



Department of/Office of Neurology

# Annual Report

# 2015

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

For the period including  
January 1, 2015 — December 31, 2015

# 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 of Medicine	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, Genera. Neurology	Epilepsy (non-epileptic seizures, non-convulsive status, nocturnal seizures, the use of the sleep EEG in the pre-surgical evaluation



# 4 Teaching

## Baccalaureate

### Graduate students, including thesis supervision

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

**Cassandra Milling, M.D.** – Graduate student education including thesis supervision (masters, doctors, and post-doctoral).

### Undergraduate medical education

**Bradley Jacobs, M.D.**

NRL 891 – Neuroscience Clerkship

- Lectures to 3<sup>rd</sup> year medical students; attending physician and preceptor for 3<sup>rd</sup> and 4<sup>th</sup> year medical students
- Weekly Neurology case conference.
- Supervise monthly Neurological Localization conference
- Supervise monthly Journal Club.
- Attending Physician for inpatient General Neurology and Stroke service at Miami Valley Hospital, teaching 3<sup>rd</sup> year medical students.

**Eleina Mikaylov, M.D.**

- Year 4 elective faculty-Inpatient neurology rotation attending
- Year 3 clerkship-Inpatient neurology rotation attending

**Cassandra Milling, M.D.**

- **Participation in Clinical course:**
  - o ICM 1 – Two yearly lectures covering the Neurology Exam.
  - o ICM 2 – One lecture covering the Neurology Exam in case-based format.
  - o **Psychiatry Clerkship**
    - o Didactic case conference q rotation incorporating the interface between Neurology and Psychiatry.
  - o **Neuroscience Clerkship (NRL-891):**
    - o Didactic Curriculum for MS3 and 4 Neurology course (new structure as of 2014-2015).
      - Moved inpatient experience to the MS3 year and created new MS3 Neurology Curriculum
      - New MS3 Curriculum includes interactive learning/TBL modules in Neurology Exam, The Coma Exam, Epilepsy, Stroke and Neuromuscular disease.
      - New Text and reading suggested with creating new quiz and reworking of other quizzes.
    - o Reorganization of MS3 clinical experiences to integrate with new residency program.
    - o Reorganization of MS4 clinical outpatient experiences including addition of new outpatient sites to meet (MVH and preparation for 5 Rivers) 3<sup>rd</sup> year medical students: attending physician and preceptor for 3<sup>rd</sup> and 4<sup>th</sup> year medical students.

- Supervision/Administration of NRL-891.
- Supervision of NRL electives and preparation for addition of 3 new electives in the 2016-17 year.
- Weekly Neurology Case conference.
- Attending Physician for inpatient General Neurology service, EMU service at Miami Valley Hospital, teaching 3<sup>rd</sup> year medical students.
- Attending Physician supervising 4<sup>th</sup> year medical students in Continuity Clinic and Epilepsy Clinic.

**Barbara Phillips, M.D.**

- Medical Student clinical teaching on neurology inpatient service at MVH-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
- Precept monthly Neurological Localization conference
- Precept 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 Friedman, D.O.**

- Neurology residency outpatient and inpatient teaching service (including rotating medical students).
- Neurology resident conferences
  - Memory disorders
  - Neuroendocrinology

**Eleina Mikhaylov, M.D.**

- Inpatient Neurology Admitting Service

**Cassandra Milling, M.D.**

- Weekly Neurology case conference
- Epilepsy surgery conference
- Epilepsy conference
- Attending Physician for inpatient General Neurology and EMU services at Miami Valley Hospital, teaching Neurology, Internal Medicine, and Psychiatry Residents.
- Attending Physician supervising Neurology residents in Continuity Clinic and Epilepsy Clinic

**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.**

- Planning committee for Dayton VA Medical Center Stroke Summit
- Invited lecturer, "Acute Stroke Management", Dayton Veterans Affairs Medical Center, Stroke Summit
- Physician Course Chair for Neurology Grand Rounds CME

**2015 Neurology Grand Rounds Presentations:**

- January 12, 2015, Presenter – John Terry, M.D. (Premier Health), presented: "Refining the Treatment of Cerebral Intraparenchymal Hemorrhage"
- February 9, 2015, Presenter – James Olson, Ph.D. (WSUBSOM), presented: "Brain Edema and Secondary Brain Injury"
- March 9, 2015, Presenter – Ania G. Pollack, M.D. (Premier Health), presented: "Anticoagulation in Neurosurgery"
- April 13, 2015, Presenter – Mary K. Foster, Ph.D. (Premier Health), presented: "Neuropsychology in a Nutshell"
- May 11, 2015, Presenter – Mohammed Sohel Ahmed, M.D. (Premier Health), presented: "Management of Intracranial Hypertension"
- June 8, 2015, Presenter – Esteban Cheng Ching, M.D. (Premier Health), presented: "Acute Ischemic Stroke 2015: Back to the Future"
- July 13, 2015, Presenter – Michael P. Weisend, Ph.D. (WSUBSOM), presented: "Endogenous and Exogenous Manipulation of Cortical Excitability to Enhance Cognitive Performance"
- September 14, 2015, Presenter – Andrew Voss, Ph.D. (WSUBSOM), presented: "Progressive Defects in Huntington's Disease Skeletal Muscle Point to a Myopathy"
- October 12, 2015, Presenters – J. Layne Moore, M.D., and Suraj Rajan, MSc., M.D. (WSUBSOM), presented: "Brain on Fire: Kindling in Epilepsy"
- November 9, 2015, Presenter – Tara E. Cook, M.D., Lt. Col. (Wright Patterson AFB), presented: "Warfighter Interface Division: Who We are and What We Do"
- December 14, 2015, Presenter – Atif Hashmi, M.D. (Clinical Neuroscience Inst., MVH), presented: "Inflammatory and Autoimmune Disorders of the Spine – A Neuroimaging Review and Update"

**Mark Rich, M.D., Ph.D.**

- Physician Course Chair for 4<sup>th</sup> Annual WSU & PH Neuroscience Institute Symposium (October 23, 2015)
- Planning committee member for annual WSU & PH Neuroscience Institute Symposium

**4<sup>th</sup> Annual WSU & PH Neuroscience Institute Symposium (October 23, 2015) Presentations:**

- Presenter – Robert M. Lober, M.D., Ph.D. (Pediatric Neurosurgeon, Dayton Children's Hospital), presented: "Advanced Clinical Imaging of the Pediatric Brain"
- Presenter – Ulas Sunar, Ph.D. (Associate Professor, Ohio Research Scholar for Medical Imaging), presented: "Optical Imaging Guided Brain Function Monitoring and Neurosurgery"
- Presenter – Juan Ed Torres-Reveron, M.D. (Neurosurgeon, WSU/Premier Health Clinical Neuroscience Institute), presented: "Neuroimaging in the Evaluation for Epilepsy Surgery"

## Other

# 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 Outcomes 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*, in press.
- 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 PI3K/Akt Pathway. *Molecular Brain*, in press.

#### Books, chapters, reviews

#### Mark Friedman, D.O.

- Reviewer for the *Medical Science Educator* journal.

#### Bradley Jacobs, M.D.

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

#### Published abstracts

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#### Significant presentations

**Mikhaylov, E.** Neurological Emergencies presentation for improving Registered Nurses education in the hospital. Good Samaritan Hospital, Dayton, January, 2015.

**Mikhaylov, E.** Neurologic Immune Disorders and treatment, specifically Amyotrophic Lateral Sclerosis, Guillian Barre, Multiple Sclerosis, and Myasthenia Gravis presentation. CNRN/SCRB review course. Berry Center Conference Room at Miami Valley Hospital, Dayton, OH. June, 2015.



## Consultantships

## Other recognition

**Bradley Jacobs, M.D.** – Ad-hoc reviewer: *Neurology*

**Eleina Mikhaylov, M.D.** – Physician of the month at Good Samaritan Hospital, Dayton, OH

# 6

## Summary of Service Activities

### Student advising

**Barbara Phillips, M.D.** – Resident Advisor

### Committee membership/officer

#### Wright State University Boonshoft School of Medicine

**Mark Friedman, D.O.**

- Pass/Fail Taskforce Committee

**Cassandra Milling, M.D.**

- B2 committee
- Informal 1-1 advisor sessions and mentoring to multiple 3<sup>rd</sup> and 4<sup>th</sup> year medical students interested in Neurology
- SIGN group advisor

**Barbara Phillips, M.D.**

- Program Evaluation/Clinical Competency Committee – resident evaluation and program review.

#### Wright State University

#### Wright State Physicians

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#### Hospital or affiliated institution

Bradley Jacobs, M.D.

- Clinical Neuroscience Chief's peer review committee
- General Neurology Division chief of Clinical Neuroscience Institute

Eleina Mikhaylov, M.D. – Good Samaritan Hospital, Miami Valley Hospital Inpatient and Ambulatory, Neurology

Barbara Phillips, M.D. - Premier Health NeuroService Line – working on length of stay and decreasing readmissions specifically re seizures.

#### State

### **National**

Bradley Jacobs, M.D.

- American Academy of Neurology Stroke and Vascular Neurology Section

### **Other**

## 7

### **Patient Care Summary**

#### **Bradley Jacobs, M.D.**

- Attending Inpatient General Neurology and vascular Neurology
- Attending Outpatient General Neurology and Vascular Neurology

#### **Cassandra Milling, M.D.**

- Attending Inpatient General Neurology and Epilepsy
- Attending Outpatient General Neurology and Epilepsy

## 8

### **Honors and awards**

## 9

### **Hosted events**

**Monthly Neurology Grand Rounds (See #4 under Continuing Medical Education)**

**Annual WSU & PH Neuroscience Institute Symposium (See #4 under Continuing Medical Education)**

## 10

### **Other information**

#### **Mark Friedman, D.O.**

- Received Master of Science degree in Medical Education Leadership, University of New England (2013-2015), in August, 2015.

**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 coinvestigator with Dr. Yanfang Chen.
- Participate in Premier Health Stroke Program, including telemedicine treatment of acute ischemic stroke patients throughout the region.

**Cassandra Milling, M.D.**

- Epilepsy Monitoring Unit – Created this unit at Miami Valley Hospital (MVH) and continue to remain very active with its administration and functioning.
- Epilepsy surgery program – actively involved in moving this program forward at MVH.

**Barbara Phillips, M.D.**

- Achieved National Association of Epilepsy Centers (NAEC) Level 3 epilepsy program status.
- Resident research project in con-convulsive status epilepticus being developed. Awaiting final IRB approval for chart review of EEG and medication and outcomes.
- Working with neurosurgeon, neurodiagnostics, nursing and MVH administration to develop protocols for epilepsy monitoring with intracranial electrodes, evaluation and care of surgical epilepsy patients, equipment, etc.
- Working with MVH neurodiagnostic lab on recruiting technologists.
- Working with WSPI and PH to recruit another epileptologist.