Department of Neurology

Neurology concerns itself with the diseases of brain, spinal cord, peripheral nerves and muscles. An introduction to the anatomy and physiology of the nervous system is presented in the first-year neuroscience course by faculty from the Department of Neuroscience (http://neurosci.wustl.edu), with participation of faculty from the Department of Neurology (http://neuro.wustl.edu). A first-year selective titled Clinical Correlations in Neurosciences (FYSelect 5017) is available, which is an opportunity for interested students to shadow physicians in neuro-related fields and attend basic science or clinical conferences. Another first-year selective titled Alzheimer's Disease (AD) in the Clinic and the Lab is also available, which is an opportunity for interested students to get an overview of the most exciting areas of AD clinical and science research. In the second year, the Department of Neurology presents the course Diseases of the Nervous System (Neurol 632) in conjunction with the departments of Pathology & Immunology (http://pathology.wustl.edu), Neurosurgery (http://neurosurgery.wustl.edu) and Ophthalmology & Visual Sciences (http://ophthalmology.wustl.edu). The course emphasizes the pathophysiology, pathology, clinical manifestations and treatment of the major neurological and neurosurgical diseases. The department also participates in the Practice of Medicine course, providing lectures, demonstrations and teaching exercises with patients in neurological physical diagnosis.

For more information about the Department of Neurology and its thirteen divisions, please visit the department website.

Website: https://neuro.wustl.edu/education

Degrees & Requirements

While the Department of Neurology does not offer its own degree, some of the department’s courses are open to students in the MD and MSTP (MD/PhD) programs. Further information about the MD and MSTP degrees can be found in the Degrees & Programs Offered (http://bulletin.wustl.edu/medicine/degrees) section of this Bulletin.

Research

M35 Neurol 900

In the fourth year, opportunities exist for many varieties of advanced clinical or research experience.

Beau Ances, MD

Taylor Avenue Building Extension, 2nd Floor
Phone: 314-747-8423

Neuroimaging of Neurodegenerative Disorders. Students can work in a neuroimaging laboratory that is focused on translational discovery of neuroimaging biomarkers for neurodegenerative diseases. The laboratory focuses on the pathogenesis of Alzheimer’s disease (AD) and HIV-associated neurocognitive disorders (HAND). We are investigating the effects of neurodegenerative diseases on brain network level using functional (blood oxygen level dependent imaging, arterial spin labeling), structural (volumetrics, diffusion tensor imaging), and metabolic (PET amyloid and tau). Multiple projects that involve bioengineering, neuroimaging, and infectious disease are available depending on the interest of the student.

Randall Bateman, MD

Biotechnology Center, Room 304
Phone: 314-747-7066

Central nervous system protein metabolism in aging and dementia. This research elective will expose the student to translational research in the study of Alzheimer’s disease. The student will participate in multiple areas of the research including participant consent, enrollment, and admission to a research hospital unit. Lumbar catheter placement and CSF sample collection will be demonstrated. The student will participate in sample analysis including processing for mass spectrometry quantitation, ELISA, and western gel methods. Quantitation, analysis and modeling of the data will be taught in the context of data interpretation and study design.

Anne H. Cross, MD, and Laura Piccio, MD, PhD

McMillan, 3rd Floor
Phone: 314-747-4591 or 314-747-0405

Understanding interactions of the immune system with the central nervous system as it relates to multiple sclerosis and other neuroimmunological disorders. Our goal is to understand how immune cells cross the blood-brain barrier and initiate the cascade of events leading to lesions of multiple sclerosis. We are also funded to study the effects of diet and adipokines on neuroinflammation. Depending upon the time commitment of the student and their individual interests and goals, they will either assist with ongoing projects or be given a laboratory project on which to work. Projects may involve animal models for MS, cell culture or studies of human samples (CSF, blood, autopsied specimens). Interested students should contact Dr. Cross (crossa@neuro.wustl.edu) or Dr. Piccio (picciol@neuro.wustl.edu) several weeks in advance before signing up for this research to allow for sufficient planning.

Robert T. Naismith, MD

McMillan, Room 310B
Phone: 314-747-0432

Clinical Imaging Research in Multiple Sclerosis (8 weeks). The student will learn about neuroimaging, imaging analyses, data collection, data management, and clinical study endpoints in multiple sclerosis (MS). They will observe patient participants undergoing a detailed evaluation of disability measures, such as ambulation, symptom scales, cognition, vision, upper extremity function, etc. They will witness the entire process of image acquisition, processing, analyses, and data extraction. They
will have the opportunity to interact with many people who are vital to the research, including research coordinators, imaging technologists, imaging physicists/chemists, and specialized research clinicians (i.e., neurocognitive and physical therapy research specialists).

The student will assist with hands-on clinical investigative research. They will gain an excellent appreciation of MS, from its pathophysiology within the central nervous system, to how it affects the neurological function of individuals. Through detailed and quantitative imaging analysis, the student will become very adept at analyzing brain MRI scans. They will mark and track lesions, determine their effects on clinical function, normal appearing white matter, cortex and gray-matter structures. They will become familiar with Amira Imaging Analysis Software, SPSS Statistical Analysis Software, SIENA Volume Analysis Software, and Matlab Imaging Analysis Software.

Steven E. Petersen, PhD
East Building, Room 2108
Phone: 314-362-3319
This lab is interested in brain organization and function, particularly for language, attention, and memory. Our main approaches to these issue is through functional MRI and large-scale network analysis.

Joel S. Perlmutter, MD
East Building, 2nd Floor
Phone: 314-362-6026
Pathophysiology of Movement Disorders. The lab is primarily interested in etiology, pathophysiology and treatment of basal ganglia disorders. We have several studies of PD. We investigate mechanisms of action of deep brain stimulation, a dramatic new treatment. These studies combine PET, cognitive testing and quantified measures of movement. We also test new drugs that might rescue injured nigrostriatal neurons (a model of PD). For these, we use PET to measure dopamine pathways and also quantify motor behavior. We also have an active program developing and validating neuroimaging biomarkers for PD and integrity of the nigrostriatal pathway that includes studies in people and animal models of PD. We have an active program combining a variety of approaches to develop biomarkers and investigate the pathophysiology of dementia associated with PD. We use PET to measure radioligand binding and sensorimotor processing in dystonia. We developed a new animal model of dystonia to investigate pharmacologic and physiologic changes. We use PET to investigate drug-mediated pathways in the brain and parse out the effects of selective dopaminergic agonists. We also are working to develop MR-based methods including DTI and resting-state functional connectivity to investigate brain mechanisms underlying PD and dystonia.

Brad A. Racette, MD
McMillan, 9th Floor
Phone: 314-362-5291
Our lab is primarily interested in environmental risk factors associated with Parkinson's disease. We use a variety of techniques to study these risk factors, including traditional field epidemiology in which we evaluate workers exposed to metals in the U.S. and residents living near a smelter in South Africa, neuroimaging where we study the pathophysiology of toxin-mediated parkinsonism, geographic information systems research where we associate environmental toxin exposures with incident and prevalent Parkinson's disease in the U.S. and Finland, and neuropathologic studies in manganese-exposed workers from South Africa. There are numerous opportunities available for students to be involved with any of these projects. Students will have some clinical exposure, as well, to familiarize them with pertinent clinical syndrome.

Marcus E. Raichle, MD
Neuro Imaging Laboratory – East Building, 2nd Floor
Phone: 314-362-6907
In vivo brain hemodynamic, metabolic and functional studies of human cognition and emotion using cyclotron-produced isotopes and emission tomography (PET) as well as functional magnetic resonance imaging (fMRI) in humans. Refer also to the listing on this page for Steven E. Petersen, PhD.

Gregory Wu, MD, PhD
McMillan, 3rd Floor
Phone: 314-362-3293
Understanding how immune responses are generated that target the central nervous system. Specifically, studies on antigen presentation cell contributions to autoimmune animal models of multiple sclerosis. Our goal is to understand what cellular interactions are critical to the development of immune-mediated demyelination.

Faculty

Department Chair
David Holtzman, MD
Visit our website for more information about our faculty (https://neuro.wustl.edu/about-us/physician-faculty-directory) and their appointments.

A
Aninda Bhat Acharya, MD, MD1
Instructor in Clinical Neurology (primary appointment)
BS University of Kansas 1992
MD University of Kansas 1996
MD1 University of Kansas 1996

Muhammad Taher Al-Lozi, MS, MD
Professor of Neurology (primary appointment)
MS University of Jordan 1985
MD University of Punjab 1980
BA University of Punjab 1976

Denis Ian Altman, MBBCH
Associate Professor of Clinical Neurology (primary appointment)
Assistant Professor of Clinical Pediatrics
MBBCH University of the Witwatersra 1975

**Lizette Alvarez-Montero, MD**
Instructor in Clinical Neurology (primary appointment)
MD School Not Listed 1991
BA Washington Univ in St. Louis 1987

**Beau Mark Ances, MD, PhD, MS**
Professor of Neurology (primary appointment)
Professor of Biomedical Engineering
Professor of Radiology
BS University of Pennsylvania 1993
MD University of Pennsylvania 2001
PHD University of Pennsylvania 2000
MS London School of Economics 1994

**Gabriel C Araujo, MS, BA1, PHD**
Instructor in Clinical Neurology (primary appointment)
BA California State University 2004
MS Washington Univ in St. Louis 2007
BA1 California State University 2004
PHD Washington Univ in St. Louis 2011

**Sylvia Awadalla, MD**
Professor of Neurology (primary appointment)
MD Ohio State University 1985

**Alan J Birtwistle**
Assistant Professor of Clinical Neurology (primary appointment)

**Joseph T Black, MD**
Professor of Clinical Neurology (primary appointment)
MD School Not Listed 1965
BA University of Rochester 1961

**Lynn Bennett Blackburn, PHD, MA**
Assistant Professor of Clinical Neurology (primary appointment)
BS Univ of Wisconsin Madison 1968
PHD Indiana University Bloomington 1972
MA Indiana University Bloomington 1970

**James Scott Bonner, MD**
Instructor in Clinical Neurology (primary appointment)
BA Drury College 1976
MD University of Missouri 1980

**Christopher C. Bosworth, PHD**
Assistant Professor of Clinical Neurology (primary appointment)
BA Southern Illinois University 2002
PHD University of Texas Southwest 2014

**Robert H Baloh, MD1, MD, PHD**
Adjunct Assistant Professor of Neurology (primary appointment)
MD1 Washington Univ in St. Louis 2001
MD Washington Univ in St. Louis 2000
BS Brown University 1995

**Robert H Baloh, MD1, MD, PHD**
Adjunct Assistant Professor of Neurology (primary appointment)
MD1 Washington Univ in St. Louis 2001
MD Washington Univ in St. Louis 2000
BS Brown University 1995

**Randall John Bateman, BS1, MD**
Professor of Neurology (primary appointment)
BS Washington Univ in St. Louis 1995
BS1 Washington Univ in St. Louis 1995
MD Case Western Reserve Univ 2000

**Max Prely Benzaquen**
Instructor in Clinical Neurology (primary appointment)

**Mary Ellen Bertrand, MD**
Associate Professor of Neurology (primary appointment)
Associate Professor of Pediatrics
BS Mckendree College 1987

**Garrett C Burris, MD**
Associate Professor of Clinical Neurology (primary appointment)
Associate Professor of Clinical Pediatrics
MD Saint Louis University 1968
BS School Not Listed 1964
C

Nigel John Cairns, PHD
Professor of Neurology (primary appointment)
Professor of Pathology and Immunology
PHD University of London 1995

David J Callahan, MD
Assistant Professor of Clinical Neurology (primary appointment)
Assistant in Clinical Pediatrics
BS University of Notre Dame 1982
MD Washington Univ in St. Louis 1986

Alejandra Camacho-Soto, MD
Instructor in Neurology (Pending Dean's Approval) (primary appointment)
BA Georgetown University 2005
MD University of Pittsburgh 2011

Meghan Clark Campbell, PHD
Associate Professor of Neurology (primary appointment)
Associate Professor of Radiology
BS University of Illinois 1999
PHD Indiana State University 2004

Russell C. Cantrell, MD
Instructor in Clinical Neurology (primary appointment)
MD University of Tennessee 1989
BS School Not Listed 1985

David A Carpenter, MD
Professor of Neurology (primary appointment)
MD Washington Univ in St. Louis 1983
BS Amherst College 1979

Alexandre Carter, PHD, MD
Associate Professor of Neurology (primary appointment)
Associate Professor of Occupational Therapy
PHD Harvard University 2003
BS Brandeis University 1991
MD Harvard University 2003

Salim Chahin, MD, MS
Assistant Professor of Neurology (primary appointment)
MD Damascus University 2004
MS University of Pennsylvania 2013

Yasheng Chen, PHD, MA
Assistant Professor of Neurology (primary appointment)
PHD Washington Univ in St. Louis 2002
BA Tianjin University 1993
MA Washington Univ in St. Louis 2002

Luqi Chi, MD, MA
Associate Professor of Neurology (primary appointment)
MD Huabei Medical College for Coa 1984
MA University of Pennsylvania 2009

John R. Cirrito, PHD
Associate Professor of Neurology (primary appointment)

BA Boston College 1998
PHD Washington Univ in St. Louis 2004

David B Clifford, MD
Melba and Forest Seay Professor of Clinical Neuropharmacology
in Neurology (primary appointment)
Professor of Medicine
BA Southwestern University 1971
MD Washington Univ in St. Louis 1975

Anne Maureen Connolly, MD
Professor of Neurology (primary appointment)
Professor of Pediatrics
BS Saint Mary's College 1980
MD Indiana University Bloomington 1984

Maurizio Corbetta, MD
Norman J. Stupp Professor of Neurology (primary appointment)
Associate Professor of Psychological & Brain Sciences
Professor of Neuroscience
Professor of Radiology
MD University of Pavia 1985

Susan R Criswell, MD
Associate Professor of Neurology (primary appointment)
BS University of Nebraska 1997
MD University of Nebraska 2001

Dorothy Anne Cross, MD
Professor of Neurology (primary appointment)
MD University of Alabama 1980
BS University of South Alabama 1976

Nicole Cruz
Instructor in Clinical Neurology (primary appointment)

David Rex Curfman, MD
Instructor in Clinical Neurology (primary appointment)
BS Purdue University 2007
MD Case Western Reserve Univ 2011

Rachel S Darken, MD, PHD
Associate Professor of Neurology (primary appointment)
MD Cornell University 2004
PHD Cornell University 2003
BA University of Texas Austin 1996

Albert Augustus Davis, PHD, MD
Instructor in Neurology (primary appointment)
BS Emory University 2002
PHD Emory University 2009
MD Vanderbilt University 2011

Brian Keith Day, MD, PHD
Assistant Professor of Neurology (primary appointment)
MD University of Kentucky 2007
PHD University of Kentucky 2005
BS Harvard University 1997
Gregory Scott Day, MS, MD  
Instructor in Neurology (primary appointment)  
MS Queen's University 2006  
BS Queen's University 2003  
MD Queen's University 2009  

Gabriela De Bruin, MD  
Associate Professor of Neurology (primary appointment)  
MD Federal University of Ceara 2005  

Andrea Denny, JD, MSSW  
Instructor in Neurology (primary appointment)  
JD University of Texas Austin 1998  
MSSW University of Texas Austin 1993  
BA University of Virginia 1990  

Amar Dhand, PHD, MD  
Adjunct Assistant Professor of Neurology (primary appointment)  
PHD Oxford University 2006  
MD Harvard University 2008  
BS Dartmouth College 2001  

Rajat Dhar, MD  
Associate Professor of Neurology (primary appointment)  
MD McMaster University 2000  

Marc I Diamond, MD  
Adjunct Professor of Neurology (primary appointment)  
BS Princeton University 1987  
MD University of San Francisco 1993  

Michael N Diringer, MA, MD  
Professor of Neurology (primary appointment)  
Professor of Anesthesiology  
Professor of Neurological Surgery  
Professor of Occupational Therapy  
MA University of Louisville 1978  
MD University of Kentucky 1982  
BA State Univ of NY Stonybrook 1974  

Jonathan Noel Dodd  
Instructor in Clinical Neurology (primary appointment)  

Joseph M Dooley Jr, MD  
Associate Professor of Clinical Neurology (primary appointment)  
MD Saint Louis University 1958  
BS Saint Louis University 1954  

Nico U. Dosenbach, PHD, MD  
Assistant Professor of Neurology (primary appointment)  
Assistant Professor of Occupational Therapy  
Assistant Professor of Pediatrics  
BA Columbia University 2000  
PHD Washington Univ in St. Louis 2008  
MD Washington Univ in St. Louis 2008  

Alexander W Dromerick, MD  
Adjunct Associate Professor of Neurology (primary appointment)  
Adjunct Associate Professor of Occupational Therapy  
Adjunct Associate Professor of Physical Therapy  

MD University of Maryland 1986  
BA University of Virginia 1980  

Lawrence N Eisenman, PHD, MD  
Professor of Neurology (primary appointment)  
PHD Northwestern University 1997  
MD Northwestern University 1997  
BS Johns Hopkins University 1988  

Juan Escandon, MD  
Assistant Professor of Clinical Neurology (primary appointment)  
MD School Not Listed 1989  
BS School Not Listed 1985  

Eugene Evra, MD  
Instructor in Clinical Neurology (primary appointment)  
MD Smolensk State Medical Academy 1996  

Julaine Marie Florence, DPT, MS  
Professor of Neurology (primary appointment)  
Professor of Physical Therapy  
BS Washington Univ in St. Louis 1975  
DPT Washington Univ in St. Louis 2002  
MS Washington Univ in St. Louis 1983  

Wing Man Fong, MA, PHD  
Instructor in Neurology (Pending Dean's Approval) (primary appointment)  
MA University of Hong Kong 2009  
BS University of Nottingham 2005  
PHD Illinois Institute of Technol 2015  

Andria L Ford, MD  
Associate Professor of Neurology (primary appointment)  
BS Duke University 1998  
MD University of Oklahoma 2002  

Bennett David Frank, MD, PHD  
Instructor in Clinical Neurology (primary appointment)  
MD Beaufort Technical College 1988  
PHD Beaufort Technical College 1987  
BA Washington Univ in St. Louis 1982  

Robert P. Fucetola, PHD, MA  
Professor of Neurology (primary appointment)  
Adjunct Professor of Psychological & Brain Sciences  
PHD Washington Univ in St. Louis 1997  
BA Washington Univ in St. Louis 1991  
MA Washington Univ in St. Louis 1993  

Rafael Galindo, PHD, MD  
Assistant Professor of Neurology (primary appointment)  
PHD University of New Mexico 2005  
MD University of New Mexico 2007
Gilbert Gallardo, MS, PHD, PHD, MS
Assistant Professor of Neurology (primary appointment)
BS University of Texas El Paso 1999
BS University of Texas El Paso 1999
MS Univ of Texas San Antonio 2002
PHD University of Texas Southwest 2008
PHD University of Texas Southwest 2008
MS Univ of Texas San Antonio 2002

Stefanie Geisler, MD
Assistant Professor of Neurology (primary appointment)
BS University of New Mexico 1996

Nupur Ghoshal, MD, PHD
Assistant Professor of Neurology (primary appointment)
Assistant Professor of Psychiatry
BS University of Texas El Paso 1999
BS University of Texas El Paso 1999
MS Univ of Texas San Antonio 2002
PHD Northwestern University Med 2003
BA Iowa State University 1995

James M Goldring, PHD, MD
Instructor in Clinical Neurology (primary appointment)
BA Washington Univ in St. Louis 1971
PHD Washington Univ in St. Louis 1977
MD Washington Univ in St. Louis 1986

Paul T Golumbek, PHD, MS, MD
Assistant Professor of Neurology (primary appointment)
Assistant Professor of Pediatrics
PHD Johns Hopkins University 1995
MS University of Maryland 1985
BA University of Maryland 1984
MD Johns Hopkins University 1995

Royal Gene Grueneich, PHD
Professor of Neurology (primary appointment)
PHD University of Minnesota 1979
BA School Not Listed 1973

Rejean Michael Guerriero, MD
Assistant Professor of Neurology (primary appointment)
MD University of New England 2009
BS Bates College 2001

Kristin Guilliams, MD
Assistant Professor of Neurology (primary appointment)
Assistant Professor of Pediatrics
BS Furman University 2002
MD University of Virginia 2006

Christina A. Gurnett, PHD, MD
Professor of Neurology (primary appointment)
BS Phillips Academy 1989

David H Gutmann, PHD, MD, MS
Donald O. Schnuck Family Professor of Neurology (primary appointment)
Professor of Genetics
Professor of Neurological Surgery
Professor of Pediatrics
BS Davenport University 1979
PHD Davenport University 1984
MD Davenport University 1986
MS Davenport University 1980

H

Joseph Hanaway, MD
Assistant Professor of Clinical Neurology (primary appointment)
MD McGill University 1996
BA McGill University 1996

Lisa Adel Harker
Instructor in Clinical Neurology (primary appointment)

Jason J Hassenstab, MS PSYC, B MUS, PHD
Assistant Professor of Neurology (primary appointment)
Assistant Professor of Psychological & Brain Sciences
BA Washington Univ in St. Louis 1981
B MUS New York University 2002
PHD Fordham University 2009

J Michael Hatlelid, MD
Associate Professor of Clinical Neurology (primary appointment)
MD University of MO Columbia 1989
BA Augustana College 1985

Derek Lance Holder, MD, MS
Assistant Professor of Neurology (Pending Executive Faculty Approval) (primary appointment)
BS Washington Univ in St. Louis 2007
MD CHICAGO MEDICAL SCHOOL 2012

David Michael Holtzman, MD
Professor of Neurology (primary appointment)
Head of the Department of Neurology
Professor of Developmental Biology
MD Northwestern University Med 1989
BA Stetson University 1983

Terri L Hosto, BSW, MSW
Assistant Professor of Neurology (primary appointment)
BSW University of Illinois 1981
MSW University of Michigan 1986

Chung Hsu, PHD, MD
Adjunct Professor of Neurology (primary appointment)
PHD University of Virginia 1975
MD National Taiwan University 1970

Theresa Human
Instructor in Clinical Neurology (primary appointment)

Thy N Huskey, MD
Associate Professor of Neurology (primary appointment)
MD Northwestern University Med 1996
BS Northwestern University 1993

Krzysztof L Hyrc, PhD, MS
Assistant Professor of Neurology (primary appointment)
PHD Jagiellonian University 1987
MS Jagiellonian University 1981

Jill Christine Isenberg, MS PSYC, PHD
Instructor in Clinical Neurology (primary appointment)
MS PSYC Wake Forest University 2003
BA Wake Forest University 1998
PHD Wake Forest University 2005

Sindhu Saji Jacob, MD
Assistant Professor of Neurology (primary appointment)
MD Kottayam Medical College 1994

Mark F Jacquin, PhD
Professor of Neurology (primary appointment)
BS Brandeis University 1975
PHD City University of New York 1980

Siddharth Vinod Jain, MD
Assistant Professor of Neurology (primary appointment)
Assistant Professor of Pediatrics
MD D.Y. Patil Medical College 2003

Yo-El S Ju, MD
Assistant Professor of Neurology (primary appointment)
MD Columbia University 2005
BS Harvard University 2001

Neringa Juknis, MD
Associate Professor of Neurology (primary appointment)
BA School Not Listed 1985
MD Kaunas Medical Institute 1989

Richard T. Katz, MD, MA
Professor of Clinical Neurology (primary appointment)
BA University of Rochester 1977
MD Case Western Reserve Univ 1981
MA Cleveland Institute of Music 1979

Salah G. Keyrouz, MD
Associate Professor of Neurology (primary appointment)
Associate Professor of Neurological Surgery

MD Lebanese Univ Med Science 2000

Syed Ahmed Khader, MD
Instructor in Clinical Neurology (primary appointment)
MD University of Madras 1993
BS School Not Listed 1989

Paul Thomas Kotzbauer, PhD, MD
Associate Professor of Neurology (primary appointment)
Associate Professor of Developmental Biology
BS Northwestern University 1989
PHD Washington Univ in St. Louis 1997
MD Washington Univ in St. Louis 1997

Geraldine J. Kress, PHD
Assistant Professor of Neurology (primary appointment)
PHD Washington Univ in St. Louis 2009

Ashok Kumar, MD
Assistant Professor of Clinical Neurology (primary appointment)
MD Dow Medical College Karachi 1985

Terrance T. Kummer, PhD, MD
Assistant Professor of Neurology (primary appointment)
PHD Washington Univ in St. Louis 2006
BS University of Minnesota 1999
MD Washington Univ in St. Louis 2006

David Veloso Lardizabal, MD
Associate Professor in Neurology (primary appointment)
BS University of the Philippines 1987
MD CEBU Institute of Medicine 1991

Douglas P. Larsen, MD
Associate Professor of Neurology (primary appointment)
Associate Professor of Pediatrics
MD University of Utah 2003
BA Brigham Young University 1999

Jin-Moo Lee, MD, PHD
Professor of Neurology (primary appointment)
Professor of Radiology
MD Cornell University 1993
BA Yale University 1989
PHD Cornell University 1992

Walter Lemann III, MD
Associate Professor of Clinical Neurology (primary appointment)
BS Yale University 1975
MD Tulane University 1979

Alison M Leston, MD, PHD
Assistant Professor of Clinical Neurology (primary appointment)
BS University of Illinois 1990
MD Washington Univ in St. Louis 2001
PHD University of Chicago 2000

Mingjie Li, PHD, MD
Assistant Professor of Neurology (primary appointment)
PHD Kochi Medical School 1989
MD Heilongjiang Coll of Trad Med 1983

Yan Li, PHD
Instructor in Neurology (Pending Dean's Approval) (primary appointment)
PHD University of Alabama 2017
BS Huazhong Agricultural U 2007

Amy K Licis, MD
Assistant Professor of Neurology (primary appointment)
MD Washington Univ in St. Louis 2004
BS Rice University 2000

Matthew Chandler Loftspring
Assistant Professor of Neurology (primary appointment)

Jane Loitman, MD, MS
Assistant Professor of Clinical Neurology (primary appointment)
Instructor in Clinical Medicine
MD University of Minnesota 1992
MS Georgetown University 1988
BA Tufts University 1982

Glenn Lopate, MD
Professor of Neurology (primary appointment)
BS Colorado St University 1983
MD Ohio State University 1987

Brendan Patrick Lucey, MD
Assistant Professor of Neurology (primary appointment)
MD John Hopkins University 2003
BA University of Vermont 1999

Luigi Maccotta, PHD, MD
Assistant Professor of Neurology (primary appointment)
PHD Washington Univ in St. Louis 2005
MD Washington Univ in St. Louis 2005
BS St Peters College 1994

Baijayanta Maiti, PHD, MD
Assistant Professor of Neurology (primary appointment)
PHD University of Utah 2010
MD Calcutta University 2003

John F Mantovani, MD
Associate Professor of Clinical Neurology (primary appointment)
Assistant Professor of Clinical Pediatrics
MD University of Missouri 1974
BA University of Evansville 1971

Soe S Mar, MD
Associate Professor of Neurology (primary appointment)
Associate Professor of Pediatrics
MD Institute of Medicine 1987

Robert P Margolis, MD
Assistant Professor of Clinical Neurology (primary appointment)
BA Kent St University 1971

MD Saint Louis University 1975

Pietro Mazzoni, PHD, MD
Associate Professor of Neurology (primary appointment)
BS University of CA San Diego 1988
PHD Mass Inst of Technology (MIT) 1994
MD Harvard University 1995

Eric Martin McDade, DOST
Assistant Professor of Neurology (primary appointment)
BA Canisius College 1998
DOST Chicago Coll of OsteopathicMed 2004

Bryan Edward McGill, MD
Instructor in Neurology (primary appointment)
Instructor in Pediatrics
MD Baylor University 2008
BS Denison University 1999

Timothy M Miller, MD, PHD
Clayson Professor of Neurology (primary appointment)
MD Washington Univ in St. Louis 1998
PHD Washington Univ in St. Louis 1998

John Carl Morris, MD
Harvey A and Dorismae Hacker Friedman Distinguished Professor of Neurology (primary appointment)
Professor of Occupational Therapy
Professor of Pathology and Immunology
Professor of Physical Therapy
BA Ohio Wesleyan University 1970
MD University of Rochester 1974

Stephanie Morris, MD
Instructor in Neurology (primary appointment)
MD University of Phoenix 2011
BS University of Arizona 2007

Michael Justin Morrissey, PHD
Instructor in Clinical Neurology (primary appointment)
PHD Saint Louis University 2005

Krista L Moulder, PHD
Associate Professor of Neurology (primary appointment)
BA Northwestern University 1993
PHD Washington Univ in St. Louis 2001

Erik S Musiek, PHD PMCG, MD
Assistant Professor of Neurology (primary appointment)
PHD PMCG Vanderbilt University 2005
BS College of William and Mary 1999
MD Vanderbilt University 2007

Robert T Naismith II, MD
Associate Professor of Neurology (primary appointment)
MD Case Western Reserve Univ 1998
BS Case Western Reserve Univ 1994

Susan Searles Nielsen, MA, PHD
Assistant Professor of Neurology (primary appointment)
MA University of Washington 2000
PHD University of Washington 2004
BA Evergreen St College 1992

Anne Fagan Niven, PHD
Professor of Neurology (primary appointment)
PHD University of CA San Diego 1992
BA Wellesley College 1984

Michael Justin Noetzel, MD
Professor of Neurology (primary appointment)
Professor of Pediatrics
Vice Chair of Pediatric and Developmental Neurology
BA Yale University 1973
MD University of Virginia 1977

Scott Norris, MD
Assistant Professor of Neurology (primary appointment)
MD University of MO Columbia 2008
BA Washington Univ in St. Louis 2000

Sheel Jitendra Pathak, MD
Instructor in Clinical Neurology (primary appointment)
BS University of Texas Austin 2004
MD University of Texas Galveston 2008

Robert Harris Paul, PHD, MS
Adjunct Assistant Professor of Neurology (primary appointment)
BS California State Long Beach 1993
PHD Oklahoma St University 1998
MS Oklahoma St University 1995

Toni Shih Pearson, B MUS, MD
Associate Professor of Neurology (primary appointment)
B MUS University of Adelaide 2000
MD University of Adelaide 1998

David M Peeples, MD
Instructor in Clinical Neurology (primary appointment)
BA Vanderbilt University 1982
MD University of Chicago 1986

Karen J Pentella, MD
Assistant Professor of Clinical Neurology (primary appointment)
BS Ohio State University 1975
MD Ohio State University 1979

Joel S Perlmutter, MD
Professor of Neurology (primary appointment)
Professor of Neuroscience
Professor of Occupational Therapy
Professor of Physical Therapy
Professor of Radiology
BA Princeton University 1975
MD University of MO Columbia 1979

Alan Pestronk, MD

Professor of Neurology (primary appointment)
Professor of Pathology and Immunology
BA Princeton University 1966
MD Johns Hopkns University Medic 1970

Daniel Phillips, MD, BE
Assistant Professor of Clinical Neurology (primary appointment)
MD Washington Univ in St. Louis 1980
BE Northwestern University 1982
BS Northwestern University 1976

Chia Ling Phuah, MS1, MD, MS
Assistant Professor of Neurology (primary appointment)
MS1 Cambridge University 2007
MD Cambridge University 2006
MS Harvard University 2016
BS Cambridge University 2003

Laura Piccio, MD
Associate Professor of Neurology (primary appointment)
MD University of Milan 1997

Stephanie K Powell, MS, PHD
Instructor in Clinical Neurology (primary appointment)
MS Univ of Wisconsin Milwaukee 2000
PHD Univ of Wisconsin Milwaukee 2004
BS University of Notre Dame 1994

William John Powers, MD
Adjunct Professor of Neurology (primary appointment)
MD Cornell University 1975
BA Dartmouth College 1971

Brad Alan Racette, MD
Robert Allan Finke Professor of Neurology (primary appointment)
Executive Vice Chair of Clinical Affairs, Department of Neurology
BA Princeton University 1988
MD Northwestern University 1992

David Martin Reisler, MD, M PH
Assistant Professor of Clinical Neurology (primary appointment)
MD Washington Univ in St. Louis 1961
BA Harvard University 1957
M PH Johns Hopkns University Medic 1971

Dave A Rengachary, MD
Instructor in Clinical Neurology (primary appointment)
MD Northwestern University 2000
BA Northwestern University 1996

Terri L Riutcel, MD
Associate Professor of Neurology (primary appointment)
BS University of MO Columbia 1991
MD Vanderbilt University 1995

Catherine M Roe, MA, PHD
Associate Professor of Neurology (primary appointment)
MA Southern Illinois University 1990
PHD Southern Illinois University 1992
BA Purdue University 1986

James R Rohrbaugh, MD
Associate Professor of Clinical Neurology (primary appointment)
Associate Professor of Clinical Pediatrics
MD Ohio State University 1974
BA Yale University 1971

Rinna Ruvinaskaya, MD
Associate Professor of Neurology (primary appointment)
MD Leningrad Inst of Peds Med 1985
BA School Not Listed 1979

Robin C Ryther, PHD, MD
Assistant Professor of Neurology (primary appointment)
BS University of MO Columbia 1998
PHD Vanderbilt University 2004
MD Vanderbilt University 2006

Chihiro Sato, MS, PHD
Instructor in Neurology (primary appointment)
MS University of Tokyo 2005
PHD University of Tokyo 2008
BS University of Tokyo 2003

Andrew David Sauerbeck, PHD
Instructor in Neurology (Pending Dean's Approval) (primary appointment)
BS University of Kentucky 2005
PHD University of Kentucky 2011

Anneliese M Schaefer, JD, BBA, PHD
Professor of Neurology (primary appointment)
JD Washington Univ in St. Louis 1988
BBA Washington Univ in St. Louis 1985
PHD Washington Univ in St. Louis 2001

Suzanne E. Schindler, PHD, MD
Assistant Professor of Neurology (primary appointment)
BS Millsaps College 1999
PHD Washington Univ in St. Louis 2008
MD Washington Univ in St. Louis 2008

Bradley L Schlaggar, MD, PHD
A Ernest and Jane G Stein Professor of Neurology (primary appointment)
Professor of Neuroscience
Professor of Pediatrics
Professor of Psychiatry
Professor of Radiology
MD Washington Univ in St. Louis 1994
BA Brown University 1986
PHD Washington Univ in St. Louis 1994

Earl R Schultz, MD
Professor of Clinical Neurology (primary appointment)
Associate Professor of Clinical Psychiatry

MD Washington Univ in St. Louis 1955
BA Southeast Missouri St Univers 1952
BS University of Missouri 1953

Christian T Sheline, PHD
Adjunct Research Associate Professor of Neurology (primary appointment)
PHD University of California 1989
BA Dartmouth College 1983

Gordon L Shulman, MS, PHD
Professor of Neurology (primary appointment)
MS University of Oregon 1977
BA Yale University 1975
PHD University of Oregon 1979

Eli R Shuter, MD
Associate Professor of Clinical Neurology (primary appointment)
MD Washington Univ in St. Louis 1960
BA Cornell University 1956

Todd B Silverman
Instructor in Clinical Neurology (primary appointment)

Barry A. Singer
Assistant Professor of Clinical Neurology (primary appointment)

Christopher D Smyser, MD
Assistant Professor of Neurology (primary appointment)
Assistant Professor of Pediatrics
Assistant Professor of Radiology
MD University of Iowa 2004
BS University of Iowa 1998

Barbara Joy Snider, MD, PHD
Professor of Neurology (primary appointment)
BA Northwestern University 1979
MD University of Texas Southwest 1989
PHD University of Texas Southwest 1989

Richard Brian Sommerville, MD
Associate Professor of Neurology (primary appointment)
MD Columbia University 2005
BS Harvard University 1999

Tara V. Spevack, MS, PHD
Instructor in Clinical Neurology (primary appointment)
MS University of Florida 1994
PHD University of Florida 1997
BS McGill University 1987

Sandra L Tate, MD
Instructor in Clinical Neurology (primary appointment)
MD Southern Illinois University 1987

Mengesha A Teshome, MD
Instructor in Neurology (primary appointment)
MD Addis Ababa University 1989
Kwee L Thio, PHD, MD  
Professor of Neurology (primary appointment)  
Professor of Neuroscience  
Professor of Pediatrics  
BS Brown University 1984  
PHD Washington Univ in St. Louis 1992  
MD Washington Univ in St. Louis 1992

Jeffrey B. Titus, MA, PHD  
Assistant Professor of Clinical Neurology (primary appointment)  
MA University of Northern Colorado 1999  
PHD Ball State University 2002  
BS Evangel College 1997

Stuart Ramm Tomko, MD  
Assistant Professor of Neurology (primary appointment)  
BS Davidson College 2005  
MD Baylor College of Medicine 2010

Norman Edwin Trevathan III, MD, MS  
Adjunct Professor of Neurology (primary appointment)  
MD Emory University 1982  
MS Emory University 1982  
BS David Lipscomb University 1977

Angela M Tripp  
Assistant Professor of Clinical Neurology (primary appointment)

Jason Daniel Ulrich, PHD  
Assistant Professor of Neurology (primary appointment)  
PHD University of Iowa 2011  
BS Quincy College 2004

Mwiza Ushe, MD, MS  
Assistant Professor of Neurology (primary appointment)  
MD Washington Univ in St. Louis 2007  
BS University of Pittsburgh 2000  
MS Washington Univ in St. Louis 2007

Renee Bailey Van Stavern, MD  
Professor of Neurology (primary appointment)  
MD Univ Texas Health Science Ctr 1997  
BA Texas A&M University 1991

Arun S. Varadhachary, MD, PHD  
Associate Professor of Neurology (primary appointment)  
MD Temple University 2004  
PHD Temple University 2001

Oksana Volshteyn, MD  
Professor of Neurology (primary appointment)  
Professor of Medicine  
MD Minsk State Medical Institute 1976

Andrew M. Wayne, MD  
Instructor in Clinical Neurology (primary appointment)  
BS University of CA Riverside 1989  
MD University of Missouri 1993

Ling Wei, MD  
Adjunct Research Assistant Professor of Neurology (primary appointment)  
MD Beijing Medical University 1977

Conrad Christian Weihl, PHD, MD  
Associate Professor of Neurology (primary appointment)  
BS University of Illinois 1993  
PHD University of Chicago 1998  
MD University of Chicago 2001

Judith L. Weisenberg, MD  
Associate Professor of Neurology (primary appointment)  
MD University of Minnesota 2002  
BS Barnard College 1998

Howard I Weiss, MD  
Assistant Professor of Clinical Neurology (primary appointment)  
MD Tulane University 1972

Nicole Joy Werner, PHD, MS  
Associate Professor of Neurology (primary appointment)  
PHD Saint Louis University 2004  
MS Saint Louis University 2000  
BS Univ of Minnesota Twin Cities 1997

Robert L. White III  
Instructor in Neurology (Pending Executive Faculty Approval)  
(primary appointment)  
BS Washington Univ in St. Louis 1999

Martin B Wice, MS, MD  
Associate Professor of Neurology (primary appointment)  
MS University of Washington 1983  
MD Northwestern University 1977  
BS Grinnell College 1972

Michael Wong, MD, PHD  
Allen P and Josephine B Green Professor of Pediatric Neurology  
(Primary appointment)  
Professor of Neuroscience  
Professor of Pediatrics  
MD University of Texas Southwest 1995  
BA Princeton University 1987  
PHD University of Texas Southwest 1995

Gregory Frederick Wu, MD, PHD  
Assistant Professor of Neurology (primary appointment)  
Assistant Professor of Pathology and Immunology  
BS Washington Univ in St. Louis 1993  
MD University of Iowa 2001  
PHD University of Iowa 2001

Carla Marie Yuede, PHD
The goal of this course is to provide an introduction to the diseases of the central and peripheral nervous system, including their clinical manifestations, pathology, pathophysiology and pharmacotherapy. The course includes reading assignments, lectures, laboratories, conferences and clinical presentations.

M35 Neurol 720 Neurology Clerkship
A full-time, four-week clerkship is provided on the neurology services at Barnes-Jewish Hospital. Patients are assigned to students who evaluate and follow them with the resident staff and discuss them regularly in conferences with the senior neurological staff. Students also work in the neurology clinic under staff supervision and attend a series of lectures on neurosurgical problems.
Credit 154 units.

M35 Neurol 730 Physical Medicine and Rehabilitation Clerkship
Clerkship in PM&R for third-year medical students provides an opportunity to gain basic knowledge and clinical skills in evaluation and management of a wide range of neurological and musculoskeletal diseases and conditions that require specialized rehabilitative medical and therapeutic care. Students spend two weeks on Spinal Cord Injury Unit (SCI) and two weeks on Brain Injury (BI) & Stroke Unit at The Rehabilitation Institute of St. Louis. Students are expected to be a part of the rehabilitation team, follow two to three patients, participate in daily morning rounds, participate in performing consults, attend team meetings and family conferences. Students are required to attend all PM&R curriculum lectures and conferences. Upon the first day of rotation, students meet with the PM&R program director to go over goals, objectives and schedules. Upon completion of the rotation, students are required to fill out the evaluation form to provide feedback regarding rotation experience.
Credit 154 units.

M35 Neurol 827 Neurology Sub-Internship for WUSM Students
This four-week elective will be customized to include inpatient and outpatient experiences desired by WU students who have completed the WU Neurology Clerkship. Students may choose this elective to further improve their neurology knowledge and skills. Students considering neurology as a career may also desire additional exposure to supplement their prior clerkship experience. The elective is split into two two-week rotations which may include: 1. Adult Inpatient General Service (with one clinic/week) 2. Adult Inpatient Stroke Service (with one clinic/week) 3. Adult Inpatient Consult Service (with one clinic/week) 4. Pediatric Neurology Consult Service (with one clinic/week) 5. Adult Neurology ICU (with one clinic/week) 6. Outpatient Clinics (with 8-10 clinics/week).
Credit 154 units.

M35 Neurol 828 Neurology Sub-Internship for Visiting US Medical Students
This four-week elective for fourth-year visiting students from a U.S. medical school provides the option (space permitting) of four weeks of Adult Inpatient Service (Stroke for two weeks, General Neurology for two weeks), or two weeks on an Adult Inpatient Service and two weeks on the Adult Consult Service. Students on the inpatient service will function as a Sub-Intern under the supervision of their junior resident, chief resident, and attending physician. The student will also attend weekly clinical
conferences and a weekly outpatient clinic experience. This elective is suitable for visiting fourth-year students interested in neurology, who wish to improve their neurology knowledge and skills.

M35 Neurol 830 Neuro-Oncology
Provide an outpatient-oriented combined pediatric and adult neuro-oncology experience for fourth-year medical students. 1. Attend multidisciplinary adult and pediatric neuro-oncology clinics and case conferences (tumor boards); 2. Attend adult and pediatric radiation oncology clinics; 3. Attend neuropathology brain tumor review; 4. Participate in subspecialty brain tumor clinics; 5. Attend monthly brain tumor research conferences.

M35 Neurol 851 Clinical Aspects of Aging and Dementia
This elective provides the opportunity to learn about clinical research and clinical care in health brain aging and dementia. Students should contact the course directors to discuss this, as this elective is customized based on student interests. This can be a two-week or four-week elective. Students can gain proficiency in interviewing techniques and in the neurologic examination of the geriatric patient, and be introduced to neuropsychology, neuropsychiatry, biomarkers, neuroimaging, genetics, and other biomedical procedures important in the diagnostic evaluation of older adults. The Knight ADRC is an interdisciplinary group, so students have the opportunity to interact with physicians, nurse clinicians, psychologists and social workers, and to explore the neuropsychology, neuropsychiatry, biomarkers, neuroimaging, genetics, and other biomedical procedures used in the diagnosis of dementing disorders such as Alzheimer’s disease, dementia with Lewy bodies, frontotemporal dementias, cerebrovascular disorders, and affective disorders.

M35 Neurol 859 Neonatal Neurology
The Neonatal Neurology elective will consist of a combination of inpatient and outpatient experiences designed to provide medical students with comprehensive exposure to the field. Through the rotation, students will actively participate in all aspects of patient care, acquiring the knowledge and skill necessary to effectively manage infants with neurological disorders, including encephalopathy, stroke, seizures, hypotonia, intraventricular hemorrhage, and periventricular leukomalacia, among others. Clinical activities will be tailored to fit the interests and goals of the individual student and include a combination of inpatient and outpatient exposures. Inpatient activities will occur in the St. Louis Children’s Hospital Neonatal Intensive Unit as part of the Neonatal Neurology Consultation service. Outpatient activities will occur in the St. Louis Children’s Hospital Outpatient Clinics. Students will also attend educational conferences specific to the field during the rotation, including Neonatal Neurology Clinical Conference and Neonatal Neuroradiology Conference.

M35 Neurol 860 Pediatric Neurology
The senior elective experience in child neurology is designed to adapt to the individual goals and objectives of students. The elective takes place in two 2-week blocks that occur among five possible venues as chosen by the student: (1) Outpatient clinics, (2) Inpatient ward service, (3) Inpatient general consult service, (4) NICU consult service, and (5) Video EEG (VEEG) monitoring service. The combination of services and experiences will be arranged directly between the student and the course director prior to beginning the rotation. In the outpatient clinics, students will rotate between a variety of subspecialties and work with a variety of attendings in order to experience the breadth of outpatient pediatric neurology. Students rotating on the inpatient ward service will have a different role than the third-year student on pediatrics. The fourth-year student will focus solely on neurology patients and work closely with the pediatric neurology resident to develop neurology-specific care plans. No call or weekend duties will be expected on this rotation. On the general consult services, students will work with the consult attending and pediatric neurology residents on that team to see consults in the PICU, CICU, ER, and other hospital floors. The NICU consult team focuses on infants in the NICU. Students rotating on the VEEG monitoring service will focus on learning the indications and uses of VEEG and basic EEG reading skills. All students choosing a pediatric neurology elective will arrange their specific schedule with the course director beforehand.

M35 Neurol 861 Neurology/Neurosurgery ICU
This elective provides the opportunity to learn about clinical research and clinical care in health brain aging and dementia. Students should contact the course directors to discuss this, as this elective is customized based on student interests. This can be a two-week or four-week elective. Students can gain proficiency in interviewing techniques and in the neurologic examination of the geriatric patient, and be introduced to neuropsychology, neuropsychiatry, biomarkers, neuroimaging, genetics, and other biomedical procedures important in the diagnostic evaluation of older adults. The Knight ADRC is an interdisciplinary group, so students have the opportunity to interact with physicians, nurse clinicians, psychologists and social workers, and to explore the neuropsychology, neuropsychiatry, biomarkers, neuroimaging, genetics, and other biomedical procedures used in the diagnosis of dementing disorders such as Alzheimer’s disease, dementia with Lewy bodies, frontotemporal dementias, cerebrovascular disorders, and affective disorders.

M35 Neurol 865 Adult and Pediatric Epilepsy
Students will learn how epileptologists diagnose and manage epilepsy in adults and children. They will learn how to use the history and physical exam and laboratory studies such as EEG, MRI, PET, and SPECT to diagnose and manage patients with new onset epilepsy, established epilepsy, and medically intractable epilepsy. They will become familiar with the medical management of epilepsy as well as the treatment options for medically intractable epilepsy including surgery, the vagus nerve stimulator, and the ketogenic diet. They will also learn how to manage the co-morbid conditions that accompany epilepsy such as depression, behavioral problems, cognitive impairment, sleep disturbance, and non-epileptic events. Students will accomplish these goals by attending epilepsy clinics and rounds on the inpatient epilepsy service with the epilepsy team at Barnes-Jewish Hospital and St. Louis Children’s Hospital. They will attend the Adult Epilepsy Conference, the Pediatric Epilepsy Conference, and Neurology Grand Rounds. Students will also have the opportunity to observe epilepsy surgery if they wish. They will have the option to present one 15-30 minute talk on a topic relevant to epilepsy.

M35 Neurol 872 MS Center/Outpatient - Missouri Baptist
Students will develop their skills in taking histories and performing neurological examinations on patients with multiple sclerosis under direct supervision of multiple sclerosis specialists. Localization of neurological findings and symptoms to the neuro-axis will be emphasized. A major goal for the students will be to increase the understanding of comprehensive patient management including disease treatment, symptom management, adjunctive therapy services, and psychosocial issues. The outpatient rotation will be four weeks at The MS Center for Innovations in Care at Missouri Baptist Medical Center with Dr. Barry Singer and Dr. Mark Tullman. An additional goal for students will be to understand process of clinical research and translation into approved therapies. The center has been a leader in clinical trial development of therapeutics that have been or will soon be FDA-approved as new medications for multiple sclerosis.
M35 Neurol 900 Research Elective - Neurology
Research opportunities may be available. If interested, please contact the Department of Neurology.