

## OVERVIEW

A neurological disorder is any disorder of the nervous system. There are more than 600 neurologic diseases, some common, but many rare. The World Health Organization estimates that neurological disorders and their sequelae affect as many as one billion people worldwide.

Stroke is the leading cause of adult disability and the 5<sup>th</sup> leading cause of death in the United States. According to the American Stroke Association, approximately 800,000 Americans suffer from strokes and TIAs and 150,000 patients die every year.

Through the use of lectures and case discussion, national and regional experts will address the latest advances in awake craniotomy and skull base surgery, neurological emergencies, diagnosis and management of epilepsy, extending the time window for acute stroke therapies, emerging treatment for multiple sclerosis, myasthenia gravis and migraines.

The purpose of this conference is to provide neurosurgeons, neurologists, family medicine, internal medicine, trauma and emergency room physicians, residents, advanced practice providers, nurses, pharmacists, radiology techs, and other healthcare professionals with advances in diagnosis, treatment and management of patients with strokes and/or cerebral aneurysms, seizures, multiple sclerosis, myasthenia gravis and migraines.

## LOCATION

Hilton Garden Inn is located at 6165 Levis Commons Blvd., Perrysburg, Ohio in the Levis Commons shopping district, with convenient access from I-475/US 23.

## ACCOMMODATIONS

If overnight accommodations are required, contact Hilton Garden Inn, 419-873-0700, toll-free 1-877-STAY-HGI or online at StayHGI.com.

Other hotels in the area include: Holiday Inn French Quarter, 419-874-3111 or toll-free 1-888-874-2592; Holiday Inn Express, 419-874-3101; and Courtyard by Marriott, 419-872-5636.

## FACULTY

### Imran I. Ali, MD

Vice Chair and Professor  
of Neurology  
Senior Associate Dean for  
Academic Affairs

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Toledo, Ohio

### Mark Buehler, MD

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University of Toledo Medical Center  
Toledo, Ohio

### Kimberly Cole, DNP, FNP

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Toledo, Ohio

### Melinda Hendricks-Jones, PA-C

Neurology, Stroke Clinic  
ProMedica  
Toledo, Ohio

### Tudor G. Jovin, MD

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and Neurosurgery  
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of Medicine  
Pittsburgh, Pennsylvania

### Mouhammad A. Jumaa, MD

Program Director for Vascular  
Neurology Fellowship  
Assistant Professor of Neurology  
University of Toledo Medical Center  
Toledo, Ohio

### Boyd Koffman, MD, PhD

Professor of Neurology  
University of Toledo Medical Center  
Toledo, Ohio

### Vieh Kung, MD

Vascular Neurology Fellow  
University of Toledo Medical Center  
Toledo, Ohio

### Patrick McCormick, MD

Neurological Surgery  
ProMedica Physicians Neurosurgery  
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### Michael Nagel, MD

Pediatric Neurology  
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### Noor Pirzada, MD

Professor  
Program Director, Neurology  
Residency  
Director, EMG Laboratory  
University of Toledo Medical Center  
Toledo, Ohio

### Vicki Ramsey-Williams, MD, PhD

Assistant Professor  
Assistant Dean of Medical Education  
University of Toledo Medical Center  
Toledo, Ohio

### Kevin Reinard, MD

Neurological Surgery  
ProMedica Physicians Neurosurgery  
Toledo, Ohio

### Jason Schroeder, MD

Neurosurgery, Neurosurgical  
Oncology, Surgical Oncology  
University of Toledo Medical Center  
Toledo, Ohio

### Julie Shawver, PA-C

ProMedica Physicians Neurology  
Toledo, Ohio

### Ajaz Sheikh, MD

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University of Toledo Medical Center  
Toledo, Ohio

### Gretchen Tietjen, MD

Professor and Chair of Neurology  
Director of UTM Headache Treatment  
and Research Program  
Director of the UTM Stroke Program  
University of Toledo Medical Center  
Toledo, Ohio

### J. Christopher Zacko, MD

Assistant Professor College of  
Medicine, Neurosurgery  
Pennsylvania State University Clinical  
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### Syed Zaidi, MD

Assistant Professor of Neurology  
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1<sup>st</sup> Annual

## NEUROLOGICAL DISORDERS AND STROKE UPDATE

Friday, December 15, 2017

Registration: 7 a.m.

Conference: 8 a.m. – 4:50 p.m.

Hilton Garden Inn Conference Center  
Perrysburg, Ohio



PROMEDICA'S CONTINUING MEDICAL EDUCATION DEPARTMENT PRESENTS **1<sup>ST</sup> ANNUAL**  
**NEUROLOGICAL DISORDERS  
AND STROKE UPDATE**

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Hilton Garden Inn Conference Center  
6165 Levis Commons Blvd. | Perrysburg, Ohio 43551



COLLEGE OF MEDICINE  
AND LIFE SCIENCES  
THE UNIVERSITY OF TOLEDO

PROMEDICA NEUROSCIENCES INSTITUTE

# 1<sup>st</sup> Annual NEUROLOGICAL DISORDERS AND STROKE UPDATE

Friday, December 15, 2017 | Registration: 7 a.m. | Conference: 8 a.m. – 4:50 p.m.

Due by: **Monday, December 11, 2017 or until maximum capacity is reached.**

Fee: **\$80** Fee includes continental breakfast, lunch and conference materials.

Name \_\_\_\_\_ Credentials \_\_\_\_\_

Home address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Is this a new address?  Yes  No Cell phone \_\_\_\_\_

Home phone \_\_\_\_\_ Office phone \_\_\_\_\_

Email address (required) \_\_\_\_\_

Employer \_\_\_\_\_

Please check your primary discipline:

MD/DO  Resident  PA  NP  Physical Therapist

Nurse  Other (please specify) \_\_\_\_\_

Please check if you prefer a vegetarian meal.

Please check if you require assistance with hearing, vision or mobility.

Method of Payment: **Payment is required to process registration.**

Personal check (Payable to ProMedica CME)  Employer check

Visa  MasterCard  Discover  American Express

Card number \_\_\_\_\_

Expiration date \_\_\_\_\_ Amount \$ \_\_\_\_\_

Signature of credit card holder \_\_\_\_\_

Cardholder's address \_\_\_\_\_

**Phone registrations will not be accepted.**

Registration Options:

**ONLINE** [promedica.cloud-cme.com](http://promedica.cloud-cme.com) (Chrome internet browser required)

Credit cards only.

**MAIL** ProMedica  
Continuing Medical Education Department  
3949 Sunforest Court, Suite 203  
Toledo, Ohio 43623

**FAX** 419-479-6003 - Credit card number required to process registration.

**EMAIL** [debbie.marinik@promedica.org](mailto:debbie.marinik@promedica.org)

## AGENDA & OBJECTIVES

**7 a.m. Registration and Continental Breakfast**  
**7:45 a.m. Welcome and Introductions** - *Mouhammad A. Jumaa, MD*

### SESSION 1 - NEUROSURGERY

**8 a.m. Awake Craniotomy/Glioblastoma** - *Jason Schroeder, MD*

- Review indications for awake craniotomies.
- Cite new evidence for awake craniotomies.

**8:20 a.m. Spinal Cord Compression** - *Patrick McCormick, MD*

- Review common presentations of spinal cord injury.
- Discuss evidence for management of spinal cord compression.

**8:40 a.m. Skull Base Surgery** - *Kevin Reinard, MD*

- Discuss surgical approach to skull base lesions.
- Describe indications for minimally invasive approach for skull base tumors.

**9 a.m. Neurotrauma** - *J. Christopher Zacko, MD*

- Review management paradigm for patients with traumatic brain injury.
- Discuss indications for intracranial pressure monitoring in patients with traumatic brain injury.

**9:40 a.m. Panel Discussion** - *Moderator - Mouhammad A. Jumaa, MD*

- Summarize management and treatment modalities for neurosurgical cases.

**9:50 a.m. Break and Exhibits**

### SESSION 2 - SEIZURE/INJURY

**10 a.m. Management of Status Epilepticus** - *Ajaz Sheikh, MD*

- Review treatment paradigm for patients with status epilepticus.
- Discuss evidence for medication induced coma in management of status epilepticus.

**10:20 a.m. Semiology of Seizures** - *Vicki Ramsey-Williams, MD, PhD*

- Review presentations of epileptic seizures.
- Cite options and evidence for epilepsy monitoring.

**10:40 a.m. Management of Antiepileptics** - *Kimberly Cole, DNP, FNP*

- Discuss treatment paradigm for patients with partial and generalized epilepsy.
- Review common side effects of commonly used anti-epileptics.

**11 a.m. EEG Monitoring During Critical Care** - *Imran I. Ali, MD*

- Discuss incidence and clinical manifestations of non-convulsive status epilepticus.
- Review indications for EEG monitoring in the ICU.

**11:20 a.m. Neuroimaging in Epilepsy** - *Mark Buehler, MD*

- Review common findings in patients with epilepsy.
- Review advanced imaging modalities for epileptogenic focus detection.

**11:40 p.m. Panel Discussion** - *Moderator - Mouhammad A. Jumaa, MD*

- Summarize management and treatment modalities for seizures and neurological injuries.

**12 Noon Lunch and Keynote Speaker** - *Tudor G. Jovin, MD*

**Extending the Time Window for Stroke Interventions**

- Review recent evidence for mechanical thrombectomy outside the conventional six-hour time window.
- Review results of DAWN trial.

### SESSION 3 - STROKE/ NEURO CRITICAL CARE

**1 p.m. Management of Cervical Artery Dissection** - *Vieh Kung, MD*

- Identify signs and symptoms of cervical artery dissection.
- Review evidence for management of patients with cervical artery dissection.

**1:20 p.m. Case Presentation - Ischemic Stroke** - *Mouhammad A. Jumaa, MD; Syed Zaidi, MD; Julie Shawver, PA-C*

- Cite recorded cases of management modalities for patients with acute ischemic stroke.
- Review evidence for treatment options in ischemic stroke patients.

**1:40 p.m. Management of Subarachnoid Hemorrhage** - *Syed Zaidi, MD*

- Discuss management paradigm for patients with subarachnoid hemorrhage.
- Review evidence for treatment of ruptured intracranial aneurysms.

**2 p.m. Case Presentation - Aneurysms** - *Mouhammad A. Jumaa, MD; Syed Zaidi, MD and Julie Shawver, PA-C*

- Cite recorded cases of unruptured aneurysms embolization.
- Review common complications of coil embolization and flow diversion.

**2:20 p.m. Brain Perfusion Imaging** - *Mark Buehler, MD*

- Discuss indications for brain perfusion imaging.
- State overview of brain perfusion modalities and pitfalls.

**2:40 p.m. Panel Discussion** - *Moderator - Mouhammad A. Jumaa, MD*

- Summarize management and treatment modalities for acute stroke patients.

**2:50 p.m. Break and Exhibits**

### SESSION 4 - MS AND OTHER NEURO TOPICS

**3 p.m. New and Emerging Therapies for Multiple Sclerosis** - *Boyd Koffman, MD, PhD*

- Review pathophysiology and clinical presentation of MS.
- Discuss indications and common side effects for recently approved MS therapies.

**3:20 p.m. Diagnosis and Management of Myasthenia Gravis** - *Noor Pirzada, MD*

- Review pathophysiology and clinical presentations of myasthenia.
- Discuss treatment options for myasthenia.

**3:40 p.m. Emerging Therapies for Migraine** - *Gretchen Tietjen, MD*

- Cite incidence and types of migraine.
- Review evidence for prophylactic treatments for migraine.

**4 p.m. Pediatric Neurological Emergencies** - *Michael Nagel, MD*

- Identify incidence and presentations common in pediatric emergencies.
- Discuss treatment paradigms for pediatric emergencies.

**4:20 p.m. Panel Discussion** - *Moderator - Mouhammad A. Jumaa, MD*

- Summarize management and treatment modalities for MS and other neurological events.

**4:40 p.m. Evaluation and Adjournment**

*For your comfort, please bring a sweater or jacket to the conference.*

## EDUCATIONAL CREDITS

ProMedica is accredited by the Ohio State Medical Association to provide continuing medical education for physicians.

ProMedica designates this live educational activity for a maximum of 8.0 *AMA PRA Category 1 Credits*<sup>™</sup>. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Participants claiming CME credit from this activity may submit the credit hours to the American Osteopathic Association for Category 2 credit.

AAPA accepts certificates of participation for educational activities certified for *AMA PRA Category 1 Credit*<sup>™</sup> from organizations accredited by ACCME or a recognized state medical society. Physician assistants may receive a maximum of 8.0 hours of *AMA PRA Category 1 Credit*<sup>™</sup> for completing this program.

ProMedica is an approved provider of continuing nursing education by the Ohio Nurses Association, an accredited approver by the American Nurses Credentialing Center's Commission on Accreditation. (OBN-001-91)(OH-069, 4-1-2018)

Application has been made to American Society of Radiological Technologist (ASRT) for accreditation for credit hours in Category A.

Application has been made to the Ohio Physical Therapy Association for continuing education credit. Credit approval is pending.

## REFUND/CANCELLATION POLICY

The registration fee, minus a \$25 administrative fee, will be refunded if a cancellation is received (in writing or by phone) no later than **Monday, December 11, 2017**. Refunds will not be given for failure to attend. Substitutions may be made at any time (in writing or by phone) without an additional charge.

**If this meeting is cancelled for any reason, including labor strikes or acts of nature, liability is limited to a full refund of registration fees.**

For more information, please call the ProMedica Continuing Medical Education Department at 419-291-4650.

**We ask you to help support ProMedica's fight against hunger by donating a non-perishable food item to this conference which will be donated to a local food bank. Thank you!**