# CHRISTINE L HAMMER BS MD FAANS FCNS

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# EMPLOYMENT

04/2023 Neurosurgeon, Olympia Orthopedic Associates, Olympia,WA

09/2019 – 10/2022 Neurosurgeon, Virginia Mason Franciscan Health, Tacoma, WA

08/2018 – 07/2019 Spine Fellow and Junior Faculty, Emory University, Atlanta, GA

06/2011 – 06/2018 Neurosurgery Resident, Thomas Jefferson University Hospital, Philadelphia, PA

# EDUCATION

5/202 Institute for Function Medicine, Certification Track

3/2024 Functional Medicine Coaching Academy, Health Coach Certification Program

2/2024, 4/2024 Aesthetics Medical Educators Training, Basic and Advanced Neurotoxin and Filler Certifications

06/2015 – 06/2016 Thomas Jefferson University, College of Population Health, Philadelphia, PA Health Policy, Graduate Certificate applicable to an M.S. in Health Policy

08/2007 – 05/2011 Indiana University School of Medicine, Indianapolis, IN

08/2002 – 05/2007 Indiana University Purdue University, Indianapolis, IN, B.S. Biology

Research Thesis: The Role of Zinc Finger Transcription Factors in Xenopus Laevis Development

# MEDICAL LICENSES

08/2019 State of Washington: Active MD60937237

06/2018 – 12/2019 State of Georgia: Not Renewed

10/2018 – 12/2019 State of Tennessee: Not Renewed

06/2011 – 07/2018 State of Pennsylvania: Not Renewed

# NPI and DEA

06/2011 NPI 1821389255

06/2018 DEA (FH7706306, unrestricted)

# ATLS TRAINING CERTIFIED

# BOARD CERTIFICATION

2024 American Board of Neurological Surgery, Oral Exam, Passed (ABNS Board Certified)

03/2015, 03/2016 American Board of Neurological Surgery, Primary Exam, Passed

# FAANS: FELLOW, AMERICAN ASSOCIATES OF NEUROLOGICAL SURGERY (active)

# FACNS: FELLOW, CONGRESS OF NEUROLOGICAL SURGEONS (active)

# PUBLICATIONS

2019 Hammer, C et. al. Liposomal bupivacaine may decrease opiate use and lower pain scores in patients undergoing lumbar spine surgery. 2019. Submitted.

2018 Hammer, C et al. Penetrating Injuries to the Cervical Spine. Cervical Trauma. 2018.

2017 Hammer, C et al. Navigated anterior transoral surgery for C1 and C2 pathologies. Navigation and Robotics in Spine Surgery. 2018.

2017 Achey et al. Patient-assessed tremor severity, not physician-reported motor symptom severity, predicts depression and anxiety in Parkinson’s Disease and Essential Tremor patients undergoing deep brain stimulation. J Neurosurg. 2017.

2017 Daoh, B et al. Anticoagulation versus Antiplatelet Treatment in Patients with Carotid and Vertebral Artery Dissection: A Study of 370 Patients and Literature Review. Neurosurg. 2017.

2016 Hammer, C, Rodriguez, A, Schirmer, C. Achieving Greatness: #Concussion. Neurosurgery Blog. Published October 12, 2016.

2016 Storey, A, et al. Development of moyamoya arteriopathy following treatment of intracranial tumors: Clinical and radiographic characterization. 2016. (Submitted)

2016 Hammer, C, Winer, J, Warf, B. Central Cord Syndrome in a Pediatric Patient with Chiari-I Malformation 2016.

2016 Jernigan, S, et al. Cerebral vasculopathy associated with PHACE syndrome after indirect surgical revascularization. 2016. (Accepted 2018).

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| 2016 | Hammer, C et al. Decreased CSF Output as a Clinical Indicator of Cerebral Vasospasm Following |
|  | Aneurysmal Subarachnoid Hemorrhage. Clin Neurol Neurosurg. 2016. May; 144:101-4 |
| 2015 | Daoh, B et al. Dissecting Pseudoaneurysms: Predictors of Symptom Occurrence, Enlargement, Clinical |
|  | Outcome and Treatment. J Neurosurg. 2015. |
| 2014 | Chalouhi, N et al. Safety and Efficacy of the Pipeline Embolization Device in 100 Small Aneurysms. J |
|  | Neurosurg. 2015 Jun; 122(6):1498-502. |
| 2014 | Chalouhi, N et al. Endovascular management of cerebral vasospasm following aneurysm rupture: |
|  | Outcomes and predictors in 116 patients. Clinical Neurol Neurosurg. 2014 Mar; 118:26-31. |
| 2014 | Hammer, C et al. Nutritonal Care of the Spinal Cord Injured Patient. Benzel’s Spine Surgery: Techniques, Complication Avoidance, and Management, 4th Edition 2014. |
| 2013 | Hammer, C, et al., A. Images In Neurosurgery. Congress Quarterly, Fall 2013. |
| 2012 | Hammer, C, et al. J. Techniques for Intradural Tumor Resection. Master Techniques in Orthopaedic Surgery: The Spine, 3rd Edition. 2014. |
| 2012 | Hammer, C, et al. Cranial Epidural Abscess and Subdural Empyema. Principles and Practice of Pediatric |
|  | Neurosurgery, 3rd Edition. 2014. |

# RESEARCH AND ACADEMIC ACTIVITIES

2017 Antiplatelet Agent Reversal in Patients with Intracranial Hemorrhage (Retrospective IRB approved) Principle Investigator: Jack Jallo M.D., Department of Neurological Surgery, Thomas Jefferson University, Philadelphia, PA

2017 The comparative effects of DTRAX in the setting of multiple level ACDF (IRB approved)

Principle Investigator: Joshua Heller M.D., Department of Neurological Surgery, Thomas Jefferson University, Philadelphia, PA

2016 Assessment of time and financial costs of lumber microdiscectomy for twenty patients

Principle Investigator: William Welch M.D., Department of Neurological Surgery, University of Pennsylvania Health System, Philadelphia, PA

2016 The impact of DBS on quality of life and depression in patients with Parkinson’s Disease and Essential Tremor

Principle Investigator: Darlene Lobel M.D., Department of Neurological Surgery, Cleveland Clinic, Cleveland, OH

2016 Quality Improvement in Pediatric Neurosurgery

Principle Investigator: Liliana Goumnerova M.D. and Mark Proctor M.D., Boston Children’s Hospital, Boston, MA

2014 - 2015 Internal Carotid Artery and Vertebral Artery Dissections, Retrospective Study

Principle Investigator: S. Tjoumakaris, M.D., Department of Neurological Surgery, Thomas Jefferson University, Philadelphia, PA

2013 - 2015 Vasospasm and CSF trends in patients with subarachnoid hemorrhage, Retrospective Study

Principle Investigator: Pascal Jabbour, M.D, Department of Neurological Surgery, Thomas Jefferson University, Philadelphia, PA

2008 - 2009 Summer Research Program in Academic Medicine, Spinal Cord and Brain Injury Research Group, Stark Neurosciences Research Institute, Indiana University School of Medicine, Indianapolis, IN

Principle Investigator: Xiao-Ming Xu M.D. Ph.D., Department of Neurological Surgery Project: CPLA2 Activation Induces Neuronal Death Through Apoptosis

2006 - 2007 Undergraduate Senior Research, Indiana University School of Medicine, Indianapolis, IN

Principle Investigator: Simon J Rhodes Ph.D., Department of Cellular and Integrative Physiology Project: The Role of Zinc Finger Transcription Factors in Xenopus Laevis Development

# AWARDS

2016 AANS/CNS Resident Traveling Fellowship in Pediatric Neurosurgery

Boston Children’s Hospital, Boston, MA

2015 Council of State Neurosurgical Societies, Northeast Quadrant Socioeconomic Fellowship 2015-2016 2011 Julius M. Goodman Neurosurgery Scholarship

Indiana University School of Medicine, Indianapolis, IN

2009 Claude Smith Black M.D. Scholarship, Best Project and Presentation

Indiana University School of Medicine Student Research Forum, Indianapolis, IN

 2008 Student Summer Research Program in Academic Medicine Scholarship

Indiana University School of Medicine, Indianapolis, IN

2004 Scholarship Recipient and Biology Mentor

Bepko Learning Center, Indiana University Purdue University, Indianapolis, IN

# POSTER SESSIONS AND ORAL PRESENTATIONS

2017 Housestaff Quality and Safety Poster Session

Antiplatelet Agent Reversal in Patients with Intracranial Hemorrhage Thomas Jefferson University Hospital, Philadelphia, PA

2015 Digital Poster Session, The Congress of Neurological Surgeons (CNS), Fall 2015 Meeting

Dissecting Pseudoaneurysms: Predictors of Symptom Occurrence, Enlargement, Clinical Outcome and Treatment.

CNS Fall 2015 Meeting, New Orleans, LA

2015 Digital Poster Session, The Congress of Neurological Surgeons (CNS), Fall 2015 Meeting Anticoagulation versus Antiplatelet Treatment in Patients with Carotid and Vertebral Artery Dissection: A Study of 370 Patients and Literature Review.

CNS Fall 2015 Meeting, New Orleans, LA

2015 Counsel of State of Neurosurgical Societies (CSNS), Fall 2015 Meeting Testimony to Resolutions

CSNS Fall 2015 Meeting, New Orleans, LA

2015 Housestaff Quality and Safety Poster Session

Intraoperative Communication: Quality and Safety Concerns and Future Directions Thomas Jefferson University Hospital, Philadelphia, PA

2011 - 2018 Residency case conference presentations and board review presentations

# PROFESSIONAL ACTIVITIES

2015 - 2016 Council of State Neurosurgical Societies, Fellowship

2015 - 2016 Housestaff Quality and Safety Leadership Council

Thomas Jefferson University Hospital, Philadelphia, PA

2013 Society of Neurological Surgeons Junior Resident Course, Bootcamp II Weill Cornell Medical Center, New York, NY

2011 Society of Neurological Surgeons Intern Course, Bootcamp I University of Pennsylvania, Philadelphia, PA

# PRE-RESIDENCY ACADEMIC ACTIVITIES

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| 2010 - 2011 | Dean Appointed Liaison, Competency Team, Indiana University School of Medicine, Indianapolis, IN |
| 2010 - 2011 | Volunteer, Student Outreach Clinic, Indiana University School of Medicine, Indianapolis, IN |
| 2009 - 2010 | Dean Appointed Student Leader, Student Research Committee, Indiana University School of Medicine, |
|  | Indianapolis, IN |
| 2008 - 2009 | Co-Chair, Ethics At Lunch Student Interest Group, Indiana University School of Medicine, Indianapolis, IN |
| 2007 - 2008 | Member, Indiana University School of Medicine Ethics Team, Indianapolis, IN |

Competency VII: Moral Reasoning and Ethical Judgment

2004 - 2007 Technical Assistant, *Stroke News*, Stroke Program, Indiana University School of Medicine, Indianapolis, IN Initiated design: Spring 2004

Subsequent issues: Fall 2004, Spring 2005, Fall 2005, Summer 2006, Winter 2007/2008

2003 - 2005 Learning Resource Mentor, Bepko Learning Center, Indiana University Purdue University

 Indianapolis, IN