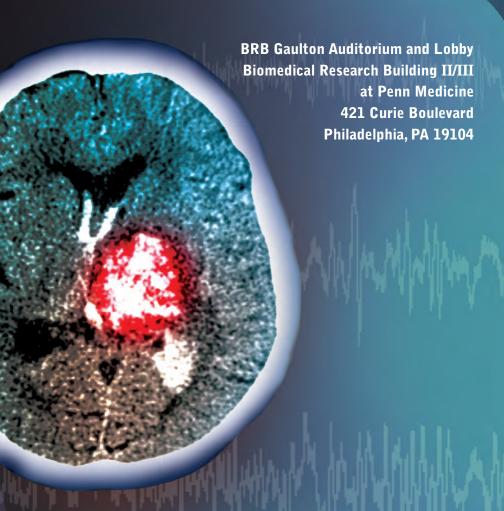


The Department of Neurology at Penn Medicine Presents

Advances in Stroke 2020
Thursday, March 26, 2020
and
Foundations of Neurologic Practice 2020
Friday-Saturday, March 27-28, 2020

A CME/CNE-ACCREDITED COURSE



https://upenn.cloud-cme.com/strokeneuro2020



## **Program Overview & Target Audience**

This course is designed as a multi-part educational activity spanning three days, either taken individually or together. Day One, *Advances in Stroke 2020*, reviews the latest in stroke care, including acute treatments as well as secondary prevention and post-stroke care, through a series of interactive, case-based discussions. Days Two and Three, *Foundations of Neurologic Practice 2020: Common Problems in Clinical and Advanced Neurology*, are designed to enhance diagnostic and management skills related to neurologic conditions most frequently encountered in clinical practice. Course topics are designed to simulate patient encounters as they would occur in clinical practice.

This course has been designed for neurologists, internal medicine and family practice physicians, emergency medicine physicians, cardiologists, radiologists, nurses, nurse practitioners, physician assistants, and other healthcare professionals.

## Learning Objectives Day 1 Advances in Stroke 2020

Upon completion of the activity, participants should be able to:

- Accurately select patients with acute ischemic stroke for thrombolytic therapy
- Implement measures to speed delivery of thrombolytic therapy
- Discuss the role of mechanical thrombectomy in acute ischemic stroke
- Optimize evaluation and treatment of patients with TIA
- Optimize identification, counseling, and treatment of post stroke anxiety, depression, and fatigue
- Review features of patients at high-risk of undetected paroxysmal atrial fibrillation and explain diagnostic and interventional tools for this population
- Review management of asymptomatic aneurysms
- Discuss emerging stroke recovery interventions
- Optimize lipid management in secondary stroke prevention

## **Advances in Stroke 2020**

Thursday, March 26, 2020

## **Foundations of Neurologic Practice 2020**

Friday-Saturday, March 27-28, 2020

# Learning Objectives Day 2 and 3 Foundations of Neurologic Practice 2020

## Day 2

Upon completion of the activity, participants should be able to:

- Confidently perform a detailed neuromuscular examination and efficiently record findings in the electronic medical record
- Identify patterns of aging nervous system function and answer questions about mitigating cognitive decline by physical, dietary, and mental exercise
- Perform head-thrust and Dix-Hallpike maneuvers and distinguish causes of acute vestibular syndrome
- Explain uses and adverse effects of new anti-epileptic drugs with particular consideration of women's issues
- Approach a patient with medically unexplained physical symptoms with sensitive and effective strategies to mitigate symptoms
- Perform a cost-effective workup of polyneuropathy
- Identify headache patterns requiring specific approaches such as the Cefaly device, botulinum toxin, CGRP antagonists
- Discuss common movement disorders
- Identify neuro-ophthalmologic emergencies such as optic neuritis and idiopathic intracranial hypertension
- Choose appropriate pharmacotherapy for neurogenic bladder
- Identify barriers to neurologic care and disparities in neurologic disease management
- Acquire evidence base to answer common patient questions about cannabis,
   Lyme disease, vitamin D and other supplement use, gadolinium use in MRI

#### Day 3

Upon completion of the activity, participants should be able to:

- Describe the recent evidence regarding the association between traumatic brain injury and neurodegeneration
- Review current treatment options for Parkinson's disease and review future directions of potential therapeutic interventions
- Discuss recent advances in deep brain stimulation technology and epilepsy treatment
- Describe the spectrum of clinical presentations of mitochondrial neurologic disease
- Identify recent therapeutic advances in motor neuron disease, multiple sclerosis, and Alzheimer's dementia
- Describe conditions that mimic myositis



## **Hosting Department**

Advances in Stroke 2020 and Foundations of Neurologic Practice 2020: Common Problems in Clinical Neurology and Advanced Neurology is hosted by the Department of Neurology, Perelman School of Medicine at the University of Pennsylvania.

#### **Accreditation**



In support of improving patient care, Penn Medicine is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC), to provide continuing education for the healthcare team.

## **Designation of Credit**

Physicians: Penn Medicine designates this live activity for a maximum of 21.0 AMA PRA Category 1 Credits<sup>TM</sup>. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

- Day 1 Advances in Stroke 2020 7.25 AMA PRA Category 1 Credits™
- Day 2 Foundations of Neurologic Practice 2020, Common Problems in Clinical Neurology 8.5 AMA PRA Category 1 Credits™
- Day 3 Foundations of Neurologic Practice 2020, Advanced Neurology − 5.0 AMA PRA Category 1 Credits™

Nurses: This program provides 21.0 contact hours.

- Day 1 Advances in Stroke 2020 6.75 contact hours
  Optional Session: Stroke Center Certification 0.5 contact hours
- Day 2 Foundations of Neurologic Practice 2020, Common Problems in Clinical Neurology – 8.0 contact hours Optional Early Session: Physical Examination Practice Sessions – 0.5 contact hours
- Day 3 Foundations of Neurologic Practice 2020, Advanced Neurology 5.0 contact hours

Physician Assistants: AAPA accepts certificates of participation for educational activities certified for AMA PRA Category 1 Credit<sup>TM</sup> from organizations accredited by ACCME or a recognized state medical society. PAs may receive a maximum of 21.0 Category 1 credits for completing this activity.

Certificates and Transcripts: After the conference has concluded, all participants will receive a follow-up email with instructions and a link. Once participants submit the request for credit, the earned credits will be available for viewing on a transcript and certificates will be available for printing at <a href="https://upenn.cloud-cme.com">https://upenn.cloud-cme.com</a>. Please note that the individual certificate will not be mailed.

#### **Disclosures**

Penn Medicine, Office of Continuing Medical and Interprofessional Education, adheres to the *ACCME Standards for Commercial Support*. Faculty disclosure information will be made available in the conference materials and syllabi. Faculty members are also expected to disclose to participants any discussions of off-label and/or investigational uses of pharmaceutical products or devices within their presentations.

## **Registration Fees**

The registration fees for *Advances in Stroke 2020* and *Foundations of Neurologic Practice 2020* (Thursday, Friday and Saturday attendance) are \$550 for Physicians and Industry personnel, \$350 for Nurses and Healthcare Professionals and \$200 for Residents and Fellows.

The registration fees for any combination of two days (Thursday, Friday and/or Saturday) are \$400 for Physicians and Industry personnel, \$250 for Nurses and Healthcare Professionals or \$125 for Residents and Fellows.

The registration fees for single-day attendance (Thursday, Friday or Saturday) are \$250 for Physicians and Industry personnel, \$150 for Nurses and Healthcare Professionals or \$75 for Residents and Fellows.

Penn Medicine employees, faculty and Staff: You may register at 50% off of the listed registration fees. In order to register at the reduced rate, you must sign into your <a href="https://upenn.cloud-cme.com">https://upenn.cloud-cme.com</a> account with your Pennkey and Password and register online using PENNSTROKE. The reduced rate is only available to Penn Medicine employees.

The registration fee includes attendance to the conference (on the day(s) you register to attend). Each attendee will also receive a course booklet, a link to view the presentations online, continental breakfast, mid-morning & afternoon refreshment breaks and lunch.

If you are registering with a credit card or check, please register online at *https://upenn.cloud-cme.com/strokeneuro2020*. We cannot accept faxed or mailed registration forms with credit card information. To pay by check, complete your registration online and mail a copy of your confirmation email with your check. See the registration form for mailing information. Please note: mailed registrations can take up to 5-10 business days before they are received. All registrations will be confirmed by email as long as your registration is received no later than March 24, 2020.

#### **Cancellation and Refund Policy**

In order to process refunds for course withdrawals, cancellations must be received in writing by March 12, 2020 (subject to a service charge of 10% of the registration fee but not less than \$15.00). No refunds will be issued after March 12, 2020. The University reserves the right to cancel or postpone any course due to unforeseen circumstances. In the event of cancellation or postponement, the University will refund registration fees but is not responsible for related costs or expenses to participants, including cancellation fees assessed by hotels, airlines, and travel agencies.

### **Meeting Location**

Advances in Stroke 2020 and Foundations of Neurologic Practice 2020 will be held Thursday – Saturday, March 26-28, 2020 at the BRB II/III Gaulton Auditorium and Lobby of the Biomedical Research Building II/III (BRB II/III) at Penn Medicine, 421 Curie Boulevard, Philadelphia, PA 19104

Directions & Parking: The Biomedical Research Building (BRB II/III) is located on PENN's campus across from the Stellar-Chance Laboratory Building (an enclosed walkway connects the two) and next to the Clinical Research Building (CRB).

On Thursday and Friday, March 26-27, the 3600 Civic Center Blvd Parking Garage is open for public parking. This garage is accessible from Civic Center Boulevard and is located at Civic Center Blvd and West Service Drive (next to the Colket Research Center).

The BRB II/III is about a 5 minute walk from this parking garage. Parking is about \$20 per day. This garage is only open Monday – Friday. It is closed on weekends.

On Saturday, March 28th, LOT #44 Parking Garage (located right next to the BRB II/III) is open to those attending. The conference will validate the parking fees on Saturday ONLY and only in LOT #44. Parking fees on Thursday and Friday will not be validated or reimbursed.

## **Overnight Accommodation Options**

A block of rooms has been reserved at the Sheraton University City Hotel, 3600 Chestnut Street, Philadelphia, PA 19104. There is a special group rate of \$219 per night (single or double occupancy). Taxes are 16.36% per room per night and are subject to change. A credit card is required to hold the reservation. Hotel check-in is at 3 pm, check-out is at noon.

Please visit ttps://www.marriott.com/event-reservations/reservation-link.mi?id=1579102782286&key=GRP&app=resvlink or call 215-387-8000 to make your reservation. The deadline for reservations is February 25, 2020.

The Sheraton has an attached parking garage and offers self-parking for \$20-\$26 for daily or \$35 for overnight guests. Parking costs are not validated or reimbursed. This hotel is a 5-10 minute walk to/from BRB II/III.

#### Additional Overnight Accommodation Options:

There are no special room rates for course participants at other properties. Contact the following hotels directly if you are interested in overnight room reservations:

The Study at University City Hotel
20 South 33rd Street, Philadelphia, PA 19104
215-387-1400
https://www.thestudyatuniversitycity.com

Homewood Suites by Hilton 4109 Walnut Street, Philadelphia, PA, 19104 215-382-1111 www.HomewoodUnivCity.com \*Homewood Suites offers a complimentary shuttle service to Penn's campus The Inn at Penn 3600 Sansom Street Philadelphia, PA 19104 215-222-0200 www.theinnatpenn.com



## Advances in Stroke 2020

All faculty are from Penn Medicine, Philadelphia, PA

#### **COURSE CO-DIRECTORS**

Brett Cucchiara, MD Associate Professor of Neurology

Laura Stein, MD Assistant Professor of Neurology

## **FACULTY**

Donna Kurowski George, MD Assistant Professor of Neurology

Robert Hurst, MD Professor of Radiology

Roy Hamilton, MD Assistant Professor of Neurology

Scott E. Kasner, MD Professor of Neurology

David Kung, MD Assistant Professor of Neurosurgery

Jeanie Luciano, RN, CRNP Coordinator Penn Comprehensive Stroke Center

Michael Mullen, MD Assistant Professor of Neurology

Pasquale Santangeli, MD, PhD Assistant Professor of Medicine – Cardiology

Daniel Soffer, MD, FNLA Clinical Associate Professor of Medicine

Kristy Yuan, MD Professor of Neurology

Services for the Disabled If special arrangements are required for an individual with a disability to attend this meeting, please contact the Office of Continuing Medical and Interprofessional Education no later than March 12, 2020 at 215-898-8005.

Nondiscrimination Statement The University of Pennsylvania values diversity and seeks talented students, faculty, and staff from diverse backgrounds. The University of Pennsylvania does not discriminate on the basis of race, sex, sexual orientation, gender identity, religion, color, national or ethnic origin, age, disability, or status as a Vietnam Era Veteran or disabled veteran in the administration of educational policies, programs or activities; admissions policies; scholarship and loan awards; athletic, or other University administered programs or employment. Questions or complaints regarding this policy should be directed to Executive Director, Office of Affirmative Action and Equal Opportunity Programs, 3600 Chestnut Street, Sansom Place East, Suite 228, Philadelphia PA 19104-6106 or 215-898-6993 (Voice) or 215-898-7803 (TDD). www.upenn.edu/affirm-action



## AGENDA

## **DAY 1** | Thursday, March 26, 2020

#### **ADVANCES IN STROKE 2020**

7:30-8:15 AM Registration and Continental Breakfast

8:15-8:30 AM Welcome and Introduction

Brett Cucchiara, MD

#### **ACUTE STROKE THERAPY**

8:30-9:00 AM Acute Stroke Therapy – The Essentials

• Basics of acute stroke supportive care

• Intravenous thrombolysis

• Minor strokes – treat or not?

• Should we treat after 4.5 hours using imaging selection?

New thrombolytic agents

Donna Kurowski George, MD

9:00-9:30 AM Mechanical Thrombectomy – The Mechanics

Robert Hurst, MD

9:30-10:00 AM Mechanical Thrombectomy – The Evidence

Scott Kasner, MD

10:00-10:30 AM Acute Transient Ischemic Attack

Risk stratification

 Practice-changing impact of the POINT, CHANCE and SOCRATES trials

Brett Cucchiara, MD

10:30-10:45 AM Break

10:45-11:05 AM Stroke Systems of Care – Patients, Policy and Public Health

Stroke units

• Regionalization and geographic modeling of stroke care

Michael Mullen, MD

11:05 AM-12:00 PM Decision-making in Acute Stroke – Case Studies

Moderator: Brett Cucchiara, MD

Panelists: Donna Kurowski George, MD, Robert Hurst, MD,

Scott Kasner, MD, Michael Mullen, MD

12:00-1:00 PM Lunch

1:00-1:30 PM Anticoagulation-associated Intracerebral Hemorrhage

• Reversal of warfarin and direct oral anticoagulants

• Restarting anticoagulation in high-risk patients

Kristy Yuan, MD

# STROKE RECOVERY

1:30-2:00 PM Identifying and Managing Post-stroke Depression,

Anxiety and Fatigue Laura Stein, MD

2:00-2:30 PM Non-invasive Neuromodulation to Treat Post-stroke Aphasia

Roy Hamilton, MD

2:30-2:45 PM Break

#### STROKE PREVENTION

2:45-3:15 PM Management of Asymptomatic Cerebral Aneurysms

David Kung, MD

3:15-3:45 PM Finding and Treating Atrial Fibrillation (AF)

• Apple watch for AF detection – revolutionary advance or disaster in the making?

• Mobile cardiac outpatient telemetry

• How much AF is important

• Non-pharmacologic treatment of AF

LAA occlusion devices

Ablation – CABANA

Pasquale Santangeli, MD

3:45-4:15 PM Lipids and Stroke – New Evidence, New Treatment Strategies

• Lipids and lipoproteins

• Statins and beyond for stroke prevention, including

emerging therapies (PCSK9 inhibitors, icosapent)

Daniel Soffer, MD

4:15-4:30 PM Question and Answer Panel Discussion

Moderator: Brett Cucchiara, MD

Panelists: Scott Kasner, MD, Daniel Soffer, MD

and Laura Stein, MD

4:30 PM Adjourn

4:30-5:00 PM OPTIONAL SESSION: Stroke Center Certification

Jeanie Luciano, RN, CRNP



## Foundations of Neurologic Practice 2020

All faculty are from Penn Medicine, Philadelphia, PA

### **COURSE CO-DIRECTORS**

Andres Deik, MD, MSEd

Assistant Professor of Clinical Neurology Director of Experimental Therapeutics, Parkinson's Disease and Movement Disorders Center

Amy Pruitt, MD

Professor of Neurology Vice Chair for Education Department of Neurology

#### **FACULTY**

Geoffrey Aguirre, MD, PhD Associate Professor of Neurology

Danielle Becker MD, MS Assistant Professor of Clinical Neurology

Ramon Diaz-Arrastia, MD, PhD

Christyn Edmundson, MD
Assistant Professor of Clinical Neurology

Lauren Elman, MD Associate Professor of Neurology

Professor of Neurology

Amy Goldstein, MD Associate Professor of Clinical Pediatrics

Katherine Hamilton, MD Assistant Professor of Neurology

Ingo Helbig, MD
Assistant Professor of Neurology

David Irwin, MD Assistant Professor of Neurology

Dina Jacobs MD Associate Professor of Neurology

Sharon Lewis, MD Associate Professor of Clinical Neurology

Grant Liu, MD

Christopher Perrone, MD Assistant Professor of Neurology

Colin Quinn, MD Assistant Professor of Clinical Neurology

Raymond Price, MD Associate Professor of Clinical Neurology

Andrew Siderowf, MD Professor of Neurology

Meredith Spindler, MD Assistant Professor of Clinical Neurology

## PHYSICAL EXAMINATION FACILITATORS

Alisha Amendt, RN, CRNP Nurse Practitioner General Neurology Division

Danielle Becker, MD, MS Assistant Professor of Clinical Neurology

Maria Chen, MD, PhD Assistant Professor of Clinical Neurology

Erin Ingala, MD Clinical Assistant Professor of Neurology

Sami Khella, MD
Professor of Clinical Neurology

Site Chief, Penn Presbyterian Medical Center

Sharon Lewis, MD
Assistant Professor of Clinical Neurology

Michael Rubenstein, MD

Associate Professor of Clinical Neurology Meredith Spindler, MD

Assistant Professor of Clinical Neurology

Eliot Wallack, MD Associate Professor of Clinical Neurology

**Grant Liu, MD** Professor of Neurology and Ophthalmology



## AGENDA

## **DAY 2** | Friday, March 27, 2020

## **FOUNDATIONS OF NEUROLOGIC PRACTICE 2020**

7:00-8:15 AM OPTIONAL SESSION: Physical Examination Practice Sessions

7:30-8:15 AM Registration and Continental Breakfast

## **COMMON PROBLEMS IN CLINICAL NEUROLOGY**

8:15-8:30 AM Welcome and Introduction to the Course:

**Essential Neurologic Skills** 

Amy Pruitt, MD

8:30-9:15 AM The Spin Doctor: Dizziness

Raymond Price, MD

9:15-10:00 AM Advances in Migraine Therapy

Katherine Hamilton, MD

10:00-10:15 AM Break

10:15-11:00 AM Providing Neurologic Care for Women:

**Epilepsy and Multiple Sclerosis** 

Danielle Becker, MD and Dina Jacobs, MD

11:00-11:40 AM The Aging Nervous System

Geoffrey Aguirre, MD

11:40 AM-12:15 PM Peripheral Neuropathy

Christyn Edmundson, MD

12:15-1:15 PM Lunch

\*Feel free to bring your topics to the CME desk for the

panel discussion at the end of the day

1:15-2:00 PM Movement Disorders You Need to Recognize

Meredith Spindler, MD

2:00-2:45 PM Neuro-Ophthalmologic Diagnoses You Don't Want To Miss

Grant Liu, MD

2:45-3:20 PM Medically Unexplained Physical Symptoms

Amy Pruitt, MD

3:20-3:50 PM Health Disparities in Neurology

Sharon Lewis, MD

3:50-4:00 PM Break

4:00-5:00 PM Panel Discussion: Questions Your Patients Will Ask –

A Series of Mini-Cases: Cannabis, Lyme, Vitamin D,

Gadolinium MRI Use, Neurogenic Bladder

Moderator: Amy Pruitt, MD

Panelists: Christyn Edmundson, MD, Grant Liu, MD

and Raymond Price, MD

5:00 PM Closing Remarks and Adjourn



## DAY 3 | Saturday, March 28, 2020

#### **FOUNDATIONS OF NEUROLOGIC PRACTICE 2020**

8:00-8:25 AM Registration and Continental Breakfast

8:25-8:30 AM **Welcome** 

Andres Deik, MD

8:30-9:00 AM Traumatic Brain Injury and Neurodegenerative Disease –

What Does the Evidence Show? Ramon Diaz-Arrastia, MD, PhD

**Neurogenetics** 

9:00-9:30 AM Precision Medicine in Epilepsy

Ingo Helbig, MD

9:30-10:00 AM Updates in Mitochondrial Neurologic Diseases

Amy Goldstein, MD

10:00-10:30 AM Break

**Movement Disorders** 

10:30-11:00 AM Recent Advances in Symptomatic Therapy of Parkinson's Disease

Meredith Spindler, MD

11:00-11:30 AM Emerging Therapies for Movement Disorders

Andrew Siderowf, MD

11:30 AM-12:00 PM The Future of Deep Brain Stimulation Surgery

Andres Deik, MD, MSEd

12:00-1:00 PM Lunch

**Neuromuscular Diseases** 

1:00-1:30 PM Disease Modifying Therapy in Motor Neuron Disease

Lauren Elman, MD

1:30-2:00 PM Myositis Mimics

Colin Quinn, MD

2:00-2:15 PM Break

Other Specialties

2:15-2:45 PM Dementia: Monoclonal Antibody Therapy for AD: An Update

David Irwin, MD

2:45-3:15 PM Demyelinating Disease:

Advancement in the Monitoring and Treatment of MS

Christopher Perrone, MD

3:15 PM Closing Remarks and Adjourn

## Advances in Stroke 2020

Thursday, March 26, 2020

## Foundations of Neurologic Practice 2020

Friday-Saturday, March 27-28, 2020

You may register by credit card or check online at: https://upenn.cloud-cme.com/strokeneuro2020

Questions? Contact us at:

Please print or type

Phone: 215-898-6400 or 215-898-8005 • penncme@pennmedicine.upenn.edu

Please note we are unable to accept faxed or mailed registration forms with credit card payment.

Name (First) (Last) Academic Degree Medical Specialty Affiliation (Hospital, Office, or Company) Address ( ☐ Affiliation or ☐ Home) City State Zip Phone Fax E-mail Registration Fees (pre-payment is required to be officially registered) ☐ *Advances in Stroke* (Thursday) ☐ Common Problems in Clinical Neurology (Friday) ☐ *Advanced Neurology* (Saturday) Advances in Stroke and Foundations of Neurologic Practice (Thursday, Friday and Saturday attendance) □ \$550 for Physicians and Industry personnel □ \$350 for Nurses and Other Healthcare Professionals ☐ \$200 for Residents and Fellows Registration fees for any combination of two days (Thursday, Friday and/or Saturday) ☐ \$400 for Physicians and Industry personnel □ \$250 for Nurses and Other Healthcare Professionals ☐ \$125 for Residents and Fellows Registration fees for single-day attendance (Thursday, Friday or Saturday) □ \$250 for Physicians and Industry personnel ☐ \$150 for Nurses and Other Healthcare Professionals □ \$75 for Residents and Fellows (per day) Check the complimentary optional sessions you plan to attend: ☐ OPTIONAL SESSION: *Joint Commission Stroke Center Certification* (Thursday) ☐ OPTIONAL EARLY SESSION: Practice Your Examination Skills (Friday) Penn Medicine employees, faculty and staff will receive 50% off of the registration rates

#### **Payment Method**

• If you are paying by credit card, please register online at https://upenn.cloud-cme.com/strokeneuro2020

when registering online with discount code PENNSTROKE.

 If you are paying by check, you may mail your completed registration form and check made payable to The Trustees of the University of Pennsylvania/CME to:

Conference Manager, Office of Continuing Medical & Interprofessional Education Academic Programs, Penn Medicine, JMEC, SPE, 6th floor

3400 Civic Center Blvd, Bldg. 421, Philadelphia, PA 19104-5162

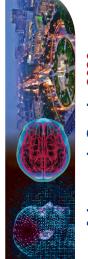
 Do not include any credit card information on the registration form or email any credit card information

> Please Note: Walk-in registrants must bring payment to the program. Seating may be limited for walk-in registrants.

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Philadelphia, PA 19104-5162



Advances in Stroke 2020

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BRB Gaulton Auditorium and Lobby Biomedical Research Building II/III at Penn Medicine

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