctoral NRSA	National Institutes of Health
2006	Best Poster Award, Biochemistry and Molecular Biology of Lipids section	American Society for Biochemistry and Molecular Biology (ASBMB) Annual Meeting
2006	Graduate Student Travel Award	ASBMB Annual Meeting
2010	Institutional Postdoctoral NRSA	National Institute of Mental Health
2011	Individual Postdoctoral NRSA	National Institute of Mental Health
2014	Young Investigator Award (NARSAD)	Brain and Behavior Research Foundation

Professional Societies [List all society committees, leadership, and course leadership roles here]

Dates	Society Name, member
2010-Present	Society for Neuroscience, member
2019-Present	Association of Biomolecular Resource Facilities, member

Editorial Activities

Year(s)	Journal Name
2013-Present	Ad Hoc reviewer for: Lipids, Neuropsychopharmacology, Advances in Medicine, Journal of Neuroscience Research, Scientific Reports, Advanced Science

Grant Support

<u>Present</u>	Grantor: Texas Alzheimer's Research and Care Consortium (TARCC)
	Title of Project: A Novel MRI Biomarker for Brain Tau Deposition
	Role: Co-I. Fang (Frank) Yu, PI.
	Annual amount and date (direct costs only to Denise Ramirez): \$2,724
	Award period: 10/16/2020-10/15/2022
	Total amount of award: \$4,548
	Grantor: National Institute of Neurological Diseases and Stroke (NINDS)
	Title of Project: Cell Type Specific Genetic Manipulation to Dissect Cholinergic Interneuron Function and Plasticity in a Symptomatic Model of DYT1 Dystonia
	Role: Co-I. William Dauer, PI.
	Annual amount and date (direct costs only to Denise Ramirez): \$8,832
	Award period: 2/1/2021-1/31/2026
	Total amount of award: \$46,274
	Grantor: Dr. Donald E. and Patsy Meier Fund for Cerebral Amyloid Angiopathy (CAA) Research
	Title of Project: Assessment of baseline amyloid burden in mouse models of CAA and prospective treatments
	Role: Mark Goldberg and Denise Ramirez, Co-PIs
	Award period: 1/1/2021-8/31/2022
	Total amount of award: \$150,000
<u>Pending</u>	Grantor: National Institute of General Medical Sciences (NIGMS)
	Title of Project: High-performance slide scanner for multichannel fluorescence, brightfield and polarization

	Role: PI
	Total amount: \$207,781
	Council review date: Nov. 9-10, 2021

Teaching Activities

Year(s)	Activity
<u>Medical and graduate school didactic and small group teaching</u>	
2014-Present	One-on-one slide scanner training sessions, cumulatively over 300 training sessions since 2014
2017	Co-leader with Dr. Woo-Ping Ge, Neurotechniques Journal Club (UTSW Neuroscience Graduate Program)
2017, 2019, 2020, 2021*	WBMF tour/demonstration for “Optical Microscopy for Biomedical Research” graduate course directed by Dr. Kate Luby-Phelps (*virtual in 2021)
<u>Postgraduate medical education (graduate & continuing medical education)</u>	
2019	“Neuroimaging in Research” lecture for Neurology residents
<u>Graduate Student Trainee Co-mentor</u>	
2021	Katherine Poinatte (Mark Goldberg and Helen Lai, co-mentors)

Invited Lectures [*Since last promotion/appointment*]

Year(s)	Title	Location
<u>Regional/Local</u>		
2017	Circuit mapping in mouse models of brain injury and disease by serial two-photon tomography (poster)	Team Science Research Resources Fair, UTSW CTM
2017	Circuit mapping in mouse models of brain injury and disease by serial two-photon tomography (poster)	Neuroscience Graduate Program Annual Retreat, UTSW
2018	Progress and Expansion of the Whole Brain Microscopy Facility: recent advances in automated quantification of whole brain images	Neurology WIPS, UTSW
2018	An automated image analysis pipeline for registration and quantification of volumetric serial two-photon images in animal models of brain injury and disease (poster)	Neuroscience Graduate Program Annual Retreat, UTSW
2019	Serial Two-Photon Tomography and Automated Image Analysis Pipeline	Advanced Imaging Initiative Mini-Symposium
2019	Progress and Expansion of the Whole Brain Microscopy Facility: recent advances in	Neurology WIPS, UTSW

	automated quantification of whole brain images	
2021	O'Donnell Brain Institute Research Resources Seminar - Overview of the Whole Brain Microscopy Facility and the Neuro-models Facility	O'Donnell Brain Institute, UTSW (virtual)
2022	TBD	Neurology Research Seminar, UTSW
<u>National</u>		
2019	Mapping Brain Circuitry in Health and Disease Using Serial Two-Photon Tomography	Nebraska Center for the Prevention of Obesity Related Diseases (NPOD) Annual Fall Symposium; Univ. of Nebraska-Lincoln
2021	Serial Two-Photon Tomography and Automated Image Analysis Pipeline	Arizona Imaging and Microanalysis Society (AIMS) Annual Meeting (virtual)

Technological and Other Scientific Innovations

I developed monoclonal antibodies directed against the enzyme cholesterol 24-hydroxylase which were licensed to Millipore, Santa Cruz and Abcam.

http://www.emdmillipore.com/US/en/product/Anti-Cholesterol-24-Hydroxylase-Antibody%2C-clone1A7,MM_NF-MAB2259

<http://www.scbt.com/datasheet-136148-cyp46-1f11-antibody.html>

<https://www.abcam.com/cyp46a1-antibody-1a7-bsa-and-azide-free-ab255757.html>

Service to the Community

Year(s)	Role	Organization or institution
2017	Oral presentation/demonstrations for Chancellor's Council Meeting entitled "Peeking Inside: Visualizing brain injury through microscopy"	UT System, UTSW
2017	Open House/WBMF grand re-opening	UTSW
2017	Haggerty Family Foundation WBMF tour/demonstration	UTSW
2017	Interviewer for prospective medical students	UTSW Medical School
2018	"Inside Your Brain" lab demonstrations and oral presentations for first annual "Science in the City" public outreach event	UTSW, Dallas Morning News
2018	Lab demonstrations and oral presentations for Cary Council members	UTSW

2018	Career Day presentation	St. Maria Goretti Catholic School, Arlington TX
2018	“Hands on Healthcare” lab demonstrations/WBMF tours	UTSW, Texas Legislature
2018	Interviewer for prospective medical school students	UTSW Medical School
2018	“Neurosphere” immersive video presentation, UTSW 75th Anniversary Signature Event	UTSW, DHD Films
2019	WBMF tour/demonstration for visiting student regent	UT System, UTSW
2019	Meier Family Foundation WBMF tour/demonstration	UTSW
2019	Alzheimer’s Lunch and Lab Tour	UTSW Center for Alzheimer’s and Neurodegenerative Disease
2019	“Inside Your Brain” lab demonstrations and oral presentations for annual “Science in the City” public outreach event	UTSW, Dallas Morning News
2019	WBMF tour for U.S. Army Futures Command	UTSW, UT System, U.S. Army
2019	WBMF tours (3) for Neurology residency recruitment of research track applicants	UTSW Neurology
2019	Dementia with Lewy Body Lunch and Lab Tour	UTSW O’Donnell Brain Institute
2019	Middle School Science Fair judge	St. Maria Goretti Catholic School, Arlington TX
2020	Selected contributor to UTSW BrainArt 2020 exhibit presented at 4 venues	UTSW O’Donnell Brain Institute
2020	Developed virtual NL Research Labs Tour for prospective Neurology residents and participated in virtual interviews	UTSW Neurology
2020-2021	Interviewer for new hires to Neurology Finance Team (24 interviews; virtual)	UTSW Neurology
2020-2021	Interviewer for faculty candidates (5 interviews; virtual and/or in person)	UTSW Neurology, Neuroscience, Psychiatry
2021	Interviewer for prospective medical students (8 interviews; virtual)	UTSW Medical School

Bibliography

Peer-Reviewed Publications (*List in chronological order with complete pagination. Authors should be listed in the same order as they appear in the published article. Do not include abstracts or submitted works.*)

Original Research Articles

1.	Jo M, Thomas KS, O'Donnell DM , Gonias SL. (2003) <u>Epidermal growth factor receptor-dependent and -independent cell-signaling pathways originating from the urokinase receptor.</u> J Biol Chem 278:1642-6
2.	Kotti TJ, Ramirez DM , Pfeiffer BE, Huber KM, Russell DW. (2006) <u>Brain cholesterol turnover required for geranylgeraniol production and learning in mice.</u> PNAS 103:3869-74
3.	Yildiz Y, Matern H, Thompson B, Allegood JC, Warren RL, Ramirez DM , Hammer RE, Hamra FK, Matern S, Russell DW. (2006) <u>Mutation of mouse bile acid β-glucosidase gene (<i>Gba2</i>) causes glycolipid storage disease and impaired male fertility.</u> J Clin Invest 116: 2985-94
4.	Ramirez DM , Andersson S, Russell DW. (2008) <u>Neuronal expression and subcellular localization of cholesterol 24-hydroxylase in the mouse brain.</u> J Comp Neurol 507: 1676-93
5.	Ramirez DM , Khvotchev M, Trauterman B, Kavalali ET. (2012) <u>Vti1a identifies a vesicle pool that preferentially recycles at rest and maintains spontaneous neurotransmission.</u> Neuron 73: 121-134
6.	Raingo J, Khvotchev M, Liu P, Darios F, Li YC, Ramirez DM , Adachi M, Lemieux P, Toth K, Davletov B, Kavalali ET. (2012) <u>VAMP4 directs synaptic vesicles to a pool that selectively maintains asynchronous transmission.</u> Nat Neurosci 15: 738-45
7.	Bal M, Leitz J, Reese AL, Ramirez DM , Durakoglugil M, Herz J, Monteggia LM, Kavalali ET. (2013) <u>Reelin mobilizes a VAMP7-dependent synaptic vesicle pool and selectively augments spontaneous neurotransmission.</u> Neuron 80: 934-46
8.	Rivas JR, Ireland SJ, Chkheidze R, Rounds WH, Lim J, Johnson J, Ramirez DM , Ligocki AJ, Chen D, Guzman AA, Woodhall M, Wilson PC, Meffre E, White C 3rd, Greenberg BM, Waters P, Cowell LG, Stowe AM, Monson NL. (2017) <u>Peripheral VH4+ plasmablasts demonstrate autoreactive B cell expansion toward brain antigens in early multiple sclerosis patients.</u> Acta Neuropathol 133: 43-60
9.	Crawford DC*, Ramirez DM* , Trauterman B, Monteggia LM, Kavalali ET. (2017) <u>Selective molecular impairment of spontaneous neurotransmission modulates synaptic efficacy.</u> Nat Commun 8:14436 (*Equal contribution)
10.	Ramirez DMO , Crawford DC, Chanaday NL, Trauterman B, Monteggia LM, Kavalali ET. (2017) <u>Loss of Doc2-Dependent Spontaneous Neurotransmission Augments Glutamatergic Synaptic Strength.</u> J Neurosci 37: 6224-6230
11.	Filatenkov A, Richardson TE, Daoud E, Johnson-Welch SF, Ramirez DM , Torrealba J, Greenberg B, Monson NL, Rajaram V. (2017) <u>Persistence of parenchymal and perivascular T-cells in treatment-refractory anti-N-methyl-D-aspartate receptor encephalitis.</u> Neuroreport 28:890-895
12.	Hoerder-Suabedissen A, Korrell KV, Hayashi S, Jeans A, Ramirez DMO , Grant E, Kavalali ET, Wilson MC, Molnár Z. (2019) <u>Cell-specific loss of SNAP25 from cortical projection neurons allows normal development but causes subsequent neurodegeneration.</u> Cereb Cortex doi: 10.1093/cercor/bhy127. PMID: 29850799

13.	Hamner JJ, Carrick KS, Ramirez DMO , Corton MM. <u>Gross and Histologic Relationships of the Retropubic Urethra to Lateral Pelvic Sidewall and Anterior Vaginal Wall in Female Cadavers: Clinical Applications to Retropubic Surgery.</u> (2018) Am J Obstet Gynecol 219:597 e1-597.e8 (PMID: 30278172)
14.	Jackson LA, Ramirez DMO , Carrick KS, Pedersen R, Spirtos A, Corton MM. <u>Gross and Histologic Anatomy of the Pelvic Ureter: Clinical Applications to Pelvic Surgery.</u> (2019) Obstet Gynecol 133: 896-904 (PMID: 30969205)
15.	Jackson LA, Hare AM, Carrick KS, Ramirez DM , Hamner JJ, Corton MM. <u>Anatomy, Histology, and Nerve Density of Clitoris and Associated Structures: Clinical Applications to Vulvar Surgery.</u> (2019) Am J Obstet Gynecol doi: 10.1016/j.ajog.2019.06.048 (PMID 31254525)
16.	Poinsatte K, Betz D, Torres VO, Ajay AD, Mirza S, Selvaraj UM, Plautz EJ, Kong X, Gokhale S, Meeks JP, Ramirez DMO , Goldberg MP, Stowe AM. (2019) Visualization and quantification of neural connectivity and neuroinflammation using serial two-photon tomography in the whole mouse brain. Front Neurosci 13:1055. doi: 10.3389/fnins.2019.01055 (PMID: 31636534)
17.	Ortega SB, Torres VO, Latchney SE, Whoolery CW, Noorbhai IZ, Poinsatte K, Selvaraj UM, Benson MA, Meeuwissen AJ, Plautz EJ, Kong X, Ramirez DMO , Ajay AD, Meeks JP, Goldberg MP, Monson N, Eisch AJ, Stowe AM. (2020) B cells migrate into remote brain areas and support neurogenesis and functional recovery after focal stroke in mice. PNAS 117:4983-4993 (PMID: 32051245)
18.	Lin P, Ricagni NC, Horvath P, Ramirez D , Monteggia L, Kavalali E. (2020) VAMP4 maintains a Ca ²⁺ -sensitive pool of spontaneously recycling synaptic vesicles. J Neurosci 40: 5389-5401 (PMID: 32532887)
19.	Jackson LA, Hare AM, Carrick KS, Ramirez DM , Hamner JJ, Corton MM. (2021) Reply to “Anatomy, histology, and nerve density of clitoris and associated structures: clinical applications to vulvar surgery” by Pin PG, Pin J. Am J Obstet Gynecol 224:124-125 doi: 10.1016/j.ajog.2020.08.113
20.	Abdullah KG, Buehler JD, Bird CE, Savani MR, Sternisha AC, Levitt MM, Li W, Ramirez DMO , Patel T, Garzon-Muvdi T, Barnett S, Zhang G, Ashley DM, Hatanpaa KJ, Richardson TE, McBrayer SK. Establishment and propagation of patient-derived organoid models of lower grade glioma. Neuro-oncology – Submitted June 2021, in revision September 2021.
21.	Jacobe H, Zhu JL, Paniagua RT, Florez-Pollack S, Kunzler E, Teske N, Byekova Rainwater Y, Li Q-Z, Hosler G, Li W, Ramirez DMO , Monson NL. Autoantigen microarrays reveal myelin basic protein autoantibodies in morphea. Journal of Translational Medicine – submitted July 2021, in revision October 2021.

Reviews, Chapters, Monographs and Editorials

1.	Russell DW, Halford RW, Ramirez DM , Shah R, Kotti T. (2009) <u>Cholesterol 24-hydroxylase: an enzyme of cholesterol turnover in the brain.</u> Annu Rev Biochem 78: 1017-1040
2.	Kavalali ET, Chung C, Khvotchev M, Leitz J, Nosyreva E, Raingo J, Ramirez DM . (2011) <u>Spontaneous neurotransmission: an independent pathway for neuronal signaling?</u> Physiology (Bethesda) 26: 45-53

3.	Ramirez DM , Kavalali ET. (2011) <u>Differential regulation of spontaneous and evoked neurotransmitter release at central synapses</u> . <i>Curr Opin Neurobiol</i> 21: 275-82
4.	Ramirez DM , Kavalali ET. (2012) <u>The role of non-canonical SNAREs in synaptic vesicle recycling</u> . <i>Cell Logist</i> 2: 20-27
5.	Ramirez DMO , Ajay DA, Goldberg MP and Meeks JP. (2019) <u>Serial Multiphoton Tomography and Analysis of Volumetric Images of the Mouse Brain</u> . In: Hartveit E. (eds) <i>Multiphoton Microscopy</i> . <i>Neuromethods</i> , vol 148. Humana, New York, NY. doi: https://doi.org/10.1007/978-1-4939-9702-2_9

Abstracts

1.	Ramirez DM , Kotti TJ, Russell DW. <u>Brain cholesterol turnover required for geranylgeraniol production and learning in mice</u> . Poster Presentation, ASBMB Annual Meeting, San Francisco, CA, April 2006
2.	Ramirez DM , Kotti TJ, Russell DW. <u>Subcellular localization and neuronal distribution of cholesterol 24-hydroxylase</u> . Poster Presentation, Society for Neuroscience Annual Meeting, San Diego, CA, November 2007
3.	Kotti, TJ, Ramirez DM , and Russell DW. <u>Geranylgeraniol acts on NMDA receptor to affect synaptic plasticity</u> . Poster Presentation, Society for Neuroscience Annual Meeting, Chicago, IL, October 2009
4.	Ramirez DM , Khvotchev M, Trauterman B, and Kavalali ET. <u>Vt1a identifies a pool of vesicles that preferentially recycles at rest and selectively maintains spontaneous neurotransmission</u> . Nanosymposium Oral Presentation, Society for Neuroscience Annual Meeting, Washington, D.C., November 2011
5.	Ramirez DM , Khvotchev M, Trauterman B, Kavalali ET. <u>Vt1a identifies a vesicle pool which selectively maintains spontaneous neurotransmission and signals to postsynaptic eukaryotic elongation factor-2 kinase</u> . Poster Presentation, Gordon Conference – Synaptic Transmission, Waterville Valley, NH, July 2012
6.	Crawford DC, Ramirez DM , Trauterman B, Monteggia LM, Kavalali ET. <u>The role of vt1a- and VAMP7-driven spontaneous vesicle fusion in synaptic plasticity</u> . Poster presentation, Society for Neuroscience Annual Meeting, Chicago, IL October 2015
7.	Ramirez DM , Ma L, Goldberg MP, Meeks JP. <u>High-resolution, three-dimensional serial two-photon tomography of whole mouse brains allows mapping of neuronal circuit alterations following brain injury</u> . Dynamic Poster Presentation, Society for Neuroscience Annual Meeting, Chicago, IL October 2015
8.	Ramirez DM , Goldberg MP, Meeks JP. <u>High-resolution, three-dimensional serial two-photon tomography of whole mouse brains allows mapping of neuronal circuit alterations following brain injury</u> . Poster Presentation, Texas FreshAIR Meeting, Austin, TX October 2016
9.	Ramirez DM , Hernandez A, Bibb JA, Goldberg MP, Meeks JP. <u>Circuit mapping in mouse models of brain injury and disease by serial two-photon tomography</u> . Poster Presentation, Society for Neuroscience Annual Meeting, San Diego, CA November 2016.
10.	Poinsatte K, Gokhale S, Mirza SA, Ramirez DM , Kong X, Plautz EJ, Goldberg MP. <u>High throughput imaging of motor system connectivity in the mouse brain</u> . Poster Presentation, Society for Neuroscience Annual Meeting, San Diego, CA November 2016.
11.	Crawford DC, Ramirez DM , Trauterman B, Monteggia LM, Kavalali ET. <u>Spontaneous neurotransmission driven by non-canonical vesicular SNAREs modulates synaptic plasticity</u> . Poster Presentation, Society for Neuroscience Annual Meeting, San Diego, CA November 2016.

12.	Hamner JJ, Carrick KS, Ramirez DMO , Corton MM. <u>Gross and histologic relationships of the retropubic urethra to lateral pelvic sidewall and anterior vaginal wall in female cadavers: clinical applications to retropubic surgery.</u> American Urogynecologic Society Annual Meeting, Providence, RI October 2017.
13.	Torres VO, Ortega SB, Ramirez DMO , Plautz EJ, Ingle L, Kong X, Stowe AM. <u>B cells Migrate to Remote Areas Supporting Functional Recovery After Stroke.</u> International Stroke Conference, Los Angeles, CA January 2018.
14.	Hamner J, Ramirez D , Carrick K, McIntire D, Corton M. <u>Nerve Density Assessment of Urethra, Paraurethral Tissue and Anterior Vaginal Wall using Immunohistochemistry & Automated Neuronal Axon Detection.</u> Society of Gynecologic Surgeons Annual Scientific Meeting, Orlando, FL March 2018
15.	Torres VO, Ortega SB, Ramirez DM , Ajay A, Plautz EJ, Kong X, Meeks JP, Goldberg MP, Stowe AM. <u>B cells migrate to remote brain areas supporting functional recovery after stroke.</u> Neuroprotection Neurorepair meeting, Dresden, Germany October 2018.
16.	Jackson LA, Pedersen R, Ramirez DMO , Carrick KS, Spirtos A, Corton, MM. <u>Gross and Histologic Anatomy of the Pelvic Ureter: Clinical Applications to Pelvic Surgery.</u> American Urogynecologic Society Annual Meeting, Chicago, IL October 2018.
17.	Ramirez DMO , Ajay DA, Torres VO, Stowe AM, Goldberg MP, and Meeks JP. <u>An automated image analysis pipeline for registration and quantification of volumetric serial two-photon images in animal models of brain injury and disease.</u> Dynamic poster presentation, Society for Neuroscience Annual Meeting, San Diego, CA November 2018.
18.	Jackson LA, Hare AM, Carrick KS, Ramirez DMO , Hamner JJ, Corton MM. <u>Anatomy of Clitoris and Associated Neurovascular Structures: Clinical Applications to Vulvar Surgery.</u> Oral Presentation, 45 th Annual Scientific Meeting of the Society of Gynecologic Surgeons (SGS), Tucson, AZ (2019)
19.	Poinsatte K, Ramirez DM , Ajay A, Betz D, Plautz EJ, Kong X, Meeks JP, Goldberg MP. Whole-Brain Visualization and Quantification of Region-Specific Neuroplasticity and Axonal Connectivity Using Serial Two-Photon Tomography. 29 th International Symposium on Cerebral Blood Flow, Metabolism and Function. Yokohama, Japan July 2019
20.	Poinsatte K*, Torres V*, Ajay A, Plautz EJ, Kong X, Meeks JP, Goldberg MP, Ramirez DMO , Stowe AM. Visualization and Quantification of CD8+ T Cell Diapedesis Into the Ischemic Brain. 29 th International Symposium on Cerebral Blood Flow, Metabolism and Function. Yokohama, Japan July 2019
21.	Ajay AD, Ramirez DMO , Poinsatte K, Goldberg MP, Meeks JP. Computational Methods for Registration and Analysis of Whole Brain Volumetric Image Data Acquired via Serial Two-Photon Tomography. Society for Neuroscience Annual Meeting, Chicago, IL October 2019.
22.	Ramirez DMO , Davenport E, Goldberg MP. Neurosphere 360 ^o : An Immersive Voyage into the Brain. Brain Awareness Campaign Event, Society for Neuroscience Annual Meeting, Chicago, IL October 2019.
23.	Poinsatte K, Ramirez DM , Ajay A, Betz D, Plautz E, Kong X, Meeks JP, Stowe A, Goldberg MP. Visualization and Quantification of Post-Stroke Neural Connectivity in Mice Using Serial Two-Photon Tomography. International Stroke Conference 2020. Los Angeles, CA Feb 2020.
24.	Schneider L*, Irani A, Ajay A, Plautz E, Kong X, Ramirez D , Goldberg M. A Machine Learning Pipeline to Measure Whole Brain Vascular Amyloid in Transgenic Mice Using Serial Two Photon Tomography. International CAA Conference (virtual), September 30-October 1, 2020. *winner of best poster award

25.	Ajay AD, Meeks JP, Tavakkoli A, Ramirez DMO . Creation of an automated registration and analysis pipeline for whole rat brain serial two photon tomography images. Society for Neuroscience Global Connectome: A Virtual Event, January 11-13, 2021.
26.	Schneider LL, Irani AS, Ajay AD, Plautz EJ, Kong X, Ramirez DM , Goldberg MP. Quantifying Whole Brain Vascular Amyloid in Transgenic Mice using Serial Two-Photon Tomography and A Machine Learning Pipeline. International Stroke Conference 2021. March 2021 (virtual).
27.	Schneider LL, Irani AS, Ajay AD, Plautz EJ, Kong X, Ramirez DM , Goldberg MP. Characterizing 3D patterns of whole brain amyloid deposition in transgenic mice using serial two-photon tomography and a machine learning pipeline. Society for Neuroscience Annual Meeting, Virtual: November 8-11, In-Person: November 13-16, Chicago, IL

Non-peer reviewed scientific or medical publications/materials in print or other media

1.	UTSW Newsroom article April 17, 2015; “UT Southwestern acquires next-generation microscopes to create whole brain imaging facility”
2.	St. Mary’s University Gold and Blue Alumni Magazine, Fall 2015 issue; “Tiny Brains, Big Science”
3.	“ Experience Neurosphere 360 ” immersive neuroscience education video, UT Southwestern O’Donnell Brain Institute
4.	UTSW In Pursuit article January 28 th , 2020; “Brain Power to the Max”