The Foundation of the ASNR Symposium 2016: Emergency Neuroradiology

Powerpoint Presentations

ASNR 2016
Washington, DC

May 21-26, 2016 • Washington, D.C.
Washington Marriott Wardman Park

Acknowledgment of Commercial Support
Bayer
Table of Contents

3 Program Chair Welcome Letter

4-5 The Foundation of the ASNR Symposium 2016 Faculty

6 The Foundation of the ASNR Symposium 2016 Accreditation Statement

6 Target Audience

6 Educational Objectives

7-8 Disclosure Statements

9-11 The Foundation of the ASNR Symposium 2016 Program

12 ASNR Future Annual Meetings

Program Committee

Howard A. Rowley, MD
ASNR 2016 Program Chair/President Elect

Yoshimi Anzai, MD, MPH
Nafi Aygun, MD
Robert M. Barr, MD, FCR
Jacqueline A. Bello, MD, FCR
Jerrold Boxerman, MD
Barton F. Branstetter IV, MD
Falgun H. Chokshi, MD
Christopher G. Filippi, MD
Donald F. Frei, Jr., MD
Judith A. Gadde, DO, MBA
Lindell R. Gentry, MD, FCR
John L. Go, MD, FCR
Andrei I. Holodny, MD
Thomas A. Kim, MD, MBA
Wayne S. Kubal, MD
Gregory J. Lawler, MD
Roland R. Lee, MD, FCR

Michael H. Lev, MD, FCR
Laurie A. Loevner, MD
Suresh K. Mukherji, MD, FCR, MBA
Mark E. Mullins, MD, PhD
Tina Young Poussaint, MD
Charles J. Prestigiacomo, MD
Alireza Radmanesh, MD
Timothy P. L. Roberts, PhD
Jeffrey S. Ross, MD
Pina C. Sanelli, MD, MPH, FCR
Erin Simon Schwartz, MD
David J. Seidenwurm, MD, FCR
Dikoma C. Shungu, PhD
James G. Smirniotopoulos, MD
Raymond K. Tu, MD, FCR
Achala S. Vagal, MD
Max Wintermark, MD

Program Committee
The Foundation of the ASNR Symposium 2016:
Emergency Neuroradiology
Saturday, May 21 – Sunday, May 22

The Foundation of the ASNR Symposium 2016 held May 21-22 will feature world renowned speakers providing a comprehensive review of Emergency Neuroradiology and neuroimaging issues in critical care. Neuroimaging has become an indispensable tool for triage and management of both adults and children in emergency settings. Efficient and appropriate use of CT and MRI are critical to the urgent management of brain, spine, head & neck, and neurovascular emergencies, all of which will be highlighted by expert faculty. Best practices for traumatic and non-traumatic emergencies will be discussed, including methods to ensure optimal workflow, image post-processing, PACS integration, telemedicine, safety, and quality. Challenges and solutions for providing 24/7 coverage will be presented and debated.

Howard A. Rowley, MD
ASNR 2016 Program Chair and President-Elect
<table>
<thead>
<tr>
<th>Presenters</th>
<th>Institutions/Departments</th>
<th>Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>William G. Bradley, Jr MD, PhD, FACR</td>
<td>USD Medical Center</td>
<td>Who Should Read After Hours Emergency Neuroradiology? Residents vs Fellows vs Neuroradiologists vs ER Radiologists vs Teleradiology?</td>
</tr>
<tr>
<td>Lara A. Brandão, MD</td>
<td>Clinica Radiologica Luis F. Mattoso</td>
<td>Zika Virus-Associated CNS Injury</td>
</tr>
<tr>
<td>Philip R. Chapman, MD</td>
<td>University of Alabama Birmingham</td>
<td>Neck and Airway Emergencies</td>
</tr>
<tr>
<td>Bohdan W. Chopko, MD, PhD</td>
<td>Stanford University Medical Center</td>
<td>Traumatic and Non-Traumatic Spine Emergencies: A Surgeon’s Perspective</td>
</tr>
<tr>
<td>Asim F. Choudhri, MD</td>
<td>University of Tennessee Health Center</td>
<td>Non-Accidental Trauma</td>
</tr>
<tr>
<td>Hugh D. Curtin, MD, FACR</td>
<td>Massachusetts Eye &amp; Ear Infirmary</td>
<td>Acute Orbit Abnormalities</td>
</tr>
<tr>
<td>T. Jason Druzgal, MD, PhD</td>
<td>University of Virginia</td>
<td>Panel Discussion — Concussions: State of the Art</td>
</tr>
<tr>
<td>Christopher G. Filippi, MD</td>
<td>North Shore University Hospital</td>
<td>Traumatic Neurovascular Injury</td>
</tr>
<tr>
<td>Donald Frush, MD</td>
<td>Duke University Medical Center</td>
<td>Think Ahead: A New Initiative from the Image Gently Alliance</td>
</tr>
<tr>
<td>John L. Go, MD, FACR</td>
<td>LAC/USC Medical Center</td>
<td>Paranasal Sinus Emergencies</td>
</tr>
<tr>
<td>Edward C. Jauch, MD, MS, FAHA</td>
<td>Medical University of South Carolina</td>
<td>Disaster/ Mass Casualty Planning</td>
</tr>
<tr>
<td>Edward C. Jauch, MD, MS, FAHA</td>
<td>Medical University of South Carolina</td>
<td>Who Should Read After Hours Emergency Neuroradiology? Residents vs Fellows vs Neuroradiologists vs ER Radiologists vs Teleradiology?</td>
</tr>
<tr>
<td>Edward C. Jauch, MD, MS, FAHA</td>
<td>Medical University of South Carolina</td>
<td>Overcoming Barriers &amp; Improving Stroke Workflow: The ED Medicine Perspective</td>
</tr>
<tr>
<td>Aleksandrs U. Kalnins, MD, MBA</td>
<td>Stanford University School of Medicine</td>
<td>Emergency Triage, Safety, and Protocol Tips</td>
</tr>
<tr>
<td>Wayne S. Kubal, MD</td>
<td>University of Arizona Medical Center</td>
<td>CNS Infection</td>
</tr>
<tr>
<td>John I. Lane, MD</td>
<td>Mayo Clinic</td>
<td>Temporal Bone Emergencies</td>
</tr>
<tr>
<td>Meng Law, MD, MBBS, FRACR</td>
<td>Keck Medical Center of USC</td>
<td>Who Should Read After Hours Emergency Neuroradiology? Residents vs Fellows vs Neuroradiologists vs ER Radiologists vs Teleradiology?</td>
</tr>
<tr>
<td>Roland R. Lee, MD, FACR</td>
<td>UCSD/VA Medical Center</td>
<td>Emergency Triage, Safety, and Protocol Tips</td>
</tr>
<tr>
<td>Michael H. Lev, MD, FACR</td>
<td>Massachusetts General Hospital/ Harvard Medical School</td>
<td>ED Stroke Imaging Beyond 2016: CTA, CTA-Collaterals, CTP or MRI for Treatment Selection?</td>
</tr>
</tbody>
</table>

**NOTE:** Not all presenters have submitted Powerpoint Presentations.
NOTE: Not all presenters have submitted Powerpoint Presentations.

**Laurie A. Loevner, MD**  
University of Pennsylvania Medical Center  
Who Should Read After Hours Emergency Neuroradiology? Residents vs Fellows vs Neuroradiologists vs ER Radiologists vs Teleradiology?

**Yvonne Lui, MD**  
NYU School of Medicine  
Panel Discussion — Concussions: State of the Art

**Pratik Mukherjee, MD, PhD**  
San Francisco VA Medical Center  
Panel Discussion — Concussions: State of the Art

**Richard L. Robertson, MD**  
Boston Children’s Hospital  
MRI is Better Than CT for Ventricular Shunt Dysfunction

**Jeffrey S. Ross, MD**  
Mayo Clinic  
MR in Spine Trauma

**Pina C. Sanelli, MD, MPH, FCR**  
Northwell Health  
ED Stroke Imaging 2016: An Evidence-Based Review of the Current “State of the Art”

**Erin Simon Schwartz, MD**  
Children’s Hospital of Philadelphia  
CT is Better Than MRI for Ventricular Shunt Dysfunction

**Erin Simon Schwartz, MD**  
Children’s Hospital of Philadelphia  
Who Should Read After Hours Emergency Neuroradiology? Residents vs Fellows vs Neuroradiologists vs ER Radiologists vs Teleradiology?

**David J. Seidenwurm, MD, FCR**  
Sutter Health  
Head CT: More Than an Hors d’oeuvre

**Lubdha M. Shah, MD**  
University of Utah  
Imaging of Non-Traumatic Spine Emergencies

**James G. Smirniotopoulos, MD**  
Uniformed Services University  
‘Found Down’

**Aquilla S. Turk, DO**  
Medical University of South Carolina  
Emergency Endovascular Stroke Intervention

**Patrick A. Turski, MD, FCR**  
University of Wisconsin  
MRI in Spontaneous ICH

**Jaun Pablo Villablanca, MD, FCR**  
David Geffen School of Medicine at UCLA  
Emergency CT in CNS Hemorrhage

**Christopher T. Whitlow, MD, PhD, MHA**  
Wake Forest School of Medicine  
Sports Concussion

**Richard H. Wiggins, III, MD**  
University of Utah  
Who Should Read After Hours Emergency Neuroradiology? Residents vs Fellows vs Neuroradiologists vs ER Radiologists vs Teleradiology?

**Robert D. Zimmerman, MD, FCR**  
New York Presbyterian Hospital  
Emergency Evaluation of Head Trauma

**Vahe M. Zohrabian, MD**  
Yale New Haven Hospital  
High Resolution CT in Spine Trauma
Accreditation Statement
The American Society of Neuroradiology is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians. The American Society of Neuroradiology takes responsibility for the content, quality, and scientific integrity of the CME activity.

Credit Designation Statement
The American Society of Neuroradiology designates this live activity for a maximum of 13.25 AMA PRA Category 1 Credit(s)™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Target Audience
The Foundation of the ASNR 2016 Symposium: Emergency Neuroradiology will focus on neuroradiology emergencies in practice. The audience will include practicing neuroradiologists, other radiologists charged with interpreting urgent CNS studies, emergency department physicians, neuroscientists interested in the latest imaging advances, and clinical colleagues who order and use CT and MRI in the emergency setting. Dedicated topic areas will include head and neck, pediatric central nervous system, spine, central nervous system hemorrhage, acute ischemic stroke, head trauma, and non-traumatic emergencies. Stroke sessions will include the latest developments in triage and endovascular treatment for acute brain ischemia. Both didactic lectures and case-based material will be presented to facilitate learning and recall. Related clinical workflow issues including a session on best models for 24/7 coverage will be presented and debated.

Objectives
- Appraise state-of-the-art imaging and intervention for ischemic and hemorrhagic stroke.
- Compare and critique systems of 24/7 emergency Neuroradiology exam reading room coverage.
- Describe and recognize clinical, pathophysiologic, and imaging findings of traumatic brain injury.
- Design efficient, fast neuroimaging protocols for brain, spine, and head & neck emergencies.
- Detect crucial imaging features of non-traumatic emergencies of the brain and spine.
- Identify imaging abnormalities on emergency Neuroradiology CT and MRI exams in adults and children.
- Integrate new techniques in CT and MRI to enable lower radiation, safer exams, and optimize image quality.
- Practice key differential diagnostic skills to ensure accurate emergency diagnosis in the CNS.
These presenters have disclosed the following conflicts of interest (COI) which have been resolved by limiting data to applicable results.

All submitted research and presentation materials were reviewed by the program chair and/or member of the program committee.

Gregory W. Albers, MD, FAHA
Received equity and was a consultant at iSchema View (Ended/Concluded) and is a consultant at Medtronic (Current/Ongoing).
• RESOLUTION: speaker was limited to data applicable to results

Bohdan W. Chopko, MD, PhD
Co-founder and has stock with Silver Bullet Therapeutics (Current/Ongoing) and is a consultant and received stock from Integral Spine Solutions and Vertos Medical: Consultant (Current/Ongoing).
• RESOLUTION: speaker was limited to data applicable to results

Hugh D. Curtin, MD, FACR
Receives royalties from Elsevier Publishing.
• RESOLUTION: speaker was limited to data applicable to results

Christopher G. Filippi, MD
Was a consultant for Syntactx (Ended/Concluded) and received a honorarium from Guerbet (Ended/Concluded).
• RESOLUTION: speaker was limited to data applicable to results

Edward C. Jauch, MD, MS, FAHA
Recieves a Research Grant from Genentech (Current/Ongoing) and is a consultant at Pulse Therapeutics (Current/Ongoing).
• RESOLUTION: speaker was limited to data applicable to results

Wayne S. Kubal, MD
Is an Author & Editor at Elsevier (Current/Ongoing) and is a Stockholder at CVS Health Corp, Gilead Sciences Inc, Sarepta Therapeutics Inc and Stryker Corp (Current/Ongoing).
• RESOLUTION: speaker was limited to data applicable to results

Meng Law, MD, MBBS, FRACR
Is a Scientific/Medical Advisory Board Member and receives honorariums from Bracco, Guerbet, and Glibib (Current/Ongoing), a Research Grant Site Principal Investigator and received a grant from Toshiba (Current/Ongoing), is a consultant and receives an honorarium from Siemens and Samsung (Current/Ongoing), is a Stock Shareholder and receives an honorarium from Prism Clinical Imaging and Glibib (Current/Ongoing), and is a Scientific/Medical Advisory Board Member and received an honorarium from Fuji (Ended/Concluded).
• RESOLUTION: speaker was limited to data applicable to results

Michael H. Lev, MD, FACR
Is a consultant with Millennium Pharmaceuticals, MedyMatch, and D-Pharm (Current/Ongoing) and is a Research Grant Overall Principal Investigator and received a Research grant to MGH for RA support Consultant from GE Healthcare (Ended/Concluded).
• RESOLUTION: speaker was limited to data applicable to results

Pratik Mukherjee, MD, PhD
Is a Research Grant Site Principal Investigator and receives grant funding from NIH, General Electric-National Football League (Current/Ongoing).
• RESOLUTION: speaker was limited to data applicable to results

David J. Seidenwurm, MD, FACR
Is a Consultant and receives consulting fee from The Alliance (Current/Ongoing), and is Consultant and receives expert witness fees from medical legal (Current/Ongoing).
• RESOLUTION: speaker was limited to data applicable to results

Patrick A. Turski, MD, FACR
Receives software support from GE Healthcare (Current/Ongoing).
• RESOLUTION: speaker was limited to data applicable to results
Nothing to Disclose

William G. Bradley, Jr, MD, PhD, FACR  John I. Lane, MD  Lubdha M. Shah, MD
Lara A. Brandão, MD  Roland R. Lee, MD, FACR  James G. Smirniotopoulos, MD
Philip R. Chapman, MD  Laurie A. Loevner, MD  Aquilla S. Turk, DO
Asim F. Choudhri, MD  Yvonne Lui, MD  Juan Pablo Villablanca, MD, FACP
T. Jason Druzgal, MD, PhD  Richard L. Robertson, MD  Christopher T. Whitlow, MD, PhD, MHA
Donald Frush, II, MD  Jeffrey S. Ross, MD  Richard H. Wiggins, III, MD
John L. Go, MD, FACP  Pina C. Sanelli, MD, MPH, FACP  Robert D. Zimmerman, MD, FACP
Aleksandrs U. Kalnins, MD, MBA  Erin Simon Schwartz, MD  Vahe M. Zohrabian, MD
# The Foundation of the ASNR Symposium 2016: Emergency Neuroradiology

## Saturday, May 21, 2016

### 10:20am–10:30am  
**Session SY1**  
**Opening Remarks**  
**Location:** Marriott Ballroom  
Howard A. Rowley, MD, ASNR 2016 Program Chair/President-Elect

### 10:30am–12:00pm  
**Session SY1**  
**Nontraumatic Head and Neck Emergency Imaging**  
**Audience Response (AR)**  
**Self-Assessment Module (SAM)**  
**Location:** Marriott Ballroom  
Moderators: Lindell R. Gentry, MD, FACR; Hugh D. Curtin, MD, FACR

10:30am–10:50am  
**Temporal Bone Emergencies**  
John I. Lane, MD

10:50am–11:10am  
**Paranasal Sinus Emergencies**  
John L. Go, MD, FACR

11:10am–11:30am  
**Neck and Airway Emergencies**  
Philip R. Chapman, MD

11:30am–11:50am  
**Acute Orbit Abnormalities**  
Hugh D. Curtin, MD, FACR

11:50am–12:00pm  
**Questions/Answers**

### 10:30am–1:30pm  
**Lunch Concessions Stands**  
**Locations:** Marriott Foyer, Atrium, Exhibit Hall A

### 12:15pm–1:00pm  
**Special Panel Session:**  
**Gadolinium Deposition and Its Safety of MRI Contrast Agents**  
**Location:** Marriott Ballroom

### 1:00pm–1:30pm  
**Session SY2**  
**The Not-So Lowly Head CT**  
**Location:** Marriott Ballroom  
Moderators: Camilla E. Lindan, MD; Erik H. Gaensler, MD

1:00pm–1:30pm  
**Head CT: More Than an Hors d’oeuvre**  
David J. Seidenwurm, MD, FACR

### 1:30pm–3:00pm  
**Session SY3**  
**Pediatrics**  
**Location:** Marriott Ballroom  
Moderators: Erin Simon Schwartz, MD; Judith A. Gadde, DO, MBA

1:30pm–1:50pm  
**Think Ahead: A New Initiative from the Image Gently Alliance**  
Donald Frush, MD

1:50pm–2:10pm  
**Non-Accidental Trauma**  
Asim F. Choudhri, MD

2:10pm–2:30pm  
**Zika Virus-Associated CNS Injury**  
Lara A. Brandão, MD

2:30pm–2:45pm  
**MRI is Better Than CT for Ventricular Shunt Dysfunction**  
Richard L. Robertson, MD

2:45pm–3:00pm  
**CT is Better Than MRI for Ventricular Shunt Dysfunction**  
Erin Simon Schwartz, MD

### 3:00pm–3:30pm  
**Afternoon Beverage Break**  
**Location:** Marriott Foyer

### 3:30pm–5:00pm  
**Session SY4**  
**CNS Emergencies**  
**Location:** Marriott Ballroom  
Moderators: Christopher P. Hess, MD, PhD; Steven G. Imbesi, MD

3:30pm–4:00pm  
**‘Found Down’**  
James G. Smirniotopoulos, MD

4:00pm–4:30pm  
**CNS Infection**  
Wayne S. Kubal, MD

4:30pm–5:00pm  
**Disaster/ Mass Casualty Planning**  
Edward C. Jauch, MD, MS, FAHA
### The Foundation of the ASNR Symposium 2016: Emergency Neuroradiology

#### Saturday, May 21, 2016

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Topic</th>
<th>Location</th>
<th>Moderators</th>
</tr>
</thead>
<tbody>
<tr>
<td>5:00pm–6:15pm</td>
<td><strong>Session SY5</strong></td>
<td>24/7 Neurocoverage Audience Response (AR)</td>
<td>Marriott Ballroom</td>
<td>Meng Law, MD, MBBS, FRACR; Max Wintermark, MD</td>
</tr>
<tr>
<td>5:00pm–6:15pm</td>
<td></td>
<td>Who Should Read After Hours Emergency Neuroradiology?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Team I:</td>
<td>• Laurie A. Loevner, MD</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Erin Simon Schwartz, MD</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Richard H. Wiggins, III, MD</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Team II:</td>
<td>• William G. Bradley, Jr., MD, PhD, FACR</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Meng Law, MD, MBBS, FRACR</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Edward C. Jauch, MD, MS, FAHA</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Sunday, May 22, 2016

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Topic</th>
<th>Location</th>
<th>Moderators</th>
</tr>
</thead>
<tbody>
<tr>
<td>6:30am–8:30am</td>
<td></td>
<td>Breakfast Concession Stands</td>
<td>Marriott Foyer, Atrium, Exhibit Hall A</td>
<td></td>
</tr>
<tr>
<td>8:00am–9:45am</td>
<td><strong>Session SY6</strong></td>
<td>Essentials of Acute Stroke Imaging in the New Era of Positive IAT Trials</td>
<td>Marriott Ballroom</td>
<td>Michael H. Lev, MD, FACR; Pina C. Sanelli, MD, MPH, FACR; Christopher P. Hess, MD, PhD</td>
</tr>
<tr>
<td>8:00am–8:25am</td>
<td></td>
<td>Overcoming Barriers &amp; Improving Stroke Workflow: The ED Medicine Perspective</td>
<td></td>
<td>Edward C. Jauch, MD, MS, FAHA</td>
</tr>
<tr>
<td>8:25am–8:45am</td>
<td></td>
<td>ED Stroke Imaging 2016: An Evidence-Based Review of the Current “State of the Art”</td>
<td></td>
<td>Pina C. Sanelli, MD, MPH, FACR</td>
</tr>
<tr>
<td>8:45am–9:05am</td>
<td></td>
<td>ED Stroke Imaging Beyond 2016: CTA, CTA-Collaterals, CTP or MRI for Treatment Selection?</td>
<td></td>
<td>Michael H. Lev, MD, FACR</td>
</tr>
<tr>
<td>9:05am–9:30am</td>
<td></td>
<td>Summing Up: Lessons from the Recent IAT Stroke Trials? The Stroke Neurologist Perspective</td>
<td></td>
<td>Gregory W. Albers, MD, FAHA</td>
</tr>
<tr>
<td>9:30am–9:45am</td>
<td></td>
<td>Panel Discussion: Interactive Audience Q&amp;A</td>
<td></td>
<td>Christopher P. Hess, MD, PhD</td>
</tr>
<tr>
<td>9:45am–10:15am</td>
<td></td>
<td>Morning Beverage Break</td>
<td>Marriott Foyer</td>
<td></td>
</tr>
</tbody>
</table>
# The Foundation of the ASNR Symposium 2016 Program

## The Foundation of the ASNR Symposium 2016: Emergency Neuroradiology

### Sunday, May 22, 2016

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Description</th>
<th>Location</th>
<th>Moderators</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:15am–12:00pm</td>
<td><strong>Session SY7</strong></td>
<td><strong>Emergency Stroke – Hemorrhage</strong></td>
<td><strong>Marriott Ballroom</strong></td>
<td>Patrick A. Turski, MD, FACR; Philip M. Meyers, MD</td>
</tr>
<tr>
<td>10:15am–10:45am</td>
<td></td>
<td>Emergency CT in CNS Hemorrhage</td>
<td></td>
<td>Juan Pablo Villablancas, MD</td>
</tr>
<tr>
<td>10:45am–11:15am</td>
<td></td>
<td>Emergency Endovascular Stroke Intervention</td>
<td></td>
<td>Aquilla S. Turk, DO</td>
</tr>
<tr>
<td>11:15am–11:45am</td>
<td></td>
<td>MRI in Spontaneous ICH</td>
<td></td>
<td>Patrick A. Turski, MD, FACR</td>
</tr>
<tr>
<td>11:45am–12:00pm</td>
<td></td>
<td>Cases and Controversies</td>
<td></td>
<td>Philip M. Meyers, MD</td>
</tr>
<tr>
<td>10:30am–1:30pm</td>
<td></td>
<td>Lunch Concession Stands</td>
<td><strong>Marriott Foyer, Atrium, Exhibit Hall A</strong></td>
<td></td>
</tr>
<tr>
<td>12:15pm–1:00pm</td>
<td></td>
<td><strong>How-To Session: Siemens Healthcare (non-CME)</strong></td>
<td><strong>Marriott Ballroom</strong></td>
<td></td>
</tr>
<tr>
<td>1:15pm – 1:45pm</td>
<td><strong>Session SY8</strong></td>
<td><strong>Emergency Triage, Safety, and Protocol Tips</strong></td>
<td><strong>Marriott Ballroom</strong></td>
<td>Max Wintermark, MD</td>
</tr>
<tr>
<td>1:15pm – 1:45pm</td>
<td></td>
<td>Emergency Triage, Safety, and Protocol Tips</td>
<td></td>
<td>Roland R. Lee, MD, FACR; Aleksandrs Kainins, MD, MBA</td>
</tr>
<tr>
<td>1:45pm – 3:15pm</td>
<td><strong>Session SY9</strong></td>
<td><strong>Emergency Imaging of the Spine</strong></td>
<td><strong>Marriott Ballroom</strong></td>
<td></td>
</tr>
<tr>
<td>1:45pm – 2:07pm</td>
<td></td>
<td>MR in Spine Trauma</td>
<td></td>
<td>Jeffrey S. Ross, MD</td>
</tr>
<tr>
<td>2:07pm – 2:29pm</td>
<td></td>
<td>High Resolution CT in Spine Trauma</td>
<td></td>
<td>Vahe M. Zohrabian, MD</td>
</tr>
<tr>
<td>2:29pm – 2:51pm</td>
<td></td>
<td>Imaging of Non-Traumatic Spine Emergencies</td>
<td></td>
<td>Lubdha M. Shah, MD</td>
</tr>
<tr>
<td>2:51pm – 3:15pm</td>
<td></td>
<td>Traumatic and Non-Traumatic Spine Emergencies</td>
<td></td>
<td>Bohdan W. Chopko, MD, PhD</td>
</tr>
<tr>
<td>3:15pm – 3:30pm</td>
<td></td>
<td><strong>Afternoon Beverage Break</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3:30pm – 5:15pm</td>
<td><strong>Session SY10</strong></td>
<td><strong>Head Trauma</strong></td>
<td><strong>Marriott Ballroom</strong></td>
<td></td>
</tr>
<tr>
<td>3:30pm – 3:55pm</td>
<td></td>
<td>Emergency Evaluation of Head Trauma</td>
<td></td>
<td>Robert D. Zimmerman, MD, FACR</td>
</tr>
<tr>
<td>3:55pm – 4:20pm</td>
<td></td>
<td>Sports Concussion</td>
<td></td>
<td>Christopher T. Whitlow, MD, PhD, MHA</td>
</tr>
<tr>
<td>4:20pm – 4:45pm</td>
<td></td>
<td>Traumatic Neurovascular Injury</td>
<td></td>
<td>Christopher G. Filippi, MD</td>
</tr>
<tr>
<td>4:45pm – 5:00pm</td>
<td></td>
<td>Questions/Answers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5:00pm – 5:15pm</td>
<td></td>
<td>Panel Discussion — Concussions: State of the Art</td>
<td></td>
<td>Yvonne Lui, MD, Pratik Mukherjee, MD, T. Jason Druzgal, MD, PhD, Christopher T. Whitlow, MD, PhD, MHA</td>
</tr>
<tr>
<td>5:15pm – 6:15pm</td>
<td></td>
<td>ASNR Foundation of the ASNR Symposium 2016 Closing Reception</td>
<td><strong>Marriott Foyer</strong></td>
<td></td>
</tr>
<tr>
<td>6:30pm – 7:20pm</td>
<td></td>
<td>ASNR Entertainment — Capitol Steps Performance</td>
<td><strong>Marriott Ballroom</strong></td>
<td></td>
</tr>
</tbody>
</table>
AMERICAN SOCIETY OF NEURORADIOLOGY
FUTURE ANNUAL MEETINGS

2017
ASNR
Long Beach, California

ASFNRI ASHNR ASPNR ASSR SNIS

ASNR 2017 – 55th ANNUAL MEETING
April 22-27
Long Beach Convention & Entertainment Center
Long Beach, California

ASNR 2018 – 56th ANNUAL MEETING
June 2-7 • Vancouver Convention Centre
Vancouver, B.C., Canada

ASNR 2019 – 57th ANNUAL MEETING
May 18-23 • Hynes Convention Center
Boston, Massachusetts