CURRICULUM VITAE JULIE LAUREN ROTH, MD, FAAN

Assistant Dean of Medicine, Program in Liberal Medical Education, Advising Associate Professor of Neurology, Associate Professor of Medical Science The Warren Alpert Medical School of Brown University Director of Women's Neurology Comprehensive Epilepsy Program, Department of Neurology Rhode Island Hospital, APC-5 Providence, RI 02903
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Jroth1@lifespan.org (clinical) and Julie Roth@brown.edu (academic)

EDUCATION

Brown University, B.A. 1999, Comparative Literature, English/French

Brown Medical School, M.D. 2004

POSTGRADUATE TRAINING

Brown Medical School/Rhode Island Hospital, Internship in Internal Medicine, 6/2004–6/2005 *Stanley Aronson Prize for Medical Student Excelling in the Neurosciences, 2004

Harvard Medical School/Beth Israel Deaconess Medical Center, Residency in Neurology, 7/2005–6/2008

*Chief Resident, Neurology, Harvard Medical School/Beth Israel Deaconess Medical Center, Boston, MA 7/2007-6/2008

The Warren Alpert Medical School of Brown University /Rhode Island Hospital, Fellowship in Clinical Neurophysiology, Epilepsy track 7/2008-6/2009

HONORS AND AWARDS

Harvard Medical School, Outstanding Resident Teaching Award, Harvard Medical School, 2006

Neurology Residents Scholar Program, 2007

Harvard Medical School/Beth Israel Deaconess Medical Center, Administrative Chief Resident, 7/2007–6/2008

TopScholar Epilepsy Fellow, American Epilepsy Society Annual Meeting, 2008

Resident Teaching Award (Annual Recipient for Neurology Faculty), Brown/Rhode Island Hospital Neurology Residency 2014

The Dean's Excellence in Teaching Award, The Warren Alpert Medical School of Brown University 2010, 2011, 2012, 2014, 2015, 2016, 2018, 2020, 2022

Certificate of Recognition for Exemplary Teaching in BIOL 3652 IMS II: Brain Sciences, 2010, 2013, 2017, 2018, 2019, 2020

Positive Champion of the Learning Environment, The Warren Alpert Medical School of Brown University 2018, 2021

Fellow of the American Academy of Neurology (FAAN) 2018

Senior Citation: Profile in Competence Award, Ability III: Using Basic Science in the Practice of Medicine Award, awarded by MD Class of 2019, Alpert Medical School, 2019

A.B. Baker Teaching Recognition Award, American Academy of Neurology, 2019

Alpha Omega Alpha Honor Medical Society, Faculty Inductee, 2020

Top Doctor in the category of Neurology, for Rhode Island Monthly Magazine 2014, 2017, 2018, 2019, 2020, 2022

Longitudinal Integrated Clerkship Mentoring Award, Alpert Medical School 2022

Member's Choice Award, American Headache Society, for Best Manuscript of 2021

PROFESSIONAL LICENSES AND BOARD CERTIFICATION

Full Allopathic Medical License, Rhode Island Department of Health, Board of Medical Licensure and Discipline - MD12830 - *Active*

USMLE I, II, III – passed 2002-2005

American Board of Psychiatry and Neurology (ABPN) Certification Examination in Neurology – initial certification 2008, recertification 2018

American Board of Psychiatry and Neurology (ABPN) Certification Examination in Clinical Neurophysiology – initial certification 2011, recertification 2018

HOSPITAL AND CLINICAL APPOINTMENTS

Rhode Island Hospital, Department of Neurology and Comprehensive Epilepsy Program, Providence, RI, Attending Neurologist, 2009-present. Director of Women's Health in Epilepsy, 2012-present.

Rhode Island Hospital and The Warren Alpert Medical School of Brown University, Providence, RI, Director of Women's Neurology, 2015-present

Women and Infants Hospital, Providence, Rhode Island, Affiliated Neurologist, 7/2009-present

Newport Hospital, Newport, Rhode Island, Affiliated Neurologist – 1/2010-present

The Miriam Hospital, Providence, RI, Consulting Neurologist, 2015-present

Adult Correction Institute (ACI), Cranston, Rhode Island, Consulting Neurologist – 10/2010-present

ACADEMIC APPOINTMENTS

Assistant Professor, Neurology, The Warren Alpert Medical School of Brown University/Rhode Island Hospital, Providence, RI 2009-2018

Assistant Professor, Medical Science, The Warren Alpert Medical School of Brown University/Rhode Island Hospital, Providence, RI 2017-2018

Associate Professor, Neurology, The Warren Alpert Medical School of Brown University/Rhode Island Hospital, Providence, RI 2018-present

Associate Professor, Medical Science, The Warren Alpert Medical School of Brown University/Rhode Island Hospital, Providence, RI 2018-present

Assistant Dean of Medicine, Program in Liberal Medical Education (PLME), Advising, Providence, RI 2021-present

OTHER APPOINTMENTS

Ad hoc reviewer for *Neurology* (2010-present); *Aging Health* (2009); *Pediatrics* (2017), *Acta Neurological Scandinavica* (2019-present); *Quantitative Imaging in Medicine and Surgery* (2020); *Obstetric Medicine* (2020-present); *Neurology* (2021-present)

Invited to serve on the Aquifer Neurology Task Force, 2021

MEMBERSHIP IN SOCIETIES

American Academy of Neurology, Member 2005-present, FAAN 2018-present

American Epilepsy Society, Member 2007-present

Rhode Island Neurological Society (RINS), Member 2012-present, Vice President 2017-2021

Brown Institute for Brain Sciences, Member 2015-2018

Association of Migraine Disorders, Advisory Board Member 2015-present

HOSPITAL COMMITTEES

Rhode Island Hospital Neuro-oncology Division Search Committee, member (2010)

Rhode Island Hospital Stroke Division Search Committee, member (2011-2015)

Rhode Island Hospital and The Miriam Hospital, Pharmacy & Therapeutics Committee, member (2012-2020)

Adolescent Medicine Chair Search Committee (Department of Pediatrics), member (2015-2017)

Rhode Island Hospital Comprehensive Epilepsy Program Surgical Planning Conference, coplanner (2012-present)

Migraine Endowed Chair Search Committee (Departments of Neurology and Internal Medicine), member (2019-2021)

Pediatric Surgery Search Committee, Hasbro Children's Hospital and Rhode Island Hospital (2021-present)

UNIVERSITY AND EDUCATIONAL COMMITTEES

The Warren Alpert Medical School of Brown University, LCME Clerkships and Preclinical Committee, member (2011-2012)

Brown Neurology Clinical Competency Committee, member (2013-present)

The Warren Alpert Medical School of Brown University, Medical Faculty Executive Committee (MFEC), elected member (2016-2019)

Brown University, Bioengineering and Biomedical Engineering, Thesis Advisory Committee, for Joshua Levitt, Master of Science Degree candidate (April 2017)

The Warren Alpert Medical School of Brown University, LCME Standards 8 and 9 Committee, member (2018-2020)

The Warren Alpert Medical School of Brown University, LCME Standard 3 Committee, member (2018-2020)

The Warren Alpert Medical School of Brown University, Committee on the Learning Environment (COLE), selected member (2017-2020)

PLME Advisory Selection Board, Brown University and The Warren Alpert Medical School of Brown University, member (2014-2021)

Brown Neurology Medical Education Committee, Brown Neurology, member (2015-present)

PUBLICATIONS LIST

Peer-Reviewed Publications

Depositario-Cabacar D, Peters JM, Pong AW, **Roth J**, Rotenberg A, Riviello JJ, Takeoka M. High-dose intravenous levetiracetam for acute seizure exacerbation in children with intractable epilepsy. *Epilepsia* 2010 July. 51(7);1319-1322. PMID: 20163437

Bond DS, **Roth J**, Nash JM, Wing RR. Migraine and Obesity: Epidemiology, Possible Mechanisms, and the Potential Role of Weight Loss Treatment." *Obesity Reviews* 2011; 12:e362-371. PMID: 20673279

Bond DS, O'Leary KC, Thomas JG, Lipton RB, Papandonatos GD, **Roth J**, Rathier L, Daniello R, Wing RR. Can Weight loss improve migraine headaches in obese women? Rationale and design of the WHAM randomized controlled trial. *Contemporary Clinical Trials*. 2013 March 21. S1551-7144(13)00037-2. (epub ahead of print). PMID: 23524340

Wendell LC, Potter NS, **Roth JL**, Salloway SP, Thompson BB. Successful Management of Severe Neuroinvasive Eastern Equine Encephalitis. *Neurocritical Care* June 2013 (epub ahead of print). DOI: 10.1007/s12028-013-9822-5

Bond DS, Thomas JG, O'Leary KC, Lipton RB, Peterlin BL, **Roth J**, Rathier L, Wing RR. Objectively measured physical activity in obese women with and without migraine. *Cephalalgia*. 2014 Dec 4. pii: 0333102414562970.

- Roth JL, Guest Editor. Rhode Island Medical Journal. "Headache" Issue, February 2015.
- Rathier L and **Roth JL.** A Biobehavioral Approach to Headache Management. *Rhode Island Medical Journal*. "Headache" Issue. February 2015.
- Bond DS, Buse DC, Lipton RB, Thomas JG, Rathier L, **Roth J**, Pavlovic JM, Evans EW, Wing RR. Clinical Pain Catastrophizing in Women with Migraine and Obesity. *Headache*. 2015 Jul:55(7):923-33. doi: 10.1111/head.12597. Epub 2015 Jun 18.
- Bond DS, Thomas JG, Pavlovic J, **Roth J**, Rathier L, O'Leary KC, Lipton RB. Ecological Momentary Assessment of Headache Pain Intensity and Pain Interference in Women with Migraine and Obesity. *Cephalalgia*. 2016 Jan 6. pii: 0333102415625613. [Epub ahead of print]
- Miller LA, Galioto R, Tremont G, Davis J, Bryant K, **Roth J**, LaFrance WC Jr, Blum AS. Cognitive impairment in older adults with epilepsy: Characterization and risk factor analysis. Epilepsy Behavior. 2016 Mar;56:113-7. doi: 10.1016/j.yebeh.2016.01.011. Epub 2016 Feb 7.
- Gross R, Davis J, **Roth J**, Querfurth H. Cognitive Impairments Preceding and Outlasting Autoimmune Limbic Encephalitis. Case Reports in Neurological Medicine. 2016:7247235. doi: 10.1155/2016/7247235. Epub 2016 Jan 10
- Bond, D.S., Pavlović, J.M., Lipton, R.B., Graham Thomas, J., Digre, K.B., **Roth, J.**, Rathier, L., O'Leary, K. C., Evans, E. W. and Wing, R.R., Sexual Dysfunction in Women With Migraine and Overweight/Obesity: Relative Frequency and Association With Migraine Severity. *Headache: The Journal of Head and Face Pain* 2016 Dec. doi:10.1111/head.13019
- Lillis, J., Thomas, G.T., Seng, E.K., Lipton, R.B., Pavlovic, J., Rathier, L., **Roth, J.**, O'Leary, K., & Bond, D.S. Importance of pain acceptance in relation to headache disability and pain interference in women with migraine and overweight/obesity. *Headache: The Journal of Head and Face Pain.* 13 Mar 2017. doi: 10.1111/head.13058
- Galioto, R, O'Leary, K.C., Thomas J.G., Demos K., Lipton R.B, Gunstad, J., Pavlovic, J.M., **Roth, J.**, Rathier, L., & Bond, D.S. Lower inhibitory control interacts with greater pain catastrophizing to predict greater pain intensity in women with migraine and overweight/obesity. *Journal of Headache and Pain*. 2017 18(1):41. doi: 10.1186/s10194-017-0748-8
- Farris SG, Thomas JG, Abrantes AM, Lipton RB, Pavlovic J, Smitherman TA, Irby MB, Penzien DB, **Roth J**, O'Leary KC and Bond DS. Pain Worsening with Physical Activity During Migraine Attacks in Women with Overweight/Obesity: A Prospective Evaluation of Frequency, Consistency, and Correlates. *Cephalalgia* 2017 Jan 1:333102417747231.
- Lillis J, Thomas JG, Seng EK, Lipton RB, Pavlovic J, Rathier L, **Roth J**, O'Leary KC, and Bond DS. The association of changes in pain acceptance and headache-related disability. *Headache* 2017 May; 57(5):709-718.
- Galioto, R., O'Leary, K.C., Lipton, R.B., Gunstad, J., Thomas, J.G., Pavlović, J.M., **Roth, J.**, Rathier, L., & Bond, D.S. The role of migraine headache severity, associated features, and interactions with overweight/obesity in inhibitory control. International Journal of Neuroscience. 2018. 128(1):63-70. doi: 10.1080/00207454.2017.1366474

- Bond DS, Thomas JG, Lipton RB, **Roth J**, Pavlovic JM, Rathier L, O'Leary KC, Evans EW & Wing RR. Behavioral Weight Loss Intervention for Migraine: A Randomized Controlled Trial. *Obesity* 2018 Jan;26(1):81-87.
- Bayer AD, Blum AS, Asaad WF, **Roth J**, Toms SA and Deck GM. Fighting Fire with Fire: Surgical Options for Patients with Drug-Resistant Epilepsy. *Rhode Island Medical Journal* 2018 Mar 1;101(2):37-40.
- Farris, S. G., Thomas, J. G., Abrantes, A. M., Godley, F. A., Roth, J. L., Lipton, R. B., Pavlovic, J., & Bond, D. S. Intentional avoidance of physical activity in women with migraine. *Cephalalgia Reports*. 2018 1, 1–8. doi: 10.1177/2515816318788284
- Adjepong K, Boxerman J and **Roth J**. Seeing Stars: Acute Repetitive Occipital Seizures in Hyperglycemia. *Neurographics*. 2019 Feb; 9(1):75-78. doi: https://doiorg/10.3174/ng.1700072
- Lillis J, Thomas JG, Lipton RB, Rathier L, **Roth J**, Pavlovic J, O'Leary KC, Bond Ds. The Association of Changes in Pain Acceptance and Headache-Related Disability. Ann Behav Med. 2019 Jun 4; 53(7):686-690. PMID: 30289426
- **Roth J** and Deck G. "Neurovascular Disorders in Pregnancy: A Review." *Obstetric Medicine* 2019; 0(0): 1-4. DOI: 10.1177/1753495X19825699
- Farris SG, Burr EK, Abrantes AM, Thomas G, Godley FA, **Roth JL**, Lipton RB, Pavlovic J, Bond DS. Anxiety Sensitivity as a Risk Indicator for Anxiety, Depression, and Headache Severity in Women with Migraine. *Headache*. 2019 Jun 5; epub ahead of print. PMID: 31166015.
- Farris SG, Thomas JG, Abrantes AM, Lipton RB, Burr EK, Godley FA, **Roth JL**, Pavlovic JM, Bond DS. Anxiety sensitivity and intentional avoidance of physical activity in women with probable migraine. *Cephalalgia*. 2019 Jul 1; 333102419861712. Epub ahead of print. PMID: 31260336.
- **Roth** J, Chang A, Ricci B, Hall M, Mehta N. Why Not a Podcast? Assessing Narrative Audio and Written Curricula in Obstetrical Neurology. *JGME* 2020 Jan 31. 12 (1): 86-91. PMID 32089798.
- Saldanha IJ, **Roth JL**, Chen KK, Zullo AR, Adam GP, Konnyu KJ, Cao W, Bhuma MR, Kimmel HJ, Mehta S, Riester MR, Sorial MN, Balk EM. Management of Primary Headaches in Pregnancy. Comparative Effectiveness Review No. 234. (Prepared by the Brown Evidence-based Practice Center under Contract No. 290-2015-00002-I.) AHRQ Publication No. 20(21)-EHC026. Rockville, MD: Agency for Healthcare Research and Quality; November 2020. DOI: https://doi.org/10.23970/AHRQEPCCER234.
- Saldanha IJ, Cao W, Bhuma MR, Konnyu KJ, Adam GP, Mehta S, Zullo AR, Chen KK, **Roth** JL, Balk EM. Management of primary headaches during pregnancy, postpartum, and breastfeeding: A systematic review. *Headache*. 2021 Jan; 00:1-33.
- Liu DD, Lauro PM, Phillips RK, Leary OP, Zheng B, **Roth JL**, Blum AS, Segar DJ, Asaad WF. Two-trajectory laser amygdalohippocampotomy: Anatomic modeling and initial seizure outcomes. *Epilepsia*. 2021 Oct; 62 (10):2344-2356. PMID 34338302

Cersonsky TE, **Roth J**. A Midsummer Night's Gene: The familial Neurological Illness of Felix Mendelssohn. *J Med Biogr*. 2021 Oct 12:9677720211046584. doi: 10.1177/09677720211046584. Epub ahead of print. PMID: 34636685.

Erlich-Malona N, Bartolini L, D'Abreu A, **Roth J**. Paroxysmal Hypothermia With Prominent Parkinsonian Features After Suprachiasmatic Tumor Resection. *The Neurohospitalist*. December 2021. PMID: 35419139

Saldanha IJ, Cao W, Bhuma MR, Konnyu KJ, Adam GP, Zullo AR, Chen KK. **Roth JL**, Balk EM. Systematic reviews can guide clinical practice and new research on primary headaches in pregnancy: an editorial on the 2021 Members' Choice Award paper. *Headache*. 2022 May 31 (Online ahead of print) PMID 35638183

Other publications

Blum AS, **Roth JL**. "Focal Status Epilepticus." *Medscape Reference (Emedicine)*. http://emedicine.medscape.com/article/1138539-overview. Updated May 07, 2009.

Roth JL, Ott BR, Gaitanis JN, Blum AS. "The Neuroimmunology of Cortical Disease: Alzheimer's Disease, Epilepsy and Autoimmune Associated Encephalopathies." Coyle PK and Rizvi S. *Clinical Neuroimmunology: Multiple Sclerosis and Related Disorder*. Humana Press, 2011.

Roth JL. "Multiple Sclerosis Treatment Algorithm." Domino FJ. *The 5-Minute Clinical Consult 2012*. Philadelphia: Lippincott, Williams & Wilkins, 2012.

McNicoll L and **Roth JL**. "Dystonia." Ferri F, et al. *Ferri's Clinical Advisor 2013*. Philadelphia: Mosby/Elsevier, 2013, (revision) 2015.

Roth JL and Misra B. "Pseudotumor Cerebri." McGarry K and Tong I. *The 5-Minute Consult Clinical Companion to Women's Health, Second Edition*. Philadelphia: Lippincott, Williams & Wilkins, 2013.

Liu J and **Roth JL**. "Acute Stroke Treatment Algorithm." Domino FJ. *The 5-Minute Clinical Consult 2013*. Philadelphia: Lippincott, Williams & Wilkins, 2013.

Roth JL and Bilodeau C. "Neurology: Headaches and Seizures." Rosene-Montella K, et al. *Medical Management of the Pregnant Patient*. New York: Springer, 2015.

Roth JL, Blum AS, Cavazos JE, et al. *Status Epilepticus*. *Medscape Reference (Emedicine)*. http://emedicine.medscape.com/article/1164462-overview. Updated 2011; 2014; 2015; 2018.

Roth JL. "Wavy Lines: EEGs in the Hospital." *ACP Hospitalist*. Jun 2016. ACP Hospitalist. www.acphospitalist.org/archives/2016/06/expert-analysis-EEG.htm

Goldfarb D, Mehta N and Roth J. "Stroke in Pregnancy." Neurostories.com, 2017.

Roth J. "The Push: A Pregnancy Neurology Podcast. Episode 1: Stroke in Pregnancy." *Neurostories.com*, 2017.

Roth J and Mehta N. "Migraine in Pregnancy." Neurostories.com, 2017.

Roth J. "The Push: A Pregnancy Neurology Podcast. Episode 2: Migraine in Pregnancy." *Neurostories.com*, 2017.

Roth J and Mehta N. "Seizures and Epilepsy in Pregnancy." Neurostories.com, 2017.

Roth J. "The Push: A Pregnancy Neurology Podcast. Episode 3: Epilepsy in Pregnancy." *Neurostories.com*, 2017.

Mehta N and **Roth J.** "Preeclampsia and Its Cerebrovascular Consequences - RCVS and PRES." *Neurostories.com*, 2017.

Roth J. "The Push: A Pregnancy Neurology Podcast. Episode 4: Preeclampsia, RCVS and PRES." *Neurostories.com*, 2017.

Mehta N and **Roth J.** "Pseudotumor and Secondary Causes of Headache in Pregnancy." *Neurostories.com*, 2017.

Roth J. "The Push: A Pregnancy Neurology Podcast. Episode 5: "Pseudotumor Cerebri in Pregnancy." *Neurostories.com*, 2017.

Chang S, Mehta N, and **Roth J.** "Bells' Palsy and Other Neuropathies in Pregnancy and Postpartum." Neurostories.com, 2017.

Roth J. "The Push: A Pregnancy Neurology Podcast. Episode 6: "Bell's Palsy and Neuropathy in Pregnancy." *Neurostories.com*, 2017.

Roth J and Hall M. "Podcasting for Medical Education: A how to guide." *Neurostories.com*, 2017.

Roth, JL. "Status Epilepticus." Medscape Drugs & Diseases. Updated February 13, 2018. Available at: https://emedicine.medscape.com/article/1164462-overview

Mohler A, Montalvo JM, **Roth J.** "Paraneoplastic and Autoimmune Encephalopathies." Coyle PK and Rizvi S. Clinical Neuroimmunology: Multiple Sclerosis and Related Disorder 2nd Edition. Springer (2019).

Roth JL. "Dystonia." Ferri F, et al. Ferri's Clinical Advisor 2020. Philadelphia: Mosby/Elsevier (2020).

Phillips O and Roth JL. "Dystonia." Ferri F, et al. Ferri's Clinical Advisor 2021. Philadelphia: Mosby/Elsevier (2021).

Roth JL and Cahill J. How to Answer a Clinical Question. Eltorei ATM, Rougas SC, George P. *The Pre-Clerkship Guide*. First Edition. Lippincott (2021).

Abstracts

Kemp-Mehl S; Sundstrom DT; **Roth J**; Krishnamurthy KB. The Path Towards Epilepsy Surgery – Why Do Patients Fail To Progress? Comprehensive Epilepsy Center, Beth Israel Deaconess Medical Center and Harvard Medical School, Boston, Massachusetts. Poster presented at American Epilepsy Society Annual Meeting, December, 2007.

- Depositario-Cabacar D; Peters J.; Pong AW; **Roth J**; Rotenberg A; Riviello JJ; Takeoka M. High-dose Intravenous Levetiracetam for Acute Seizure Exacerbation in Children with Intractable Epilepsy. Division of Epilepsy and Clinical Neurophysiology, Department of Neurology, Children's Hospital, and Harvard Medical School, Boston, Massachusetts. Poster presented at American Epilepsy Society Annual Meeting, December, 2007.
- **Roth J**; Sundstrom DT; Kemp-Mehl S; Krishnamurthy KB. Pregnant Women With Epilepsy Taking Older Anticonvulsants Have Higher Rates of Miscarriage and Fetal Demise. Comprehensive Epilepsy Center, Beth Israel Deaconess Medical Center and Harvard Medical School, Boston, Massachusetts. Poster presented at American Epilepsy Society Annual Meeting, December, 2007 and The Greater Boston Epilepsy Society Meeting, February, 2009.
- **Roth JL**, Paniszyn K, Gendron V, Harini C, Blum AS. Barriers to Bone Health Counseling for Women with Epilepsy on Antiepileptic Drugs. The Warren Alpert Medical School of Brown University/Rhode Island Hospital. Poster presented at American Epilepsy Society Annual Meeting, December, 2012.
 - Otto, Alexander. "Bone Risks of Older Antiepileptics Sometimes Unaddressed." *Internal Medicine News, Neurology News*, and *Endocrinology News*. 12/3/12. Published online by Digital Network. Feature on American Epilepsy Society poster presentation, above.
- Bond DS, Lipton RB, Thomas JG, O'Leary KC, **Roth JL**, Papandonatos G, Rathier L, Wing RR. Can weight loss improve migraine headaches in obese women? Rationale and design of the Women's Health and Migraine Trial. Weight Control and Diabetes Research Center of Brown University. Contemporary clinical trials. 05/2013; 35(1):133–144. Poster presented at NIH Pain Consortium Symposium in April, 2013.
- Roth JL, Mehta N. The Neurology of Pregnancy and the Postpartum Period: Proposal for A Case-Based Curriculum. Abstract and Poster presented at Alpert Medical School of Brown University, The Program in Educational Faculty Development of Alpert Medical School, Medical Education Scholarship Seminar and Reception April 6, 2015.
- Park H and **Roth JL**. "Impact of inhaled marijuana on cEEG spike count in a 33-year old man with idiopathic epilepsy: A case report and literature review." Abstract and Poster presented at American Academy of Neurology Annual Meeting, Washington, DC. April 22, 2015.
- Ludwig KS and **Roth J**. Exacerbation of Headache by Lifestyle Changes Common to Pregnancy: Is Pregnancy Bound to Worsen Neurological Conditions? Presented virtually at AHS Annual Meeting, and published in: *Abstracts at the 62nd Annual Scientific Meeting of the American Headache Society. Headache 2020. Wiley Periodicals, LLC. Page 147. DOI:* 10.1111/head.13854
- Mandel D, Shu L, Tinsley A, Cutting S, **Roth J.** Admission for Migraine is Increasing Over Time (2673). Poster was to be presented at the American Academy of Neurology Annual Meeting (cancelled), abstract available April 14, 2020.
- Ding JJ, Mitta S, Kole-White M, **Roth J**, Malhame I. Preventability of Strokes During Pregnancy and Postpartum. Poster presented at Society for Maternal Fetal Medicine 41st Annual Pregnancy Meeting, virtual conference, January 25-30, 2021. American Journal of Obstetrics and Gynecology, Feb 2021.

Shu L, Mandel D, Xiao H, **Roth J**. Association of migraine with hospitalization for mental health disorders in US adults. Poster presented at American Academy of Neurology Annual Meeting (P10.072), virtual conference, April, 2021

Pending Articles and Chapters.

Hovaguimian A, **Roth J.** Management of Chronic Migraine. *British Medical Journal*. 2021. *Manuscript accepted, pending publication*.

Zheng B, Hsieh B, Rex N, Lauro P, Collins S, **Roth J**, Blum A, Ayub N, Asaad W. A Hierarchical Anatomical Framework and Workflow for Organizing Stereotactic Encephalography in Epilepsy. *Human Brain Mapping*. 2022. *Manuscript accepted, pending publication*.

Hovaguimian A, Stavros K, **Roth J**. Twelve EdTech Tips for Medical Education. 2022. *Manuscript in preparation, Medical Teacher*.

Pinto M, Raimondo E, LaBarbera V, Sarezky J, Asaad W, **Roth J**. Severity of Encephalopathy on EEG Correlates with D-dimer Level in COVID-19. (2022) *Manuscript in revision*.

PRESENTATIONS, LECTURES, AND PANEL PARTICIPATION: INTERNAL

Warren Alpert Medical School of Brown University Lectures and Panel Discussions

January 10, 2010 – "Neurological Exam Part I: MMSE and CN Exam" – Lecture and demonstration for First Year Medical Students, Doctoring Course

February 4, 2010 – "Localization II" – Lecture for First Year Medical Students

March 23, 2010 – "Careers and Cookies: A Career in Neurology" – Discussion with 1st and 2nd Year Medical Students

January 11, 2011 - "Neurological Exam Part I: MMSE and CN Exam" - Lecture and

demonstration for First Year Medical Students, Doctoring Course

January 30, 2011 – "Dizziness" – First Year Medical Students, Brain Sciences

January 10, 2012 - "Neurological Exam Part I: MMSE and CN Exam" - Lecture and

demonstration for First Year Medical Students, Doctoring Course

January 30, 2012 – "Dizziness" – First Year Medical Students, Brain Sciences

February 9, 2012 – "Neurology – USMLE Step One Review Session – Part I" – Lecture for Second Year Medical Students

February 15, 2012 – "Neurology – USMLE Step One Review Session – Part II" – Lecture for Second Year Medical Students

March 6, 2012 – Panelist, Women in Residency Fair

January 15, 2013 - "Neurological Exam Part I: MMSE and CN Exam" - Lecture and

demonstration for First Year Medical Students, Doctoring Course

January 29, 2013 – "Dizziness" – First Year Medical Students, Brain Sciences

March 13, 2013 – "Neurology – USMLE Step One Review Session – Part II" – Lecture for Second Year Medical Students

January 24, 2014 – "Dizziness" – First Year Medical Students, Brain Sciences

January 24, 2014 – "The Neurological Exam as a Localization Tool" – First Year Medical Students, Brain Sciences

January 29, 2014 – "Careers in Neuroscience" – Medical Students (1st and 2nd Year)

February 21, 2014 – "Toxic-Metabolic Encephalopathy" – First Year Medical Students, Brain Sciences

January 12, 2016 – "Neurological Exam Part I: MMSE and CN Exam" – Lecture and demonstration for First Year Medical Students, Doctoring Course

January 21, 2016 - "Dizziness and Vertigo" - First Year Medical Students, Brain Sciences

February 10, 2016 – "Student Interest Group in Neurology (SIGN): Neurology Career Pathways" – First and Second Year Medical Students

February 11, 2016 - "Headache" - First Year Medical Students, Brain Sciences

February 16, 2016 – "Neuropharmacology of Epilepsy" – First Year Medical Students, Brain Sciences

February 17, 2016 – "Toxic-Metabolic Encephalopathy" – First Year Medical Students, Brain Sciences

February 22, 2016 – "A Case of Headaches, Personality Changes and Vision Impairment" – First Year Medical Students, Brain Sciences

March 8, 2016 – "CPC: Intractable Epilepsy" – With neuropathologist Dr. John Donahue, First Year Medical Students, Brain Sciences

January 10, 2017 – "Neurological Exam Part I: MMSE and CN Exam" – Lecture and demonstration for First Year Medical Students, Doctoring Course

January 18, 2017 - "Dizziness and Vertigo" - First Year Medical Students, Brain Sciences

February 6, 2017 – "Headache" – First Year Medical Students, Brain Sciences

February 23, 2017 – "Toxic-Metabolic Encephalopathy" – First Year Medical Students, Brain Sciences

March 7, 2017 – "CPC: Intractable Epilepsy" – With neuropathologist Dr. John Donahue, First Year Medical Students, Brain Sciences

November 27, 2017 – "Tumor Treatment Fields: Impact on Clinical Treatment of Brain Tumors." Medical Impact of Translational and Basic Science (MITBS) Pre-Clinical Elective (First and Second Year Medical Students)

January 9, 2018 – "Neurological Exam Part I: MMSE and CN Exam" – Lecture and demonstration for First Year Medical Students, Doctoring Course

January 18, 2018 - "Dizziness and Vertigo" - First Year Medical Students, Brain Sciences

January 31, 2018 – "Best of Brain Sciences: USMLE Step One Review Session" – Second Year Medical Students, Alpert Medical School

January 5, 2018 – "Headache" – First Year Medical Students, Brain Sciences

February 22, 2018 – "Toxic-Metabolic Encephalopathy" – First Year Medical Students, Brain Sciences

October 11, 2018 – Women in Medicine Mentoring Night – Panelist

January 17, 2019 – "Dizziness and Vertigo" – First Year Medical Students, Brain Sciences

January 30, 2019 – "Introduction to Medical Educational Podcasting" – Preclinical Medical

Students, Med Ed Scholarly Concentration, Co-Presented with Dr. Gita Pensa

February 4, 2019 – "Intracranial Hemorrhage" – First Year Medical Students, Brain Sciences

February 4, 2019 – "Headache" – First Year Medical Students, Brain Sciences

March 13, 2019 – "CPC: Intractable Epilepsy" – With neuropathologist Dr. John Donahue, First Year Medical Students, Brain Sciences

March 27, 2019 – "Toxic-Metabolic Encephalopathy" – First Year Medical Students, Brain Sciences

January 17, 2020 - "Dizziness and Vertigo" - First Year Medical Students, Brain Sciences

January 28, 2020 – "Neurology Review for USMLE Step 1" – Second Year Medical Students

February 3, 2020 - "Headache" - First Year Medical Students, Brain Sciences

February 6, 2020 – "Anticonvulsant Medications" – First Year Medical Students, Brain Sciences February 26, 2020 – "Toxic-Metabolic Encephalopathy" – First Year Medical Students, Brain Sciences

February 28, 2020 – "Cases in Obstetrical Neurology" – for Student Interest Group in Ob/Gyn

January 8, 2021 – "The Neurological Exam... To a Neurologist" – Digital Module, for First Year Medical Students, Brain Sciences

January 21, 2021 – "Dizziness and Vertigo" – First Year Medical Students, Brain Sciences

February 8, 2021 – "Headache" – First Year Medical Students, Brain Sciences

February 9, 2021 – "Neuroscience Career Panel" – Undergraduate Students, Brown University DUG Panel

February 10, 2021 – "Anticonvulsant Medications" – First Year Medical Students, Brain Sciences March 1, 2021 – "Toxic-Metabolic Encephalopathy" – First Year Medical Students, Brain Sciences

Brown/Rhode Island Hospital Neurology Residency Program Lectures

September 21, 2009 – "Anticonvulsants"

May 18, 2010 - "Epilepsy Surgery"

September 20, 2010 – "Anticonvulsants"

May 5, 2011 – "Women's Health in Neurology"

August 2, 2011 – "Introduction to EEG I"

September 19, 2011 – "Partial Epilepsy"

March 30, 2012 – "Generalized Epilepsy"

July 13, 2012 – "The Neuro Exam" – Lecture and demonstration

July 31, 2012 – "Introduction to EEG"

June 10, 2013 – "Pregnancy and Epilepsy"

July 10, 2013 – "The Neuro Exam" – Lecture and demonstration

July 30, 2013 – "Introduction to EEG"

August 6, 2013 – "Antiepileptic Drugs"

March 24, 2014 – Focal Epilepsies and Localization

July 7, 2014 – "The Neuro Exam" – Lecture and demonstration for Neurology Residents

October 6, 2014 – "Epilepsy: Diagnosis, Mechanisms and Treatment, Part I"

October 27, 2014 – "Epilepsy: Diagnosis, Mechanisms and Treatment, Part II"

August 30, 2016 - "EEG: What does it all mean?"

September 12, 2016 – "Nonconvulsive Status Epilepticus: Diagnosis and Treatment"

September 15, 2016 – "Toxic-Metabolic Causes of Seizures"

March 30, 2017 – "Chronic Headache"

June 9, 2017 – "Stroke in Pregnancy"

June 23, 2017 – "Migraine in Pregnancy"

September 18, 2017 – "Antiepileptic Drugs"

September 21, 2017 – "Seizure Mimics"

September 17, 2018 – "Seizure Mimics"

September 24, 2018 – "Antiepileptic Drugs"

January 22, 2019 - "Headache"

January 24, 2019 – "Headache in Pregnancy"

September 24, 2019 – "Chronic Migraine: When to Consider Botox"

October 11, 2019 – "Seizures and Epilepsy in Pregnancy"

October 19, 2019 – "Antiepileptic Drugs"

April 14, 2020 – "Cases in Obstetrical Neurology"

July 20, 2020 – "Introduction to EEG"

July 6, 2021 – "Introduction to EEG"

INVITED PRESENTATIONS, LECTURES, AND PANEL PARTICIPATION: EXTERNAL

Invited Lectures: Local and Regional

January 29, 2009 – "Pregnancy and Epilepsy," Presentation to Greater Boston Epilepsy Society Meeting, Beth Israel Deaconess Medical Center (BIDMC), Boston, MA

January 4, 2010 – "Neurophysiology Review" – Lecture for Neurosurgery Residents, RIH January 15, 2010 – Invited Panelist, Subspecialty Care in Pregnant Patients (SCIPP) Conference at Women and Infants Hospital (WIH): "Focus on Neurology," for Obstetrical Medicine Staff January 20, 2010 – "Update: The Care of Women with Epilepsy, Through the Age Spectrum" – Grand Rounds Presentation for Neurology Department, RIH

March 9, 2010 – "Caring For Women with Epilepsy through the Childbearing Years" – Lecture for Obstetrical Medicine Department, WIH

April 27, 2010 – "A 24 Year Old with Fever and Confusion" – Panelist, Department of Medicine Morbidity and Mortality Conference, RIH

May 15, 2010 – "Transition to Adulthood Independence" – Co-presenter, Workshop for parents of children with epilepsy, Matthew Siravo Memorial Foundation, Inc. conference: "Epilepsy Parent Conference: Transitions," Hasbro Children's Hospital, Providence, RI

July 23, 2010 – Invited Panelist, SCIPP Conference at Women and Infants Hospital (WIH): "Focus on Neurology," for Obstetrical Medicine Staff

April 8, 2011 – Invited Panelist, SCIPP Conference at Women and Infants Hospital (WIH): "Focus on Neurology," for Obstetrical Medicine Staff

December 9, 2011 – Invited Panelist, MOMS Conference: Focus on pseudotumor cerebri, for Women's Health Collaborative, Lifespan/RIH

January 25, 2012 – "Neurophysiology I: Introduction to EEG" – Lecture for Neurosurgery Residents, RIH

February 8, 2012 – "Neurophysiology II: Neuromuscular Disease and EMG" – Lecture for Neurosurgery Residents, RIH

March 30, 2012 – Invited Panelist, SCIPP Conference at Women and Infants Hospital (WIH): "Focus on Neurology," for Obstetrical Medicine Staff

January 23, 2013 – "The Migraine Patch" – Channel 12 News (WPRI) Interview regarding new treatment for migraine, http://www.wpri.com/dpp/news/local_news/providence/new-treatment-for-migraines

April 17, 2013 - "Encephalopathy" - Internal Medicine Interns, RIH

May 3, 2013 – Invited Panelist, SCIPP Conference at Women and Infants Hospital (WIH):

"Focus on Neurology," for Obstetrical Medicine Staff

February 14, 2014 – Invited Panelist, SCIPP Conference at Women and Infants Hospital (WIH): "Focus on Neurology," for Obstetrical Medicine Staff

April 30, 2014 - "Encephalopathy" - Internal Medicine Interns, RIH

May 2, 2014 – Invited Speaker, "Update in Management of Migraines," for VAMC Internal Medicine and Primary Care Program, "Updates in Internal Medicine" series

October 17, 2014 – Invited Panelist, SCIPP Conference at Women and Infants Hospital (WIH): "Focus on Neurology in Pregnancy," for Obstetrical Medicine Staff

February 16, 2015 – Invited Speaker, "Bench to Bedside: Migraines" – with Drs. Michael Moskowitz and Catherine Buettner; for graduate students in neuroscience, with Brown Institute for Brain Science, Sidney Frank Hall at Brown University

May 22, 2015 – "Migraines," Lecture for Ob/Gyn residency Core Curriculum

June 19, 2015 – "Stroke in Pregnancy," lecture for Maternal-Fetal Medicine and Obstetrical Medicine fellowship, Women and Infants Hospital

June 19, 2015 – Invited Panelist, SCIPP Conference at Women and Infants Hospital (WIH):

"Focus on Neurology in Pregnancy," for Obstetrical Medicine Staff

July 24, 2015 – "Migraine," lecture for Brown University Employee Wellness Program, Providence, RI

November 7, 2015 – "Strategies in Migraine Care" – CME program for primary care physicians, Providence, RI

November 13, 2015 – Invited Panelist, SCIPP Conference at Women and Infants Hospital (WIH): "Focus on Neurology in Pregnancy," for Obstetrical Medicine Staff

December 21, 2015 – Invited Speaker, "EEG and Seizures in Neurosurgical Patients," for Rhode Island Hospital Neurosurgery Department Grand Rounds, Providence, RI

February 20, 2016 – Invited Speaker, "Young Women's Epilepsy Support Group: Transitioning into adulthood: Sex, Drugs and Rock and Roll" – sponsored by The Matty Fund, Warwick, RI February 26, 2016 – Invited Panelist, SCIPP Conference at Women and Infants Hospital (WIH): "Focus on Neurology in Pregnancy," for Obstetrical Medicine and Maternal Fetal Medicine Departments

March 15, 2016 and March 22, 2016 – "Career Lab" – Brown University Undergraduate Careers In Medicine, Panelist

March 16, 2016 – "Brown Neurology Education Update 2016" – Grand Rounds Co-Presentation for Neurology Department, RIH

April 27, 2016 – "PLME Speed-Networking Event" – Brown University, Neurology Mentor November 8, 2016 – "Headaches in Pregnancy" – Lecture for Obstetrical-Medicine Fellowship Program, Women and Infants Hospital

November 9, 2016 – "Migraine," lecture for Ob/Gyn residency Core Curriculum (WIH)

November 28, 2016 – "Medical Impact of Translational and Basic Science Research" – Lecture to Medical Students in preclinical elective course, Alpert Medical School

January 20, 2017 – Invited Panelist, SCIPP Conference at Women and Infants Hospital (WIH): "Focus on Neurology in Pregnancy," for Obstetrical Medicine and Maternal Fetal Medicine Departments

April 5, 2017 – "Brown Neurology Education Update 2017" – Grand Rounds Co-Presentation for Neurology Department, RIH

April 7, 2017 – Invited Panelist, SCIPP Conference at Women and Infants Hospital (WIH): "Focus on Neurology in Pregnancy," for Obstetrical Medicine and Maternal Fetal Medicine Departments

May 10, 2017 – "Seizures and Strokes" – Rhode Island Stroke Support Group

May 17, 2017 – "Is Pain Quantifiable? A Search for Migraine Biomarkers" – Joint Neurology-Neurosurgery Grand Rounds Co-Presentation with Dr. Carl Saab, RIH

June 12, 2017 – "Stroke in Pregnancy" – Multimedia Presentation for Internal Medicine Residents (RIH)

June 15, 2017 – "Stroke in Pregnancy" – Multimedia Presentation for Ob/Gyn residency (WIH) July 13, 2017 – "Migraine in Pregnancy" – Multimedia Presentation for Family Medicine Residents, Memorial Hospital of Rhode Island

October 3, 2017 – "Stroke in Pregnancy" – Obstetrical Medicine Grand Rounds, Rhode Island Hospital

November 21, 2017 – "Migraine in Pregnancy" – Core Curriculum Lecture for Obstetrical Medicine Fellowship, Women and Infants Hospital

December 22, 2017 – Invited Panelist, SCIPP Conference at Women and Infants Hospital (WIH): "Focus on Neurology in Pregnancy," for Obstetrical Medicine and Maternal Fetal Medicine Departments

January 26, 2018 – Invited Panelist, SCIPP Conference at Women and Infants Hospital (WIH): "Focus on Neurology in Pregnancy," for Obstetrical Medicine and Maternal Fetal Medicine Departments

February 8, 2018 – Invited Guest Speaker, "Podcasting in Medical Education," Intro to Podcasting Course, AS220, Providence, RI (Director: J. Haller)

February 15, 2018 – "Career Lab" – Brown University Undergraduate Careers in Medicine, Panelist

February 22, 2018 – Invited Presenter, "Why Not a Podcast? Using and Assessing a Novel Technology in Medical Education," Alpert Medical School Program in Educational Faculty Development, Providence, RI

March 7, 2018 – "Brown Neurology Education Update 2018" – Grand Rounds Co-Presentation for Neurology Department, RIH

May 4, 2018 – "Forest for the Trees" – The Whole Patient Program – First year college students at Brown University, Program in Liberal Medical Education

May 25, 2018 – Invited Panelist, SCIPP Conference at Women and Infants Hospital (WIH): "Focus on Neurology in Pregnancy," for Obstetrical Medicine and Maternal Fetal Medicine Departments

June 6, 2018 – Invited Presenter, "Using Media for 'Flipped' Instruction" – Active Learning Retreat, Brown/Alpert Medical School Program in Educational Faculty Development Regional Conference, Providence, RI Co-Presentation with Dr. Gita Pensa

July 31, 2018 – "Headache" – Brown Psychiatry Residency Program Core Lecture Series August 24, 2018 – Invited Panelist, SCIPP Conference at Women and Infants Hospital (WIH): "Focus on Neurology in Pregnancy," for Obstetrical Medicine and Maternal Fetal Medicine Departments

September 5, 2018 – "Headaches in Pregnancy" – Obstetrical Medicine Fellowship Program, Women and Infants Hospital

September 12, 2018 – "Clinicopathological Conference" – Grand Rounds Panelist for Neurology Department, RIH

September 29, 2018 – "Epilepsy Concerns in Patients with Developmental Disabilities" – Invited Speaker for Epilepsy Symposium, for patients and families, for Epilepsy Foundation of New England, Providence, RI

October 10, 2018 – "Morbidity and Mortality Conference" – Grand Rounds Panelist for Neurology Department, RIH

October 17, 2018 – "Neurovascular Disorders in Pregnancy and Postpartum: More Than Just A Headache" – Invited Speaker, Combined Grand Rounds for Neurology and Emergency Medicine Departments Stroke Series, RIH

March 15, 2019 – Invited Speaker, "Seizures and Epilepsy in Pregnancy" – for Maternal Fetal Medicine Fellowship Program, Women and Infants Hospital

March 20, 2019 – Co-Presenter, "Brown Neurology Education Update" – Neurology Grand Rounds, Rhode Island Hospital

March 29, 2019 – "Headaches in Pregnancy" – Core Curriculum Lecture for Obstetrical Medicine Fellowship, Women and Infants Hospital

May 10, 2019 – Invited Panelist, SCIPP Conference at Women and Infants Hospital (WIH): "Focus on Neurology in Pregnancy," for Obstetrical Medicine and Maternal Fetal Medicine Departments

June 9, 2019 – "Neurovascular Disorders of Pregnancy" – for Maternal Fetal Medicine Fellowship Program, Women and Infants Hospital

June 13, 2019 – Invited Speaker, "How to Make a Podcast" – for Office of Women in Medicine Professional Development Conference, Providence, RI. (Director: Dr. Katherine Sharkey) June 18, 2019 – "Migraine" – for Ophthalmology Residency Program, Rhode Island Hospital July 9, 2019 – "Headache" – for Psychiatry Residency Program, Rhode Island Hospital October 8, 2019 – "Seizures and Epilepsy in Pregnancy" – for Obstetrical Medicine Fellows, Women and Infants Hospital

October 18, 2019 – Invited Panelist, SCIPP Conference at Women and Infants Hospital (WIH): "Focus on Neurology in Pregnancy," for Obstetrical Medicine and Maternal Fetal Medicine Departments

January 17, 2020 – Invited Panelist, SCIPP Conference at Women and Infants Hospital (WIH): "Focus on Neurology in Pregnancy," for Obstetrical Medicine and Maternal Fetal Medicine Departments

March 20, 2020 – Invited Panelist, SCIPP Conference at Women and Infants Hospital (WIH): "Focus on Neurology in Pregnancy," for Obstetrical Medicine and Maternal Fetal Medicine Departments

May 6, 2020 – "Digital Technology for Neurology Education: Creation, Curation and Collaboration" – Invited Co-Speaker with Dr. Kara Stavros, Neurology Grand Rounds, Rhode Island Hospital

May 27, 2020 – Co-Presenter, "Brown Neurology Education Update" – Neurology Grand Rounds, Rhode Island Hospital

June 2, 2020 – "Headache" – for Ophthalmology Residency Program, Rhode Island Hospital July 21, 2020 – "Headache" – for Psychiatry Residency Program, Rhode Island Hospital August 11, 2020 – "Headache in Pregnancy" – joint noon conference for Obstetrical Medicine and Neurology residents and fellows, Women and Infants Hospital and Rhode Island Hospital February 16, 2021 – "Seizures in Pregnancy" – Obstetrical medicine Fellows Conference, Women and Infants Hospital

March 19, 2021 – "Seizures, Headache and Stroke" – Ob/Gyn Core Lecture, Women and Infants Hospital

May 21, 2021 – "Seizures and Epilepsy in Pregnancy and Postpartum" – Maternal Fetal Medicine Fellows Conference, Women and Infants Hospital

June 24, 2021 – Invited Speaker, "Obstetrical Neurology in the Clinic: A Practical Approach" – for Women and Infants Hospital Ob/Gyn Grand Rounds, (virtual) Providence, Rhode Island August 3, 2021 – "Headache" – for Psychiatry Residency Program, Rhode Island Hospital August 10, 2021 – "Headaches in Pregnancy" – Obstetrical Medicine Fellowship Program, Women and Infants Hospital

October 6, 2021 – "Seizures and Epilepsy in Pregnancy" – Obstetrical Medicine Fellowship Program, Women and Infants Hospital

March 16, 2022 – Co-Presenter, "Brown Neurology Education Update" – Neurology Grand Rounds, Rhode Island Hospital

March 18, 2022 – Invited Panelist, SCIPP Conference at Women and Infants Hospital (WIH): "Focus on Neurology in Pregnancy," for Obstetrical Medicine and Maternal Fetal Medicine Departments

April 9, 2022 – "Women's Health and Epilepsy," for Epilepsy Foundation of New England Virtual Symposium

June 24, 2022 – Invited Panelist, SCIPP Conference at Women and Infants Hospital (WIH): "Focus on Neurology in Pregnancy," for Obstetrical Medicine and Maternal Fetal Medicine Departments

July 19, 2022 – "Headache" – for Psychiatry Residency Program, Rhode Island Hospital August 2, 2022 – "Headaches in Pregnancy and Postpartum" – Obstetrical Medicine Fellowship and Neurology Program, Women and Infants Hospital and Rhode Island Hospital

Invited Lectures: National and International

September 20-21, 2013 – Invited Speaker, "Neurology in Obstetrical Medicine," North American Obstetric Medicine (NASOM) Conference, Providence, RI

March 20, 2014 – Invited Speaker, "Update in Neurological Issues of Pregnancy," for University of Buffalo School of Medicine and Biomedical Sciences Neurology Grand Rounds, Buffalo, NY. April 25, 2015 – Invited Speaker, "Management of Seizures and Epilepsy in the ICU" – for American Academy of Neurology (AAN) Annual Conference, "Neurology Consultation in the Medical Surgical ICU" Course, Washington, DC (Director: N. Silvestri, MD)

November 6, 2015 – Invited Speaker, "Wavy Lines: EEG in Primary Care and the Hospital Setting," for North Shore Medical Center's Medical Grand Rounds, Salem, MA

April 16, 2016 – Invited Speaker, "Cases in the ICU: Seizures and Status Epilepticus" – for American Academy of Neurology (AAN) Annual Conference, "Neurology Consultation in the Medical Surgical ICU" Course, Vancouver, BC, Canada (Director: N. Silvestri, MD)

April 24, 2017 – Invited Speaker, "Cases in the ICU: Seizures and Status Epilepticus" – for American Academy of Neurology (AAN) Annual Conference, "Neurology Consultation in the Medical Surgical ICU" Course, Boston, MA (Director: N. Silvestri, MD)

December 1-3, 2017 – Invited Speaker, "Neurology in Obstetrical Medicine: Cerebrovascular Disorders in Pregnancy," North American Obstetric Medicine (NASOM) Conference, Jersey City, NJ

March 16, 2018 – Invited Speaker, "Neurological Vascular Disorders in Pregnancy and Postpartum" – for Tufts Neurology Department Grand Rounds, Boston, MA

April 26, 2018 – Invited Speaker, "Cases in the ICU: Seizures and Status Epilepticus" – for American Academy of Neurology (AAN) Annual Conference, "Neurology Consultation in the Medical Surgical ICU" Course, Los Angeles, CA (Director: N. Silvestri, MD)

June 16, 2018 – Invited Speaker, "Under Pressure: Diagnosis & Management of Intracranial Hypertension (Pseudotumor Cerebri) and Associated Headaches" – for 3rd Annual Cerebrospinal Fluid Disorders Symposium, Providence, RI

March 30, 2019 – Invited Speaker and Panelist, "Hormones and Migraine" – for Association of Migraine Disorders Hot Topics Symposium. Providence, RI (Director: Rick Godley, MD) May 8, 2019 – Invited Speaker, "Case Studies in Epilepsy" – for American Academy of Neurology (AAN) Annual Conference, "Case Studies in Pregnancy" Course, Philadelphia, PA (Director: Amy Hessler, DO)

October 23, 2019 – Conference Co-Director and Panel Facilitator, "FOMO: Keeping Current with Digital Technology in Medical Education." National medical education conference, Providence, RI. (Co-Directors: Gita Pensa, MD, Emily Green, PhD)

October 23, 2019 – Speaker and Workshop Facilitator, "Podcasting 101," for "FOMO: Keeping Current with Digital Technology in Medical Education." Providence, RI. (Co-Facilitator: Gita Pensa, MD; Directors Roth/Green/Pensa)

October 23, 2019 – Speaker and Workshop Facilitator, "Technology to Enhance Group Learning," for "FOMO: Keeping Current with Digital Technology in Medical Education." Providence, RI. (Co-Speakers: Kara Stavros, MD, Melissa Kane, PhD; Directors Roth/Green/Pensa)

February 11, 2020 – Invited Speaker, "Education Technology Module" – for Masters of Medical Science in Medical Education Program, Harvard Medical School, Boston, MD (Director: Alexandra Hovaguimian, MD)

September 10, 2020 – Invited Speaker, "When Lightning Strikes: Headaches, Strokes, and Seizures in the Obstetrical Patient" – for St. Louis University (virtual) Neurology Department Grand Rounds, St. Louis, Missouri.

November 10, 2020 – Invited Speaker, "Neurovascular Disorders in Pregnancy" – for Boston Medical Center/Boston University Neurology Department Grand Rounds, Boston, MA. February 19, 2021 – Invited Speaker, "Education Technology Module: Podcasting for Med Ed" – for Masters of Medical Science in Medical Education Program, Harvard Medical School, Boston, MD (Director: Alexandra Hovaguimian, MD)

April 19, 2021 – Invited Speaker, "Curating the Educational Experience" – for American Academy of Neurology (AAN) Annual Conference, "Digital Technology for Neurology Education: Creation, Curation, Collaboration" Course (Virtual 2021) (Director: Alexandra Hovaguimian, MD)

September 17-18, 2021 – Course Co-Director (CME), The Migraine Symposium – National Virtual Conference, Association of Migraine Disorders (Co-Director: Frederick Godley, MD)

January 19, 2022 – Invited Speaker, "Headaches in Pregnancy and Postpartum" – for Harvard Medical School, Longwood Neurology Grand Rounds, Boston, MA

April 8, 2022 – Invited Speaker, "Education Technology Module: Introduction to Podcasting for Medical Education" – for Masters of Medical Science in Medical Education Program, Harvard Medical School, Boston, MD (Director: Alexandra Hovaguimian, MD)

Invited Lectures Affected/Cancelled due to COVID-19 Pandemic

April 28, 2020 – Invited Speaker, "Curating the Educational Experience" – for American Academy of Neurology (AAN) Annual Conference, "Digital Technology for Neurology Education: Creation, Curation, Collaboration" Course, Toronto, CA (Director: Alexandra Hovaguimian, MD)

Recurring Conferences

EEG Conference – preceptor, every other month, for Neurology Residents, RIH, 2009-2018 Case Conference, Book Club, Journal Club – preceptor, 2-4 times yearly for Neurology Residents, RIH, 2009-2018

Morning Report – preceptor, 2-4 times yearly for Neurology Residents, RIH, 2009-2018 Epilepsy Case Conference - Coordinator and presenter, quarterly, for Epilepsy Faculty, fellows and Neurology Residents, RIH, 2013-2015

Comprehensive Epilepsy Program Surgical Planning Conference – co-planner and presenter, once monthly, and Working Group meetings once monthly, 2009-present

CURRENT RESEARCH

Brown Physicians Inc. Research Award (PI: Roth, then PI: Richards) 10/19/2019-10/2021 Total Award: \$50,000

"Machine Learning and Scalp EEG Interpretation." A collaborative pilot study with Dr. Judy Liu/Neurology/Molecular and Cellular Biology; Dr. Luca Bartolini, Child Neurology; and Dr. Thomas Serre, Cognitive and Linguistic and Psychological Sciences. We are using a novel machine learning algorithm based on the intricacies of the visual system, and standard computational analysis methods to train computers to interpret electroencephalograpy (EEG), with a focus on normal EEG versus epilepsy and seizures. Prior PI was Dr. Gina Deck. Role: co-Principal Investigator.

PRIOR RESEARCH

Carney Award (Association of Migraine Disorders and Miles for Migraine), The Carney Institute for Brain Science (PI: Roth) 6/1/19-6/1/2020

Total Award: \$30,000

"Wireless EEG and Migraine." A collaborative pilot study (with Dr. Carl Saab/Neurosurgery) correlating wireless EEG signals through computational analysis with ratings on a 0-10 subjective pain scale, comparing chronic versus episodic migraineurs vs healthy controls.

Role: co-Principal Investigator.

Neurology Department and Neurosurgery Department (PI: Roth) 1/1/17-5/31/2019 Internal funding, Total Award: \$1,000.

"Wireless EEG and Migraine." A collaborative pilot study (with Dr. Carl Saab/Neurosurgery) correlating wireless EEG signals through computational analysis with ratings on a 0-10 subjective pain scale, during treatment of status migrainosus with intravenous NSAIDs, fluid and antiemetics. **Role: Principal Investigator.**

The Rhode Island Foundation (PI: Roth) 10/1/16-12/31/17

Total Award: \$62,500

"Pregnancy and Neurology: Safeguarding Moms and Babies." The creation of training podcasts to aid neurologists, obstetricians, and other medical professionals in caring for pregnant women who have neurological conditions. **Role: Principal Investigator**

BIBS Migraine Group (co-PI: Moore C, Kauer J, Lipscombe D, Saab C, Roth J) 6/14-7/16 Association of Migraine Disorders (AMD)

Funding supported two post-doctoral investigators through this research-clinical collaborative, dedicated to the exploration of basic science, translational, and clinical projects pertaining to migraine, migraine-associated conditions, and neuronal-vascular connections.

Role: Co-Principal Investigator

NIH (NINDS) R01 (PI: Bond DS)

7/1/12-6/30/16

Total Award: \$2,560,836

"WHAM (Women's Health And Migraine Study)." Behavioral weight loss as a treatment for migraine in obese women. Description: The purpose of this project is to test the efficacy of behavioral weight loss for treatment of migraine headaches in obese women. The Miriam Hospital and The Warren Alpert Medical School of Brown University, Providence, RI.

Role: Co-Investigator

Neurology Intramural Grant Program (PI: Roth JL) 11/1/11-10/31/12 Total Award: \$5,000

"Bone Health and AEDs: A Retrospective Study of Neurologist Counseling Habits Regarding Bone Health and Vitamin D for Adolescent Girls and Young Women on Antiepileptic Drugs for the Treatment of Epilepsy. Description: A retrospective, observational study examining bone health counseling practices among neurologists (pediatric and adult) affiliated with Rhode Island Hospital treating outpatients with epilepsy. Rhode Island Hospital, Hasbro Children's Hospital, The Neurology Foundation, and The Warren Alpert Medical School of Brown University, Providence, RI. **Role: Principal Investigator**

Unfunded Pilot Study

(PI: Bond DS) 2010-2012

"Women's Health and Migraine Study." Description: A randomized, controlled pilot study to evaluate the effects of weight loss on migraine frequency and severity among obese female migraineurs. The Miriam Hospital and The Warren Alpert Medical School of Brown University, Providence, RI. **Role: Co-Investigator**

Unfunded Retrospective Study

(PI: Krishnamurthy KB) 2006-2010

"Outcomes in Pregnancy Among Patients with Epilepsy." Description: Database of maternal and fetal pregnancy outcomes among all women with epilepsy at Beth Israel Deaconess Medical Center from 1995-2010. Beth Israel Deaconess Medical Center and Harvard Medical School, Boston, MA. **Role: Principal Researcher**

UNIVERSITY TEACHING ROLES

Course Co-Director, BIOL 3652 IMS II: Brain Sciences, The Warren Alpert Medical School of Brown University, Providence, RI, 2010-present

-I have designed and overseen curriculum for Brain Sciences, the core neuroscience course for first year Alpert Medical students. In addition to being an "overall" course codirector, I am also a co-director for the Neuropathophysiology portion of the course. This course runs for approximately 10 weeks and encompasses neuroanatomy, neurobiology, neuropharmacology, neuropathology/neuroimaging, neuropathophysiology, brain and behavior, and psychiatry.

- -Since 2010 I have reinstated case-based learning through "small group" sessions, designed multimedia clinical cases to enhance learning, including one with a subsequent live patient presentation and panel discussion. I have recruited faculty lecturers and faculty and resident small group leaders.
- -From 2020-2021 in light of the COVID-19 pandemic, I designed and implemented new curricular activities to enhance the Brain Sciences course, including brief pre-recorded videos and modules to reduce total virtual lecture time, and added student directed learning and team-based learning activities to solve "mystery cases" in small groups, to improve student engagement and lifelong learning.
- -I contribute additionally as a lecturer and individual small group leader, exam proctor, and I write test questions with attention to rationales and learning objectives.

Course Lecturer and Small Group Leader, BIOL 3652 IMS II: Brain Sciences, The Warren Alpert Medical School of Brown University, Providence, RI, 2010-present

Course Lecturer, Doctoring, "The Neurological Exam." The Warren Alpert Medical School of Brown University, Providence, RI, Annually, 2010-2018

Faculty Co-Advisor, Student Interest Group in Neurology (SIGN), AAN organization with chapter at The Warren Alpert Medical School of Brown University, Providence, RI, 2014-present

Faculty Advisor, Alpert Medical School Preclinical Elective: "Medicine in Film and Television," 2017-2018, Student Leaders: Sukrit Jain, MD '20 and Anna Delamerced, MD '20

Course Co-Director, Alpert Medical School Preclinical Elective: "Podcasting in Medical Education," September-November 2018, with Co-Leaders: Gita Pensa, MD and Chibuikem Nwizu, MD'21

Co-Director, Rhode Island Hospital and Women and Infants Hospital, Curriculum in Women's Neurology, 2020-present; Co-lead lecture series for obstetrical medicine fellows and neurology residents on neurological issues in pregnancy and postpartum, with Co-Leader: Srilakshmi Mitta, MD

Course Co-Faculty Advisor, Alpert Medical School Preclinical Elective: "Introduction to Neurology," August-November 2021, with Co-Leader: Emily Weisbach, MD and student leaders Janet Guo MD25, Alice Lin MD24, Martin Li MD24

Mary Arnold Faculty Longitudinal Mentor, The Warren Alpert Medical School of Brown University, Providence, RI, 2019-present

-Through this formal medical student mentoring position, I provide guidance on career, personal and professional development for a cohort of ten medical students per class (forty total) over the span of their four years of medical school.

Assistant Dean of Medicine, Advising, Program in Liberal Medical Education, The Warren Alpert Medical School of Brown University, Providence, RI, 2021-present

-I provide career, professional and academic advising to a cohort of 15-18 undergraduate students per class over the span of their four years of college in the undergraduate portion of their eight-year bachelor's-medical degree continuum. I also direct the Medicine in Action Program, which pairs undergraduate students, graduates, those taking a gap year or leave of absence, and medical students with shadowing opportunities and career connections in medical fields.

ADDITIONAL TEACHING AND MENTORSHIP

Brown University Women in Medicine Mentoring Program, 2009-2010; Mentee: Andrea Batchelor, MD '13

Faculty Advisor to Brown University Undergraduate Independent Study, BIOL 1960: "Women's Health and Epilepsy, Focus on Bone Health and Anticonvulsants," 2010-2011; Student: Catherine Paniszyn, ScB '11, MD '15 (PLME)

Longitudinal Clerkship Preceptor, The Warren Alpert Medical School of Brown University, Providence, RI, 2011-2012; Student: Jennifer Kim, MD '12

Mentor for High School Senior Project: "Neurology." East Providence Public Schools, East Providence, RI, 2012; Student: Stephanie DeCarvalho

Community Mentor, Doctoring Course Year II, The Warren Alpert Medical School of Brown University/Rhode Island Hospital, Providence, RI 2012-2013, Mentee: Hannah Park, MD '15

Community Mentor, Doctoring Course Year I, The Warren Alpert Medical School of Brown University/Rhode Island Hospital, Providence, RI 2013, Mentee: Sandeep Nayak, MD '16

Community Mentor, Doctoring Course Year I, The Warren Alpert Medical School of Brown University/Rhode Island Hospital, Providence, RI 2013-2014, Mentee: Abdul-Kareem Ahmed, MD '17

Longitudinal Clerkship Preceptor, The Warren Alpert Medical School of Brown University, Providence, RI, 2014-2015; Student: Ami Cuneo, MD '15

Brown University Summer@Brown Pre-College course, Introduction to Medicine: Do You Want to be a Doctor, Providence, RI, high school student shadowing program, July 20-23rd, 2015.

Migraine Shadowing Day, Association of Migraine Disorders and the Brown Institute for Brain Sciences, August 5, 2015

Faculty Mentor, Rhode Island Hospital Neurology Residency Program, Providence, RI, Christina Mijalski, MD, 2013-2015

Mentor for High School Senior Project: "The ER is No Place for a Migraine." Providence, RI, 2016, Student: Hannah Mackinnon

Faculty Mentor, Rhode Island Hospital Neurology Residency Program, Providence, RI, Alina Bayer, MD, 2015-2018

Mentor for High School Senior Project: "Neurology: Concussion and Brain Injury." Providence, RI, 2017, Student: Maya Solomon-Messier.

Faculty Preceptor for Independent Study, "Medical Education through Audio Storytelling." Alpert Medical School, 9/4/2017-9/22/2017, Student: Katrina Roi, MD'18

Faculty Preceptor for Independent Study, "Women's Neurology." Alpert Medical School, 5/4/2018-5/25/2018, Student: Neesha Nama, MD'19

Longitudinal Integrated Clerkship (LIC) Neurology Mentor, The Warren Alpert Medical School of Brown University, Providence, RI, 2015-present. 2015-2016; Students: Jamila Wynter, MD '17 and Abass Noor, MD '17; 2016-2017: Carlos Rodriguez-Russo, MD '18 and Jenny Tsai, MD '18; 2017-2018: Stephanie Chang MD '19 and Matthew Perry MD '19; 2018-2019: Travis Brown, MD '20 and Michael Broder, MD'20; 2019-2020: Jeremy Lowe, MD'20 and Roy Chen, MD'21; 2020-2021: James Robbins, MD'22 and Fernando Ibhanes, MD'22; 2021-2022: Jenny Thai, MD'23 and Isabel Chin, MD'23

Summer Mentor for Brandeis College Student, "Multiple Sclerosis in Pregnancy: A Podcast and Written Review," August 2018, Student: Dustine Reich, BS'20

Faculty Preceptor for Independent Study, "Podcasting in Medical Education." Alpert Medical School, October 2018, Student: Angela Zhang, MD'20

Faculty Mentor, Rhode Island Hospital Neurology Residency Program, Providence, RI, Nupur Lala, MD, 2018-2022

Faculty Preceptor for Independent Study, "Family History: A Podcast. *On What We Inherit and What We Want to Pass On.*" Alpert Medical School, April-May, 2019, Student: Anna Delamerced, MD'21

Faculty Preceptor for Scholarly Concentration, "Firsts: A podcast about first-time medical experiences" Alpert Medical School, 2019-present, Student: Amador (Tino) Delamerced, MD'22

Faculty Mentor and PI for Unfunded, Independent Research Study, "Neurological Disorder Characteristics and Treatment in an Obstetrical Neurology Clinic," Alpert Medical School, July 2019-April 2020, Student: Karin Ludwig, MD

Faculty Advisor to Brown University Undergraduate Independent Study, CLPS 1970: "Menstruation and the Mind," Spring 2020; Student: Joanne Won, ScB '20

Faculty Mentor for Summer Project, "A Midsummer Night's Gene: the familial neurological illness of Felix Mendelssohn," Alpert Medical School, May-July, 2020; Student: Tess Cersonsky, MD'23.

Faculty Advisor for Independent Study, "First Reckoning," about Black Medical Student Experiences, Alpert Medical School, August 2020, Student: Amador (Tino) Delamerced, MD'22

Faculty Advisor and PI for Unfunded, Independent Research Study, "EEG in Covid-19," Alpert Medical School, July 2020-present, Student: Mauricio Pinto, MD'23; Residents: Emilia Raimondo, DO; Jon Sarezky, MD; Vincent Labarbera, MD

Faculty Mentor, Rhode Island Hospital Neurology Residency Program, Providence, RI, Emily Weisbach, MD, 2020-present

MEETINGS ATTENDED AND FACULTY DEVELOPMENT:

NIH Women's Health Conference, Women and Infants Hospital – 9/22/09 Greater Boston Epilepsy Society Meeting – 10/21/09, 5/11/10

American Epilepsy Society Meeting – 12/4-12/8/09; 12/3-12/6/11; 12/6-12/10/13; 12/4-8/15; 12/2-12/6/16; 11/29/18-12/2/18; 12/6-12/10/19; 12/4-12/8/20

Office of Women in Medicine and Science (OWIMS): Best Practices for Your Career Success in Medicine and Science, Alpert Medical School – 6/13/2013, 6/13/19

North American Obstetric Medicine Conference, Brown University, Providence, RI – 9/20 – 9/21/13, 12/1-12/3/2017

Longitudinal Integrated Clerkship (LIC) Retreat, The Warren Alpert Medical School of Brown University, Attendee, Neurology Mentor - September 17-18, 2014

American Academy of Neurology Meeting – 4/10/10-4/12/10, 4/21-4/26/15, 4/15-4/18/16, 4/22-4/27/17, 4/22-4/27/18, 5/5-5/9/19, 4/17-4/24/21

Active Learning Retreat, Brown/Alpert Medical School Program in Educational Faculty Development Regional Conference, Providence, RI – 6/6/2018

The 3rd Annual Cerebrospinal Fluid Disorders Symposium, Providence, RI – 6/18/2018 Obstetrical Neurology Conference, University of Pittsburgh Medical Center, Pittsburgh, PA – 9/7-9/8/18

Office of Women in Medicine and Science (OWIMS): We're in This Boat Together: Navigating the Changing Waters of Science and Medicine: A professional development conference for faculty, trainees and house staff -6/13/19

FOMO: Keeping Current with Digital Technology in Medical Education -10/23/20 Office of Women in Medicine and Science (OWIMS): Virtual Professional Development Conference -6/10/20