



Department of/Office of Neurology
Annual Report

2016

Glen D. Solomon, M.D.
Professor and Interim Chair

For the period including
January 1, 2016 — December 31, 2016

1

Statement from the Chair/Associate Dean

2 Programs/Divisions

Name of Division or Program	Director	Dates
Neurology Clerkship	Cassandra Milling, M.D.	2008/2009 -
Neurology Residency Program	Bradley Jacobs, M.D.	July 1, 2014 -

3 Fully Affiliated Faculty

Name and Academic Position	Clinical Interests	Research Interests
Mark N. Friedman, D.O. Assistant Professor, Dept. of Neurology	Clinical Neuroendocrinology. Develop new and innovative teaching programs for residents in all specialties. New program development to enhance the educational experience for residents. Development of assessment methods. Clinical neuroendocrinology/advanced general neurology fellowship (consideration for future development).	Medical education. Research studies.
Bradley Jacobs, M.D. Associate Professor Neurology Residency Program Director	Stroke, Hypercoagulability	Stroke, epidemiology. Acute stroke management, stroke prevention. Stroke biomarkers including micro particles and metabolomics.
Eleina Mikhaylov, M.D. Assistant Professor	Inpatient/Ambulatory General Neurology	
Cassandra Milling, M.D. Assistant Professor	Epilepsy, Sleep Medicine, General Neurology	Epilepsy (non-epileptic seizures, non-convulsive status, nocturnal seizures, the use of the sleep EEG in

Name and Academic Position	Clinical Interests	Research Interests
Barbara Phillips, M.D. Assistant Professor	<p>Epilepsy and Neurodiagnostics- clinical Director of EEG/Epilepsy at TCNI Subspecialty clinic in epilepsy. Continue to build a focused practice and identify epilepsy surgery candidates</p> <p>Maintained WSU/PH Comprehensive Epilepsy Center which achieved National Association of Epilepsy Centers (NAEC) Level 3 epilepsy program status. With epilepsy team, established weekly rotations for EEG, long term monitoring with call for continuity of care EEG review and teaching for resident rotation.</p> <p>Regular resident teaching conferences for epilepsy and EEG.</p> <p>Multi-disciplinary Epilepsy Conference for review of potential epilepsy surgery candidates increased to every two weeks</p> <p>Worked with neurodiagnostic lab to re-establish evoked potential testing at MVH. Continuing to work with techs to improve quality</p> <p>Work with neuropsychologist to obtain specialist neuropsych testing for appropriate patients and participate in Wada testing procedure here for work-up of potential surgical epilepsy candidates.</p> <p>Established epilepsy surgery program. Two brain surgeries were performed and one intracranial monitor in addition to VNS implant and explant.</p>	<p>The pre-surgical evaluation of epilepsy.</p> <p>Work with neurosurgeon, neurodiagnostics, nursing and MVH administration to continue to improve protocols for epilepsy monitoring with intracranial electrodes, evaluation and care of surgical epilepsy patients, equipment, etc.</p> <p>Working with MVH neurodiagnostic lab on recruiting technologists</p> <p>Working with WSPI and PH to recruit another epileptologist – continuing</p>

Name and Academic Position	Clinical Interests	Research Interests

4 Teaching

Baccalaureate

Graduate students, including thesis supervision

Bradley Jacobs, M.D. - Ph.D. committee, Jinju Wang, Dept. of Pharmacology and Toxicology.

Undergraduate medical education

Bradley Jacobs, M.D.

- Participation in Clinical course:
 - o Neuroscience Clerkship (NRL-891), lectures to 3rd year medical students; attending physician and preceptor for 3rd and 4th year medical students.
 - o Weekly Neurology case conference
 - o Supervise monthly Neurological Localization conference
 - o Supervise monthly Journal Club
 - o Attending Physician for inpatient General Neurology and Stroke service at Miami Valley Hospital, teaching 3rd year medical students.
 - o Attending Physician of Neurology Resident Continuity Clinic and Stroke Clinic, teaching 4th year medical students.

Eleina Mikhaylov, M.D.

- Medical student Clinical teaching during their General Neurology inpatient service rotation at MVH
- Medical student Clinical teaching during their General neurology outpatient service rotation at MVH
- Weekly neurology case conferences

Cassandra Milling

- MS1's ICM Neurology Exam Series
- MS2's ICM Neurology Exam
- MS3's
 - o Psychiatry Clerkship – Neuro-Psychiatry Case teaching q 6 weeks
 - o IM-Neurology Clerkship
 - Direction of Neurology Clerkship (2 weeks inpatient, 3 weeks of didactics)
 - Series of 4 x ½ day teaching sessions in Neurology
 - Summative IRAT/GRAT session (newly created this year)
 - Clinical inpatient teaching
- MS4's
 - o Direction of Neurology Clerkship (2 weeks outpatient experience)
 - o Clinical outpatient teaching
 - o Administration of Neurology Electives

- 3 new ones added in 2016:
 - Neurology Sub-Internship
 - Neuro-radiology
 - Neurosurgery
- Precepted longitudinal electives in Neurology (2 students)

Barbara Phillips, M.D.

- Medical student clinical teaching on neurology inpatient service at MVH
 - o Involves patient specific neurologic issues, neurologic examination, prepared lectures on disease topics.
- Medical student clinical teaching in outpatient subspecialty clinic in epilepsy and in general neurology resident continuity clinic.

Graduate medical education

Bradley Jacobs, M.D.

- Residency Program Director
- Weekly Neurology case conference
- Supervise monthly Neurological Localization conference
- Supervise monthly Journal Club
- Organize daily noon conference schedule
- Supervise and organize Morning Report
- Coordination of internal medicine resident, psychiatry resident, geriatric fellow and pharmacology student Neurology rotations
- Attending Physician for inpatient General Neurology and Stroke services at Miami Valley Hospital, teaching Neurology, Internal Medicine, and Psychiatry Residents
- Attending Physician supervising Neurology residents in Continuity Clinic and Stroke Clinic

Mark N. Friedman, D.O.

- Involved with teaching of neurology and medical residents, and medical students in the hospital and clinical setting.

Eleina Mikhaylov, M.D.

- Attending Physician supervision and teaching during inpatient and outpatient General neurology services for neurology residents as well as Medical and Psychiatry residents.
- Attending Physician supervision and teaching during their general neurology continuity clinic for neurology residents.
- Participation with weekly neurology case conferences.
- Neurology resident noon conferences.
- Attending Physician adviser to Neurology resident, Dr. Ashley Paul.

Cassandra Milling, M.D. (residents, fellows)

- Clinical inpatient teaching
- Clinical epilepsy/EEG teaching
- Neurology exam and EEG lectures
- Clinical Competency Committee

Barbara Phillips, M.D.

- Supervise junior and senior neurology residents as well as medical and psychiatry residents on inpatient neurology admitting service.
- Supervise residents in subspecialty epilepsy clinic and in general neurology continuity clinic.

Continuing medical education

Bradley Jacobs, M.D.

Physician Course Chair for Neurology Grand Rounds CME

2016 Neurology Grand Rounds Presentations:

- January 11, 2016, Presenter – Suraj Rajan, MSc., M.D. (WSUBSOM), presented: “Where Does Parkinson’s Disease Begin? 12 Years Since the Braak Hypothesis
- February 8, 2016, Presenter – Barbara Phillips, M.D. (WSUBSOM), presented: “Cannabis Update”
- March 14, 2016, Presenter – Jason G. Parker, Ph.D., DABR (WSUBSOM), presented: “Nosologic Imaging Based on Multimodal Magnetic Resonance Signatures”
- April 11, 2016, Presenter – Juan Ed Torres-Reveron, M.D. (Premier Health), presented: “Surgical Evaluation and Treatment of Epilepsy”
- May 9, 2016, Presenter – Thomas Charles Pitts, M.D. (WSUBSOM), presented: “Myasthenia Gravis – Diagnostic, Management, and Research Consideration”
- June 13, 2016, Presenter – Amr Ibrahim Elmaghaby, M.B. BCh. (WSUBSOM), presented: “Management of Vasospasm in Subarachnoid Hemorrhage”
- July 11, 2016, Presenter – Michael R. Kentris, D.O. (WSUBSOM), presented: “Nonconvulsive Status Epilepticus: Diagnosis, Treatment, and Prognosis”
- August 8, 2016, Presenter – Suraj Rajan, MSc., M.D. (WSUBSOM), presented: “History of Neurology in 20 Pictures”
- September 12, 2016, Presenter – Shumei Man, M.D. (WSUBSOM), presented: “The Impact of Stroke Center Certification on the Outcome of Stroke Care”
- October 10, 2016, Presenter - Assaf Harel, Ph.D. (WSUBSOM), presented: “Unraveling the Spatiotemporal Dynamics of Visual Scene Recognition: Neuroimaging and Electrophysiological Evidence”
- November 14, 2016, Presenter – Nivedita Mankotia, MBBS (Premier Health), presented: “What are Anticoagulants and Antiplatelets, and Why They Are Critical in ICH management”
- December 12, 2016, Presenter – William E. Venanzi, Jr., M.D., FACP (WSUBSOM), presented: “Chronic Pain, By Any Other Name...”

Invited lecturer/panel participant, “Healing the Brain”, University of Dayton Osher Lifelong Learning Institute, Dayton, OH, June 1, 2016

Eleina Mikhaylov, M.D.

- October 4th, 2016, Presented: “Fibromyalgia” at noon conference on 5 East at MVH
- October 25, 2016, Supervised Botox seminar for Chronic Migraines for neurology residents at MVH.
- October 27, 2016, Supervised Botox seminar fo Cervical dystonia and Spasticity for neurology residents at MVH.

Cassandra Milling, M.D.

- Neurology Case Conferences

Barbara Phillips, M.D.

- Neurology Grand Rounds, February 8, 2016, Presented: “Cannabis Update”

5 Scholarly Activity

Funded grants

Bradley Jacobs, M.D.

- “A Phase IIIb, double-blind, multicenter study to evaluate the efficacy and safety of alteplase in patients with mild stroke: rapidly improving symptoms and minor neurologic deficits (PRISMS)”, Site PI: BS Jacobs, Sponsor: Genentech, Inc.
- “Platelet-oriented inhibition in new TIA and minor ischemic stroke (POINT) trial”, Site PI: BS Jacobs, Sponsor: NINDS
- “The Impact of State Stroke Legislation on the Accessibility and Outcome of Stroke Care”, co-PI: BS Jacobs, Sponsor: American Heart Association

Publications

Papers in refereed journals

Bradley Jacobs, M.D.

- Wang J, Guo R, Yang Y, Jacobs BS, Chen S, Iwuchukwu I, Gaines KJ, Chen Y, Simman R, Lv G, Wu K, Bihl JC. The Novel Methods for Analysis of Exosomes Released from Endothelial Cells and Endothelial Progenitor Cells. *Stem Cells International*, 2016.
- Wang J, Chen Y, Yang Y, Xiao X, Chen S, Zhang C, Jacobs BS, Zhao B, Bihl J, Chen Y. Endothelial Progenitor Cells and Neural Progenitor Cells Synergistically Protect Cerebral Endothelial Cells from Hypoxia/reoxygenation-induced Injury via Activating the P13K/Akt Pathway. *Molecular Brain*, 2016.

Books, chapters, reviews

Bradley Jacobs, M.D.

- Jacobs BS. Hyperhomocysteinemia. In: Gilman S., editor. *Medlink Neurology*. San Diego: MedLink Corporation, 3rd 2002 edition – present.

Significant presentations

Cassandra Milling, M.D.

- Posters for which students were chosen as National Finalists to the ACP Conference at Washington, D.C.
 - o “Cortical origin of nystagmus: a case of reflex seizures”
 - o “Craniopharyngeal myasthenia masquerading as cranial polyneuropathic Guillain Barre Syndrome”

Other recognition

Bradley Jacobs, M.D.

- Ad-hoc reviewer: *Neurology, Stroke, Circulation*

Mark N. Friedman, D.O.

- Reviewer for International Association of Medical Science Educators.
- Developing a primer for clinical neuroendocrinology.

6 Summary of Service Activities

Student advising

Cassandra Milling, M.D.

- Met with and advised many students interested in Neurology
 - o 5 of these students ended up applying to Neurology (a record number)
- Faculty advisor to SIGN group

Barbara Phillips, M.D.

- Resident advisor

Committee membership/officer

Wright State University Boonshoft School of Medicine

Bradley Jacobs, M.D.

- Neurology Medical Student Clerkship Steering Committee
- Wright State University and Premier Health Neuroscience Institute Research Committee
- Neurology Residency Clinical Competency Committee
- Neurology Residency Program Evaluation Committee (Chair)
- Wright State University Graduate Medical Education Committee
- Neurology Grand Rounds Planning Committee (Chair)

Mark. N. Friedman, D.O.

- Neurology resident advisor (year round)

Cassandra Milling, M.D.

- B2 Committee
- Faculty

Hospital or affiliated institution

Bradley Jacobs, M.D.

- Clinical Neuroscience Chiefs peer review committee
- General Neurology Division chief of Clinical Neuroscience Institute
- Premier Health Stroke Team
- Miami Valley Hospital Medical Education Program Directors

Barbara Phillips, M.D.

- Premier Health NeuroService Line – working on length of stay and decreasing readmissions specifically re-seizures.
- Program Evaluation/Clinical Competency Committee
 - o Resident evaluation and program review.
- Advisory Committee, Electro Neurodiagnostics program, Sinclair Community College Allied Health.

National / International

Bradley Jacobs, M.D.

- American Academy of Neurology Stroke and Vascular Neurology Section

Other

Bradley Jacobs, M.D.

- Judge, 17th Annual Virginia C. Wood Resident Research Forum

7

Patient Care Summary

Bradley Jacobs, M.D.

- Attending Inpatient General Neurology and Vascular Neurology
- Attending Outpatient General Neurology and Vascular Neurology
- Attending Neurology Resident Continuity Clinic

Cassandra Milling, M.D.

- Inpatient Admit Service Attending Physician Miami Valley Hospital
- EEG/EMU Service Attending Physician Miami Valley Hospital
- Clinical Neuroscience Institute outpatient care
- Received "Physician of the Month" recognition at Good Samaritan Hospital (previously covered weekends at that location)

Barbara Phillips, M.D.

- Inpatient Admit Service Attending Physician Miami Valley Hospital
- EEG/EMU Service Attending Physician Miami Valley Hospital
- Clinical Neuroscience Institute outpatient care

8

Honors and awards

9

Hosted events

10

Other information

Bradley Jacobs, M.D.

- "Pilot study of metabolic profiling of ischemic stroke patients and control subjects". In collaboration with Dr. Nicholas Reo (Dept. of Biochemistry and Molecular Biology).
- "Feasibility study for cerebrovascular health assessment", PI: Audrey Choh, co-I: BS Jacobs, Sponsor: Department of Community Health
- "Balance of Angiotensin II/Angiotensin (1-7): A Target in Ischemic Stroke", Submitted NIH grant application as co-investigator with Dr. Yanfang Chen
- Participate in Premier Health Stroke Program, including telemedicine, treatment of acute ischemic stroke patients throughout region

Cassandra Milling, M.D.

- Over the past 3 years, as an individual and as a department I/we have worked very hard to create an outstanding residency program and medical student clinical teaching experience. I have worked to integrate residents as teachers and this has enhanced the student teaching significantly.
- Over the past 3 years, I have worked to integrate the inpatient portion of the Neurology clerkship into the MS3 year (previously confined to the MS4 year) and maintain the outpatient portion in the MS4 year (at least until all the clerkship can be moved into the MS3 year). I believe this has enhanced the Neurology teaching for the medical students significantly overall.