

# Curriculum Vitae

## Joseph T. Ho, MD, PhD, MBA

### Education

M.B.A. with Healthcare Management certification, Pacific Lutheran University, Tacoma, WA, 2023  
M.D., University of Washington School of Medicine, Seattle, WA, 2006  
Ph.D. Neurobiology and Behavior, University of Washington, Seattle, WA, 2004  
B.S. with college honors in Molecular and Cellular Biology, University of Washington, Seattle, WA, 1996  
B.S. with college honors in Chemistry, University of Washington, Seattle, WA, 1996

### Post-Graduate Training

Chief Resident Neurological Surgery, University of Colorado, Denver, CO 07/1/12 – 06/30/13  
Fellow Neurointerventional Surgery, University of Colorado, Denver, CO 07/1/11 – 06/30/12  
Resident Neurological Surgery, University of Colorado, Denver, CO 07/1/07 – 06/30/13  
Intern General Surgery, University of California San Francisco, San Francisco, CA 06/20/06 – 06/21/07

### Employment Experience

Instructor, Department of Biology, Pacific Lutheran University, Tacoma, WA. 02/2025 - current  
Clinical Associate Professor, College of Medicine, Washington State University, Vancouver, WA. 4/7/2023 - current  
Lecturer, School of Nursing, Pacific Lutheran University, Tacoma, WA. 02/17/2021 - current  
Volunteer Physician, The Olympia Free Clinic, Olympia, WA. 4/28/2021 - current

Independent Consultant (Joseph T Ho, LLC) for Starfish Neuroscience Inc, Bellevue, WA. 5/23/2022 – 6/30/2023  
Neurosurgeon and Neurointerventionalist. Medical Director of Neurointerventional Surgery. Co-Medical Director of Stroke and Neuro ICU programs. Providence St. Peter Hospital, Olympia, WA. 08/24/2015- 1/31/2021.  
Neurosurgeon and Neurointerventionalist. Providence Saint Joseph Medical Center, Burbank, CA 10/2013 – 07/31/2015  
Research Assistant, Graduate Program in Neurobiology and Behavior / Department of Neurological Surgery, University of Washington, 1999 – 2004  
Research Scholar, Howard Hughes Medical Institute-National Institutes of Health Research Scholars Program, National Institute of Neurological Disease and Stroke, NIH, 1998-1999  
Computer Lab Assistant, Computing and Communications, Client Services, University of Washington, 1994-1996  
MCAT review course lecturer and small group leader, The Princeton Review, Summer 1997  
Hydrologist, Hydrology Department, US Geological Survey, US Department of the Interior, 1991-1992

### Certificates and Licensure

Washington State Medical License MD60550779, Issued 4/23/2015, Expires 2/11/2028  
California State Medical License 126941, Issued 8/16/2013, Expires 2/28/2025  
Colorado State Medical License DR.0047010, Issued 8/22/2008, Expired 4/30/2019  
Emergency Neurological Life Support (ENLS) Certification, Expired 10/3/2021  
Advanced Cardiac Life Support  
Basic Life Support  
Advanced Trauma Life Support, Expired  
CA Fluoroscopy Xray Supervisor and Operator License, Issued 11/1/2013, Expired 10/31/2015

### Additional training / course work

Emergency Neurological Life Support (ENLS) Train the Trainer Course, 10/3/2019  
Principles and Practice of Gamma Knife Radiosurgery, University of Pittsburgh, January 2013  
The American Society of Neuroimaging course with certification in Transcranial Doppler, Miami, FL 2012

### Honors and Awards

Beta Gamma Sigma, The International Business Honor Society 2023 -

Nominee for World Class Care, the President's Awards, University of Colorado Hospital, 2012  
 Myra Pascoe Endowed Scholarship Fund in Medicine, 2005  
 Genevieve Bale Endowed Scholarship, 2005  
 University of Washington Medical Student Research Training Program award, 1997  
 Golden Key National Honor Society, 1993  
 Robert C. Byrd Honors Scholarship, 1991  
 Frank W. Seldon Memorial Scholarship, 1991  
 University of Washington Undergraduate Scholars Award, 1991

### **Professional Society Memberships**

Society of Neurointerventional Surgery, Emeritus Member, 10/2021 - current  
 Neurocritical Care Society, 10/2019 - 2020  
 Society of Neurointerventional Surgery, Senior Member, 01/2015 – 1/2021  
 AANS/CNS Section on Trauma and Neurocritical Care, 11/2014  
 American Heart Association, 2013 - 2022  
 Congress of Neurologic Surgeons, 2013 - 2021  
 American Association of Neurologic Surgeons, Member, 2013 - 2021  
 Society of Neurointerventional Surgery, Junior Member, 2011 - 2014  
 Member, Cerebrovascular Section, AANS/CNS, 2011 - 2020  
 American Association of Neurological Surgeons, Candidate (Resident) Member, 2007 - 2013  
 Congress of Neurological Surgeons, Resident Member 2007 - 2013  
 American College of Surgeons, 2006 – 2007  
 American Medical Association, 1996 – 2000, 2015 - 2021  
 Washington State Medical Association, 1996 – 1998, 2015 - 2021

### **Hospital Committees**

Providence St. Joseph Health Stroke Focus Group 2018 - 2021  
 Providence St. Peter Hospital Physician Information Systems Committee, 06/2016 - 2018  
 Providence St. Joseph Health Research Sub-committee, 2016 - 2018  
 Providence St. Joseph Health Stroke and Hemorrhage Sub-committee, 2013 – 2018  
 Providence Saint Joseph Medical Center Physician Information Systems Committee and Epic Super User, 05/2014 – 07/2015  
 Providence Saint Joseph Medical Center Multidisciplinary Peer Review Committee, April 2014 – July 2014  
 Providence Saint Joseph Medical Center Endovascular Peer Review Committee, February 2013 – July 2015  
 University of Colorado Hospital Professional Risk Management committee, 2009-2013  
 University of Colorado Medical Board, 2010-2011  
 University of Colorado Graduate Medical Education Committee, 2009-2010  
 University of Colorado House Staff Association executive committee member, 2007-2013

### **Research Experience**

#### **Providence St. Joseph Health**

Providence St. Joseph Health system wide stroke research projects (various). See below for list of posters.

#### **University of Washington**

Graduate Program in Neurobiology and Behavior/Department of Neurological Surgery  
 Dissertation research in the laboratory of Prof. R. S. Morrison, 1999 – 2004  
 Dissertation title: *Bridging cell growth and proliferation: Identification and characterization of binding partners for pescadillo, a novel nucleolar protein involved in tumorigenesis and DNA damage.*

#### **National Institutes of Health**

Howard Hughes Medical Institute - National Institutes of Health Research Scholars Program  
 National Institute of Neurological Disorders and Stroke  
 Mutational analysis of Bax and Bcl-X<sub>L</sub> under Dr. R. J. Youle, August 1998 – July 1999

#### **University of Washington**

#### Department of Neurological Surgery

Role of p53 in anoxia/aglycemia-induced cell death under Prof. R. S. Morrison, 1996 - 1998

Neuroprotection of MK-801 and cycloheximide in an ischemia model under Prof. D. W. Newell, 1995 – 1996

Undergraduate Honors thesis: *Additive protection by cycloheximide and MK-801 against combined oxygen and glucose deprivation in a rat organotypic hippocampal slice culture model.* June 1996.

#### Department of Chemistry, Center for Process Analytical Chemistry

Fluorescence and UV/VIS spectroscopy of thermal denaturation of DNA under Prof. J. B. Callis, 1994 - 1995

Characterization of Composition and Physical Effects on Moisture Determination, CPAC Optical Moisture

Monitoring of Hanford Waste Tank Project, under Dr. D. J. Veltkamp, 1993 - 1994

Bridging in ionic solutions under Dr. C. J. Thompson and Prof. J. B. Callis, 1992 – 1993

Undergraduate honors thesis: *Quantification of NaCl solutions by means of short wave near-infrared spectroscopy.* June 1996.

### Teaching Experience

Instructor, Department of Biology, Pacific Lutheran University (2/2025 – current)

- BIOL 442 Cell Biology

Clinical Instructor for Washington State University Medical Students (4/2023 – current)

Lecturer, DNP Program, Pacific Lutheran University (2/2021 - current)

- NURS 730 Advanced Pathophysiology
- NURS 770 Primary Care Procedures and Diagnostics
- NURS 773 FNP II (Guest lecturer)

Guest Lecturer, School of Business (2023 - current)

- BUSA 387 Healthcare Operations (1 lecture)

Routine on-going CME lectures for various MD, RN, and ancillary staff throughout the year on cerebrovascular diseases at various community and Providence St. Joseph Health Hospitals, 2013 – 2021 (see complete listing below)

Madaktari Africa, teaching neurosurgery in Tanzania, Africa November 2010

Brain cutting lab for University of Colorado medical students, 2008-2012

Teaching Assistant University of Washington, Introduction to Clinical Medicine, Spring 2002

Teaching Assistant University of Washington, Neuroanatomy, Spring 2000

Teaching Assistant University of Washington, for Head and Neck Anatomy, Spring 1998

The Princeton Review, MCAT course lecturer and small group leader, Summer 1997

### Publications

**Neurologic Emergencies.** In K.J. Richardson. *Emergency Nursing.* In preparation. Book Chapter.

**Pharmacological management of cerebral venous sinus thrombosis with full-dose IV heparin infusion and its clinical outcomes.** A. Fernandez, V. Nair, A. Mckeone, **J. Ho.** Am J Emerg Med. 2017 Mar 18

**Pipeline Embolization Device for the treatment of cervical carotid and vertebral dissecting aneurysms.** E.F. Sczudlo, C. Benavides-Baron, **J.T. Ho,** G.P. Teitelbaum. J Vasc Surg. 2016 May; 63(5):1371-4.

**Recurrent cerebrospinal fluid shunt infection and the efficacy of reusing infected ventricular entry sites.** K.R. Winston, **J.T. Ho,** S.A. Dolan. J Neurosurg Pediatr. 2013 Jun;11(6):635-42.

**Impact of B-cell Defects on West Nile Virus Meningoencephalitis in Solid Organ Transplant Recipients.** M.E. Levi, D. Quan, **J.T. Ho,** B.K.Kleinschmidt-DeMasters, K.L. Tyler, T.J. Grazia. Clinical Transplantation. 2010 Mar; 24(2):223-228.

**A novel interaction between nucleolar proteins pescadillo and nucleophosmin/B23.** **J.T. Ho,** T. Uo and R.S. Morrison. Journal of Investigative Medicine. 2004 Jan; 52(1). Abstract.

**Proteomic analysis in neurosciences.** R. S. Morrison, Y. Kinoshita, M. D. Johnson, T. Uo, **J. T. Ho,** J. K. McBee, T. P. Conrads, T. D. Veenstra. Molecular and Cellular Proteomics. 2002 Aug; 1(8):553-60. Review.

**Neuronal survival and cell death mechanisms.** R. S. Morrison, Y. Kinoshita, M. D. Johnson, S. Ghatan, **J. T. Ho**, and G. Garden. *Advances in Experimental Medicine and Biology*. 2002; 513:41-86. Review.

**Mechanisms of Neuronal Cell Death.** R. S. Morrison, Y. Kinoshita, H. Xiang, M. D. Johnson, C. Kuntz, S. Ghatan, **J. T. Ho**, and P. A. Schwartzkroin. *Mental Retardation and Developmental Disabilities Research Reviews*. 1998; 4:157-170. Review.

**Evidence for p53 playing a direct role in mediating anoxia/aglycemia-induced cell death in primary cultures of murine cortical neurons.** **J. T. Ho**, H. Xiang, Y. Kinoshita, D.W. Newell, R. S. Morrison. *Journal of Investigative Medicine*. 1998 Jan; 46(1). Abstract.

## Posters

**Thrombectomy Treatment Times Pre-post Early Activation of Interventional Radiology Team.** S. Henderson, E. Baraban, B.S. Rogers, M. Provencher, **J.T. Ho**, Y. Loh, A. Scherman. *International Stroke Conference*, 2021.

**IV Alteplase Benefits Thrombectomy Patient with Incomplete TICI 2 Endovascular Reperfusion but not those with Complete TICI 3 Endovascular Reperfusion.** J.W. Tarpley, **J.T. Ho**, T.L. Stuchiner, R. Ovando, D. Kelley, N. Martin, G.P. Teitelbaum, E. Baraban. *International Stroke Conference*, 2021.

**IV Alteplase Prior to Thrombectomy Benefitted Patients with M1 Occlusion but not Thrombectomy Patient with M2 Occlusions.** J.W. Tarpley, **J.T. Ho**, T.L. Stuchiner, R. Ovando, D. Kelley, N. Martin, G.P. Teitelbaum, E. Baraban. *International Stroke Conference*, 2021.

**Does IV tPA Improve Outcomes in Stroke Patients with Large Vessel Occlusions Treated with Intra-arterial Therapy?** **J.T. Ho**, J. W. Tarpley, H. Li. *International Stroke Conference*, 2017.

**What Hospital Characteristics Drive Faster Thrombectomy for Emergent Large Vessel Occlusion (ELVO)?** J. Tarpley, L. Lucas, **J.T. Ho**, E. Baraban. *International Stroke Conference*, 2017.

**Endovascular Treatment of Dural Venous Sinus Thrombosis.** **J.T. Ho**, J. Seinfeld, D.A. Kumpe. Poster presentation at the Society for Neurointerventional Surgery, July 2012.

**Stenting for pseudotumor: Patterns of hemodynamic failure.** D.A. Kumpe, J. Seinfeld, **J.T. Ho**, Q. Mei, and Z. Yi. Poster presentation at the Society for Neurointerventional Surgery, July 2012.

**Nerve conduction study and electromyography aids in early detection of West Nile infection in the immunosuppressed.** P. Kaur, **J.T. Ho**, M. Levi, T. Grazia, K.L. Tyler, B. Kleinschmidt-Demasters, D. Quan. Abstract at 2008 AANEM annual meeting.

**A novel interaction between nucleolar proteins pescadillo and nucleophosmin/B23.** **J.T. Ho**, T. Uo and R.S. Morrison. Stage presentation at 2003 American Federation for Medical Research, Western Section meeting (Carmel, CA).

**Pescadillo, the little fish in a big pond: a novel nucleolar protein associated with development, proliferation and malignancy.** **J. T. Ho**. Invited speaker at the 2003 Annual Retreat for the Graduate Program in Neurobiology and Behavior, University of Washington (Seattle, WA).

**Regulation of cell death by Bax and Bcl-XL.** **J. T. Ho**, Y. Hsu, R. J. Youle. Poster presentation at 1999 HHMI-NIH Research Scholars Program Science Day.

**p53 is required for ischemia-induced cell death in postnatal primary neuronal cultures.** **J. T. Ho**, H. Xiang, Y. Kinoshita, D. W. Newell and R. S. Morrison. Poster presentation at the 1998 Society for Neuroscience meeting.

**Evidence for p53 playing a direct role in mediating anoxia/aglycemia-induced cell death in primary cultures of murine cortical neurons.** J. T. Ho, H. Xiang, Y. Kinoshita, D.W. Newell, R. S. Morrison. Poster presentation at 1997 University of Washington School of Medicine Medical Student Research Training Program poster session.

**Optical imaging of acute ischemic injury in hippocampal slice cultures.** A. Barth, L. B. Nguyen, L. Barth, J. T. Ho, D. W. Hochman, D. W. Newell. Poster presentation at 1996 Society for Neuroscience meeting.

**Simultaneous analysis of the ions of simple salts by near-infrared spectroscopy.** Christopher J. Thompson, Joseph T. Ho, James B. Callis. Presented at 1993 Federation of Analytical Chemistry and Spectroscopy Society.

**Investigation of ionic interactions in aqueous solution by NIRS.** Christopher J. Thompson, Joseph T. Ho, James B. Callis. Presented at 1993 Center for Process Analytical Chemistry meeting.

**Multicomponent analysis of ions in H<sub>2</sub>O by NIRS.** Christopher J. Thompson, Joseph T. Ho, James B. Callis. Presented at 1992 Center for Process Analytical Chemistry meeting.

### **Formal Presentations / Lectures:**

**Building a new clinical program.** Guest lecturer for *BUSA 387 Health Care Operations*, School of Business, Pacific Lutheran University, 10/17/2023

**Overview of Surgical Cerebrovascular Diseases.** J.T. Ho. CME lecture at Summit Pacific Medical Center, 7/8/2020.

**Field Stroke Severity Assessment.** J.T. Ho. Thurston County EMS Night, 10/29/2019.

**Spinal Anatomy.** J.T. Ho. Community lecture, 10/15/2019.

**Updates in Acute Ischemic Stroke.** J.T. Ho and C. White. CME lecture at Mason General Hospital, 6/20/2019.

**Stroke thrombectomy.** J.T. Ho. Lecture to Providence Centralia Hospital providers, 5/10/2019.

**Updates in Acute Ischemic Stroke (Extended time window/RAPID).** J.T. Ho. Lecture for Mason General Hospital providers, 9/18/2018.

**Updates in Acute Ischemic Stroke.** J.T. Ho and C. White. Lecture for Providence St. Peter Hospital ED providers and staff, 3/27/2018.

**Endovascular Interventions for Ischemic Stroke.** J.T. Ho. Invited speaker at AHA/ASA WA State Cardiac and Stroke Conference, 10/27/2017.

**Hemorrhagic Stroke.** J.T. Ho. CME Grand Rounds at Providence St. Peter Hospital, 7/13/2017.

**Ischemic Stroke and Subarachnoid Hemorrhage.** J.T. Ho. Lecture for radiology techs and nurses at Providence St. Peter Hospital, 11/11/2016.

**Treatment for Hemorrhagic Stroke.** J.T. Ho. Invited speaker at AHA/ASA WA State Cardiac and Stroke Conference, 9/18/2016

**Ischemic Stroke.** J.T. Ho. CME lecture for Providence St. Peter Hospital, 9/8/2016.

**Endovascular Neurosurgery.** J.T. Ho. Lecture for nursing education, 6/24/2016

**Updates in Acute Stroke Care. J.T. Ho.** Lecture for Willapa Harbor Hospital, 5/11/2016.

**Updates in Acute Stroke Care. J.T. Ho.** Lecture for Providence Centralia Hospital ED, 5/9/2016

**Ischemic and Hemorrhagic Stroke. J.T. Ho.** Nursing education lecture, 3/1/2016

**Acute Stroke Treatment. J.T. Ho.** Lecture for EMS, 10/6/2015

**Stroke Treatments in 2015: Updates from the ISC. J.T. Ho.** CME lecture at Providence Saint Joseph Medical Center, 02/2015

**2015 PSJMC RN Neuro Education: Ischemic and Hemorrhagic Stroke. J.T. Ho.** Series of 6 lectures for nursing education at Providence Saint Joseph Medical Center, 01/2014

**Stroke care for EMS: ischemic and hemorrhagic. J.T. Ho.** Lecture for Burbank EMS personnel, 08/2014

**Dural Sinus Thrombosis. J.T. Ho.** CME lecture at Providence Saint Joseph Medical Center, September 2014

**Hemorrhagic Stroke. J.T. Ho.** Invited speaker, nursing education at Providence Little Company of Mary Torrance, June 2014.

**Comprehensive Stroke Care. J.T. Ho** and M. Marvi. Lecture at Community Stroke Awareness Fair at Providence Saint Joseph Medical Center, May 2014.

**Critical Care Transport Team. D. Buffham, M. Marvi, J.T. Ho.** CME lecture at Providence Saint Joseph Medical Center, May 2014

**Intracranial Atherosclerotic Disease (ICAD). J.T. Ho.** CME lecture at Providence Saint Joseph Medical Center, March 2014

**Highlights for the primary care provider from the IESC and ISC 2014. J.T. Ho.** CME lecture at Providence Saint Joseph Medical Center, March 2014

**Updates from the ISC 2014: Intracerebral Hemorrhage. J.T. Ho.** CME lecture at Providence Saint Joseph Medical Center, February 2014

**Cerebrovascular Anatomy and Stroke Cases. J.T. Ho.** CME lecture at Providence Saint Joseph Medical Center, November 2013.

**Advanced Stroke Treatment. J.T.Ho.** Aurora Colorado EMS “Brains and Breakfast” symposium 2011.

**Brainstem cavernous malformations: Is the natural history ever worse than the surgical risk? J.T. Ho.** Neurosurgery in the Rockies Meeting 2009.