



ANGELIQUE TAY, MD, MS

CURRICULUM VITAE

SPECIALTY: GENERAL NEUROSURGERY WITH A FELLOWSHIP TRAINING IN FUNCTIONAL NEUROSURGERY FOR PARKINSON'S DISEASE AND ESSENTIAL TREMOR SYMPTOMS.

EDUCATION

- 2011** University of Michigan, Ann Arbor, Michigan
Degree: Bachelor of Science
Major: Neuroscience and Chemistry

- 2012** Case Western Reserve University School of Medicine, Cleveland, Ohio
Degree: Master of Science in Medical Physiology

- 2017** Case Western Reserve University School of Medicine, Cleveland, Ohio
Degree: Doctor of Medicine

- 2017-2018** Intern in Neurosurgery
Cedars Sinai Medical Center

- 2018-2024** Resident in Neurosurgery
Cedars Sinai Medical Center

- 2024-Present** Fellow in Stereotactic and Functional Neurosurgery
Vanderbilt University Medical Center

AWARDS

- 2014** Poster of Distinction Blue Ribbon, World Transplant Congress (San Francisco, CA)

- 2014** Hematology Opportunities for the Next Generation of Research Scientists (HONORS) Award, American Society of Hematology

- 2017** The William Bligh-Glover, MD Award, Case Western Reserve University

PROFESSIONAL MEMBERSHIPS

- 2016-Present** American Association of Neurological Surgeons
- 2017-Present** Congress of Neurological Surgeons
- 2019-Present** California Association of Neurological Surgeons

RESEARCH EXPERIENCE

- 2008-2009** Research Assistant

University of Michigan, Undergraduate Research Opportunity Program

- 2012-2013** Research Assistant
Case Western Reserve University, Department of Physiology and Biophysics
- 2013-2015** Research Assistant
Case Western Reserve University, Department of Nephrology and Hypertension
- 2014** Research Assistant
University of California, San Francisco, Cardiovascular Research Institute
- 2015** Research Assistant
Case Western Reserve University, Department of Ophthalmology
- 2021** Research Associate
Cedars Sinai Medical Center, Department of Neurosurgery and Neurology

TEACHING EXPERIENCE

- 2012-2013** Teaching Assistant
Medical Physiology
Case Western Reserve University, Department of Physiology and Biophysics
- 2014-2015** Visiting Lecturer
Clinical Reasoning in Medical Physiology
Case Western Reserve University, Department of Physiology and Biophysics

PUBLICATIONS

A. Research Papers – Peer-Reviewed

1. Raina R, Lou L, Berger B, Vogt B, **Do AS**, Cunningham R, Vasavada P, Herrmann K, Dell K, Simonson M. Relationship of urinary endothelin-1 with estimated glomerular filtration rate in autosomal dominant polycystic kidney disease: a pilot cross-sectional analysis. *BMC Nephrol.* (2016) Feb 29;17:22. doi: 10.1186/s12882-016-0232-8. PMID: 26923419; PMCID: PMC4770683.
2. **Do AS**, Smith GA, Pace J, Hdeib A, Kasliwal MK. Primary spinal intradural extramedullary lymphoma: A novel management strategy. *J Clin Neurosci.* (2017) Jan;35:122-126. doi: 10.1016/j.jocn.2016.10.033. Epub 2016 Nov 10. PMID: 27839915.
3. Burkhardt JK, Chua MHJ, Weiss M, **Do ASS**, Winkler EA, Lawton MT. Risk of Aneurysm Residual Regrowth, Recurrence, and de Novo Aneurysm Formation After

- Microsurgical Clip Occlusion Based on Follow-up with Catheter Angiography. World Neurosurg. (2017) Oct;106:74-84. doi: 10.1016/j.wneu.2017.06.110. Epub 2017 Jun 23. PMID: 28648910.
4. **Do AS**, Kapurch J, Kumar R, Port J, Miller JW, Van Gompel JJ. The Long and Winding Road: Thoracic Myelopathy Associated With Occipitocervical Dural Arteriovenous Fistula. World Neurosurg. (2017) Dec;108:998.e7-998.e16. doi: 10.1016/j.wneu.2017.09.073. Epub 2017 Sep 29. PMID: 28966151.
 5. **Do ASS**, Bannykh SI, Black KL, Perry TG. Unusual Exophytic Appearance of Spinal Cord Subependymoma. World Neurosurg. (2019) Jul;127:302-306. doi: 10.1016/j.wneu.2019.03.270. Epub 2019 Apr 4. PMID: 30954744.
 6. Sarmiento JM, Medina O, **Do ASS**, Farber S, Chu RM. Resection of Cervical Juxtacortical Chondroma and Circumferential Spinal Stabilization for Kyphotic Deformity. Cureus. (2019) Apr 22;11(4):e4523. doi: 10.7759/cureus.4523. PMID: 31259132; PMCID: PMC6590731.
 7. Ryu R, **Do A**, Chan J, Cuellar J, Schievink W, Baron EM. Postoperative Cerebrospinal Fluid Leak After Lumbar Total Disc Replacement: A Diagnostic and Management Challenge. World Neurosurg. (2020) May;137:119-125. doi: 10.1016/j.wneu.2020.01.226. Epub 2020 Feb 5. PMID: 32035203.
 8. **Do ASS**, Amano T, Edwards LA, Zhang L, De Peralta-Venturina M, Yu JS. CD133 mRNA-Loaded Dendritic Cell Vaccination Abrogates Glioma Stem Cell Propagation in Humanized Glioblastoma Mouse Model. Mol Ther Oncolytics. (2020) Jun 24;18:295-303. doi: 10.1016/j.omto.2020.06.019. PMID: 32728617; PMCID: PMC7378271.
 9. **Tay ASS**, Amano T, Edwards LA, Yu JS. CD133 mRNA-transfected dendritic cells induce coordinated cytotoxic and helper T cell responses against breast cancer stem cells. Mol Ther Oncolytics. (2021) May 19;22:64-71. doi: 10.1016/j.omto.2021.05.006. PMID: 34485687; PMCID: PMC8403713.
 10. **Tay ASS**, Maya M, Moser FG, Nuño M, Schievink WI. Computed Tomography vs Heavily T2-Weighted Magnetic Resonance Myelography for the Initial Evaluation of Patients With Spontaneous Intracranial Hypotension. JAMA Neurol. (2021) Aug 30:e212868. doi: 10.1001/jamaneurol.2021.2868. Epub ahead of print. PMID: 34459855; PMCID: PMC8406204.
 11. **Tay, ASS**, Menaker SA, Chan JL, Mamelak AN. Placement of Stereotactic Electroencephalography Depth Electrodes Using the Stealth Autoguide Robotic System: Technical Methods and Initial Results. Oper Neurosurg. (2022) Apr 1;22(4):e150-e157. doi: 10.1227/ONS.000000000000110. PMID: 35289779.
 12. Hanna G, Madany M, **Tay ASS**, Edwards LA, Kim S, Michael JS, Nuno M, Thomas T, Li A, Berel D, Black KL, Fan X, Zhang W, Rudnick JD, Wang R, Yu JS. ZEB1 loss increases glioma stem cell tumorigenicity and resistance to chemoradiation. J Neurosurg. (2022) Sep 16;138(5): 1313-1324. doi: 10.3171/2022.7.JNS22259. PMID: 36115050.

13. **Do AS**, Khan MA, Ross L, Ravinsky R, Milam AJ, Lee SJ, Durra O, Johnson JP. Urgent Spinal Surgery in a Lateral Decubitus on a Patient with a Left Ventricular Assist Device on Full Anticoagulation: A Case Report. *Cureus*. 2024 Feb 29;16(2):e55266. doi: 10.7759/cureus.55266. PMID: 38558610; PMCID: PMC10981535.
14. Schievink WI, Maya MM, **Tay ASS**, Nisson PL, Acharya J, Taché RB, Nuño M. Optic Nerve Sheath MR Imaging Measurements in Patients with Orthostatic Headaches and Normal Findings on Conventional Imaging Predict the Presence of an Underlying CSF-Venous Fistula. *AJNR Am J Neuroradiol*. 2024 May 9;45(5):655-661. doi: 10.3174/ajnr.A8165. PMID: 38485201.
15. Schievink WI, Maya MM, **Tay ASS**, Taché RB, Prasad RS, Wadhwa V, Nuño M. Lateral Spinal CSF Leaks in Patients with Spontaneous Intracranial Hypotension: Radiologic-Anatomic Study of Different Variants. *AJNR Am J Neuroradiol*. 2024 Jul 8;45(7):951-956. doi: 10.3174/ajnr.A8261. PMID: 38871369.

B. Research Papers – In Press

1. **Tay, ASS**, Maya MM, Schievink WS. Spontaneous intracranial hypotension mimicking iatrogenic spinal CSF leaks. *Headache*. (2024).

C. Research Papers – Submitted

1. Schievink WS, Maya MM, Babajouni R, **Tay, ASS**, Tache RB. Skull defect- sagging brain syndrome. *Neurosurgery*. (2024).

D. Book Chapters

1. **A.S. Do**, R. Babadjouni, M.J. Alexander. Thrombectomy for Acute Occlusion in Intermediate-Sized Arteries. For the Book: 12 Strokes - A Case-based Guide to Acute Ischemic Stroke Management. Springer. January 12, 2021. Published.
2. **A.S. Do**, K.L. Black, J.S. Yu. The Role of Cellular Immunity and Adoptive Immunity in Pathophysiology of Brain and Spinal Cord Tumors. For the Book: Human Brain and Spinal Cord Tumors: From Bench to Bedside. Springer. January 2, 2023. Published.
3. **A.S. Tay**, B. Caravan, A.N. Mamelak. Which are the most important aspects of microelectrode implantation? For the Book: Intracranial EEG for Cognitive Neuroscientists. Springer. August 30, 2023. Published.

E. Oral and Poster Presentations

1. R. Raina, **A.S. Do**, J. Augustine, D. Hricik, and M.S. Simonson. Endothelin-1 and kidney function in renal allograft recipients. Presented at Kidney Week 2013, American Society of Nephrology. November 7, 2013.

2. **A.S. Do**, J. Augustine, D. Hricik, and M.S. Simonson. Impact of Endothelin-1 in the Pathogenesis of Renal Allograft Dysfunction. Presented at Lepow Medical Student Research Day 2014, Case Western Reserve University School of Medicine. February 20, 2014.
3. L. Lou, R. Raina, **A.S. Do**, K. Dell, B. Berger, and M.S. Simonson. Clinical Significance of Endothelin-1 in the Pathogenesis of Autosomal Dominant Polycystic Kidney Disease: A Translational Study. Presented at Lepow Medical Student Research Day 2014, Case Western Reserve University School of Medicine. February 20, 2014.
4. **A.S. Do**, M. Nguyen, D. Farmer, M. Safaee, Z. Nierenberg, and A. Zovein. Estrogen modulation in early pregnancy leads to vascular abnormalities resulting in a preeclamptic-like phenotype in mice. Presented at 2014 William H. Tooley Memorial Lecture and Neonatology Research Symposium, Cardiovascular Research Institute, University of California San Francisco. June 17, 2014.
5. **A.S. Do**, J. Augustine, D. Hricik, and M.S. Simonson. Urine Endothelin-1 Correlates with Estimated Glomerular Filtration Rate and Macrophage Chemoattractant Protein-1 in Renal Allograft Recipients. Presented at World Transplant Congress 2014, American Society of Transplantation. July 26, 2014. *Awarded “Poster of Distinction” ribbon for being top 20% in the field of interest.
6. **A.S. Do**, R. Raina, L. Lou, B. Berger, B. Vogt, R. Cunningham, P. Vasavada, K. Herrmann, K. Dell and M.S. Simonson. Endothelin-1 as Novel Target in the Pathogenesis of Autosomal Dominant Polycystic Kidney Disease (ADPKD): A Translational Study. Presented at Lepow Medical Student Research Day 2015, Case Western Reserve University School of Medicine. July 17, 2015.
7. **A.S. Do**, D. Leizman. Where’s the Obstruction – Inside or Out? Presented at Department of Medicine Research Day 2016, UH Hospitals Case Medical Center, Case Western Reserve University School of Medicine. May 6, 2016.
8. **A.S. Do**, G.A. Smith, J. Pace, M.K. Kasliwal. Spinal Intradural Lymphoma: Is Surgery Necessary? Poster Presentation. Presented at Lepow Medical Student Research Day 2016, Case Western Reserve University School of Medicine. August 18, 2016.
9. **A.S. Do**, J.S. Yu. Intracranial injection of dendritic cells may provide anti-tumor immune response. Oral Presentation. Presented at California Association of Neurological Surgeons Annual Meeting. January 19, 2020.
10. **A.S. Do**, J. Hu, J.S. Yu. Phase I Trial Showing Immune Response and Safety of Dendritic Cell Vaccine in Newly Diagnosed GBM and Recurrent GBM Patients. E-poster. Presented at American Association of Neurological Surgeons Annual Meeting. April 25, 2020.
11. **A.S. Do**, J.S. Yu. Treatment of Recurrent Glioblastoma with Activated T Cells Against Glioma Stem Cell Antigen Epitopes Leads to Antigen Specific and Cancer Stem Cell Killing. Oral Presentation. Presented at American Association of Neurological Surgeons Annual Meeting. April 28, 2020.

12. **A.S. Tay**, M. Maya, F. Moser, and W. Schievink. Reducing Cost And Imaging In Patients With Spinal Cerebrospinal Fluid Leaks: CT- Versus Heavily T2-weighted MR-myelography. E-poster. Presented at American Association of Neurological Surgeons Annual Meeting. August 21, 2021.
13. **A.S. Tay**, J. Ha, M. Borzage, and P. Chiarelli. In vitro and in vivo evaluation of phase-contrast MRI in determining CSF flow rates within shunt tubing using a phantom and pediatric patients. E-poster. Accepted for presentation at Congress of Neurological Surgeons Annual Meeting. October 18, 2021.
14. **A.S. Tay**, M. Maya, and W. Schievink. Patients with persistent post dural puncture headache should be considered for evaluation of spontaneous cerebrospinal fluid leaks. E-poster. Presented at Congress of Neurological Surgeons Annual Meeting. September 9, 2023.
15. **A.S. Tay**, J. Daume, C. Reed, U. Rutishauser, and A.N. Mamelak. Hippocampal Interictal Epileptiform Discharges may disrupt working memory. Poster Presentation. Presented at American Society for Stereotactic and Functional Neurosurgery Biennial Meeting June 3, 2024.