



ASFNR • ASHNR • ASPNR • ASSR • SNIS

THE FOUNDATION OF THE ASNR



# ASNR 54<sup>TH</sup> ANNUAL MEETING & THE FOUNDATION OF THE ASNR SYMPOSIUM 2016



**MAY 21-26, 2016**

**WASHINGTON, D.C.**

**WASHINGTON MARRIOTT  
WARDMAN PARK**

## *Meeting Guide*

# EMERGENCY SERVICE PROCEDURES

## Washington Marriott Wardman Park Emergency Response Team and Security Services

### SECURITY

- The hotel has 24 hours/7 days week security on-site at hotel.
- House phones located in Meeting Rooms and Public Areas in the Hotel will autodial At Your Service.
- From your cell phone dial **202-328-2975**
- State your emergency and location. They will dispatch security to your location.
- In the event of an emergency, public announcements will be made giving information and instructions.

### GUEST ROOM

**Dial 11** from any guest room phone to report an emergency. State your emergency and location, they will dispatch security. From your cell phone dial **202-328-2975** this is the Loss Prevention Department's number and there is a member of the Washington Marriott Wardman Park Security team staffed 24/7.

Emergency evacuation routes and procedures are located on the inside of all guest room

### MEETING ROOM OR PUBLIC SPACE

Phones (beige) are located in public spaces and in the back of meeting rooms. The line automatically reaches the At Your Service Department. State your emergency and location and they will dispatch security.

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**Washington Marriott Wardman Park**  
**2660 Woodley Road, NW**  
**Washington, DC 20008**  
**(202) 328-2000**

**ASNR Registration Desk (Lobby Level):**  
**202-745-2114**

#### WiFi at the Washington Marriott Wardman Park

You may access complimentary WiFi service in the ASNR meeting areas using the following instructions at the Washington Marriott Wardman Park:

- When using your wireless management software, find the Wireless Network **ASNR** and enter the password **asnr2016**

#### Pharmacy CVS Pharmacy

2601 Connecticut Ave.  
Washington DC 20008  
202-332-1446  
(.19 miles from hotel)

#### Pharmacy Hours

Monday to Friday: 9:00am – 10:00pm  
Saturday: 9:00am – 6:00pm  
Sunday: 10:00am – 6:00pm

#### Store Hours

Monday to Friday: 7:00am – 10:00pm  
Saturday: 9:00am – 6:00pm  
Sunday: 10:00am – 6:00pm

### Local Hospital

**Georgetown University Hospital**  
3800 Reservoir Road NW  
Washington DC 20037  
202-784-3111  
(3 miles from hotel)

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**Meeting Registration – Convention Registration (Lobby Level)**

Registration is located at Convention Registration (Lobby Level). The registration desk will be open during the following hours:

Friday, May 20	3:00pm – 9:00pm	Tuesday, May 24	6:30am – 6:00pm
Saturday, May 21	6:30am – 6:00pm	Wednesday, May 25	6:30am – 6:00pm
Sunday, May 22	6:30am – 6:00pm	Thursday, May 26	6:30am – 5:00pm
Monday, May 23	6:30am – 6:00pm		

*As a registrant of the ASNR 54<sup>th</sup> Annual Meeting and The Foundation of the ASNR Symposium 2016, we reserve the right to use photos taken for promotional materials for future meetings.*

<http://www.freeman-cloud.com/asnr2016>

This link will be the portal for:

- Program Planner
- The Foundation of the ASNR Scientific Power Point Presentations
- Electronic Posters
- Electronic Education Exhibits
- Electronic Excerptas
- ASNR 2016 CME/SAM Evaluation Link
- Disclosures

## CHARGING STATIONS

### Continuing This Year!

During the meeting you have the opportunity to charge your cell phone, laptop or other mobile devices at one of the Charging Stations.

## CHARGING STATION LOCATIONS:

**Saturday, May 21 – Thursday, May 26**

*Convention Registration Lobby (Lobby Level)*

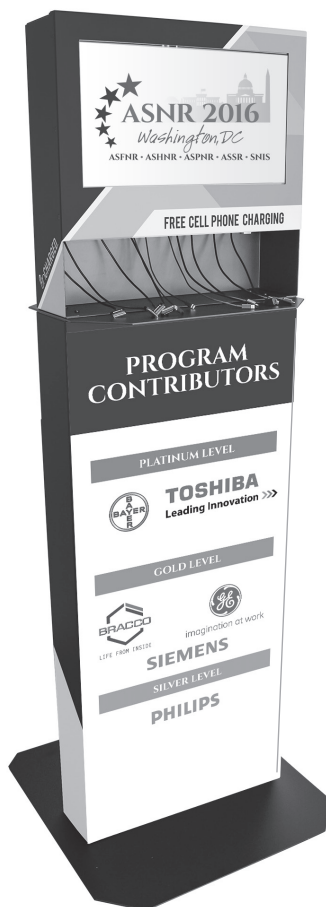
**Saturday, May 21 – Sunday, May 22  
& Thursday, May 26**

*Speaker Ready Room – Delaware B (Lobby Level)*

**Monday, May 23 – Wednesday, May 25**

*Technical Exhibits Hall –*

*Exhibit Hall C (Exhibition Level)*



Join the meeting  
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Follow us @TheASNR



[www.facebook.com/  
TheASNR](http://www.facebook.com/TheASNR)

# Get ASNR's Essential Mobile Meeting App

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Schedule, Maps, Twitter and more on your mobile device - completely free.

Download **Guidebook** on the Apple App Store or Android Marketplace or visit [guidebook.com/getit](http://guidebook.com/getit)

**Enter the Redemption Code: asnr16**

**guidebook**  
guidebook.com

**Name Badges**

Please wear name badges at all times while you are attending the scientific sessions, social programs and technical exhibits. Badge holder colors are identified as follows:

ASNR Members, ASNR Members-In-Training, Young Professionals, Research Scientists, International Outreach & Specialty Societies.....	Blue (ASFNr, ASHNR, ASPNR, ASSR & SNIS)
Non-Member and Other Professional .....	Green
Exhibitor .....	Orange
Guest Badge .....	Peach
Staff.....	Purple

**Luggage/Coat Check**

*8224 (Lobby Level)*

Hours of Operation:	
Saturday, May 21.....	7:30am – 6:00pm
Sunday, May 22.....	6:30am – 8:30pm
Monday, May 23.....	6:30am – 8:30pm
Tuesday, May 24.....	6:30am – 6:30pm
Wednesday, May 25.....	6:30am – 6:30pm
Thursday, May 26.....	6:30am – 4:00pm

**CME Pavilion/Alternate SAM Response Area**

*Delaware A (Lobby Level)*

Located in Delaware A (Lobby Level) CME Pavilion computer terminals will be available to registered attendees that can be used to evaluate attended sessions, print CME certificates and to check email.

Saturday, May 21.....	8:00am – 7:00pm
Sunday, May 22 – Wednesday, May 25.....	6:30am – 8:00pm
Thursday, May 26.....	6:00am – 6:00pm

**Committee/Specialty Society Meetings**

*Atrium (Exhibition Level)*

Please refer to the daily postings on the Meetings & Announcements Boards, located in the Atrium (Exhibition Level) at the Washington Marriott Wardman Park.

**Meetings & Announcements Board**

*Atrium (Exhibition Level)*

The Meetings & Announcements Board is located in the Atrium (Exhibition Level) at the Washington Marriott Wardman Park. Please refer to the daily postings on the Meetings & Announcements Board for information on committee meetings.

**Speaker Ready Room**

*Delaware B (Lobby Level)*

Saturday, May 21.....	8:00am – 6:00pm
Sunday, May 22 – Wednesday, May 25.....	6:00am – 6:00pm
Thursday, May 26.....	6:00am – 3:00pm

***Washington Marriott Wardman Park is the official location for all educational programming and exhibits.***

**American Board of Radiology (ABR)  
Info Desk**

Convention Registration Lobby  
(Lobby Level)

**ASNR & The Foundation of the  
ASNR Booth**

Convention Registration Lobby  
(Lobby Level)

**AJNR Booth**

Convention Registration Lobby  
(Lobby Level)

**Audience Response (AR) Help Desk**

Executive Corridor (Lobby Level)

**Luggage/Coat Check (Complimentary)**

8224 (Lobby Level)

**Case of the Day**

Atrium (Exhibition Level)

**Charging Stations**

Saturday, May 21 – Thursday, May 26  
Convention Registration Lobby  
(Lobby Level)

Saturday, May 21 – Sunday, May 22 &  
Thursday, May 26  
Speaker Ready Room – Delaware B  
(Lobby Level)

Monday, May 23 – Wednesday, May 25  
Technical Exhibit Hall – Exhibit Hall C  
(Exhibition Level)

**CME Pavilion/Alternate SAM Response Area**

Delaware A (Lobby Level)

**Donor Lounge**

Virginia A (Lobby Level)

**Headquarters Office**

8212 (Lobby Level)

**How-To Sessions**

Marriott Ballroom (Lobby Level)

**ASNR 2017 – Long Beach, CA Info Desk**

Convention Registration Lobby  
(Lobby Level)

**Lost and Found**

Registration — Convention Registration  
(Lobby Level)

**Printed Scientific Posters,  
Electronic Scientific Posters,  
Educational Exhibit Posters,  
Electronic Educational Exhibits,  
Electronic Excerptas**

Exhibit Hall B South & Exhibit Hall A  
(Exhibition Level)

**Registration**

Convention Registration (Lobby Level)

**Speaker Ready Room**

Delaware B (Lobby Level)

**Technical Exhibits**

Exhibit Hall C (Exhibition Level)

**Turbo Talks**

*Turbo Presentations*

Roosevelt 1-3 (Exhibition Level)

**Electronic Display Presentations**

Exhibit Hall A (Exhibition Level)

**Young Professionals Lounge**

*(Fellows, Residents, Young Professionals  
and Medical Students)*

8226 (Lobby Level)

Food Service Information

ASNR will offer breakfast concession stands from Sunday – Thursday and lunch concession stands Saturday – Thursday. Breakfast concession stands offer breakfast sandwiches, yogurt, bagels, fruits, coffee, and other beverages. Lunch concession stands offer sandwiches, salads, and beverages. Based on the days of your registration, your registration packet includes breakfast and lunch vouchers. Each breakfast voucher has a maximum value of \$15.00, (tax included) and each lunch voucher has a maximum value of \$22.00, (tax included). Please note that the meal vouchers have no monetary value and you will not receive change. Check out the following details for concession stand daily locations and hours.



Breakfast Concession Stands

Sunday, May 22 – Thursday, May 26, Marriott Foyer, Atrium, Exhibit Hall A ..... 6:30am – 8:30am

Continuous Coffee Service (during Technical Exhibition)

Monday, May 23 – Wednesday, May 26, Exhibit Hall C ..... 10:00am – 4:00pm

Morning Beverage Breaks

Sunday, May 22, Marriott Foyer ..... 9:45am – 10:15am  
Monday, May 23 – Wednesday, May 25, Exhibit Hall C ..... 10:00am – 10:30am  
Thursday, May 26, Marriott Foyer ..... 10:00am – 10:30am

Lunch Concession Stands

Saturday, May 21, Marriott Foyer, Atrium, Exhibit Hall A ..... 10:30am – 1:30pm  
Sunday, May 22, Marriott Foyer, Atrium, Exhibit Hall A ..... 10:30am – 1:30pm  
Monday, May 23 – Wednesday, May 25, Exhibit Hall C, Marriott Foyer, Atrium, Exhibit Hall A ..... 10:30am – 1:30pm  
Thursday, May 26, Marriott Foyer, Atrium, Exhibit Hall A ..... 10:30am – 1:30pm

Afternoon Beverage Breaks

Saturday, May 21, Marriott Foyer ..... 3:00pm – 3:30pm  
Sunday, May 22, Marriott Foyer ..... 3:15pm – 3:30pm  
Monday, May 23 – Wednesday, May 25, Exhibit Hall C ..... 2:45pm – 3:00pm

Continuous Coffee Service (during Technical Exhibition)

Monday, May 23 – Wednesday, May 25, Exhibit Hall C, 10:00am – 4:00pm



**AJNR Booth – Convention Registration Lobby (Lobby Level)**

All attendees are invited to stop by the booth any time to tour the *AJNR* Web Site and *AJNR* Blog, *AJNR* Digest and app.

<b>Saturday, May 21</b> .....	<b>10:00am – 6:00pm</b>
<b>Sunday, May 22 – Wednesday, May 25</b> .....	<b>8:00am – 5:00pm</b>
<b>Thursday, May 26</b> .....	<b>8:00am – 2:45pm</b>

**Meet AJNR’s Editor-in-Chief**

Dr. Jeffrey Ross, *AJNR*’s Editor-in-Chief, will be present at the booth at various times to answer questions regarding the Journal’s online features, listen to suggestions, talk about projects with prospective authors, and advise fellows regarding their future contributions to *AJNR*.

**AJNR**

**Neurographics**

*Neurographics* is ASNR’s bimonthly online educational journal, featuring peer-reviewed educational articles and select case reports. Most of the content for the journal is selected from the educational exhibits in the ASNR Annual Meeting. *Neurographics* is available free online at [www.neurographics.org](http://www.neurographics.org). ASNR members can earn free Category 1 SA-CME credit for each *Neurographics* review article by completing an online quiz at ASNR’s eCME site.



The logo for AJNR is displayed vertically in large, white, bold, sans-serif letters. The letters are contained within a dark grey, stylized leaf shape that has a pointed top and a rounded bottom.

# Go Green

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Members, stop by the  
ASNR Publications Booth  
to **suspend your print  
subscription and reduce  
your footprint**

(as of 4/22/16)

# HOW-TO SESSIONS

In addition to the Technical Exhibition, the leadership of the ASNR is pleased to announce the annual slate of instructional How-To Sessions. These sessions, presented in conjunction with major corporate contributors, deal with advances in imaging and procedures as well as principles in Neuroradiology and image information management. How-To Sessions are scheduled

throughout the week and offer a unique opportunity to hear about the latest developments in products and procedures that impact daily practice. Noted faculty speak on behalf of these companies to educate registrants about specific utilization of equipment and products to advance knowledge and skills of 'neuro' imaging techniques and processes. The sessions vary and include both didactic presentations and demonstrations, all with a strong practical emphasis.

**Sunday, May 22 | 12:15pm – 1:00pm**

## SIEMENS

### **Hyper-Acute Ischemic Stroke Imaging — An Interventional Neurologist's Perspective**

#### **Stroke Care and Imaging Along with Mobile Stroke Ambulance Unit and Angio Advances for Treatment**

*Lucas Eljovich, MD*

University of Tennessee Health Sciences Center/  
Semmes-Murphey Neurologic & Spine Institute

**Monday, May 23 | 12:15pm – 1:00pm**



imagination at work

### **Go Faster, Further, Deeper and see SIGNA Work**

#### **Go Faster “Magic – Potential and Productivity”**

*Blaise V. Jones, MD*

Cincinnati Children's Hospital

#### **Go Further “Dementia and PET/MR”**

*Gregory G. Zaharchuk, MD, PhD*

Stanford University

#### **Go Deeper “The GE/NFL Head Health Research Project”**

*Teena Shetty, MD*

Cornell – New York Presbyterian Hospital/Hospital of  
Special Surgery

*Please Note: Due to the direct financial support from companies to conduct these sessions, CME credit hours will not be granted for any How-To Sessions by the ASNR.*

**Tuesday, May 24 | 12:15pm – 1:00pm**

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### **Contrast Agent Use in MRI of the CNS: A Balancing Act of Efficacy and Safety**

#### **Clinical Utility of Relaxivity in Neuro MRI Applications: What Does the Evidence Tell Us?**

*Zoran Rumboldt, MD, PhD*

Medical University of South Carolina

#### **Safety Considerations for GBCA Use: An Update on Recent Hot Topics**

*David S. Enterline, MD, FACR*

Duke University School of Medicine

**Wednesday, May 25 | 12:15pm – 1:00pm**

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### **fMRI and Advanced Neuroimaging**

*Wilson B. Altmeyer, MD*

The University of Texas Health Science Center at San Antonio

**Thursday, May 26 | 12:15pm – 1:00pm**

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### **Philips MRI in the Fast Lane – The Barrow Neurological Institute Experience**

*James Pipe, PhD*

Barrow Neurological Institute

*Please Note: Due to the direct financial support from companies to conduct these sessions, CME credit hours will not be granted for any How-To Sessions by the ASNR.*

If you are a Fellow, Resident, Medical Student or Neuroradiologist in the first 3 years of practice, please join us during the ASNR Annual Meeting.

**Young Professionals Lounge 8226 (Lobby Level)**  
**Saturday, May 21 – Thursday, May 26 • 6:30am – 6:00pm**

This will provide a “home base” for Fellows, Residents, Young Professionals & Medical Students to network and share knowledge and experiences throughout the meeting.

**The Foundation of the ASNR Visionaries and Young Professionals Reception**  
*Stone’s Throw Restaurant (Lobby Level)*

**Sunday, May 22 • 7:30pm – 8:30pm**

If you are an ASNR Member-in-Training or young professional within 3 years out of fellowship training, we invite you to join us at the Young Professionals Evening Reception on Sunday, May 22, 2016 at the Washington Marriott Wardman Park at the Stone’s Throw Restaurant (Lobby Level). The leadership of the ASNR and The Foundation of the ASNR will also attend. Enjoy visiting with other trainees, fellows, and recent graduates, as well as with some of the leaders. The evening reception will include beverages and appetizers. We hope to see you there!

(as of 4/22/16)

Young Professionals Programming

Young Professionals Sessions

ASNR has designed specific program topics for learning during the ASNR Annual Meeting. You won’t want to miss the following session presentations:

**Monday, May 23 • 8:35am – 10:00am**  
*(Washington 1/2/3 – Exhibition Level)*

**Young Professional Programming:  
Adding Value to Your Practice**  
Moderators: Mark D. Mamlouk, MD;  
Joshua A. Hirsch, MD, FACR, FSIR

**Radiology’s Role in Value Based Care**  
Arun Krishnaraj, MD, MPH

**Where Are the Opportunities for  
Neuroradiologists Within the Threats to Us  
and Our Practices**  
Frank J. Lexa, VII, MD

**Utilizing Midlevel Professionals**  
Falgun H. Chokshi, MD, MS

Discussion

**Monday, May 23 • 1:15pm – 2:45pm**  
*(Washington 4/5/6 – Exhibition Level)*

**Young Professional Programming:  
Practical Post-Treatment Neuroimaging**  
Moderators: Ramon F. Barajas, Jr., MD;  
Patricia A. Hudgins, MD

**Post Treatment Brain**  
Soonmee Cha, MD

**Post Treatment Neck**  
Suresh K. Mukherji, MD, FACR, MBA

**Post Treatment Spine**  
Lubdh M. Shah, MD

Discussion

**Tuesday, May 24 • 8:35am – 10:00am**

*(Washington 4/5/6 – Exhibition Level)*

**Young Professional Programming: Utilizing Advanced Imaging in Your Practice**

Moderators: *Falgun H. Chokshi, MD, MS*  
*William P. Dillon, MD*

**Vessel Wall Imaging**

*Mahmud Mossa-Basha, MD*

**A Practical Guide to Developing a Clinical fMRI Service**

*Amit M. Saindane, MD*

**Interventional**

*Vinil N. Shah, MD*

**Discussion**

**Tuesday, May 24 • 3:00pm – 4:30pm**

*(Maryland – Lobby Level)*

**Young Professional/Social Media Programming: Career and Social Media**

Moderators: *Amy L. Kotsenas, MD;*  
*Jennifer E. Nathan, MD*

**Becoming a Leader in Private Practice**

*Robert M. Barr, MD, FACR*

**Becoming a Leader in Academics**

*Christine M. Glastonbury, MBBS*

**Why all Radiologists Should Use Social Media Professionally**

*Jenny K. Hoang, MBBS*

**The Nuts and Bolts of Social Media:**

**AKA How Do I Use This Stuff?**

*Neil U. Lall, MD*

**Social Media Super-Users Panel**

*Geraldine B. McGinty, MD, MBA*

*Ryan. T. Fitzgerald, MD*

*Falgun H. Chokshi, MD, MS*

*Courtney M. Tomblinson, MD*



### **CLOSING RECEPTION OF THE FOUNDATION OF THE ASNR SYMPOSIUM 2016: EMERGENCY NEURORADIOLOGY**

**Washington Marriott Wardman Park**

**Sunday, May 22**

**Reception:** 5:15pm – 6:15pm, Marriott Foyer (Mezzanine Level)

**Capitol Steps Performance:** 6:30pm – 7:20pm, Marriott Ballroom (Lobby Level)



Be sure to join us for this fun filled musical event with your ASNR colleagues on Sunday evening, May 22. Symposium, Annual meeting attendees and Technical Exhibitor Representatives are welcome and admission is free.

All exhibitor representatives are invited to mix, mingle, and network with Symposium attendees for a reception followed by a fun performance by

The Capitol Steps. They are a Washington D.C.-based comedy troupe that began as a group of Senate Staffers, who will present a show based on songs from their current album “Mock the Vote.”

The Capitol Steps troupe is known for edgy, political satire and bipartisan-themed musical parody — please attend at your own risk (and enjoyment)!

### **WELCOME RECEPTION WITH TECHNICAL EXHIBITORS**

**Washington Marriott Wardman Park**

**Monday, May 23**

**Reception:** 6:15pm – 7:45pm, Exhibit Hall C (Exhibition Level)

**Jam Session:** 7:45pm – 10:00pm, Exhibit Hall C (Exhibition Level)

All attendees are invited to network and meet Technical Exhibitors at a pre-dinner reception. Our evening's performance will include ASNR physician members' jazz quartet led by Drs. Bruce Wasserman and Jonathan Lewin, followed by an informal jam session in the exhibit hall. We look forward to a fun evening!

**Case of the Day**

Monday, May 23 – Wednesday, May 25

*Atrium (Exhibition Level)*

Test your neuroradiology knowledge and earn a chance to win prizes, including full registration to the ASNR 2017 Annual Meeting and two (2) nights (standard room) at the Hyatt Regency Long Beach. This interactive programming presents six new cases each day on Monday through Wednesday. Submit your preferred diagnoses by 5:00pm each day via the ASNR Annual Meeting Mobile App. Each correct submission earns you a chance to win prizes. *NOTE: No CME credit is available for this activity.*

**Education Exhibits Tour**

Monday, May 23, 12:00pm – 1:00pm

Wednesday, May 25, 12:00pm – 1:00pm

*Exhibit Hall B South (Exhibition Level)*

*Continuing in 2016! You will receive CME credits for participating in the Education Exhibits Tour!*

Review Educational Exhibits, visual presentation/educational displays designed to further the understanding of Neuroradiology by featuring cutting-edge material or by offering an instructional review of a particular topic. The session will allow for review of visually-oriented educational displays that demonstrate novel and innovative applications for computers in Neuroradiology clinical practice, training and research. Share this educational opportunity with your colleagues and primary Exhibit presenters and exchange in a lively Questions & Answers Session.

*Another unique feature not to be missed at the ASNR ... See you on the tour!*

**Turbo Talk Sessions — NEW in 2016!**

The first 50 minutes of the session will be held in the Turbo Talk Theater (Roosevelt 1-3), where authors will each give a 2.5 minute oral presentation. These brief talks are done back to back, spaced 3 minutes apart, with no questions — in a spirited, rapid fire format. The goal is to capture the essence and salient points of the work in just 2.5 minutes, highlighting innovations / results / outcomes — “The Big Picture”. The moderators will be strict but jovial!

The second 40 minutes of the session will be held in Exhibit Hall A — using electronic display monitors. Each presenter will have their own monitor to present details of their work in a longer presentation, get feedback and exchange Questions and Answers. The audience will move at will amongst the 16 displays to hear more about their favorite talks.



### **ASNR Study Groups**

The Study Groups target areas of critical importance to the field of Neuroradiology and are composed of neuroradiologists, neuroscientists, and investigators from associated disciplines, who are united in their interest in higher level, sophisticated investigations of these target areas. These sessions will be offered during the Annual Meeting. They are open to all attendees on a first-come, first-serve basis.

No CME credit will be awarded for these sessions.

### **Clinical Translation of Functional and Diffusion MRI Study Group**

*Monday, May 23 | 4:45pm – 6:00pm | Maryland (Lobby Level)*

The ASNR Study Group for the Clinical Translation of Functional and Diffusion MRI represents an international multidisciplinary endeavor to identify critical knowledge gaps that must be addressed to translate these advanced neuroimaging techniques into sensitive/specific clinical tools for the diagnosis of diseases affecting the brain. The study group is comprised of representatives from neuroradiology, neurology, neurosurgery, psychiatry, pediatrics, and the neurosciences, thereby leveraging a broad interdisciplinary perspective to develop a strategic framework of key action items to address these knowledge gaps. To this end, the group has been organized to focus on two primary aims: 1) To investigate the reproducibility of functional and advanced diffusion MRI techniques, which is necessary for translation of these methods into robust diagnostic imaging tools, and 2) To review and disseminate the current evidence to date supporting the use of functional and advanced diffusion MRI methods in clinical practice. Additional manuscripts are being developed to review the methodological breadth of advanced diffusion imaging, as well as the evidence supporting the clinical use of functional and advanced diffusion imaging techniques, as applied to a variety of clinical entities (e.g., psychiatric disease, preterm birth, brain tumors, multiple sclerosis, etc).

### **Intracranial and Cervical Vessel Wall Imaging Study Group**

*Tuesday, May 24 | 4:45pm – 6:00pm | Maryland (Lobby Level)*

With the recent success of high-resolution cervical vessel wall imaging for defining stroke risk beyond that achievable by angiography, we have now turned our attention to the intracranial vessel wall, a new frontier in neurovascular imaging. Recognizing this, the ASNR has supported the formation of the Intracranial and Cervical Vessel Wall Imaging Study Group mandated to take a leading role in advancing both clinical applications and research in this new and growing field. The group is composed of a multidisciplinary team organized to develop methodologies and share clinical expertise for redefining our knowledge of both cervical and intracranial vasculopathies. Our primary goals are to establish uniform imaging protocols, promote multi-institutional research, and develop educational programs and materials. Since the effort is just beginning, there is a tremendous opportunity for making seminal and impactful contributions in this field.



**Imaging Genomics Study Group**

*Wednesday, May 25 | 4:45pm – 6:00pm | Maryland (Lobby Level)*

The ASNR Imaging Genomics Study Group serves as a unified voice and body for advancing the clinical and research applications of imaging genomics. For this mission the study group is working on the development and validation of imaging genomics biomarkers and biomarker signatures. We will be opening an Image-Guided, Image-Registered (IGIR) Stereotactic Brain Biopsy Multi-center Clinical Trial that seeks to validate imaging genomics and subsequently metabolomics and proteomics using standardized IGIR biopsies, imaging protocols and molecular data analysis. We are also focusing on the need for standardization of imaging across vendors, software platforms, postprocessing techniques, etc., and on enhancing awareness and multidisciplinary collaboration among the imaging and non-imaging communities to advance imaging genomic analyses within these fields. The ASNR Imaging Genomics Study Group has finalized for publication the ASNR Imaging Genomics White Paper exploring the current state and future directions of imaging genomics in brain tumors.

### **Bold Functional fMRI Hands-on Workshop**

*Thursday, May 26, 7:30am – 11:30am | Maryland (Lobby Level)*

This workshop will provide a practical step-by-step post-processing of BOLD fMRI studies with SPM12 software and data presentation. This activity is intended to educate neuroradiologists, neuroradiology fellows, physicists, clinical psychologists, and MR technologists. The workshop is intended for those with moderate to advanced level fMRI experience. The workshop will include didactic lectures on: Introduction to BOLD, Paradigm Design, and SPM; Clinical Overview of Language Activation; Presenting BOLD fMRI data-statistical processing strategies; and practical exercises on language data processing.

Attendees should have a basic understanding of the physical principles and clinical applications of BOLD fMRI, and at the completion of this workshop should be able to perform the following:

- Preprocessing of BOLD fMRI Data for Realignment/ Coregistration, Spatial Normalization, Smoothing
- Single Subject Analysis of Model Specification, Model Estimation, and Visualization of the BOLD data

### **The International Hydrocephalus Imaging Working Group – CSF Flow Group**

*Thursday, May 26, 1:00pm – 6:00pm*

*Friday, May 27, 8:00am – 5:00pm*

*Room: Maryland (Lobby Level)*

The IHIWG (International Hydrocephalus Imaging Working Group) consists of Neuroradiologists, Neurologists, Neurosurgeons, Bioengineers, and basic scientists who meet twice a year in conjunction with ASNR and the ISHCSF (International Society for Hydrocephalus and CSF Disorders). During our meeting we address all forms of hydrocephalus with emphasis on imaging NPH. We discuss phase contrast techniques to measure aqueductal CSF flow, DESH (Disproportionately Enlarged Subarachnoid Space Hydrocephalus), and TimeSLIP to predict response to shunting. We also compare these noninvasive MR-based techniques to the more invasive intracranial pressure monitoring, saline infusion, high volume tap test and external lumbar drainage. We review CSF production and resorption, role of aquaporins, and CSF flow measurements to study Chiari I malformations as well as potential sources of error in our measurements. Recent meetings have had focused sessions on MRI measurement of connectivity, tractography, elastography and evolving concepts such as the “glymphatic system” and the VIIP (Visual Impairment and Intracranial Pressure) syndrome experienced by astronauts spending time on the space station.

We discuss infantile hydrocephalus and benign external hydrocephalus and the role of the latter as a potential cause of NPH later in life. We examine changes in DTI and MR elastography in NPH and discuss related topics such as aqueductal stenosis and pseudotumor cerebri.

To learn more about the IHIWG’s mission, members, and previous meetings, please visit their webpage at [www.ihiwg.org](http://www.ihiwg.org).

**If you have any questions regarding these groups,  
please visit the On-Site Registration Desk.  
No CME credit will be awarded for these sessions.**

As of 4/28/16

## Washington Marriott Wardman Park – Exhibit Hall C (Exhibition Level)

Monday, May 23.....10:00am – 4:00pm  
 Tuesday, May 24 .....10:00am – 4:00pm  
 Wednesday, May 25.....10:00am – 4:00pm

**Accriva Diagnostics**.....Booth #410  
 6260 Sequence Drive  
 San Diego, CA 92121

**American College of Radiology**.....Booth #417  
 1891 Preston White Drive  
 Reston, VA 20191

**Bayer** .....Booth #110  
 1 Bayer Drive  
 Indianola, PA 15051

**Benvenue Medical, Inc.** .....Booth #220  
 3052 Bunker Hill Lane, Suite 120  
 Santa Clara, CA 95054

**Bracco Diagnostics Inc.**.....Booth #218  
 259 Prospect Plains Road, Building H  
 Monroe Township, NJ 08331

**Brainlab**.....Booth #319  
 5 Westbrook Corporate Center, Suite 1000  
 Westchester, IL 60154

**CorTechs Labs, Inc.** .....Booth #317  
 4690 Executive Drive, Suite 250  
 San Diego, CA 92121

**Elsevier, Inc.**.....Booth #301  
 1600 John F. Kennedy Boulevard, Suite 1800  
 Philadelphia, PA 19103

**GE Healthcare**.....Booth #200  
 PO Box 414  
 Milwaukee, WI 53201

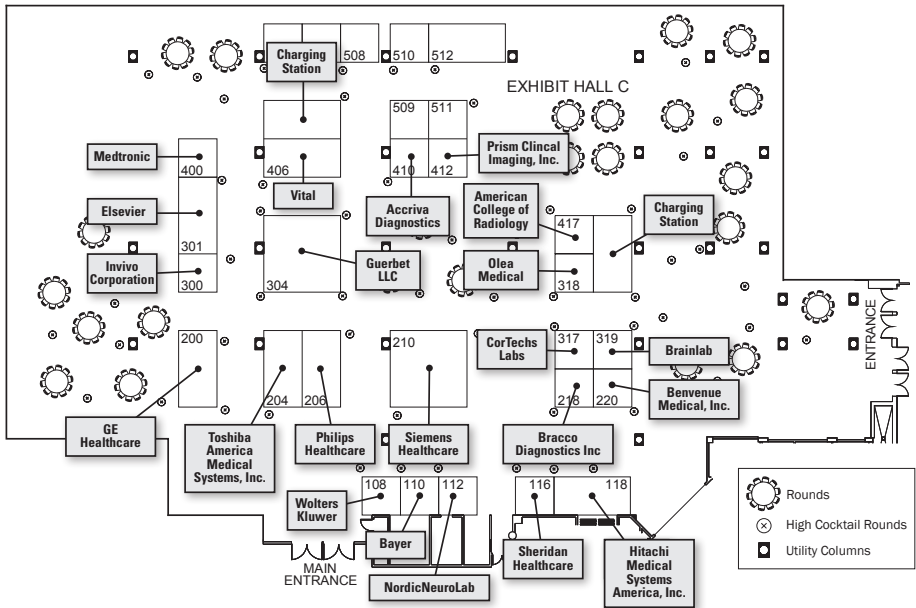
**Guerbet LLC**.....Booth #304  
 120 West 7th Street  
 Bloomington, IN 47404

# TECHNICAL EXHIBITS ROSTER

<b>Hitachi Medical Systems America, Inc.</b> .....	Booth #118
1959 Summit Commerce Park Twinsburg, OH 44087	
<b>Invivo Corporation</b> .....	Booth #300
N27 W23676 Paul Road Pewaukee, WI 53072	
<b>Medtronic</b> .....	Booth #400
2600 Sofamor Danek Drive Memphis, TN 38132	
<b>NordicNeuroLab</b> .....	Booth #112
234 W. Florida Street, Suite 205 Milwaukee, WI 53204	
<b>Olea Medical</b> .....	Booth #318
93, av. des Sorbiers 13600 La Ciotat, France	
<b>Philips Healthcare</b> .....	Booth #206
595 Miner Road Cleveland, OH 44143	
<b>Prism Clinical Imaging, Inc.</b> .....	Booth #412
890 Elm Grove Road, Suite 215 Elm Grove, WI 53122	
<b>Sheridan Healthcare</b> .....	Booth #116
1613 N. Harrison Parkway, Suite 200 Sunrise, FL 33323	
<b>Siemens Healthcare</b> .....	Booth #210
40 Liberty Boulevard Malvern, PA 19355	
<b>Toshiba America Medical Systems</b> .....	Booth #204
2441 Michelle Drive Tustin, CA 92780	
<b>Vital</b> .....	Booth #406
5850 Opus Parkway, Suite 300 Minnetonka, MN 55387	
<b>Wolters Kluwer Health</b> .....	Booth #108
Two Commerce Sq, 2001 Market Square Philadelphia, PA 19103	

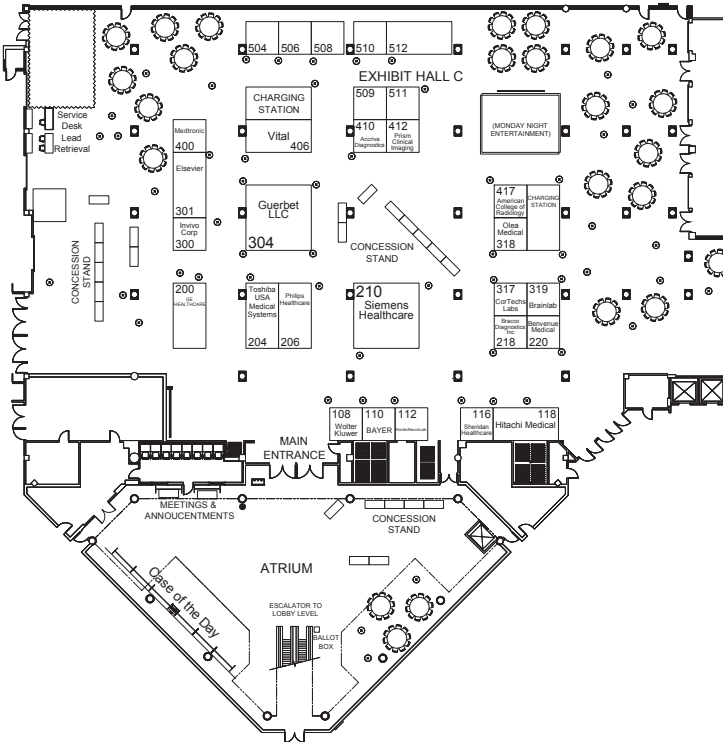
## Exhibit Hall C (Exhibition Level)

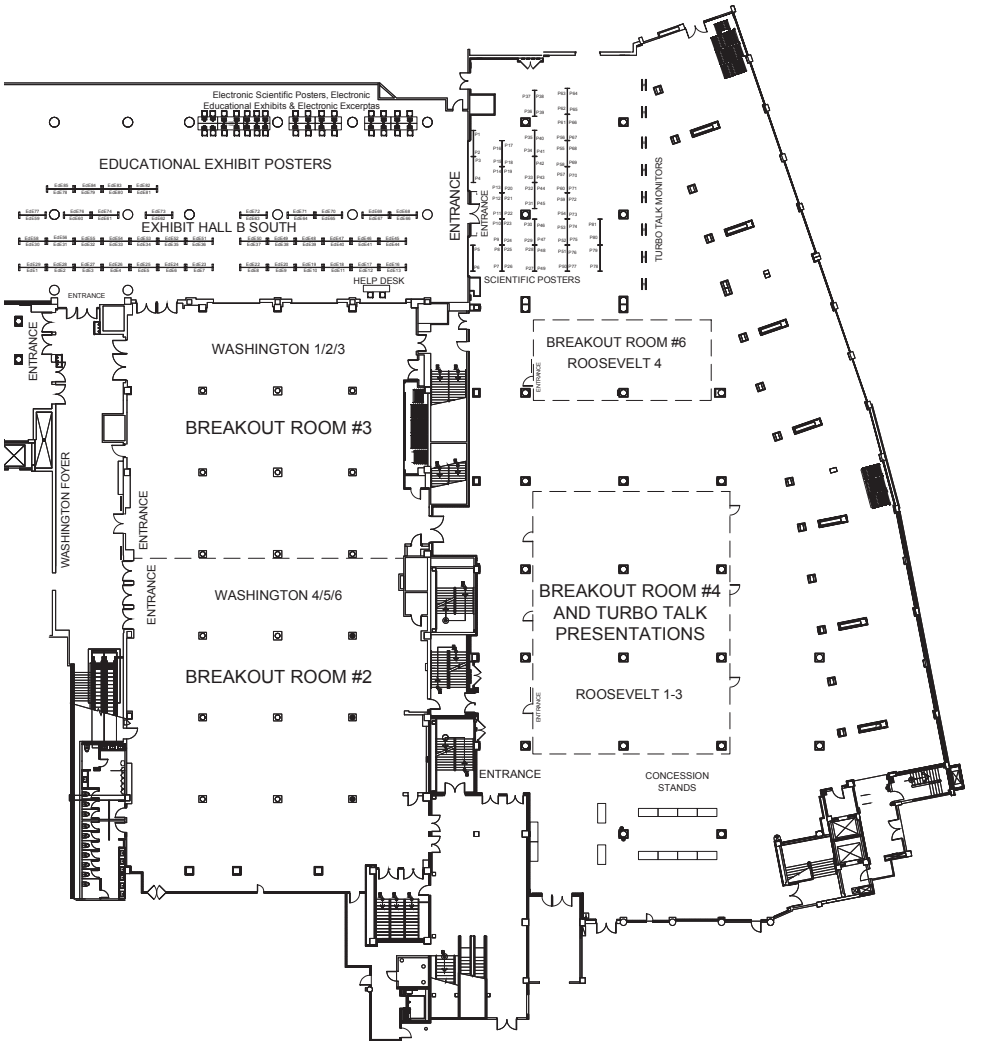
(As of 4/28/2016)



Exhibition Level

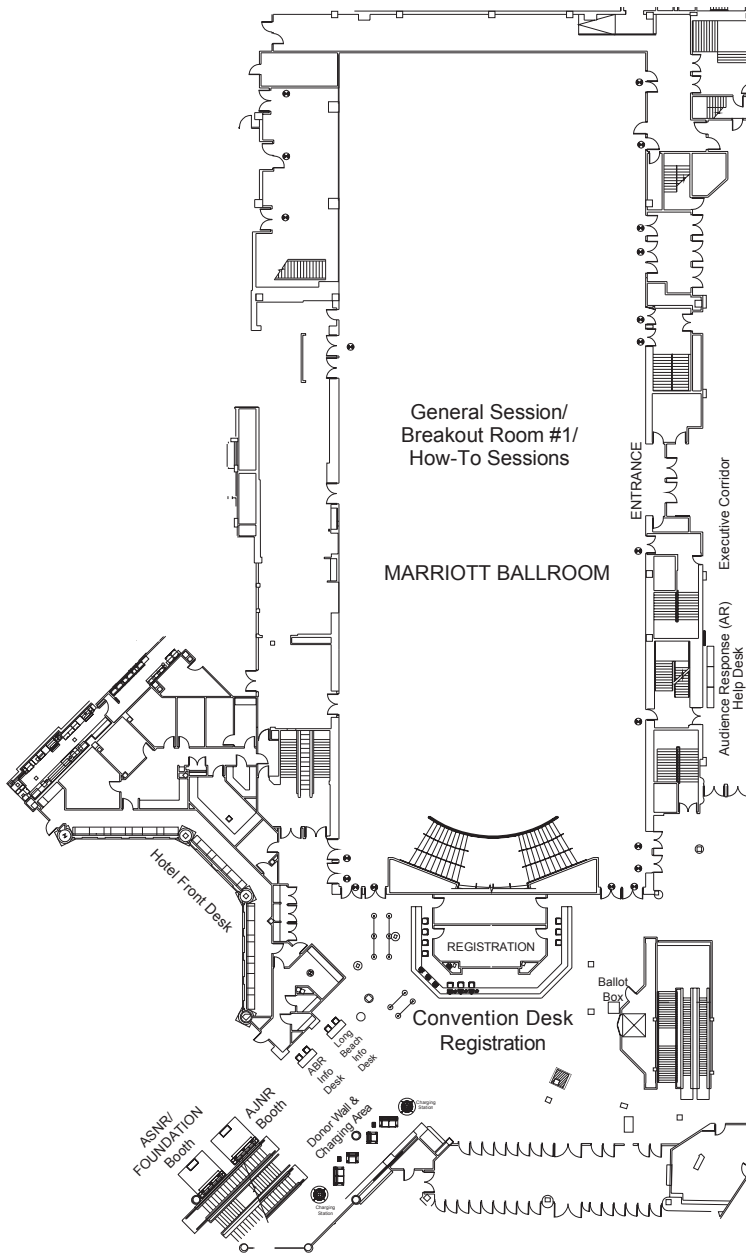
(As of 4/28/2016)



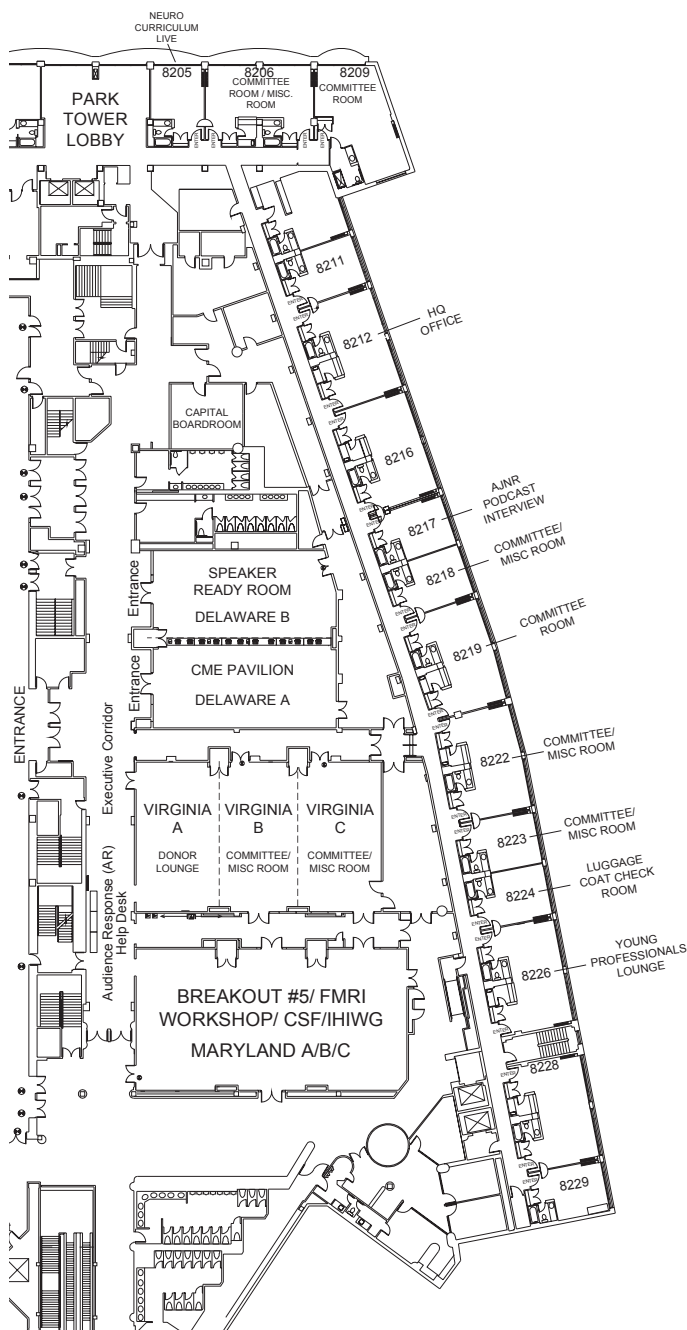


Lobby Level

As of 4/22/2016

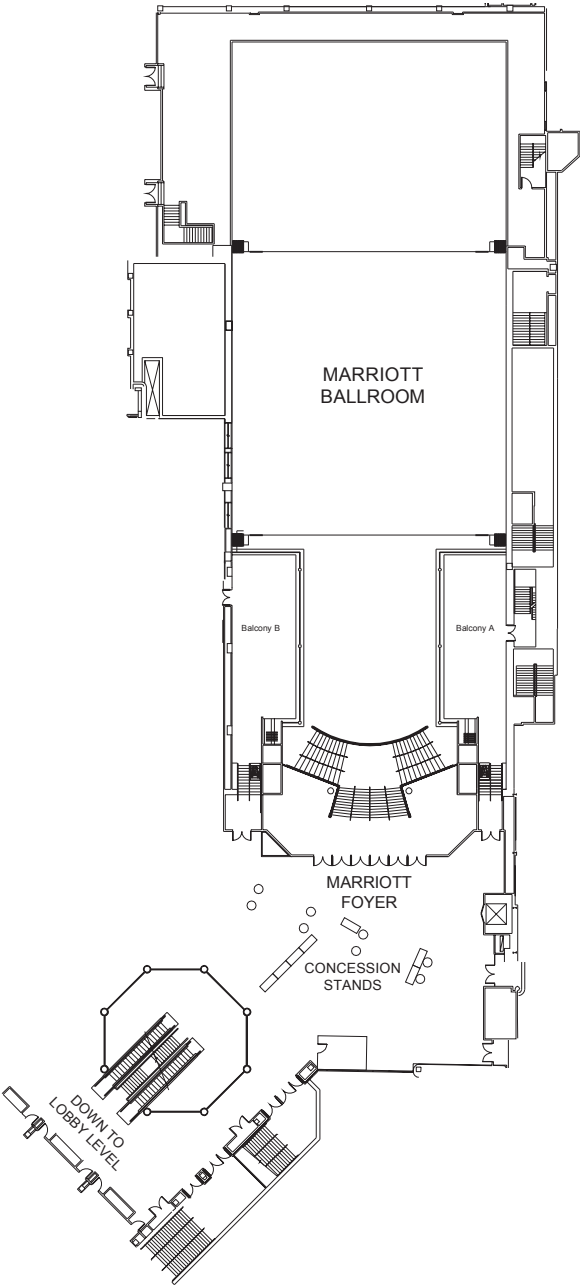






Mezzanine Level

As of 4/22/2016

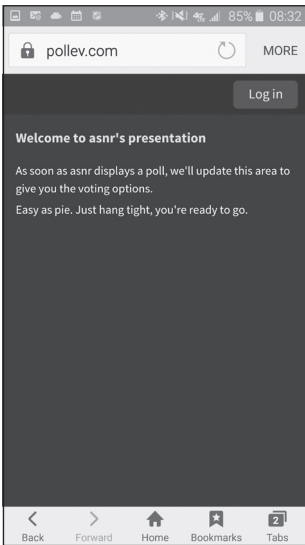


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## SMART POLLING WEB INSTRUCTIONS

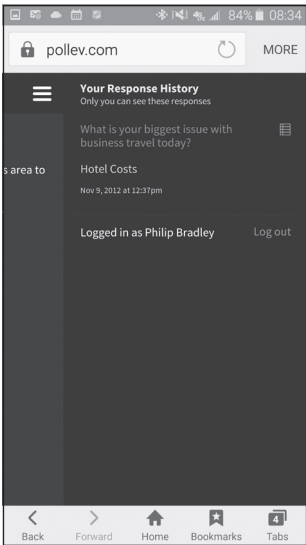
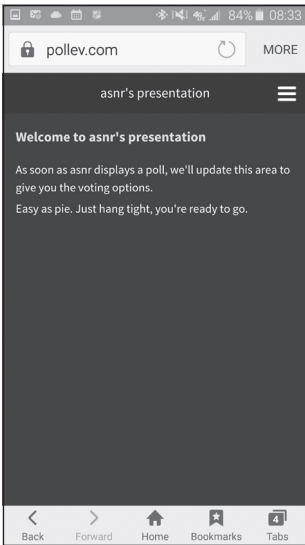
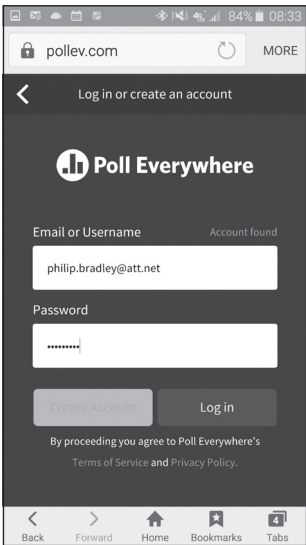
### Step 1

- Go to [www.pollev.com/asnr](http://www.pollev.com/asnr)
- Select Login



### Step 2

- You will see the following screen:  
Then enter your email address that you registered with and password asnr2016



- To reconfirm your login information click on the Icon in the blue bar beside @asnr's presentation and you will see the following then click on Back.

### Audience Response WiFi Connection

When attending Audience Response (AR) sessions, please connect your device to the wifi network named **ASNR** and enter the password **asnr2016** to ensure the strongest signal.

### Alternative Submission of SAM Answers

If you do not submit answers to SAM questions in the live session itself, you will have the opportunity to obtain self-assessment credit by answering the same questions during your CME evaluations in the CME Pavilion/Alternate SAM Response Area in Delaware A (Lobby Level) or via the Experient site at <https://ceu.experientevent.com/ASN161>.

### SAM Credits

If you use the Audience Response system to answer SAM questions within a session, your credits will not immediately appear in your CME credits listed in the CME Pavilion/Alternate SAM Response Area. Please allow two hours following the session conclusion for the credits to be transferred to the CME Pavilion/Alternate SAM Response Area.

### Login

You will need to login using your e-mail address that you registered with and password asnr2016

If you are participating in sessions below please use [www.pollev.com/asnr](http://www.pollev.com/asnr) to log into the audience response system.

Session #SY1	Session #3B	Session #11A	Session #19A
Session #SY5	Session #4A	Session #12A	Session #22A
Session #SY10	Session #7A	Session #13A	
Session #1A	Session #10A	Session #15A	
Session #2A		Session #17B	

If you are participating in sessions below please use [www.pollev.com/asnr1](http://www.pollev.com/asnr1) to log into the audience response system.

Session #10B

Please see the AR Help Desk located in the Executive Corridor (Lobby Level) with any questions.

# INFORMATION FOR SCIENTIFIC POSTER AND EDUCATION EXHIBIT PRESENTERS

## Storing of Scientific Poster/Educational Exhibit Poster Shipping Containers

Shipping containers used to transport Scientific Posters and Educational Exhibit Poster may not be left in the display area. Trash cans are available to dispose of shipping containers that will not be used again. The ASNR Luggage/Coat Check\* (8224, Lobby Level) is available to leave your container during the week.

Push pins, scissors and tape for use in mounting exhibits and posters will be available at the Service Desk at no charge.

*\* Please note that the coat check is not a secure location and ASNR will not be responsible for any containers that are lost.*

## Exhibit Service Desk Hours – Exhibit Hall B South (Exhibition Level)

Sunday, May 22 | 8:00am – 6:00pm

Monday, May 23 | 8:00am – 5:00pm

Containers placed in this area must have an identifying label that includes the name of the owner and the poster or exhibit number. Containers without an identifying label will be considered available for use by ASNR and/or will be removed.

## Security

ASNR will provide general overall guard service in Exhibit Hall B South and Exhibit Hall A on a 24-hour basis throughout the Annual Meeting. However, neither ASNR nor the guard service will be responsible for loss of or damage to any property for any cause. Any attendee requesting access to Exhibit Hall B South and Exhibit Hall A outside of posted set-up, exhibit or dismantle hours must obtain permission and authorization in advance from ASNR Meetings Department Staff.

## Contacting ASNR Staff Pre-Meeting & On-Site

Please contact us with any questions or concerns you may have. We may be contacted through the Registration Desk (Convention Registration) of the Washington Marriott Wardman Park. We will be happy to meet with you personally to discuss any aspect of the meeting.

## Exhibit Set-up/Installation Hours – Exhibit Hall B South and Exhibit Hall A (Exhibition Level)

*All exhibits must be set-up by 11:00pm on Sunday, May 22.*

## Educational Exhibit and Scientific Poster Location and Hours – Exhibit Hall B South and Exhibit Hall A (Exhibition Level)

Monday, May 23 through Wednesday, May 25 | 6:30am – 9:00pm

Thursday, May 26 | 6:30am – 1:00pm

## Exhibit Dismantle Hours

Removal of exhibits may begin at 1:00pm to 4:00pm on Thursday, May 26. All exhibits must be removed by 4:00pm on Thursday, May 26. Any items still remaining in the Exhibit Hall at 4:00pm will be discarded at that time.

*Note: All exhibits must remain in place until 1:00pm on Thursday, May 26*

Exceptions to this policy must be requested in writing to ASNR and approved by the Education Exhibits Chair.

*All presenters are required to set-up and dismantle their exhibits based on the above schedule. Should you encounter a conflict regarding this schedule, please contact Valerie Geisendorfer, CMP, Senior Manager of Scientific Meetings, at [vgeisendorfer@asnr.org](mailto:vgeisendorfer@asnr.org) or directly onsite.*

*\*\*\*A message can also be left at the ASNR Registration Desk\*\*\**

**Electronic Poster, Electronic Education Exhibits and Electronic Excerptas  
Location and Hours**

*Exhibit Hall B South (Exhibition Level)*

Monday, May 23 through Wednesday, May 25 | 6:30am – 9:00pm

Thursday, May 26 | 6:30am – 1:00pm

It is suggested that all presenters review their exhibits/posters in Exhibit Hall B South (Exhibition Level) prior to Monday, May 23 to check/view their presentations. Please contact Valerie Geisendorfer, CMP, Senior Manager of Scientific Meetings [vgeisendorfer@asnr.org](mailto:vgeisendorfer@asnr.org) or directly onsite.

*\*\*\*A message can also be left at the ASNR Registration Desk\*\*\**

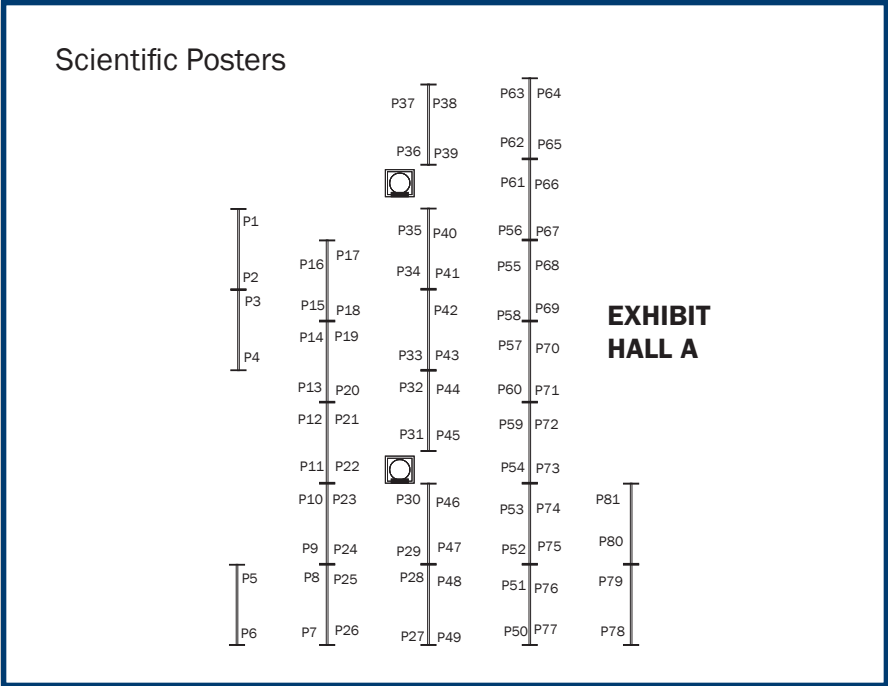
**Education Exhibit Service Desk**

A Service Desk will be located in Exhibit Hall B South (Exhibition Level) at the Washington Marriott Wardman Park during the following hours:

Sunday, May 22                      8:00am – 6:00pm

Monday, May 23                    8:00am – 5:00pm

Electronic Scientific Poster, Scientific Poster, and Electronic Excerptas  
Exhibit Hall B South and Exhibit Hall A (Exhibition Level)



Scientific Posters (Printed)

Adult Brain .....	1-49
Head and Neck .....	51-60
Interventional .....	61-65
Pediatrics .....	66-78
Spine .....	79-81

Electronic Scientific Posters (eP)\*

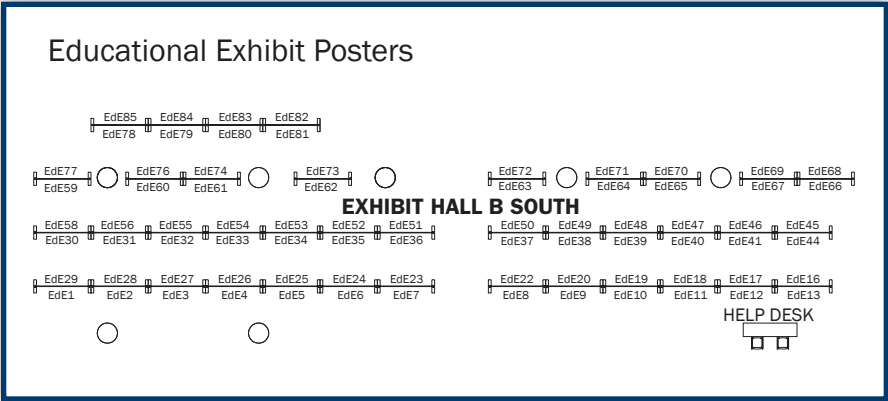
Adult Brain .....	1-123
Head and Neck .....	124-147a
Interventional .....	148-158
Pediatrics .....	159-188
Socioeconomics .....	189-193
Spine .....	194-209

Electronic Excerptas (EE)\* ..... 1-54

\*See page 23 for diagram



Educational Exhibit Posters – Exhibit Hall B South (Exhibition Level)



Educational Exhibit Posters (Printed, EdE)

Adult Brain.....	1-43
Head and Neck .....	44-59
Informatics .....	60
Pediatrics .....	61-74
Spine.....	76-85

Electronic Educational Exhibits (eEdE)\*

Adult Brain.....	1-107a
Head and Neck .....	108-170a
Informatics .....	171-174
Interventional.....	175-181
Pediatrics .....	182-212
Socioeconomics.....	213-217
Spine.....	218-249a

\*See page 23 for diagram

### Take Your Official Continuing Medical Education (CME) Certificate Home With You!

To print out the official CME certificate for the number of hours claimed during The Foundation of the ASNR Symposium 2016 and ASNR 54<sup>th</sup> Annual Meeting go to any terminal in the CME Pavilion and follow the simple directions for printing out an official The Foundation of the ASNR Symposium 2016 and ASNR 54<sup>th</sup> Annual Meeting CME Certificate.

Following the meeting, the ASNR 2016 CME certificate site will be available online by mid-June for 90 days for attendees to print out their CME certificates.

*Please Note: Due to the availability of CME certificates online, certificates will not be mailed to attendees.*

### Letter of Attendance

If you wish to obtain a Letter of Attendance, please request one at the Registration Desk located at Convention Registration (Lobby Level) of the Washington Marriott Wardman Park.

### Continuing this year!

- Evaluations available online with remote access 24/7 through the meeting at [\*\*https://ceu.experientevent.com/ASN161\*\*](https://ceu.experientevent.com/ASN161)
- Open until Wednesday, June 8, 2016 to evaluate

### CME Pavilion

Evaluations can be completed at the end of a session, during breaks, at the end of the day or the end of the week, as well as on your personal device at [\*\*https://ceu.experientevent.com/ASN161\*\*](https://ceu.experientevent.com/ASN161). You will be able to view a record of the sessions you have evaluated and the number of CME credit hours earned throughout the program. Print your certificate and transcript to take home with you.

*Please Note: To receive CME credit for sessions attended at The Foundation of the ASNR Symposium 2016 and ASNR 54<sup>th</sup> Annual Meeting, all evaluations must be entered by Wednesday, June 8, 2016.*

## 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)*<sup>™</sup>. 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.

## 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 30 *AMA PRA Category 1 Credit(s)*<sup>™</sup>. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

## Target Audience

ASNR 54th Annual Meeting will assemble domestic and international radiologists, neuroradiologists, neuroscientists, and policy makers to learn about best practices and cutting edge updates and provide an intense overview in the field of neuroradiology. This comprehensive meeting will include dedicated specialty programming in the areas of head and neck imaging, pediatric neuroimaging, stroke and vascular imaging, spinal imaging, neurodegenerative diseases, imaging physics and advanced neuroimaging techniques, neurovascular intervention, healthcare policy, and relevant associated socioeconomic and practice management topics.

Session formats will be varied to allow for individual learning preference, with a mixture of parallel session offerings in traditional didactic lectures, original scientific papers, electronic and traditional posters, and Self-Assessment Module (SAM) sessions offering web-based interactive audience response enabled lectures. There will be a rich international presence with dedicated programming from societies around the world as well as targeted sessions of interest to young professionals in training or early in practice.

## Objectives

- Analyze imaging patterns and imaging-based interventions in neurodegenerative disorders.
- Debate and assess the merits of different models for providing 24/7 readings in Neuroradiology in academic and community practice.
- Define the basis for and applications of evidence-based medicine as applied to Neuroradiology.
- Design non-invasive CT and MRI protocols for the pre- and post-intervention assessment of aneurysms and vascular malformations.
- Develop a rigorous data-driven approach to incidental findings discovered on neuro CT and MR exams.
- Discuss and explore optimal protocols for pediatric brain, spine, and head & neck imaging.
- Examine structural and functional techniques used for pre- and post-operative brain tumor assessment.
- Examine the physiologic basis and emerging clinical applications of resting state functional MRI.
- Explain the roles of standardized nomenclature, structured reporting, and report macros in spine and brain imaging.

**Objectives (continued)**

- Explore how key agencies develop regulations and policies and how they interact with Neuroradiologists.
- Illustrate advances in digital workflow, PACS, information technology integration, and informatics.
- Implement practical strategies in day-to-day neuroradiology services to remain at the cutting edge.
- Implement value-based Neuroradiology and expand its role in delivery of clinical care.
- Integrate and successfully apply new funds flow and reimbursement models emerging in practice.
- Review best practices for order-entry decision support tools in clinical Neuroradiology.
- Review advances in orbital, temporal bone, and cranial nerve imaging.
- Review new brain tumor classification schemes blending genetic, molecular, and structural metrics.
- Summarize and critically assess recent acute ischemic stroke trial results and their implications for advanced imaging triage and interventional coverage.
- Summarize ways to build branding for Neuroradiologists.

# SELF ASSESSMENT MODULES (SAM)\* AND AUDIENCE RESPONSE (AR) SESSIONS

Please use [www.pollev.com/asnr](http://www.pollev.com/asnr) to use during each SAM Session below for Audience Response

## Saturday, May 21

Marriott Ballroom (Lobby Level) • 10:30am – 12:00pm

**Session #SY1 – Nontraumatic Head and Neck Emergency Imaging** (AR) (SAM)

## Sunday, May 22

Marriott Ballroom (Lobby Level) • 3:45pm – 5:15pm

**Session #SY10 – Head Trauma** (AR) (SAM)

## Monday, May 23

Marriott Ballroom (Lobby Level) • 7:30am – 8:30am

**Session #1A – Monday Morning SAM – Vascular** (AR) (SAM)

Marriott Ballroom (Lobby Level) • 8:35am – 10:00am

**Session #2A – ASPNR Programming: Pediatric Neuroimaging for the Adult Radiologist** (AR) (SAM)

Washington 4/5/6 (Exhibition Level) • 10:30am – 12:00pm

**Session #3B – Healthcare Policy Programming: A Look to the Future for Medicine and Radiology** (AR) (SAM)

Marriott Ballroom (Lobby Level) • 1:15pm – 2:45pm

**Session #4A – Olfaction** (AR) (SAM)

## Tuesday, May 24

Marriott Ballroom (Lobby Level) • 7:30am – 8:30am

**Session #7A – Tuesday Morning SAM – Spine** (AR) (SAM)

Marriott Ballroom (Lobby Level) • 1:15pm – 2:45pm

**Session #10A – ASHNR Programming: Update on Orbital Imaging** (AR) (SAM)

Marriott Ballroom (Lobby Level) • 3:00pm – 4:30pm

**Session #11A – ASFNR Programming: Advanced Neuroimaging Techniques in Brain Tumor: Current Updates** (AR) (SAM)

\* This SAM module (or activity) meets the ABR's criteria for self-assessment CME (SA-CME) in the ABR Maintenance of Certification program.

This SAM activity will earn the same number of SA-CME credits as the stated CME credits. Please log into myABR at <https://myabr.theabr.org> to report these credits to the American Board of Radiology. If you do not have an ABR login, please click on the Not Registered link to register your account or contact the ABR at 520-519-2152 for assistance.

## SELF ASSESSMENT MODULES (SAM)\* AND AUDIENCE RESPONSE (AR) SESSIONS (CONTINUED)

### Wednesday, May 25

Marriott Ballroom (Lobby Level) • 7:30am – 8:30am

**Session #13A – Pediatrics** (AR) (SAM)

Marriott Ballroom (Lobby Level) • 10:30am – 12:00pm

**Session #15A – SNIS Programming: Point-Counterpoint: Drip-and-Ship vs. Mothership – The NeuroInterventionalist’s Role in Large Vessel Occlusion Therapy** (AR) (SAM)

Washington 4/5/6 (Exhibition Level) • 3:00pm – 4:30pm

**Session #17B – ASSR Programming: Advanced Imaging of the Spine** (AR) (SAM)

### Thursday, May 26

Marriott Ballroom (Lobby Level) • 7:30am – 8:30am

**Session #19A – Head & Neck** (AR) (SAM)

Marriott Ballroom (Lobby Level) • 1:15pm – 2:45pm

**Session #22A – Multiple Sclerosis** (AR) (SAM)

\* This SAM module (or activity) meets the ABR’s criteria for self-assessment CME (SA-CME) in the ABR Maintenance of Certification program.

This SAM activity will earn the same number of SA-CME credits as the stated CME credits. Please log into myABR at <https://myabr.theabr.org> to report these credits to the American Board of Radiology. If you do not have an ABR login, please click on the Not Registered link to register your account or contact the ABR at 520-519-2152 for assistance.

## AUDIENCE RESPONSE (AR) SESSIONS

### Saturday, May 21

Marriott Ballroom (Lobby Level) • 5:00pm – 6:15pm

**Session #SY5 – 24/7 Neurocoverage** (AR)

Please use [www.pollev.com/asnr](http://www.pollev.com/asnr) to log into the audience response system.

### Tuesday, May 24

Washington 4/5/6 (Exhibition Level) • 1:15pm – 2:45pm

**Session #10B – ESNR Programming: Cases** (AR)

Please use [www.pollev.com/asnr1](http://www.pollev.com/asnr1) to log into the audience response system.

Marriott Ballroom (Lobby Level) • 5:00pm – 6:15pm

**Session #12A – ASPNR Programming – Case Based Competition** (AR)

Please use [www.pollev.com/asnr](http://www.pollev.com/asnr) to log into the audience response system.

## Emergency Neuroradiology

THE FOUNDATION OF THE ASNR



### Day 1 – 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**      **TBD: Bayer/ICPME Gadolinium Retention Update**  
**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*



## Emergency Neuroradiology

**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*

**5:00pm – 6:15pm**

### Session SY5 24/7 Neurocoverage Audience Response (AR)

**Location: Marriott Ballroom**

*Moderators: Meng Law, MD, MBBS, FRACR; Max Wintermark, MD*

Who Should Read After Hours Emergency Neuroradiology?

5:00pm – 6:15pm

Residents vs Fellows vs Neuroradiologists vs ER Radiologists vs Teleradiology?

#### Team I:

- Laurie A. Loevner, MD
- Erin Simon Schwartz, MD
- Richard H. Wiggins, III, MD

#### Team II:

- William G. Bradley, Jr., MD, PhD, FACR
- Meng Law, MD, MBBS, FRACR
- Edward C. Jauch, MD, MS, FAHA

## Emergency Neuroradiology

### Day 2 – Sunday, May 22, 2016

<b>6:30am – 8:30am</b>	<b>Breakfast Concession Stands</b> <b>Locations: Marriott Foyer, Atrium, Exhibit Hall A</b>
<b>8:00am – 9:45am</b>	<b>Session SY6</b> <b>Essentials of Acute Stroke Imaging in the New Era of Positive IAT Trials</b> <b>Location: Marriott Ballroom</b> <i>Moderators: Michael H. Lev, MD, FACR; Pina C. Sanelli, MD, MPH, FACR; Christopher P. Hess, MD, PhD</i>
8:00am – 8:25am	Overcoming Barriers & Improving Stroke Workflow: The ED Medicine Perspective <i>Edward C. Jauch, MD, MS, FAHA</i>
8:25am – 8:45am	ED Stroke Imaging 2016: An Evidence-Based Review of the Current “State of the Art” <i>Pina C. Sanelli, MD, MPH, FACR</i>
8:45am – 9:05am	ED Stroke Imaging Beyond 2016: CTA, CTA-Collaterals, CTP or MRI for Treatment Selection? <i>Michael H. Lev, MD, FACR</i>
9:05am – 9:30am	Summing Up: Lessons from the Recent IAT Stroke Trials? The Stroke Neurologist Perspective <i>Gregory W. Albers, MD, FAHA</i>
9:30am – 9:45am	Panel Discussion: Interactive Audience Q&A <i>Christopher P. Hess, MD, PhD</i>
<b>9:45am – 10:15am</b>	<b>Morning Beverage Break</b> <b>Location: Marriott Foyer</b>
<b>10:15am – 12:00pm</b>	<b>Session SY7</b> <b>Emergency Stroke – Hemorrhage</b> <b>Location: Marriott Ballroom</b> <i>Moderators: Patrick A. Turski, MD, FACR; Philip M. Meyers, MD</i>
10:15am – 10:45am	Emergency CT in CNS Hemorrhage <i>Juan Pablo Villablanca, MD</i>
10:45am – 11:15am	Emergency Endovascular Stroke Intervention <i>Aquilla S. Turk, DO</i>
11:15am – 11:45am	MRI in Spontaneous ICH <i>Patrick A. Turski, MD, FACR</i>
11:45am – 12:00pm	Cases and Controversies <i>Philip M. Meyers, MD</i>
<b>10:30am – 1:30pm</b>	<b>Lunch Concession Stands</b> <b>Locations: Marriott Foyer, Atrium, Exhibit Hall A</b>
<b>12:15pm – 1:00pm</b>	<b>How-To Session: Siemens Healthcare (non-CME)</b> <b>Location: Marriott Ballroom</b>

## Emergency Neuroradiology

**1:15pm – 1:45pm**

### Session SY8

#### Emergency Triage, Safety, and Protocol Tips

**Marriott Ballroom**

*Moderator: Max Wintermark, MD*

1:15pm – 1:45pm

Emergency Triage, Safety, and Protocol Tips

*Roland R. Lee, MD, FACR; Aleksandrs Kalnins, MD, MBA*

**1:45pm – 3:15pm**

### Session SY9

#### Emergency Imaging of the Spine

**Location: Marriott Ballroom**

*Moderators: Jeffrey S. Ross, MD; Lubdha M. Shah, MD*

1:45pm – 2:07pm

MR in Spine Trauma

*Jeffrey S. Ross, MD*

2:07pm – 2:29pm

High Resolution CT in Spine Trauma

*Vahe M. Zohrabian, MD*

2:29pm – 2:51pm

Imaging of Non-Traumatic Spine Emergencies

*Lubdha M. Shah, MD*

2:51pm – 3:15pm

Traumatic and Non-Traumatic Spine Emergencies: A Surgeon's Perspective

*Bohdan W. Chopko, MD, PhD*

**3:15pm – 3:30pm**

#### Afternoon Beverage Break

**Location: Marriott Foyer**

**3:30pm – 5:15pm**

### Session SY10

#### Head Trauma Audience Response (AR)

##### Self-Assessment Module (SAM)

**Location: Marriott Ballroom**

*Moderators: Christopher G. Filippi, MD; Joshua P. Nickerson, MD*

3:30pm – 3:55pm

Emergency Evaluation of Head Trauma

*Robert D. Zimmerman, MD, FACR*

3:55pm – 4:20pm

Sports Concussion

*Christopher T. Whitlow, MD, PhD, MHA*

4:20pm – 4:45pm

Traumatic Neurovascular Injury

*Christopher G. Filippi, MD*

4:45pm – 5:00pm

Questions/Answers

5:00pm – 5:15pm

Panel Discussion — Concussions: State of the Art

*Yvonne Lui, MD*

*Pratik Mukherjee, MD, PhD*

*T. Jason Druzgal, MD, PhD*

*Christopher T. Whitlow, MD, PhD, MHA*

**5:15pm – 6:15pm**

#### ASNR Foundation of the ASNR (FASNR) Symposium 2016 Closing Reception

**Location: Marriott Foyer**

**6:30pm – 7:20pm**

#### ASNR Entertainment — Capitol Steps Performance

**Location: Marriott Ballroom**

**Monday, May 23, 2016**

*As of 4/22/2016*

**6:30am – 8:30am**

**Breakfast Concession Stand**

**Locations: Marriott Foyer, Atrium, Exhibit Hall A**

**7:30am – 8:30am**

**Session 1A**

**Monday Morning SAM – Vascular – Audience Response (AR) Self Assessment Module (SAM)**

**Location: Marriott Ballroom**

*Moderator: David Pasquale, MD*

7:30am – 7:55am

MRA Surveillance Imaging of Unruptured and Endovascularly Treated Intracranial Aneurysms

*Donnie Bell, MD*

7:55am – 8:00am

Questions and Answer

8:00am – 8:25am

Selected Vascular Diseases of the Brain and Spine

*Frank C. Tong, MD*

8:25am – 8:30am

Questions and Answer

**8:35am – 10:00am**

**Session 2A**

**ASPNR Programming: Pediatric Neuroimaging for the Adult Neuroradiologist Audience Response (AR) Self Assessment Module (SAM)**

**Location: Marriott Ballroom**

*Moderators: A. James Barkovich, MD and Erin Simon Schwartz, MD*

8:35am – 8:50am

Congenital Spinal Cord Anomalies: Top 10 Things to Know

*Andrea Rossi, MD*

8:50am – 9:10am

Pediatric Brain Imaging Pearls and Pitfalls

*Susan Palasis, MD*

9:10am – 9:30am

Birth Trauma & HII: What You Need to Know

*V. Michelle Silvera, MD*

9:30am – 9:50am

Pediatric Head & Imaging Pearls

*Caroline D. Robson, MB, ChB*

9:50am – 10:00am

Questions and Answers

**8:35am – 10:00am**

**Session 2B**

**ASHNR Programming: Update on Temporal Bone Imaging**

**Location: Washington 4/5/6**

*Moderators: C. Douglas Phillips, MD, FACR and Kristine M. Mosier, DMD, PhD*

8:35am – 9:00am

Contemporary Imaging of Hearing Loss

*Karen L. Salzman, MD*

9:00am – 9:30am

Inflammatory Disease of the Temporal Bone

*Deborah R. Shatzkes, MD*

9:30am – 10:00am

Imaging of the Facial Nerve

*Richard H. Wiggins III, MD*

## Monday, May 23, 2016

**Continuous Coffee Service** in the  
Technical Exhibition Hall in Exhibit Hall C

- |                          |                   |  |
|--------------------------|-------------------|--|
| <b>8:35am – 10:00am</b>  | <b>Session 2C</b> | <b>Young Professional Programming: Adding Value to Your Practice</b><br><b>Location: Washington 1/2/3</b><br><i>Moderators: Mark D. Mamlouk, MD and Joshua A. Hirsch, MD, FACR, FSIR</i>       |
| <b>8:35am – 9:00am</b>   |                   | Radiology's Role in Value Based Care<br><i>Arun Krishnaraj, MD, MPH</i>  |
| <b>9:00am – 9:25am</b>   |                   | Where are the Opportunities for Neuroradiologists Within the Threats to Us and Our Practices<br><i>Frank J. Lexa, VII, MD</i>  |
| <b>9:25am – 9:50am</b>   |                   | Utilizing Midlevel Professionals<br><i>Falgun H. Chokshi, MD, MS</i>   |
| <b>9:50am – 10:00am</b>  |                   | Discussion   |
| <b>8:35am – 10:00am</b>  | <b>Session 2D</b> | <b>PARALLEL PAPER SESSION: Turbo Talks - Aneurysms: Imaging and Intervention</b><br><b>Location: Roosevelt 1-3</b><br><i>Moderators: Aquilla S. Turk, DO and Prof. Bernhard Schuknecht, MD</i> |
| <b>8:35am – 10:11am</b>  | <b>Session 2E</b> | <b>PARALLEL PAPER SESSION: Primary and Metastatic Brain Tumors: MRI Advances</b><br><b>Location: Maryland A/B/C</b><br><i>Moderators: Ruth Eliahou, MD and Ajay Gupta, MD</i>                  |
| <b>8:35am – 10:03am</b>  | <b>Session 2F</b> | <b>PARALLEL PAPER SESSION: Advances in Functional and Structural CNS MRI</b><br><b>Location: Roosevelt 4</b><br><i>Moderators: Noriko Salamon MD and Kirk M. Welker, MD</i>                    |
| <b>10:00am – 10:30am</b> |                   | Morning Beverage Break<br><b>Location: Exhibit Hall C</b>  |
| <b>10:30am – 12:00pm</b> | <b>Session 3A</b> | <b>ASHNR Programming: Update on Cranial Nerve Imaging</b><br><b>Location: Marriott Ballroom</b><br><i>Moderators: Ashley H. Aiken, MD and Richard H. Wiggins, III, MD</i>                      |
| <b>10:30am – 11:00am</b> |                   | Evaluation of the Patient with Facial Pain<br><i>David R. DeLone, MD</i>   |
| <b>11:00am – 11:30am</b> |                   | Understanding Perineural Tumor Spread<br><i>Hilda Elie Stambuk, MD</i>   |
| <b>11:30am – 12:00pm</b> |                   | Lower Cranial Nerve Imaging<br><i>Deborah L. Reede, MD</i>   |

## Monday, May 23, 2016

- 10:30am – 12:00pm**      **Session 3B**      **Healthcare Policy Programming: A Look to the Future for Medicine and Radiology Audience Response (AR) Self Assessment Module (SAM)**  
**Location: Washington 4/5/6**  
*Moderators: Suresh K. Mukherji, MD, FACR, MBA and Andrew Steven, MD*
- 10:30am – 10:55am**      Future Trends in Organized Medicine  
*Jacqueline A. Bello, MD, FACR*
- 10:55am – 11:20am**      Neuroradiology: Today, Tomorrow, and the Day After  
*Suresh K. Mukherji, MD, FACR, MBA*
- 11:20am – 11:45am**      Technology Disrupters and the Impact of Social Media  
*Amy L. Kotsenas, MD*
- 11:45am – 12:00pm**      Questions and Answers
- 
- 10:30am – 12:00pm**      **Session 3C**      **PARALLEL PAPER SESSION: Spine: Imaging and Intervention**  
**Location: Washington 1/2/3**  
*Moderators: Ruby J. Lien, MD and Prashant Raghavan, MBBS*
- 
- 10:30am – 12:00pm**      **Session 3D**      **PARALLEL PAPER SESSION: Turbo Talks - Advanced MRI: From Microstructure to Function**  
**Location: Roosevelt 1-3**  
*Moderators: Joseph A. Maldjian, MD and Christopher G. Filippi, MD*
- 
- 10:30am – 12:00pm**      **Session 3E**      **PARALLEL PAPER SESSION: Pediatrics: Head Injury, Spine Techniques, and Radiation Dose**  
**Location: Maryland A/B/C**  
*Moderators: Mai-Lan Ho, MD and Julie Harreld, MD*
- 
- 10:30am – 12:00pm**      **Session 3F**      **Neuroradiology Education**  
**Location: Roosevelt 4**  
*Moderators: Mark E. Mullins, MD, PhD and Alisa Kanfi, MD*
- 10:30am – 10:45am**      Teaching Neuroradiology to Medical Students  
*Tabassum A. Kennedy, MD*
- 10:45am – 11:00am**      Teaching Neuroradiology to Diagnostic Radiology Residents  
*Jeffrey A. Bennett, MD*
- 11:00am – 11:15am**      Teaching Neuroradiology to Neuroradiology Fellows  
*Pamela W. Schaefer, MD*
- 11:15am – 11:30am**      ACGME/RRC Update  
*James C. Anderson, MD*
- 11:30am – 11:45am**      ABR Update  
*Robert D. Zimmerman, MD, FACR*
- 11:45am – 12:00pm**      Panel Discussion/Q&A

## Monday, May 23, 2016

**Continuous Coffee Service** in the  
Technical Exhibition Hall in Exhibit Hall C

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

**12:15pm – 1:00pm**      **How-To Session – GE Healthcare (non-CME)**  
**Location: Marriott Ballroom**

**1:15pm – 2:45pm**      **Session 4A      Olfaction Audience Response (AR) Self Assessment Module (SAM)**

**Location: Marriott Ballroom**

*Moderators: Justin L. Brucker, MD and Thomas Naidich, MD, FACR*

1:15pm – 1:55pm      Current Concepts of Olfaction From Odorant to Olfactory Bulb: How We Use It, Its Embryology and Anatomy  
*Peter M. Som, MD, FACR, FRSM*

1:55pm – 2:35pm      Central Processing of Odor  
*Thomas P. Naidich, MD, FACR*

2:35pm – 2:45pm      Questions & Answers

**1:15pm – 2:45pm**      **Session 4B      Young Professional Programming: Practical Post-Treatment Neuroimaging**  
**Location: Washington 4/5/6**

*Moderators: Patricia A. Hudgins, MD and Ramon F. Barajas, Jr., MD*

1:15pm – 1:40pm      Post Treatment Brain  
*Soonmee Cha, MD*

1:40pm – 2:05pm      Post Treatment Neck  
*Suresh K. Mukherji, MD, FACR, MBA*

2:05pm – 2:30pm      Post Treatment Spine  
*Lubdhra M. Shah, MD*

2:30pm – 2:45pm      Discussion

**1:15pm – 2:45pm**      **Session 4C      Evidence Based Medicine Programming: Imaging Blunt Cerebrovascular Injury-What is the Evidence?**  
**Location: Washington 1/2/3**

*Moderators: Yoshimi Anzai, MD, MPH and Mahmud Mossa-Basha, MD*

1:15pm – 1:35pm      Imaging Diagnosis of Cerebrovascular Injury and How We Image  
*Margaret N. Chapman, MD*

1:35pm – 1:55pm      BCVI Classification - Implications of Treatment for Carotid and Vertebral Arteries  
*Michele H. Johnson, MD*

1:55pm – 2:15pm      Current Trends of Treatment of BCVI-Treatment Strategies Outcomes  
*Steven W. Hetts, MD*

2:15pm – 2:35pm      Role of Vessel Wall Imaging in Patients with BCVI  
*Mahmud Mossa-Basha, MD*

2:35pm – 2:45pm      Questions and Answer

## Monday, May 23, 2016

1:15pm – 2:45pm

### Session 4D

**PARALLEL PAPER SESSION: Turbo Talks - Adult Brain Tumors: Diffusion, Perfusion and Beyond**  
**Location: Roosevelt 1-3**

*Moderators: Andrei I. Holodny, MD and Nikdokht Farid, MD*

1:15pm – 2:45pm

### Session 4E

**Excerpta - I**  
**Location: Maryland A/B/C**

*Moderators: Barton F. Branstetter IV, MD and Wende N. Gibbs, MD, MA*

1:15pm – 2:45pm

### Session 4F

**PARALLEL PAPER SESSION: Interventional Management of CNS Aneurysms**  
**Location: Roosevelt 4**

*Moderators: Timothy R. Miller, MD and Mohammad Chaudry, MD*

2:45am – 3:00pm

**Afternoon Beverage Break**  
**Location: Exhibit Hall C**

3:00pm – 4:30pm

### Session 5A

**ASPNR Programming: Pediatric Epilepsy 2016**  
**Location: Marriott Ballroom**

*Moderators: William B. Zucconi, DO and Vivek Gupta, MD*

3:00pm – 3:20pm

Brain Malformations and Epilepsy: New Concepts Using Molecular Pathways as a Guide  
*A. James Barkovich, MD*

3:20pm – 3:40pm

Advanced Imaging in Pediatric Epilepsy  
*P. Ellen Grant, MD*

3:40pm – 4:00pm

Advances in Clinical Epilepsy Management  
*Dennis J. Dlugos, MD*

4:00pm – 4:20pm

Advances in Surgical Epilepsy Management  
*Joseph Madsen, MD*

4:20pm – 4:30pm

Discussion

3:00pm – 4:30pm

### Session 5B

**AOSNHNR Programming: Advances in Vascular Imaging: Diagnosis and Treatment Implication**  
**Location: Washington 4/5/6**

*Moderators: Chul-Ho Sohn, MD, PhD and Yukunori Korogi, MD, PhD*

3:00pm – 3:10pm

Introduction

3:10pm – 3:30pm

Advances in the Imaging of Moyamoya Disease  
*Tae Jin Yun, MD*

3:30pm – 3:50pm

Current Clinical Applications of Intracranial Vessel Wall Imaging  
*Kazuhiro Tsuchiya, MD*

3:50pm – 4:10pm

Clinical Application of 3D T1-Weighted Black-Blood MRI in Head and Neck Arterial Lesions  
*Masayuki Maeda, MD*

4:10pm – 4:30pm

Intracranial Arterial Stenosis: MR Patterns and Outcomes of Management  
*Feng-Chi Chang, MD*



**Monday, May 23, 2016**

**Continuous Coffee Service** in the  
Technical Exhibition Hall in Exhibit Hall C

**3:00pm – 4:30pm**

**Session 5C**

**Evidence Based Medicine Programming: Speed Journal Club to Review New Evidence in the Literature on Hot Topics in Neuroradiology**

**Location: Washington 1/2/3**

*Moderators: Pina C. Sanelli, MD, MPH, FACR and Ajay Gupta, MD*

3:00pm – 3:25pm

Brain

*Pina C. Sanelli, MD, MPH, FACR and Ajay Gupta, MD*

3:25pm – 3:45pm

Spine

*Jeffrey G. Jarvik, MD, MPH*

3:45pm – 4:00pm

Head and Neck

*Yoshimi Anzai, MD, MPH*

4:00pm – 4:15pm

Pediatric

*L. Santiago Medina, MD, MPH*

4:15pm – 4:30pm

NIR

*Joshua A. Hirsch, MD, FACR, FSIR*

**3:00pm – 4:30pm**

**Session 5D**

**PARALLEL PAPER SESSION: Turbo Talks – CNS Tumors: Biomarkers, Genomics, and Radiomimics**

**Location: Roosevelt 1-3**

*Moderators: Whitney B. Pope, MD, PhD and Rivka R. Colen, MD*

**3:00pm – 4:36pm**

**Session 5E**

**PARALLEL PAPER SESSION: Head & Neck: Skull Base and Temporal Bone**

**Location: Maryland A/B/C**

*Moderators: Leon J. van Rensburg, MD, D.Sc and Burce Ozgen Mocan, MD*

**3:00pm – 4:30pm**

**Session 5F**

**PARALLEL PAPER SESSION: Spine: Trauma & Techniques**

**Location: Roosevelt 4**

*Moderators: Blake A. Johnson, MD, FACR and Benjamin P. Liu, MD*

**4:45pm – 6:15pm**

**Session 6A**

**Advanced Imaging Programming: Demystifying Advanced Imaging**

**Location: Marriott Ballroom**

*Moderator: Dikoma C. Shungu, PhD*

4:45pm – 5:15pm

Demystifying Diffusion

*Jeffrey I. Berman, PhD*

5:15pm – 5:45pm

Demystifying Perfusion

*Aaron S. Field, MD, PhD*

5:45pm – 6:15pm

Demystifying MR Spectroscopy

*Dikoma C. Shungu, PhD*

## Monday, May 23, 2016

4:45pm – 6:15pm

### Session 6B

**CSI Programming: Electronic Meetings and Publishing: Putting It All Together**

**Location: Washington 4/5/6**

*Moderators: Clifford J. Eskey, MD, PhD and Edward J. Escott, MD*

4:45pm – 5:05pm

Gathering Data: Polls  
*Wende N. Gibbs, MD, MA*

5:05pm – 5:25pm

Conducting A Meeting: Ways to Do This Over the Internet (Video Conferencing)  
*Edward P. Quigley III, MD, PhD*

5:25pm – 5:45pm

Planning a Meeting or Research Project? Using Google Spreadsheets  
*John L. Go, MD, FACR*

5:45pm – 6:05pm

E Publishing  
*Deepak Takhtani, MD*

6:05pm – 6:15pm

Questions

4:45pm – 6:15pm

### Session 6C

**Evidence Based Medicine Programming: Appropriateness of Neuroimaging and Clinical Decision Support in the Emergency Department**

**Location: Washington 1/2/3**

*Moderators: Robert M. Barr, MD, FACR and Bhavya Rehani, MD*

4:45pm – 5:05pm

Impact of Clinical Decision Support on the Volume and Appropriateness in the Emergency Department  
*Srinivasan Mukundan, Jr., MD, PhD*

5:05pm – 5:25pm

Emergency Medicine Physician Perspective on Using Clinical Decision Support  
*Ali S. Raja, MD, MBA*

5:25pm – 5:45pm

Value Based ER Radiology  
*David J. Seidenwurm, MD, FACR*

5:45pm – 6:05pm

Legal Implications of Clinical Decision Support Tools  
*Jacqueline A. Bello, MD, FACR*

6:05pm – 6:15pm

Panel Discussion

4:45pm – 6:15pm

### Session 6D

**PARALLEL PAPER SESSION: Turbo Talks - Advanced Pediatric MRI / Gadolinium Deposition**

**Location: Roosevelt 1-3**

*Moderators: Blaise V. Jones, MD and Laurence J. Eckel, MD*

4:45pm – 6:15pm

### Session 6E

**Study Group - Clinical Translation of Functional Diffusion MRI (non-CME)**

**Location: Maryland A/B/C**

## Monday, May 23, 2016

**Continuous Coffee Service** in the  
Technical Exhibition Hall in Exhibit Hall C

4:45pm – 6:21pm

### Session 6F

**PARALLEL PAPER SESSION-Thrombosis, Clot**

**Detection and CNS Hemorrhage**

**Location: Roosevelt 4**

*Moderators: Charles L. Truwit, MD and Prof. Sven Haller, MD*

6:15pm – 7:45pm

**Welcome Reception**

**Location: Exhibit Hall C**

7:45pm – 10:00pm

**Jam Session**

**Location: Exhibit Hall C**

## Tuesday, May 24, 2016

<b>6:30am – 8:30am</b>	<b>Breakfast Concession Stands</b> <b>Locations: Marriott Foyer, Atrium, Exhibit Hall A</b>
<b>7:30am – 8:30am</b>	<b>Session 7A</b> <b>Tuesday Morning SAM – Spine – Audience Response (AR) Self Assessment Module (SAM)</b> <b>Location: Marriott Ballroom</b> <i>Moderator: Maria Vittoria Spampinato, MD</i>
7:30am – 7:55am	Unusual Spine Pathology <i>Carlos H. Torres, MD, FRCPC</i>
7:55am – 8:00am	Questions and Answers
8:00am – 8:25am	Imaging of Spinal Cord Lesions <i>Christie M. Lincoln, MD</i>
8:25am – 8:30am	Questions and Answers
<b>8:35am – 10:00am</b>	<b>Session 8A</b> <b>ASPNR Programming: Pediatric Vascular Disease</b> <b>Location: Marriott Ballroom</b> <i>Moderators: Ashok Panigrahy, MD and Chen Hoffmann, MD</i>
8:35am – 8:55am	Congenital Vascular Disorders <i>Mariasavina Severino, MD</i>
8:55am – 9:15am	Arteriopathy in Pediatric Stroke <i>Max Wintermark, MD</i>
9:15am – 9:35am	Pediatric Stroke: The Neurologist's Perspective <i>Gabrielle deVeber, MD</i>
9:35am – 9:55am	Pediatric Venous Disorders <i>Nadine J. Girard, MD</i>
<b>8:35am – 10:00am</b>	<b>Session 8B</b> <b>Young Professional Programming: Utilizing Advanced Imaging in Your Practice</b> <b>Location: Washington 4/5/6</b> <i>Moderators: Falgun H. Chokshi, MD, MS and William P. Dillon, MD</i>
8:35am – 9:00am	Vessel Wall Imaging <i>Mahmud Mossa-Basha, MD</i>
9:00am – 9:25am	A Practical Guide to Developing a Clinical fMRI Service <i>Amit M. Saindane, MD</i>
9:25am – 9:50am	Interventional Spine Service: Beyond LP's & Myelos <i>Vinil N. Shah, MD</i>
9:50am – 10:00am	Discussion
<b>8:35am – 10:03am</b>	<b>Session 8C</b> <b>PARALLEL PAPER SESSION: Multiple Sclerosis / Adult Brain MRI</b> <b>Location: Washington 1/2/3</b> <i>Moderators: Gordon K. Sze, MD, FACR and Emerson L. Gasparetto, MD, PhD</i>

**Tuesday, May 24, 2016**

**Continuous Coffee Service** in the  
Technical Exhibition Hall in Exhibit Hall C

**8:35am – 10:00am**

**Session 8D**

**PARALLEL PAPER SESSION: Turbo Talks –  
Traumatic Brain Injury / Epilepsy Advances**

**Location: Roosevelt 1-3**

*Moderators: Meng Law, MD, MBBS, FRACR and Kim M. Cecil, PhD*

**8:35am – 10:00am**

**Session 8E**

**Quantitative Imaging**

**Location: Maryland A/B/C**

*Moderators: Andreia V. Faria, MD, PhD and Edward H. Herskovits, MD, PhD*

8:35am – 8:52am

Quantitative Imaging in Context  
*Edward H. Herskovits, MD, PhD*

8:52am – 9:09am

Neuroimaging Analysis  
*Dinggang Shen, MD*

9:09am – 9:26am

Computational-Aid for Head Neck Oncoradiology  
*Todd McNutt, PhD*

9:26am – 9:43am

Applications of Imaging Quantification  
*Govind Bhagavatheeshwaran, PhD*

9:43am – 10:00am

Tools For High – Throughput Neuroimage Analysis and Personalized  
Medicine  
*Andreia V. Faria, MD, PhD*

**8:35am – 10:00am**

**Session 8F**

**Healthcare Policy Programming: Payment Policy  
Update (2016 – J. Arliss Pollock Memorial Lecture)**

**Location: Roosevelt 4**

*Moderators: William D. Donovan, MD, MPH, FACR and  
Carolyn Cidis Meltzer, MD, FACR*

8:35am – 8:45am

Presentation of the J. Arliss Pollock Memorial Award

8:45am – 9:05am

The Dawn of a New Day: Goodbye SGR, Hello MACRA  
*Joshua A. Hirsch, MD, FACR, FSIR*

9:05am – 9:30am

Diving Deep on APMs and Succeeding with MIPS  
*Gregory N. Nicola, MD*

9:30am – 10:00am

How Imaging 3.0 Fits into New Paradigm for Neuroradiologists  
*Geraldine B. McGinty, MD, MBA*

**10:00am – 10:30am**

**Morning Beverage Break**  
**Location: Exhibit Hall C**

**10:30am – 11:00am**

**ASNR Annual Business Meeting (Members Only)**  
**Location: Marriott Ballroom**

## Tuesday, May 24, 2016

- 11:00am – 12:00pm**      **Session 9A**      **Healthcare Policy Programming: National Initiatives and the Role of the Government (“Public Policy Matters”)**  
**Location: Marriott Ballroom**  
*Moderators: John E. Jordan, MD and David J. Seidenwurm, MD, FACR*
- 11:00am – 11:30am**      Updates from CMS – Healthcare Policy Matters  
*Kate Goodrich, MD, MHS, Director of the Center for Clinical Standards and Quality at CMS*
- 11:30am – 12:00pm**      News from the FDA  
*Daniel Krainak, PhD, Biomedical Engineer, FDA*
- 12:15pm – 1:00pm**      **How-To Session – Bracco Diagnostic’s, Inc. (non-CME)**  
**Location: Marriott Ballroom**
- 10:30am – 1:30pm**      **Lunch Concession Stands**  
**Locations: Exhibit Hall C, Marriott Foyer, Atrium, Exhibit Hall A**
- 1:15pm – 2:45pm**      **Session 10A**      **ASHNR Programming: Update on Orbital Imaging Audience Response (AR) Self Assessment Module (SAM)**  
**Location: Marriott Ballroom**  
*Moderators: Claudia Kirsch, MD and Nandini Patel, MD*
- 1:15pm – 1:40pm**      Visual Loss: Understanding the Patterns  
*Tabassum A. Kennedy, MD*
- 1:40pm – 2:05pm**      Diplopia: Anatomy and Pathology  
*Ilona M. Schmalfuss, MD*
- 2:05pm – 2:30pm**      Orbital Infections: What You Need to Know  
*Gregory D. Avey, MD*
- 2:30pm – 2:45pm**      Questions and Answers
- 1:15pm – 2:45pm**      **Session 10B**      **ESNR Programming: Cases Audience Response (AR)**  
**Location: Washington 4/5/6**  
*Moderator: Prof. Pia Maly Sundgren, MD, PhD*
- Cases  
*Johan W. Van Goethem, MD, PhD*  
*Majda M. Thurnher, MD*  
*Walter Kucharczyk, MD, FRCP(C)*

**Tuesday, May 24, 2016**

**Continuous Coffee Service** in the  
Technical Exhibition Hall in Exhibit Hall C

**1:15pm – 2:45pm**

**Session 10C**

**Healthcare Policy Programming: Challenges Along the Road from Volume to Value**

**Location: Washington 1/2/3**

*Moderators: John E. Jordan, MD and Robert D. Zimmerman, MD, FACR*

**1:15pm – 1:45pm**

Management of Incidental Thyroid Nodules: ACR White Paper and Controversies

*Jenny K. Hoang, MBBS*

**1:45pm – 2:15pm**

A Surgeon's Perspective on Incidental Thyroid Nodules

*Julie Ann Sosa, MD, MA, FACS*

**2:15pm – 2:45pm**

ACR Perspective on the Shift from Volume to Value

*Geraldine B. McGinty, MD, MBA*

**1:15pm – 2:45pm**

**Session 10D**

**PARALLEL PAPER SESSION: Turbo Talks – Degenerative Diseases / Gadolinium Deposition**

**Location: Roosevelt 1-3**

*Moderators: David S. Enterline, MD and Mark T. Tierney, MD, PhD*

**1:15pm – 2:51pm**

**Session 10E**

**PARALLEL PAPER SESSION: Pediatric CNS: Vascular Techniques**

**Location: Maryland A/B/C**

*Moderators: P. Ellen Grant, MD and Joshua S. Shimony, MD, PhD*

**1:15pm – 2:45pm**

**Session 10F**

**CSI Programming: The Neuroradiology Work Environment**

**Location: Roosevelt 4**

*Moderator: Yvonne W. Lui, MD and C. Douglas Phillips, MD, FACR*

**1:15pm – 1:35pm**

Mistakes and How to Avoid Them

*Carlos H. Torres, MD, FRCPC*

**1:35pm – 1:55pm**

How to Avoid Interruptions in the Work Place

*John-Paul J. Yu, MD, PhD*

**1:55pm – 2:15pm**

Structured Reporting

*Richard H. Wiggins, III, MD*

**2:15pm – 2:35pm**

Image Sharing with Patients

*C. Douglas Phillips, MD, FACR*

**2:35pm – 2:45pm**

Discussion

**2:45pm – 3:00pm**

**Afternoon Beverage Break**

**Location: Exhibit Hall C**

## Tuesday, May 24, 2016

3:00pm – 4:30pm

### Session 11A

**ASFNR Programming: Advanced Neuroimaging Techniques in Brain Tumor: Current Updates Audience Response (AR) Self Assessment Module (SAM)**

**Location: Marriott Ballroom**

*Moderators: Mark S. Shiroishi, MD and Jason M. Johnson, MD*

3:00pm – 3:15pm

Proton MR Spectroscopy

*Peter B. Barker, D.Phil*

3:15pm – 3:35pm

Functional MRI Pre-Treatment Planning for Brain Tumor: Pitfalls and Progress

*Kirk M. Welker, MD*

3:35pm – 3:55pm

Perfusion: Treatment Response from Pseudoprogression

*Jerrold Boxerman, MD, PhD*

3:55pm – 4:15pm

Diffusivity and Genomics: Current Thoughts and Metrics

*Whitney B. Pope, MD, PhD*

4:15pm – 4:30pm

Questions and Answers

3:00pm – 4:36pm

### Session 11B

**PARALLEL PAPER SESSION-Stroke: Advanced CT and MR Techniques**

**Location: Washington 4/5/6**

*Moderators: Kambiz Nael, MD and Seena Dehkharghani, MD*

3:00pm – 4:30pm

### Session 11C

**Incidental Findings**

**Location: Washington 1/2/3**

*Moderators: Tabassum A. Kennedy, MD and Tina Young Poussaint, MD*

3:00pm – 3:20pm

General Overview of Incidental Findings

*Tina Young Poussaint, MD*

3:20pm – 3:40pm

Incidental Findings in CT Angiography Neck Examinations

*Philip R. Chapman, MD*

3:40pm – 3:55pm

Incidental Findings in 10,000 Research Volunteer MR Exams

*Paul Rowley, BS*

3:55pm – 4:20pm

Best Practices: Clinical and Research Incidental Findings

*Gregory G. Zaharchuk, MD, PhD*

4:20pm – 4:30pm

Questions and Answers

3:00pm – 4:30pm

### Session 11D

**PARALLEL PAPER SESSION: Turbo Talks-16 Shades of Grey and White Matter**

**Location: Roosevelt 1-3**

*Moderators: James G. Smirniotopoulos, MD and Gaurang V. Shah, MD*



**Tuesday, May 24, 2016**

**Continuous Coffee Service** in the  
Technical Exhibition Hall in Exhibit Hall C

**3:00pm – 4:30pm**

**Session 11E**

**Young Professional Programming: Social Media  
Programming: Career and Social Media**

**Location: Maryland A/B/C**

*Moderators: Amy L. Kotsenas, MD and Jennifer E. Nathan, MD*

3:00pm – 3:15pm

Becoming a Leader in Private Practice  
*Robert M. Barr, MD, FACR*

3:15pm – 3:30pm

Becoming a Leader in Academics  
*Christine M. Glastonbury, MBBS*

3:30pm – 3:45pm

WHY all Radiologists Should Use Social Media Professionally  
*Jenny K. Hoang, MBBS*

3:45pm – 4:00pm

The Nuts and Bolts of Social Media: AKA How Do I Use This Stuff?  
*Neil Uttam Lall, MD*

4:00pm – 4:30pm

Social Media Super-Users Panel  
*Geraldine B. McGinty, MD, MBA*  
*Ryan T. Fitzgerald, MD*  
*Falgun H. Chokshi, MD, MS*  
*Courtney M. Tomblinson, MD*

**3:00pm – 4:30pm**

**Session 11F**

**ASSR Programming: Advanced Interventional Spine**

**Procedures**

**Location: Roosevelt 4**

*Moderators: Jeffrey A. Stone, MD, FACR and Gregory J. Lawler, MD*

3:00pm – 3:25pm

Regenerative Spine Medicine: A Primer for Neuroradiologists  
*Blake A. Johnson, MD, FACR*

3:25pm – 3:40pm

The Future Spine Radiologist: Integrating Imaging and Procedures for  
Precision Diagnosis and Treatment  
*Gregory J. Lawler, MD*

3:40pm – 4:00pm

The Spine Clinic: Moving Toward ABR Pain Medicine Certification  
*A. Orlando Ortiz, MD, MBA, FACR*

4:00pm – 4:20pm

Interventional Pain Management in Failed Back Surgery Syndrome  
*Bassem A. Georgy, MD*

4:20pm – 4:30pm

Discussion

**4:45pm – 6:15pm**

**Session 12A**

**ASPNR Programming: Cased Based Competition**

**Audience Response (AR)**

**Location: Marriott Ballroom**

*Moderator: Erin Simon Schwartz, MD*

*Susan Palasis, MD*

*Ashok Panigrahy, MD*

*Arastoo Vossough, PhD, MD*

## Tuesday, May 24, 2016

4:45pm – 6:15pm

### Session 12B

#### Drugs and Bugs: Global Disasters

**Location: Washington 4/5/6**

*Moderators: Walter Kucharczyk, MD, FRCP(C) and  
Prof. Tchoyoson CC. Lim, MBBS, FRCR*

4:45pm – 5:10pm

CNS Manifestations Associated with Illicit Drugs and Infections  
*Prof. Tchoyoson CC. Lim, MBBS, FRCR*

5:10pm – 5:35pm

Bugs and Drugs: CNS Manifestations Associated with Illicit Drugs and Infections in Brazil  
*Lara Alexandre Brandão, MD*

5:35pm – 6:00pm

Drugs and Bugs: Look What the Boeing Dragged In!  
*Apostolos John Tsiouris, MD*

6:00pm – 6:15pm

Discussion

4:45pm – 6:15pm

### Session 12C

#### Organizational Dynamics

**Location: Washington 1/2/3**

*Moderator: Suresh K. Mukherji, MD, FACP, MBA*

4:45pm – 5:20pm

Radiology Group Dynamics-Moving from Dysfunction to Fun Using Leadership and Citizen Training  
*Frank J. Lexa VII, MD*

5:20pm – 5:55pm

There are Many Groups in Your Radiology Group: Leading Them to Success  
*Andrew F. Simon, PhD, PsyD*

5:55pm – 6:15pm

Discussion

4:45pm – 6:15pm

### Session 12D

#### PARALLEL PAPER SESSION: Turbo Talks – Hot Topics in Neuro Socioeconomics

**Location: Roosevelt 1-3**

*Moderators: Raymond K. Tu, MD, FACP and Kristine A. Blackham, MD*

4:45pm – 6:15pm

### Session 12E

#### Study Group – Intracranial and Cervical Vessel Wall Imaging (non-CME)

**Location: Maryland A/B/C**

4:45pm – 6:21pm

### Session 12F

#### PARALLEL PAPER SESSION: Interventional: Vascular Malformations

**Location: Roosevelt 4**

*Moderators: Biraj M. Patel, MD and Jeffrey L. Sunshine, MD, PhD*

## Wednesday, May 25, 2016

**Continuous Coffee Service** in the  
Technical Exhibition Hall in Exhibit Hall C

**6:30am – 8:30am**

**Breakfast Concession Stands**

**Locations: Marriott Foyer, Atrium, Exhibit Hall A**

**7:30am – 8:30am**

### Session 13A

**Wednesday Morning SAM – Spine – Audience Response (AR) Self Assessment Module (SAM)**

**Location: Marriott Ballroom**

*Moderator: Blaise V. Jones, MD*

7:30am – 7:55am

Pediatrics Brain Cases

*Tina Young Poussaint, MD*

7:55am – 8:00am

Questions and Answers

8:00am – 8:25am

Going with the Flow: Pediatric Vascular Disease

*David M. Mirsky, MD*

8:25am – 8:30am

Questions and Answers

**8:30am – 9:00am**

### Session 14

**General Session: Future of Neuroimaging / Neuroscience Research**

**Location: Marriott Ballroom**

*Moderator: R. Gilberto Gonzalez, MD, PhD*

Future of Neuroimaging / Neuroscience Research

*Walter Koroshetz, MD, Director NINDS*

**9:00am – 10:00am**

### Session 14A

**Mini Stroke – Acute Triage**

**Location: Marriott Ballroom**

*Moderator: Allan L. Brook, MD, FSIR*

9:00am – 9:30am

A New Standard for Acute Stroke Therapy

*Gregory W. Albers, MD, FAHA*

9:30am – 10:00am

Stroke Triage: Patient Selection Beyond the 6 Hour Window

*Mohammad Chaudy, MD*

**9:00am – 10:00am**

### Session 14B

**MR Safety – Updates in 2016**

**Location: Washington 4/5/6**

*Moderator: TBD*

9:00am – 9:15am

Update on Retained GBCA

*Robert J. McDonald, MD, PhD*

9:15am – 9:30am

Anthropogenic GBCA and Status of GBCA Expose

*Emanuel Kanal, MD*

9:30am – 9:45am

The American Board of MR Safety Standardization

*Emanuel Kanal, MD*

9:45am – 10:00am

Questions/Answers and Audience Feedback

## Wednesday, May 25, 2016

- 9:00am – 10:00am**      **Session 14C**      **Dementia**  
**Location: Washington 1/2/3**  
*Moderator: Jeffrey R. Petrella, MD*
- 9:00am – 9:30am      Molecular and Functional Imaging Techniques in Preclinical Alzheimer's Disease: Implications for Prevention Trials  
*Reisa Sperling, MD*
- 9:30am – 10:00am      Brain Aging and Biomarkers of Alzheimers Disease  
*Clifford R. Jack Jr., MD*
- 9:00am – 10:00am**      **Session 14D**      **PARALLEL PAPER SESSION: Turbo Talks – Brain Physiology in Practice**  
**Location: Roosevelt 1-3**  
*Moderators: David J. Mikulis, MD and Ryan T. Fitzgerald, MD*
- 9:00am – 10:00am**      **Session 14E**      **Subspecialty & Regional Society Papers, Dyke Award, Foundation of the ASNR Papers**  
**Location: Maryland A/B/C**  
*Moderators: Pina C. Sanelli, MD, MPH, FACR and Jordan M. Prager, MD*
- 9:00am – 9:10am      Awards Announcements
- 9:10am – 9:18am      A Method to Quantify Injury to White-Matter Pathways Using Diffusion MRI – Norma E. Leeds Award (ENRS)  
*Emad Ahmadi, MD*
- 9:18am – 9:26am      Automated Adaptive Multiplane-Multiangle Oblique (AAMO) Rendering Volumetric Spine CT – Stephen A. Kieffer Award or Best Mentor Paper  
*Nicholas V. Titelbaum, MD*
- 9:26am – 9:34am      CSF Venous Fistula and Renal Contrast in SIH Patients Without CSF Leak at CT Myelography – 2016 Louis A. Gilula, MD Mentor Award (ASSR)  
*Michael S. Clark, MD*
- 9:34am – 9:42am      Altered Excitation-Inhibition in Knee Osteoarthritis – Gabriel H. Wilson Award (WNRS)  
*Bradley R. Foerster, MD, PhD*
- 9:42am – 9:50am      Tales From the Crypt: When Vertebral Augmentation Goes Very Wrong – Southeastern Neuroradiology Society (SENRS) Award  
*Mary E. Jensen, MD*
- 9:50am – 9:58am      Structural Connectivity of Distributed Cortical Association Networks Reflects Cognitive Reserve in Autosomal Dominant Familial Alzheimer's Disease – 2016 Cornelius G. Dyke Memorial Award  
*Jeffrey W. Prescott, MD, PhD*
- 8:35am – 10:03am**      **Session 14F**      **PARALLEL PAPER SESSION: Venous Disease and CSF Dynamics**  
**Location: Roosevelt 4**  
*Moderators: Victor M. Haughton, MD and Ajay Malhotra, MD*
- 10:00am – 10:30am**      **Morning Beverage Break**  
**Location: Exhibit Hall C**

**Wednesday, May 25, 2016**

**Continuous Coffee Service** in the  
Technical Exhibition Hall in Exhibit Hall C

- 10:30am – 12:00pm**      **Session 15A**      **SNIS Programming: Point-Counterpoint:  
Drip-and-Ship vs. Mothership – The NeuroInterventionalist's Role in  
Large Vessel Occlusion Therapy Audience Response (AR)  
Self Assessment Module (SAM)**  
**Location: Marriott Ballroom**  
*Moderators: Peter A. Rasmussen, MD and  
Charles J. Prestigiacomo, MD, FACS, FAANS*
- 10:30am – 10:45am      Large Vessel Occlusion (LVO) Therapy: What is the Current Evidence  
*Mahesh V. Jayaraman, MD*
- 10:45am – 11:00am      Point: Drip-and-Ship for Acute Ischemic Stroke: What is the Evidence?  
*M. Shazam Hussein, MD*
- 11:00am – 11:15am      Counterpoint: Mothership for Acute Ischemic Stroke: What is the Evidence?  
*Blaise W. Baxter, MD*
- 11:15am – 11:30am      Speaker Rebuttals
- 11:30am – 11:45am      Does the Mobile Stroke Unit (MSU) Change the Rules? Incorporating MSU  
in Stroke Therapy  
*Peter A. Rasmussen, MD*
- 11:45am – 12:00pm      Questions and Answers
- 
- 10:30am – 12:00pm**      **Session 15B**      **WHO's Next and What's New? The 2016 World  
Health Organization Update on Brain Tumors: What Neuroradiologists  
Need to Know**  
**Location: Washington 4/5/6**  
*Moderators: Anne G. Osborn, MD and Kelly K. Koeller, MD, FACR*
- 10:30am – 11:15am      Updates on Brain Tumors  
*Anne G. Osborn, MD*
- 11:15am – 12:00pm      What is Next in Pathology  
*Bette K. Kleinschmidt-DeMasters, MD*
- 
- 10:30am – 12:00pm**      **Session 15C**      **ASFNR Programming: Resting State Connectivity:  
Ready for Primetime?**  
**Location: Washington 1/2/3**  
*Moderators: T. Jason Druzgal, MD, PhD and Arastoo Vossough, MD, PhD*
- 10:30am – 10:50am      Resting State Connectivity in Language Function  
*Steven M. Stufflebeam, MD*
- 10:50am – 11:10am      What We Know About Resting State Connectivity in Children  
*Robert K. Fulbright, MD*
- 11:10am – 11:30am      Resting Connectivity and the Connectome  
*Joshua S. Shimony, MD, PhD*
- 11:30am – 11:50am      Resting State Connectivity in Neurodegenerative Disease: Biomarker  
Potential  
*Haris Sair, MD*
- 11:50am – 12:00pm      Discussion

## Wednesday, May 25, 2016

- 10:30am – 12:00pm**      **Session 15D**      **PARALLEL PAPER SESSION-Turbo Talks – Pediatric CNS: Fetal Imaging / Sickle Cell Disease**  
**Location: Roosevelt 1-3**  
*Moderators: Orit A. Glenn, MD and Thierry A.G.M. Huisman, MD*
- 10:30am – 12:00pm**      **Session 15E**      **CSF Programming: Normal Pressure Hydrocephalus (NPH) and Chiari I**  
**Location: Maryland A/B/C**  
*Moderators: William G. Bradley, Jr., MD, PhD, FACR and Harold L. Rekate, MD*
- 10:30am – 10:55am**      Diagnosis and Management of Chiari  
*Harold L. Rekate, MD*
- 10:55am – 11:20am**      Computational Flow Dynamics of Chiari  
*Victor M. Haughton, MD*
- 11:20am – 11:45am**      PC-MRI in Evaluation of NPH  
*William G. Bradley Jr., MD, PhD, FACR*
- 11:45am – 12:00pm**      Discussion
- 10:30am – 12:06pm**      **Session 15F**      **PARALLEL PAPER SESSION: Informatics: Analysis Tools and Optimized Workflow**  
**Location: Roosevelt 4**  
*Moderators: Edward Yang, MD and Asim Z. Mian, MD*
- 10:30am – 1:30pm**      **Lunch Concession Stands**  
**Locations: Exhibit Hall C, Marriott Foyer, Atrium, Exhibit Hall A**
- 12:15pm – 1:00pm**      **How-To Session – Toshiba America Medical Systems (non-CME)**  
**Location: Marriott Ballroom**
- 1:15pm – 2:45pm**      **Session 16A**      **SNIS Programming: Trauma and the NeuroInterventionalist: The Management of the Endovascular Emergency**  
**Location: Marriott Ballroom**  
*Moderators: Chirag D. Gandhi, MD and Charles J. Prestigiacomo, MD, FAANS, FACS*
- 1:15pm – 1:35pm**      Diagnostic Neuroradiology in the Setting of Trauma of the Head and Neck: Spotting the Problem  
*Jeffrey L. Sunshine, MD, PhD*
- 1:35pm – 1:55pm**      Management of Traumatic Dissections of the Great Vessels of the Neck: Current Level of Evidence  
*Sameer A. Ansari, MD, PhD*
- 1:55pm – 2:15pm**      Acute Management of the Traumatic CCF  
*Rocco A. Armonda, MD*
- 2:15pm – 2:35pm**      Acute Endovascular Management of Trauma of the Face and Neck  
*Chirag D. Gandhi, MD*
- 2:35pm – 2:45pm**      Panel Discussion

**Wednesday, May 25, 2016**

**Continuous Coffee Service** in the  
Technical Exhibition Hall in Exhibit Hall C

**1:15pm – 2:45pm**

**Session 16B**

**Traumatic Brain Injury (TBI) – Advanced**

**Location: Washington 4/5/6**

*Moderators: Richard Watts, D.Phil and Gregory G. Zaharchuk, MD, PhD*

1:15pm – 1:45pm

Advanced Biomarkers of Traumatic Brain Injury for Precision Medicine  
*Pratik Mukherjee, MD, PhD*

1:45pm – 2:15pm

Brain Imaging and Subconcussive Impacts in Sports-related mild TBI  
*Joseph A. Maldjian, MD*

2:15pm – 2:45pm

Radiology Findings in Military TBI Using Advanced MR Imaging  
*Gerard Riedy, MD, PhD*

**1:15pm – 2:45pm**

**Session 16C**

**ASFNR Programming: Cutting Edge Functional Imaging in Neurodegenerative Disorders: New Concepts**

**Location: Washington 1/2/3**

*Moderators: Timothy M. Shepherd, MD, PhD and Doris D. M. Lin, MD, PhD*

1:15pm – 1:35pm

Advanced Translational Approach to Functional Connectivity MRI in Neurodegenerative Disorders  
*Jeffrey S. Anderson, MD, PhD*

1:35pm – 1:55pm

Functional MR in Alzheimers Disease  
*Jeffrey R. Petrella, MD*

1:55pm – 2:15pm

Models of Graph Spread Can Predict the Spatio-Temporal Distribution of Neurodegenerative Disorders  
*Ashish Raj, PhD*

2:15pm – 2:35pm

Metabolic Connectivity Pathways in Neurodegenerative Disease  
*David Eidelberg, MD*

2:35pm – 2:45pm

Discussion

**1:15pm – 2:45pm**

**Session 16D**

**PARALLEL PAPER SESSION: Turbo Talks – Spine Innovations**

**Location: Roosevelt 1-3**

*Moderators: John L. Go, MD, FACR and Vikas Agarwal, MD*

## Wednesday, May 25, 2016

1:15pm – 2:45pm

### Session 16E

**SILAN Programming: Cerebral Venous System: Update in Diagnostic and Novel Treatments**

**Location: Maryland A/B/C**

*Moderators: Javier M. Romero, MD, Roy F. Riascos, MD and Carlos H. Torres, MD, FRCPC*

1:15pm – 1:20pm

Introduction: What is SILAN?

*Orlando Diaz, MD*

1:20pm – 1:40pm

Diagnosis of Venous Infarct: Where Do We Stand?

*R. Gilberto Gonzalez, MD, PhD*

1:40pm – 2:00pm

Venous Sinus Stenting for Endovascular Treatment of Idiopathic Intracranial Hypertension

*Juan G. Tejada, MD*

2:00pm – 2:20pm

Endovascular Treatment of Venous Lesions of the Head and Neck

*Alex Berenstein, MD*

2:20pm – 2:40pm

Current State of Endovascular Treatment of Acute Dural Venous Sinus Thrombosis

*Josser E. Delgado, MD*

1:15pm – 2:45pm

### Session 16F

**PARALLEL PAPER SESSION: Pediatric Brain Tumors: Pre- and Post- Treatment**

**Location: Roosevelt 4**

*Moderators: Gibert Vezina, MD and Aylin Tekes-Brady, MD*

2:45am – 3:00pm

**Afternoon Beverage Break**

**Location: Exhibit Hall C**

3:00pm – 4:30pm

### Session 17A

**SNIS Programming: New Devices in NeuroInterventional Space**

**Location: Marriott Ballroom**

*Moderator: Charles J. Prestigiacomo, MD, FACS, FAANS*

3:00pm – 3:20pm

The FDA and the NeuroInterventional Space: Helping to Define New Horizons

*Mary E. Jensen, MD*

3:20pm – 3:40pm

Quality and Training in the World of New Devices: Who is Responsible?

*Charles J. Prestigiacomo, MD, FACS, FAANS*

3:40pm – 4:00pm

New Devices for Hemorrhagic Stroke (Aneurysm and AVM): A Synopsis

*Aquilla S. Turk, DO*

4:00pm – 4:20pm

New Devices for Ischemic Stroke: A Synopsis

*Ansaar T. Rai, MD*

4:20pm – 4:30pm

Panel Discussion



**Wednesday, May 25, 2016**

**Continuous Coffee Service** in the  
Technical Exhibition Hall in Exhibit Hall C

**3:00pm – 4:30pm**

**Session 17B**

**ASSR Programming: Advanced Imaging of the Spine  
Audience Response (AR) Self Assessment Module (SAM)**

**Location: Washington 4/5/6**

*Moderators: Falgun H. Chokshi, MD, MS and Meng Law, MD, MBBS, FRACR*

3:00pm – 3:20pm

MR Neurography: Plexus and Peripheral Neurography  
*John A Carrino, MD, MPH*

3:20pm – 3:40pm

Optimized Imaging of the Instrumented Spine  
*Lawrence N. Tanenbaum, MD, FACR*

3:40pm – 4:00pm

Spinal Cord Imaging: Advanced Techniques  
*Meng Law, MD, MBBS, FRACR*

4:00pm – 4:20pm

Spinal 4D MRA  
*Falgun H. Chokshi, MD, MS*

4:20pm – 4:30pm

Questions and Answers

**3:00pm – 4:30pm**

**Session 17C**

**PET-MR**

**Location: Washington 1/2/3**

*Moderators: Christopher G. Filippi, MD and Mykol Larvie, MD*

3:00pm – 3:25pm

Introduction to PET/MRI Neuroimagers  
*Gregory G. Zaharchuk, MD, PhD*

3:25pm – 3:50pm

PET/MRI of Dementia  
*Ilya M. Nasrallah, MD*

3:50pm – 4:15pm

Multimodality Imaging of Epilepsy: Role of PET/MRI  
*Steven M. Stuffebeam, MD*

4:15pm – 4:30pm

Panel Discussion

**3:00pm – 4:30pm**

**Session 17D**

**PARALLEL PAPER SESSION-Turbo Talks-Acute  
Stroke: Imaging and Intervention**

**Location: Roosevelt 1-3**

*Moderators: Gaurav Jindal, MD and Maria Gisele Matheus, MD*

**3:00pm – 4:30pm**

**Session 17E**

**PARALLEL PAPER SESSION: Brain Tumors: Diffusion  
and Perfusion Techniques**

**Location: Maryland A/B/C**

*Moderators: Jay J. Pillai, MD and Robert J. Young, MD*

**3:00pm – 4:30pm**

**Session 17F**

**PARALLEL PAPER SESSION: Pediatrics: Epilepsy,  
Autism, & Development**

**Location: Roosevelt 4**

*Moderators: Susan Palasis, MD and Sanjay P. Prabhu, MBBS, FRCP*

## Wednesday, May 25, 2016

4:45pm – 6:15pm

### Session 18A

#### One Stop Shop Symposium

**Location: Marriott Ballroom**

*Moderator: Charles A. Strother, MD*

4:45pm – 4:50pm

Introduction

4:50pm – 5:10pm

Technology Enabling Multimodality Imaging in the Angiography Suite  
*Guang-Hong Chen, PhD*

5:10pm – 5:30pm

Rationale and Feasibility of Multimodality Imaging in the Angiography Suite. How This Adds Value  
*Prof. Arnd Dörfler, MD*

5:30pm – 5:50pm

The Erlangen Experience with Multimodality Imaging in the Angiography Suite  
*Prof. Tobias Struffert, MD*

5:50pm – 6:10pm

Capabilities of Multi-Modality Imaging Using Cone-beam CT  
*Beverly Aagaard-Kienitz, MD*

6:10pm – 6:15pm

Wrap-up

4:45pm – 6:15pm

### Session 18B

#### CSI Programming: 3D Print

**Location: Washington 4/5/6**

*Moderators: Jonathan M. Morris, MD and Peter Liacouris, PhD*

4:45pm – 5:15pm

Incorporation of 3D Printing into a Quaternary Referral Center: Emphasis on Craniomaxillofacial  
*Jonathan M. Morris, MD*

5:15pm – 5:45pm

3D Printing for Pediatric Neurosurgical Surgical Simulation  
*Sanjay P. Prabhu, MBBS, FRCS*

5:45pm – 6:15pm

Using 3D Printing in the Creation of Plastic Surgery Guides and Maxillofacial Prosthetic Molds  
*Peter Liacouris, PhD*

4:45pm – 6:15pm

### Session 18C

#### ASNR/SNMMI\* Join Session: Integrated Molecular Imaging

**Location: Washington 1/2/3**

*Moderator: John Seibyl, MD*

4:45pm – 5:15pm

Imaging Biomarkers - PET and MRI  
*Sterling C. Johnson, PhD*

5:15pm – 5:45pm

Amyloid PET and IDEAS Study  
*Ilya M. Nasrallah, MD, PhD*

5:45pm – 6:15pm

Clinical Dopamine Imaging in Movement Disorders  
*John Seibyl, MD*

4:45pm – 6:15pm

### Session 18D

#### PARALLEL PAPER SESSION: Turbo Talks – Head and Neck: All Neck Extravaganza

**Location: Roosevelt 1-3**

*Moderators: Robert E. Morales, MD and Luke N. Ledbetter, MD*

\*SNMMI = Society of Nuclear Medicine and Molecular Imaging

**Wednesday, May 25, 2016**

**Continuous Coffee Service** in the  
Technical Exhibition Hall in Exhibit Hall C

**4:45pm – 6:15pm**

**Session 18E**

**Excerpta – II**

**Location: Maryland A/B/C**

*Moderators: Michele H. Johnson, MD and Reza Forghani, MD, PhD*

**4:45pm – 6:15pm**

**Session 18F**

**Study Group - Imaging Genomics (non-CME)**

**Location: Roosevelt 4**

## Thursday, May 26, 2016

6:30am – 8:30am

**Breakfast Concession Stands**

**Locations: Marriott Foyer, Atrium, Exhibit Hall A**

7:30am – 8:30am

### **Session 19A**

**Thursday Morning SAM – Head & Neck – Audience Response (AR) Self Assessment Module (SAM)**

**Location: Marriott Ballroom**

*Moderator: Ashley H. Aiken, MD*

7:30am – 7:55am

Salivary Glands

*Ruth Eliahou, MD*

7:55am – 8:00am

Questions and Answers

8:00am – 8:25am

Deep Spaces of the Neck

*Mari Hagiwara, MD*

8:25am – 8:30am

Questions and Answers

8:35am – 10:00am

### **Session 20A**

**SNIS Programming: Difficult Dilemmas: Safe Solutions for Challenging Situations in the Cavernous Sinus**

**Location: Marriott Ballroom**

*Moderator: Charles J. Prestigiacomo, MD, FAANS, FACS*

8:35am – 9:00am

Cavernous Sinus Anatomy and Its Endovascular Implications

*Charles J. Prestigiacomo, MD, FAANS, FACS*

9:00am – 9:20am

Intra-arterial Approaches to Cavernous Sinus Lesions: Is the “Direct” Route Always the Best?

*Matthew R. Amans, MD, MSc*

9:20am – 9:40am

Transvenous Approaches to Lesions of the Cavernous Sinus: The “Indirect Solution to a Complex Problem

*Krishna Amuluru, MD*

9:40am – 10:00am

Deconstruction Methods and Alternatives to the Treatment of Vascular Lesions of the Cavernous Sinus

*Ferdinand K. Hui, MD*

## Thursday, May 26, 2016

- 8:35am – 10:00am**      **Session 20B**      **Advanced Neuroimaging and Bioinformatics in Neuropsychiatric Disease**  
**Location: Washington 4/5/6**  
*Moderator: John-Paul J. Yu, MD, PhD*
- 8:35am – 8:50am      Substance Use Disorder and Neuroimaging  
*Jody L. Tanabe, MD*
- 8:50am – 9:05am      MS Spectroscopy in Neuropsychiatric Disorders  
*John D. Port, MD, PhD*
- 9:05am – 9:20am      Imaging Genetics of 22q11 Deletion Syndrome  
*James E. Schmitt, MD, PhD*
- 9:20am – 9:35am      Systems Neuroscience, Neuroimaging and Neuropsychiatric Disease  
*John-Paul J. Yu, MD, PhD*
- 9:35am – 9:50am      Overview of Functional Neuroimaging in Neuropsychiatric Disease  
*Leo P. Sugrue, MD, PhD*
- 9:50am – 10:00am      Discussion
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- 8:35am – 10:00am**      **Session 20C**      **PARALLEL PAPER SESSION: Head and Neck: Parathyroid, Thyroid, and Salivary**  
**Location: Washington 1/2/3**  
*Moderators: Tabassum A. Kennedy, MD and Tamara Feygin, MD*
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- 8:35am – 10:00am**      **Session 20D**      **PARALLEL PAPER SESSION: Turbo Talks – Neurovascular Imaging Advances**  
**Location: Roosevelt 1-3**  
*Moderators: Pamela W. Schaefer, MD and Edmond A. Knopp, MD*
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- 8:35am – 10:03am**      **Session 20F**      **PARALLEL PAPER SESSION: Pediatrics: Brain Imaging Advances**  
**Location: Roosevelt 4**  
*Moderators: Laura L. Hayes, MD and Arastoo Vossough, PhD, MD*
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- 10:00am – 10:30am**      **Morning Beverage Break**  
**Location: Marriott Foyer**

## Thursday, May 26, 2016

- 10:30am – 12:00pm**      **Session 21A**      **ASSR Programming: Oncologic Spine Imaging and Interventional Procedures**  
**Location: Marriott Ballroom**  
*Moderators: Jack W. Jennings, MD, PhD and Wade H.M. Wong, DO*
- 10:30am – 10:50am**      Oncology: The New Frontier for the Spinal / Pain Interventionalist  
*Wade H.M. Wong, DO*
- 10:50am – 11:10am**      MR Perfusion of Spinal Metastatic Disease: Implications for Treatment and Response to Therapy  
*Sasan Karimi, MD*
- 11:10am – 11:30am**      Tumor Albation and Vertebral Augmentation for Spinal Metastatic Disease  
*Jack W. Jennings, MD, PhD*
- 11:30am – 11:50am**      Endovascular Treatment of Spinal Metastatic Lesions  
*Huy M. Do, MD*
- 11:50am – 12:00pm**      Discussion
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- 10:30am – 12:00pm**      **Session 21B**      **CSF Programming: Normal Pressure Hydrocephalus (NPH) and Pseudotumor**  
**Location: Washington 4/5/6**  
*Moderator: Meng Law, MD, MBBS, FRACR*
- 10:30am – 10:55am**      Physiology and Imaging of CSF Flow  
*Ari M. Blitz, MD*
- 10:55am – 11:20am**      TimSLIP in Evaluation of NPH  
*Meng Law, MD, MBBS, FRACR*
- 11:20am – 11:45am**      Idiopathic Intracranial Hypertension  
*William P. Dillon, MD*
- 11:45am – 12:00pm**      Discussion
- 
- 10:30am – 12:00pm**      **Session 21C**      **PARALLEL PAPER SESSION: Head & Neck: The Orbital Neighborhood**  
**Location: Washington 1/2/3**  
*Moderators: Rihan Khan, MD and Jeffrey A. Bennett, MD*
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- 10:30am – 12:00pm**      **Session 21D**      **PARALLEL PAPER SESSION: Turbo Talks – Intracranial Vascular Procedures**  
**Location: Roosevelt 1-3**  
*Moderators: Matthew R. Amans, MD, MSc and John H. Rees, MD*
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- 10:30am – 12:00pm**      **Session 21F**      **Excerpta – III**  
**Location: Roosevelt 4**  
*Moderators: Gaurav Jindal, MD and Daniel Mandell, MD, PhD, FRCPC*
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- 10:30am – 1:30pm**      **Lunch Concession Stands**  
**Locations: Marriott Foyer, Atrium, Exhibit Hall A**

## Thursday, May 26, 2016

**12:15pm – 1:00pm**     **How-To Session – Philips Healthcare (non-CME)**  
**Location: Marriott Ballroom**

**1:15pm – 2:45pm**     **Session 22A     Multiple Sclerosis Audience Response (AR) Self Assessment Module (SAM)**  
**Location: Marriott Ballroom**  
*Moderator: Aaron S. Field, MD, PhD*

1:15pm – 1:40pm     MS Diagnosis and Therapy: State of the Science  
*Peter A. Calabresi, MD*

1:40pm – 2:10pm     Advanced Neuroimaging in MS  
*Daniel S. Reich, MD, PhD*

2:10pm – 2:30pm     Differential Diagnosis in MS Imaging  
*Aaron S. Field, MD, PhD*

2:30pm – 2:45pm     Questions and Answers

**1:15pm – 2:45pm**     **Session 22B     SNIS Programming: Seeing Aneurysms a Whole New Way: Biophysics and Computational Fluid Dynamics of Aneurysms**  
**Location: Washington 4/5/6**  
*Moderator: Charles J. Prestigiacomo, MD, FAANS, FACS*

1:15pm – 1:35pm     Designing Aneurysms: A Primer on Advanced Computational Fluid Dynamics  
*Adel M. Malek, MD, PhD*

1:35pm – 1:55pm     Merging Biomathematics and CFD: From Equation to Patient Care  
*Charles J. Prestigiacomo, MD, FAANS, FACS*

1:55pm – 2:15pm     Patient-Specific CFD: Personalized Medicine in Aneurysm Therapy?  
*Matthew J. Gounis, PhD*

2:15pm – 2:35pm     CFD and Device Assessment: Can We Predict the Optimal Treatment  
*Juan R. Cebral, PhD*

2:35pm – 2:45pm     Panel Discussion

**1:15pm – 2:45pm**     **Session 22D     PARALLEL PAPER SESSION: Advances in CNS Tumor Imaging and Treatment**  
**Location: Roosevelt 1-3**  
*Moderators: Daniel P. Barboriak, MD and Jacqueline A. Bello, MD, FACR*

**1:15pm – 2:45pm**     **Session 22F     PARALLEL PAPER SESSION: Intracranial Plaque and Vessel Wall Imaging**  
**Location: Roosevelt 4**  
*Moderator: Bruce A. Wasserman, MD and Fletcher M. Munter, MD*

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# 2016 PARALLEL SCIENTIFIC PAPER SESSIONS AT-A-GLANCE



Washington, D.C. ★ Washington Marriott Wardman Park ★  
May 23-26, 2016

## MONDAY

Roosevelt 1-3 (Exhibition Level)

### SESSION 2D

#### Turbo Talks – Aneurysms: Imaging and Intervention

**0-1 • 8:35:00 AM** • Younger Patients are at Higher Risk for Rupture when Multiple Intracranial Aneurysms are Present

**0-2 • 8:38:00 AM** • Aneurysm Location and Size Predict Rupture in Patients with Multiple Intracranial Aneurysms

**0-3 • 8:41:00 AM** • Volume, Surface Area and Surface Area to Volume Ratio: A Potentially Useful Measures in the Management of Patients with Small Intra-cranial Aneurysms.

**0-4 • 8:44:00 AM** • Posterior Communicating Artery Aneurysms Exhibit Higher Growth Rate and Aspect Ratio vs. Other Growing Aneurysms

**0-5 • 8:47:00 AM** • Hemodynamic Differences between Unstable and Stable Unruptured Aneurysms Independent of Size and Location: Pilot Study

**0-6 • 8:50:00 AM** • Hemodynamic Differences Between Basilar Tip and Internal Carotid Bifurcation Aneurysms

**0-7 • 8:53:00 AM** • Association of intracranial aneurysm flow conditions with inflammation and degenerative changes of the aneurysm wall

**0-8 • 8:56:00 AM** • Growing Aneurysms Show an Increase in Wall Shear Stress Over Time.

**0-9 • 8:59:00 AM** • Long-Term Clinical and Angiographic Outcomes in 140 Patients with 166 Cerebral Aneurysms Treated with the Pipeline Embolization Device: A Multi-Center Cohort Study

**0-10 • 9:02:00 AM** • Buenos Aires experience using a full retrievable flow diverter for the treatment of intracranial aneurysms

**0-11 • 9:05:00 AM** • In-stent Stenosis in Flow Diverting Implants (PED, p64): Infrequent and Transient

**0-12 • 9:08:00 AM** • Statin Use Does Not Affect Occlusion And Neurological Morbi-Mortality Rates After Pipeline Embolization For Intracranial Aneurysms.

**0-13 • 9:11:00 AM** • Hyperresponse to Platelet Antiaggregants: Tailored Dosage, Monitored with the Multiplate Analyzer

**0-14 • 9:14:00 AM** • Intrasaccular Flow Diversion for Bifurcation and Terminal Aneurysms: Buenos Aires Experience and Long Term Follow Up

**0-15 • 9:17:00 AM** • Interventional device guidance using virtual time resolved 3D fluoroscopy and endoscopy - real time and offline application

**0-16 • 9:20:00 AM** • FLOWMODDA (Flow Models for Deployment of Devices in Aneurysms) – 3D printing of transparent high resolution luminal models of cerebral aneurysms provides low cost patient specific treatment simulation of aneurysmal coil placement

## Monday

Maryland A/B/C (Lobby Level)

### SESSION 2E

#### Primary and Metastatic Brain Tumors: MRI Advances

**0-17 • 8:35:00 AM** • Patterns of Noncontrast-Enhancing Tumor in Glioblastoma

**0-18 • 8:43:00 AM** • Prognostic Value of Short Term Post-chemoradiation MRI in Patients with Glioblastoma Multiforme

**0-19 • 8:51:00 AM** • Primary brain tumors in Language Associated Brodmann Areas (LABA)

**0-20 • 8:59:00 AM** • Different Diagnostic Values of Imaging Parameters to Predict Pseudoprogression in Glioblastoma Subgroups Stratified by MGMT Promoter Methylation

**0-21 • 9:07:00 AM** • Prediction of Pattern of Progression and Time to Progression in Recurrent Primary Glioblastoma Multiforme Treated With Bevacizumab

**0-22 • 9:15:00 AM** • The Application of Standard/Delayed Contrast MRI for Early Prediction of Recurrent High Grade Glioma (rHGG) Response to Bevacizumab

**0-23 • 9:23:00 AM** • Tumor Recurrence or Radiation Necrosis That Is the Question: A Systematic Review and Meta-Analysis of Advanced Magnetic Resonance Methods

**0-24 • 9:31:00 AM** • Response Assessment of Cerebral Metastases Treated With High-Dose Stereotactic Radiation: Looking at the Trend of MR Diffusion and Perfusion Biomarkers

**0-25 • 9:39:00 AM** • Use of Susceptibility-Weighted Imaging to Assess Hemorrhage in the Brain Metastases

**0-26 • 9:47:00 AM •** Intracranial Metastases Detection and Gadobutrol Contrast Dose on MRI Prior to Stereotactic Radiosurgery

**0-27 • 9:55:00 AM •** Maximum Intensity Projection Improves Detection of Small Brain Metastases.

**0-27a • 10:03:00 AM •** An Image-Centric Data Mining Platform for Applying Machine Learning and Quantitative Image Analysis Algorithms in Radiology – Application to the Prediction of Lower Grade Gliomas in the TCGA Database on the Basis of Morphologic Parameters

## Monday

Roosevelt 4 (Exhibition Level)

### SESSION 2F

#### Advances in Functional and Structural CNS MRI

**0-28 • 8:35:00 AM •** Cumulative effect of MRIs on cardiac rhythm management devices

**0-29 • 8:43:00 AM •** Clinical Uses of Resting-State Functional Magnetic Resonance Imaging

**0-30 • 8:51:00 AM •** Basal Ganglia Network Functional Connectivity in HIV Infection

**0-31 • 8:59:00 AM •** Measuring resting-state changes in multiple sclerosis patients after a neurorehabilitation program. A feasibility study using classical block-design functional magnetic resonance studies.

**0-32 • 9:07:00 AM •** Effect of Geometric Distortion Correction on Thickness and Volume Measurements of Cortical Parcellations

**0-33 • 9:15:00 AM •** Altered Structure in the Brains of Cervical Spondylotic Myelopathy Patients

**0-34 • 9:23:00 AM •** Large scale study on multi-modal brain mapping as a predictive tool of focal neural deficit and brain plasticity.

**0-35 • 9:31:00 AM •** The Effect of Language Task Selection on the Preoperative Mapping of Wernicke's Area.

**0-36 • 9:39:00 AM •** Distinct Pattern of Cerebral Hypoperfusion Distinguishes Cognitively Impaired HIV Patients

**0-37 • 9:47:00 AM •** Evaluation of response to stereotactic radiosurgery in brain metastases using multimodal MRI

**0-38 • 9:55:00 AM •** Track-Density Images Demonstrates White Fiber Density Changes after Radiosurgical Anterior Capsulotomy for Obsessive Compulsive Disorder

## Monday

Washington 1/2/3 (Exhibition Level)

### SESSION 3C

#### Spine: Imaging and Intervention

**0-39 • 10:30:00 AM •** MR Angiographic Diagnosis of Spinal Epidural Arterio-Venous Fistulas with Perimedullary Reflux

**0-40 • 10:38:00 AM •** Ascending and Descending Thoracic Vertebral Arteries in Man

**0-41 • 10:46:00 AM •** Spinal Cord Cavernous Malformations in a Large Familial Population

**0-42 • 10:54:00 AM •** Vascular imaging of the spine in the US Medicare Population: Catheter and MR angiography volumes from 2001 to 2013

**0-43 • 11:02:00 AM •** MR Myelography in Rat Spinal Cord Demonstrates Communication Between Interstitial Spaces and the Subarachnoid Space

**0-44 • 11:10:00 AM •** Radiological outcome following traumatic grade 1 injury in blunt cerebrovascular injury patients: a retrospective analysis of a level 1 trauma center

**0-45 • 11:18:00 AM •** CT-Guided Lumbar Transforaminal Epidural Steroid Injections: Incidental Extraspinal Findings on Planning Imaging

**0-46 • 11:26:00 AM •** CT-Fluoroscopic Lumbar Transforaminal Epidural Steroid Injections: Extraforaminal Needle Tip Position Reduces Risk of Intravascular Injection

**0-47 • 11:34:00 AM •** Correlation between MRI Findings and Outcomes from Lumbar Therapeutic Facet Joint Injections

**0-48 • 11:42:00 AM •** Prevention of Oxaliplatin-Induced Neuropathy by using Minocycline as a Chemoprotectant: Demonstration by Imaging and Behavioral Assessment

**0-49 • 11:50:00 AM •** Neurographic Imaging as a Biomarker for Detecting Radiation Injury to the Spinal Cord

## Monday

Roosevelt 1-3 (Exhibition Level)

### SESSION 3D

#### Turbo Talks - Advanced MRI: From Microstructure to Function

**0-50 • 10:30:00 AM •** Flying High – White Matter Integrity in High Altitude Pilots

**0-51 • 10:33:00 AM** • Diffusion kurtosis and derived White Matter Tract Integrity (WMTI) Metrics in the Fornix Differ in Beta-Amyloid Positive versus Negative Groups

**0-52 • 10:36:00 AM** • Comparison of arterial spin labeling with [15O]-water PET at baseline and after Diamox by simultaneous PET-MRI

**0-53 • 10:39:00 AM** • Determining the Accuracy of Resting-State Functional Magnetic Resonance Imaging in Lateralizing Language Dominance

**0-54 • 10:42:00 AM** • Resting State- fMRI Demonstrate Significant Alterations in Brain Connectivity and Intra-Cerebral Networks in SLE Patients.

**0-55 • 10:45:00 AM** • Improved T1 Weighted Black Blood Vessel Wall Imaging using Distributed Spirals, Variable Density Sampling and Constrained Reconstruction: Initial Clinical Experience.

**0-56 • 10:48:00 AM** • Transient Oxygen Exchange Fraction through the Cardiac Cycle as Measure of Cerebrovascular Reserve

**0-57 • 10:51:00 AM** • Usefulness of Transit Time Corrected Arterial Spin Labeling: Correlation with Dynamic Susceptibility Contrast Perfusion MR

**0-58 • 10:54:00 AM** • Grey Matter Graphs: a new method to explore cognitive decline and brain disconnection in MS

**0-59 • 10:57:00 AM** • Famous Faces and the Right Temporal Lobe in Primary Progressive Aphasia

**0-60 • 11:00:00 AM** • The activity ratio of 18F-fluorodopa uptake in midbrain-occipital separates patients with Parkinson disease from non-Parkinson.

**0-61 • 11:03:00 AM** • Performance of Complex Tasks of Working Memory Related to Brain Tissue Microstructure: a Diffusion Kurtosis Imaging Study

**0-63 • 11:09:00 AM** • A Simplified Model for Intravoxel Incoherent Motion MRI of the Brain: Clinical Validation for Perfusion Imaging of Gliomas and Acute Strokes

**0-64 • 11:12:00 AM** • Highly Accurate Measurement Of Brain T1 Values Prior to and Following Administration of a Gadolinium Based Contrast Agent. A Feasibility Study Using a Modified MOLLI Technique At 1.5 and 3T.

**0-65 • 11:15:00 AM** • High Flight - Acute Effects of a Single High Altitude Exposure on the Brain

## Monday

Maryland A/B/C (Lobby Level)

### SESSION 3E

#### Pediatrics: Head Injury, Spine Techniques, and Radiation Dose

**0-66 • 10:30:00 AM** • Cumulative Subconcussive Head Impact Exposure in Youth Football Results in Microstructural Changes in Corpus Callosum

**0-67 • 10:38:00 AM** • Season of High School Football Increases MEG Low-Frequency Brain Waves

**0-68 • 10:46:00 AM** • Incidence of Microhemorrhages in High School Football Players over a Season of Play

**0-69 • 10:54:00 AM** • The effect of early MRI in the management of Children with Head Injury Requiring admission to the Pediatric Intensive Care Unit

**0-70 • 11:02:00 AM** • Imaging Factors Predicting Need for Surgery in Chiari 1 Malformation

**0-71 • 11:10:00 AM** • A Multi-Institutional Study of Presyrinx in Chiari I Patients with Emphasis on Spinal Canal Dimensions

**0-72 • 11:18:00 AM** • Spinal Cord Syring: Does Gadolinium Aid in The Diagnosis?

**0-73 • 11:26:00 AM** • High Resolution Lumbar Neurography with 3D Turbo Spin Echo MRI: Initial Experience in Children

**0-74 • 11:34:00 AM** • Optimizing the Balance between Radiation Dose and Image Quality in Pediatric Head CT

**0-75 • 11:42:00 AM** • The Role of Indication Based Protocols in Reducing Overall Head and Neck CT Scan Radiation Dose in Pediatric Patients

**0-76 • 11:50:00 AM** • Craniosynostosis CT at Radiation Dose of Less than 0.1 mSv: Role of Low Tube Potential and Iterative Reconstruction

## Monday

Roosevelt 1-3 (Exhibition Level)

### SESSION 4D

#### Turbo Talks – Adult Brain Tumors: Diffusion, Perfusion and Beyond

**0-77 • 1:15:00 PM** • MR Perfusion Imaging in the Evaluation of High Grade Gliomas After Treatment: A Systematic Review And Meta-Analysis

**0-78 • 1:18:00 PM •** Combined MR Perfusion and Diffusion for Differentiation of Post-treatment Changes from Recurrent High Grade Glioma

**0-79 • 1:21:00 PM •** Multi-Center Study demonstrates Dynamic Contrast Enhanced Permeability MRI differentiates pseudoprogression from true disease progression in primary high-grade gliomas and metastatic melanoma

**0-80 • 1:24:00 PM •** High Resolution DCE MRI permeability differentiates pseudoprogression from true disease progression in primary high-grade gliomas and metastatic melanoma

**0-81 • 1:27:00 PM •** The change in the apparent diffusion coefficient values predicts survival after intra-arterial bevacizumab administration in patients with recurrent glioblastomas

**0-82 • 1:30:00 PM •** Restriction Spectrum Imaging and EGFR Status Predict Post-Bevacizumab Survival in Patients with High-Grade Glioma.

**0-83 • 1:33:00 PM •** Perfusion spectral imaging (PSI) in human brain tumors

**0-84 • 1:36:00 PM •** The Utility of 18F-Fluoroethyl Tyrosine PET CT in the Evaluation of Glioma Recurrence Patterns.

**0-85 • 1:39:00 PM •** Aromatic-rNOE-suppressed amide-CEST-MRI at 7 Tesla provides a unique contrast in human glioblastoma

**0-86 • 1:42:00 PM •** Sequential MR Diffusion for Assessment of Tumor Progression in Patients with Low-Grade Glioma

**0-87 • 1:45:00 PM •** Relationship of Cerebral Blood Volume with IDH Mutation Status and Survival in Lower Grade Gliomas: A TCGA/TCIA Project

**0-88 • 1:48:00 PM •** Diffusion Kurtosis Imaging in Differentiation of Peritumoral Edema Between Brain Metastases and Primary Glioblastomas

**0-89 • 1:51:00 PM •** Temporal evolution of IVIM perfusion fraction following stereotactic radiosurgery of brain metastases.

**0-90 • 1:54:00 PM •** Ferumoxytol enhanced MRI detection of intracranial metastatic disease

**0-91 • 1:57:00 PM •** Intraoperative Contrast-Enhanced Ultrasound (iCEUS), its Utility in Cranial Neurosurgery and a Method for Obtaining Quantitative Perfusion Data on Intracranial Tumors and Tumor-Like Lesions.

**0-92 • 2:00:00 PM •** Neuroimaging and Laser Interstitial Therapy

## Monday

Maryland A/B/C (Lobby Level)

### SESSION 4E

#### Excerpta - I

**E-01 • 1:15:00 PM •** The temporal appearances of intracranial aspergillosis

**E-02 • 1:20:00 PM •** Microarteriovenous Malformations of Hereditary Hemorrhagic Telangiectasia: Utility of Arterial Spin Labeling Perfusion MRI

**E-03 • 1:25:00 PM •** Developmental Venous Anomalies (DVAs) Mimicking Neoplasm on 11C-Methionine PET and DSC Perfusion MRI.

**E-04 • 1:30:00 PM •** Primary Leptomeningeal Atypical Teratoid/Rhabdoid Tumor: Case Report

**E-05 • 1:35:00 PM •** Central Nervous System Imaging Findings in Bannayan-Riley-Ruvalcaba syndrome (BRRS)

**E-06 • 1:40:00 PM •** Positional CSF Leakage Into the Lumbar Subdural Space

**E-07 • 1:45:00 PM •** Lateral Meningocele Syndrome: Imaging Findings of a Rare Disorder

**E-08 • 1:50:00 PM •** Close your windows at night! An unusual cause of cauda equina enhancement

**E-09 • 1:55:00 PM •** Blastomycosis of Lumbar Spine with Iliopsoas Abscess: TB or not TB.

**E-10 • 2:00:00 PM •** Idiopathic Hypertrophic Pachymeningitis of the Cervical Spine

**E-11 • 2:05:00 PM •** Chondroblastic Osteosarcoma of the Pelvis: A Rare Variant with Cartilaginous Imaging Features

**E-12 • 2:10:00 PM •** A Case of Multiple Intra-spinal Melanocytic Tumours Mimicking Radiological Features of Neurofibromatosis Type II

**E-13 • 2:15:00 PM •** A Case of Chronic Lymphocytic Inflammation with Pontine Perivascular Enhancement Responsive to Steroids (CLIPPERS) with Diffuse CNS Involvement

**E-14 • 2:20:00 PM •** Chemotherapy-Induced Myelopathy after Intrathecal Chemotherapy; Magnetic Resonance Imaging Findings.

**E-15 • 2:25:00 PM •** A Case of Hirayama Disease.

**E-16 • 2:30:00 PM •** Paralysis in Morquio Syndrome: Catastrophic Consequence of Untreated Cervical Instability

**E-17 • 2:35:00 PM •** Non-traumatic Cervical Spinal Subarachnoid Hemorrhage from a Radiculomedullary Artery Pseudoaneurysm

**E-18 • 2:40:00 PM •** Supratentorial Intracerebral Schwannoma: Very Rare Variant Location of an Otherwise Common Tumor

## Monday

Roosevelt 4 (Exhibition Level)

### SESSION 4F

#### Interventional Management of CNS Aneurysms

**O-93 • 1:15:00 PM •** Distinct Morphological Changes Found in Longitudinal Comparison of Growing vs. Stable Aneurysms

**O-94 • 1:23:00 PM •** Association of Aneurismal Rupture with the Lunar Cycle

**O-95 • 1:31:00 PM •** Canadian Registry of LVIS Jr for Treatment of Intracranial Aneurysms (CaRLA)

**O-96 • 1:39:00 PM •** Initial results with Pulserider in Buenos Aires and long-term follow up. First in man experience.

**O-97 • 1:47:00 PM •** Initial experience with a low profile-microcatheter and small flow diverter device, Fred Jr.

**O-98 • 1:55:00 PM •** Computation of the Change in Length of a Flow Diverter when Deployed in Realistic Vessel Models

**O-99 • 2:03:00 PM •** Intra-Operative Rupture with Balloon-Assisted Coiling is Associated with a High Rate of Good Clinical Outcome

**O-100 • 2:11:00 PM •** Patient Outcomes, Aneurysm Occlusion, and Cerebral Infarction Following Endovascular Treatment of Dissecting Vertebral Artery Aneurysms

**O-101 • 2:19:00 PM •** Real-time Fluoroscopic Evaluation of Ommaya Reservoir Integrity

**O-102 • 2:27:00 PM •** Anatomy of the basilar artery tip in the presence of a persistent trigeminal artery. What can we learn about the origin of posterior cerebral, superior cerebellar and basilar tip perforating arteries.

**O-463 • 2:35:00 PM •** Automated and Quantitative Angiographically Based Assessment of Pial Collaterals during Acute Ischemic Stroke

## Monday

Roosevelt 1-3 (Exhibition Level)

### SESSION 5D

#### Turbo Talks – CNS Tumors: Biomarkers, Genomics, and Radiomimics

**O-103 • 3:00:00 PM •** Preclinical Validation of Radiogenomics in Glioblastoma

**O-104 • 3:03:00 PM •** Association of angiogenesis microstructure characteristics with molecular genomic biomarkers and their survival predictive value in patients with glioblastoma – A study using ROI-based measurement and voxel-based histogram analysis of MR dynamic susceptibility contrast perfusion weighted imaging

**O-105 • 3:06:00 PM •** Radiogenomic Mapping in Enhancing Volume Phenotype Identifies Novel Drivers in Glioblastoma Proliferation: Comprehensive Genomic, Proteomic, MicroRNA and Pathway Analysis

**O-106 • 3:09:00 PM •** Fast whole brain multispectral pH-weighted molecular MRI in human gliomas using multi-echo amine CEST EPI

**O-107 • 3:12:00 PM •** Relationship of Subventricular Zone with Tumor Genomics and Survival in Gliomas: A TCGA/TCIA Project

**O-108 • 3:15:00 PM •** Prognostic Imaging Markers in Triple Negative Lower Grade Gliomas: A TCGA/TCIA Project

**O-109 • 3:18:00 PM •** T2-FLAIR Mismatch, a Potential Imaging Biomarker for IDH Mutant Status in Lower Grade Gliomas: A TCGA/TCIA Project

**O-110 • 3:21:00 PM •** Predilection of Genomic Markers and Contrast-Enhancement of Lower Grade Gliomas by Anatomic Lobe: A TCGA/TCIA Project

**O-111 • 3:24:00 PM •** Radiological Features Combined with the IDH1 Status in Predicting the Survival Outcome of Glioblastoma Patients

**O-112 • 3:27:00 PM •** Reliability of Noncontrast-Enhancing Tumor as a Biomarker of IDH1 Mutation Status in Glioblastoma

**O-113 • 3:30:00 PM •** FLAIR Imaging Pattern can Predict IDH Status in Lower Grade Gliomas.

**O-114 • 3:33:00 PM •** Correlation Between MR Imaging Features and IDH Mutational Status in Lower Grade Gliomas

**O-115 • 3:36:00 PM •** Radiomics differentiate between true progression and pseudoprogression in GBM patients.



**O-116 • 3:39:00 PM •** Radiographic patterns of progression with associated outcomes after bevacizumab therapy in glioblastoma patients

**O-117 • 3:42:00 PM •** Large-scale radiomic profiling of glioblastoma identifies an imaging signature for predicting and stratifying antiangiogenic treatment response

**O-118 • 3:45:00 PM •** Quantitative Features of High-grade Gliomas Predictive of Treatment Response to Anti-PD-1 Immunotherapy

## Monday

Maryland A/B/C (Lobby Level)

### SESSION 5E

#### Head & Neck: Skull Base and Temporal Bone

**O-119 • 3:00:00 PM •** Application of Iterative Reconstruction Algorithms to Perform Sub-millisievert CT of the Facial Bones and Paranasal Sinuses

**O-120 • 3:08:00 PM •** Cracking the Code of Temporal Bone and Skull Base Anatomy with 3D Printing: A Conceptual Approach

**O-121 • 3:16:00 PM •** In Pediatric Patients with Hypoplastic Internal Auditory Canals, What is the Utility of Thin-Section T2-Weighted Imaging to Determine the Contents of the IAC?

**O-122 • 3:24:00 PM •** Detecting Meniere's disease in conventional MRI scans using radiomics

**O-123 • 3:32:00 PM •** Detection of Endolymphatic Hydrops in Meniere's Disease Using Traditional MR Imaging Sequences

**O-124 • 3:40:00 PM •** Skull Base Hemangioma Masquerading as Vascular Tumors

**O-125 • 3:48:00 PM •** Dural Metastases: A Form of Recurrence in Uncommon Sinonasal Malignancies

**O-126 • 3:56:00 PM •** Radiographic Findings in Primary Intraosseous Meningiomas: 9 Patients with Operative and Pathologic Confirmation

**O-127 • 4:04:00 PM •** Unusual Extradural Plasmacytoma of the Head and Neck: A Case Series

**O-128 • 4:12:00 PM •** Migration of Bone Wax into the Dural Venous Sinuses Following Posterior Fossa Surgery

**O-129 • 4:20:00 PM •** The CT Prevalence of Arrested Pneumatization of the Sphenoid Sinus in Patients with Sickle Cell Disease

**O-129a • 4:28:00 PM •** Dynamic contrast enhanced MRI derived intracellular water lifetime (tau<sub>i</sub>): a prognostic marker for patients with squamous cell carcinomas of head and neck.

## Monday

Roosevelt 4 (Exhibition Level)

### SESSION 5F

#### Spine: Trauma & Techniques

**O-130 • 3:00:00 PM •** Cervical Spine Clearance After Blunt Traumatic Injury: A Meta-Analysis

**O-131 • 3:08:00 PM •** CSF Pulsations in the Spinal Canal in Acute Traumatic Spinal Stenosis Patients: Evidence of Interstitial Movement of Fluid and Spinal Cord Sources and Sinks

**O-132 • 3:16:00 PM •** Isolated Increased STIR signal of the Posterior Atlanto-occipital and Atlanto-axial Membranes: A Reliable Indicator of Acute C1-C2 Fractures on MRI

**O-133 • 3:24:00 PM •** Comparative diagnostic evaluation of CT vs MR with management/outcomes in cervical spine trauma based on age and injury appearance pattern

**O-134 • 3:32:00 PM •** Atlas-based quantitative analysis of T2 signal abnormality in the spinal cord predicts outcome in acute flaccid paralysis.

**O-135 • 3:40:00 PM •** Paraspinal Edema on Unenhanced MRI is Highly Sensitive for the Detection of Lumbar Spinal Epidural Abscess

**O-136 • 3:48:00 PM •** Bone texture analysis of lumbar spine on CT to detect early finding of multiple myeloma: Comparison of control subjects with normal bone density, patients with osteoporosis, and patients with multiple myeloma

**O-137 • 3:56:00 PM •** Spinal Osseous Involvement of Sarcoidosis

**O-138 • 4:04:00 PM •** The effect of lytic lesions on the kinematic response of human thoracolumbar spines

**O-139 • 4:12:00 PM •** Diagnostic Quality of 3D T2-SPACE Compared to T2 2D-FSE in Evaluating Cervical Spine MRI Anatomy

**O-140 • 4:20:00 PM •** The Mushroom Herniation; a New Radiological Sign in Herniated Lumbar Discs Anticipating a More Difficult Nerve Root Decompression Procedure.

## Monday

Roosevelt 1-3 (Exhibition Level)

### SESSION 6D

#### **Turbo Talks – Advanced Pediatric MRI / Gadolinium Deposition**

**O-141 • 4:45:00 PM** • An Investigation of Visualization Improvement Algorithms Using Color Transformation Techniques for Clinical Pediatric Spinal Cord MRI Images in Healthy Subjects and Patients with Spinal Cord Injury

**O-142 • 4:48:00 PM** • Diffusion Tensor Imaging of the Cervical and Thoracic Spinal Cord in Pediatric Subjects using an Inner FOV 2DRF Pulse Sequence.

**O-143 • 4:51:00 PM** • Reduced FOV Diffusion Tensor MR Imaging and Fiber Tractography of the Pediatric Cervical Spinal Cord

**O-144 • 4:54:00 PM** • Atrophy and DTI in Pediatric Spinal Cord Injury: Correlation of DTI Metrics to Spinal Cord Cross Sectional Area

**O-145 • 4:57:00 PM** • Accuracy of Neuroimaging to Detect Retinal Pathology in Children Suffering From Accidental and Non-accidental Trauma; Can Ophthalmic Ultrasound Serve as a Screening Tool?

**O-146 • 5:00:00 PM** • Bridging veins rupture correlates with subdural hemorrhages in abusive head trauma: a volumetric SWI study

**O-147 • 5:03:00 PM** • Repeated Exposure to Gadolinium-based Contrast Material is Associated with Increased Unenhanced T1 Signal Intensity in the Pediatric Brain.

**O-148 • 5:06:00 PM** • Intracranial Gadolinium Deposition in the Pediatric Population Following Contrast Enhanced MRI.

**O-149 • 5:09:00 PM** • Retention of Linear Gadolinium-based Contrast Agents in the Dentate Nuclei and Globus Pallidus in Pediatric Patients with CNS Neoplasm Who Are Long-term Survivors

**O-150 • 5:12:00 PM** • In pediatric patients, increased T1 signal intensity in the dentate nucleus on unenhanced T1-weighted MR images correlates to number of previous gadolinium contrast administrations

**O-151 • 5:15:00 PM** • Asymptomatic gadolinium deposition in the dentate and other deep grey nuclei in children and adults: influence of cumulative dose and radiochemotherapy

**O-152 • 5:18:00 PM** • Absence of T1 Hyperintensity in the Dentate or Globus Pallidus in 48 Subjects Receiving 4 or More Doses of Gadobenate Dimeglumine Before Age 3

**O-153 • 5:21:00 PM** • Placental vascular pathology correlates with MRI in perinatal ischemic stroke

**O-154 • 5:24:00 PM** • Cerebellar involvement in neonatal hypoxic-ischemic injury: A diffusion tensor imaging study

**O-155 • 5:27:00 PM** • Texture analysis features reveal selective vulnerability of thalamic nuclei in mice after hypoxic-ischemic injury

**O-156 • 5:30:00 PM** • Brain Injury Detected with MRI scan in Neonates with Hypoxic-Ischemic Encephalopathy and Seizures

## Monday

Roosevelt 4 (Exhibition Level)

### SESSION 6F

#### **Thrombosis, Clot Detection and CNS Hemorrhage**

**O-157 • 4:45:00 PM** • Carotid MPRAGE Improves Detection of Simultaneous Bilateral Stroke Sources

**O-158 • 4:53:00 PM** • Thrombus perviousness is related to outcome in patients with acute ischemic stroke

**O-159 • 5:01:00 PM** • The susceptible vessel sign (SVS) for detection of arterial occlusive thrombosis on Susceptibility Weighted Images (SWI) in acute stroke patients: correlation with infarct volume.

**O-160 • 5:09:00 PM** • Imaging-based venous biomarkers in acute stroke patients

**O-161 • 5:17:00 PM** • Quality of Resident MRI Preliminary Reports following a 6-Minute MRI Stroke Protocol in the setting of hyperacute stroke.

**O-162 • 5:25:00 PM** • Role of Prothrombin Complex Concentrate (PCC) in Acute Intracerebral Hemorrhage with Positive CTA Spot Sign: An Institutional Experience at a Regional and State Designated Stroke Center

**O-163 • 5:33:00 PM** • Utility of diffusion and perfusion MRI for predicting perihemorrhagic edema growth after intracerebral hemorrhage

**O-164 • 5:41:00 PM** • Predicting Motor Outcome in Acute Intracerebral Hemorrhage

**O-165 • 5:49:00 PM** • Diagnostic Value of the MRI in Spontaneous Subarachnoid Hemorrhage of Unknown Origin

**O-166 • 5:57:00 PM** • Changes in Cerebral Perfusion with Induced Hypertension in Aneurysmal Subarachnoid Hemorrhage



**0-167 • 6:05:00 PM •** Correlation of Histological Evidence of Remote Hemorrhage and Susceptibility-Sensitive MRI for the Assessment of Rupture Risk in Brain AVM

**0-380 • 6:13:00 PM •** The effects of glioma in corticospinal tract area on motion function: evaluation with diffusion tensor imaging

## Tuesday

Washington 1/2/3 (Exhibition Level)

### SESSION 8C

#### Multiple Sclerosis / Adult Brain MRI

**0-168 • 8:35:00 AM •** T1 Relaxation Times in Multiple Sclerosis Lesions improve correlation with clinical disability in Multiple Sclerosis patients: A longitudinal survey.

**0-169 • 8:43:00 AM •** Reproducibility of Cortical Lesion Detection on Double Inversion Recovery MRI applying the MAGNIMS-Criteria in Multiple Sclerosis Patients Within a 16-Months Period

**0-170 • 8:51:00 AM •** T1 dark blood technique increases sensitivity for detection of contrast enhancing lesion in MS

**0-171 • 8:59:00 AM •** Regional quantitative susceptibility mapping of the thalami, not volumes, is associated with clinical disability in multiple sclerosis

**0-172 • 9:07:00 AM •** Comparison of quantitative cerebral blood flow between pseudo-Continuous Arterial Spin Labelling and Bookend perfusion imaging in Relapsing Remitting Multiple Sclerosis

**0-173 • 9:15:00 AM •** Molecular Imaging Profiling of Treatment Effects in Experimental Multiple Sclerosis Reveals a Novel Mechanism of Action of Interferon-beta

**0-174 • 9:23:00 AM •** Sodium MRI in Multiple Sclerosis: A Biomarker for Intracellular Sodium Accumulation in Acute Lesions of the Brain?

**0-175 • 9:31:00 AM •** Imaging CNS inflammation in patients with genetic mutations in the essential immune checkpoint inhibitor, Cytotoxic T-lymphocyte Antigen-4 (CTLA4).

**0-176 • 9:39:00 AM •** Imaging biomarkers in Neuropsychiatric Lupus- Are they robust enough?

**0-177 • 9:47:00 AM •** Diagnostic Value of Apparent Diffusion Coefficient for the Accurate Assessment and Differentiation of Postoperative Intracranial Abscesses

**0-178 • 9:55:00 AM •** Imaging of Intracranial Central Nervous Complications after Solid Organ Transplantation

## Tuesday

Roosevelt 1-3 (Exhibition Level)

### SESSION 8D

#### Turbo Talks — Traumatic Brain Injury / Epilepsy Advances

**0-179 • 8:35:00 AM •** Standard versus Extended CT Protocols in Head Trauma: radiation dose versus workflow considerations from a Level 1 Trauma Center

**0-180 • 8:38:00 AM •** Longitudinal White Matter Changes Following Traumatic Brain Injury

**0-181 • 8:41:00 AM •** Opposing Patterns of Altered Microstructure in Anterior Versus Posterior Cerebral White Matter After Mild Traumatic Brain Injury

**0-182 • 8:44:00 AM •** Blood in the brain: MRI Differentiation of cerebral fat embolism (CFE) from diffuse axonal injury (DAI)

**0-183 • 8:47:00 AM •** Prevalence of Microhemorrhages, White Matter Changes, and Cavum Septum Pellucidum in Fighters: Part of the Professional Fighters Brain Health Study

**0-184 • 8:50:00 AM •** Splenial Axonal Diffusion in Patients with Mild Traumatic Brain Injury.

**0-185 • 8:53:00 AM •** Altered Default Mode Network Connectivity and Task-related Deactivation in Patients with Mild Traumatic Brain Injury

**0-186 • 8:56:00 AM •** Evaluation of Cerebrovascular Injuries in Blunt Trauma Patients at a Level 1 Trauma Center; the Usefulness of CT Screening

**0-187 • 8:59:00 AM •** Imaging Atlas of Type I and Type II Focal Cortical Dysplasia

**0-188 • 9:02:00 AM •** Discrepancy between MRI and FDG-PET on focal cortical dysplasia

**0-189 • 9:05:00 AM •** Hybrid PET/MR shows reduced CBF and glucose uptake in Subdural Electrode Identified Seizure Foci

**0-190 • 9:08:00 AM •** Coupling of FDG uptake and CBF using simultaneous MR-PET measurements in human temporal lobe epilepsy

**0-191 • 9:11:00 AM •** Amygdala Enlargement in Temporal Lobe Epilepsy

**0-192 • 9:14:00 AM •** Differentiation of Seizure and Other Seizure Mimickers: Clinical Utility of Arterial Spin Labeling Perfusion MRI

**0-193 • 9:17:00 AM •** Predicting Laterality of Seizure Onset Zone by Diffusion Tensor Tractography of Intracranial Depth Electrodes in Patients with Temporal Lobe Epilepsy

**0-194 • 9:20:00 AM •** Registering Post-Op CT and Pre-Op MR Images for Accurate Localization of Intraoperative EEG Electrodes

## Tuesday

Roosevelt 1-3 (Exhibition Level)

### SESSION 10D

#### Turbo Talks – Degenerative Diseases / Gadolinium Deposition

**0-195 • 1:15:00 PM •** Human lifespan age-related changes of the brain proton density by quantitative MRI

**0-196 • 1:18:00 PM •** Structural Connectivity of Distributed Cortical Association Networks Reflects Cognitive Reserve in Autosomal Dominant Familial Alzheimer's Disease

**0-197 • 1:21:00 PM •** Personalized genetic prediction of age-associated Alzheimer's disease risk

**0-198 • 1:24:00 PM •** Apolipoprotein E Genotype and Mesial Temporal Atrophy: Two - year Follow-up in Patients with Stable Mild Cognitive Impairment and with Conversion from Mild Cognitive Impairment to Alzheimer's Disease

**0-199 • 1:27:00 PM •** Parkinson Disease: Diagnostic Utility of Large-Scale Structural Covariant Networks

**0-200 • 1:30:00 PM •** Dentate Nucleus Iron Deposition Is a Potential Biomarker for Tremor-dominant Parkinson's Disease

**0-201 • 1:33:00 PM •** Sex Differences in the Association Between Glycemic Control and Cerebral Blood Flow in African Americans with Type-2 Diabetes: The African-American Diabetes Heart Study MIND

**0-202 • 1:36:00 PM •** Quantitative Gray Matter Calculations in Antiphospholipid Antibody Syndrome: A Novel Tool for Early Detection

**0-203 • 1:39:00 PM •** Brain Volume and Cell Volume Fraction in Adult Survivors of Pediatric Acute Lymphocytic Leukemia measured by Quantitative <sup>23</sup>Na MR Imaging at 9.4 Tesla

**0-204 • 1:42:00 PM •** Practical Low SAR Protocol at 1.5T using Two Magnet Systems for Patients Undergoing Staged DBS Insertion

**0-205 • 1:45:00 PM •** Intracranial Gadolinium Deposition Following Contrast Enhanced MRI in Adult Patients with Normal Brain Pathology.

**0-206 • 1:48:00 PM •** Longitudinal Monitoring of Gadolinium Retention in the Dentate Nucleus and Globus Pallidus in Multiple Sclerosis Patients Within a 16-Months Period

**0-207 • 1:51:00 PM •** High T1 Signal Intensity of Brain Parenchyma after Repetitive Gadobenate Dimeglumine Administration: Evaluation of Multiple Sclerosis versus Tumor Patients

**0-208 • 1:54:00 PM •** Comparison of Tissue Deposition Rates in Multiple Murine Organs Following Intravenous Administration of Linear vs Macrocyclic Gadolinium Chelates

**0-209 • 1:57:00 PM •** Diffusion Tensor Analysis of white matter effects of Gadolinium Deposition

**0-210 • 2:00:00 PM •** How are Radiologists Responding to Gadolinium Deposition?

## Tuesday

Maryland A/B/C (Lobby Level)

### SESSION 10E

#### Pediatric CNS: Vascular Techniques

**0-211 • 1:15:00 PM •** Plural-contrast 3D multi-echo GRE for TOF MR angiogram of the Pediatric Brain.

**0-212 • 1:23:00 PM •** 3T MRA Cavernous ICA Segment Anatomy

**0-213 • 1:31:00 PM •** Normal Quantitative Luminal Metrics of the Major Intracranial Arteries in Infants, Children, & Young Adults

**0-214 • 1:39:00 PM •** Improved Visualization of Pediatric Brain Arteriovenous Malformations Using High-Resolution Vascular MRI and Blood Pool Agent (Ferumoxytol)

**0-215 • 1:47:00 PM •** Pediatric Acetazolamide Perfusion Challenge Using Magnetic Resonance Arterial Spin Labeling Perfusion with and without Sedation.

**0-216 • 1:55:00 PM •** Assessment of Arterial Spin Labeling (ASL) Sequence in the Pediatric Population Presenting with Hemiplegic Migraines.

**0-219 • 2:19:00 PM •** Aberrant Regional Cerebral Cortical Blood Flow Following Preterm Birth

**0-220 • 2:27:00 PM • Impaired Preoperative Brain Metabolism in Newborns with Congenital Heart Disease**

**0-221 • 2:35:00 PM • Default Mode Network (DMN) Activation in Children with Sickle Cell Disease (SCD) Using a Word-Stem Paradigm**

**0-386 • 2:43:00 PM • Identification of Novel Gene-Specific Biomaging Markers in Autism Spectrum Disorder**

## Tuesday

Washington 4/5/6 (Exhibition Level)

### SESSION 11B

#### Stroke: Advanced CT and MR Techniques

**0-222 • 3:00:00 PM • Combined noncontrast CT (NCCT) ASPECT score and CTA collateral score could predict a small DWI lesion with high specificity.**

**0-223 • 3:08:00 PM • Evaluation of a clinical prototype software for rapid automated display and density measurement of ASPECTS regions on CT images**

**0-224 • 3:16:00 PM • Angiographic Reconstructions From Whole-Brain Perfusion CT for the Detection of Large Vessel Occlusion and Recanalization in Acute Stroke**

**0-225 • 3:24:00 PM • Whole Brain CT Perfusion In Acute Stroke Patients With Mild Neurological Symptoms Identifies Ischemic Events**

**0-226 • 3:32:00 PM • CT Perfusion in Acute Lacunar Infarct: Detection Capabilities Based on Infarct Location**

**0-227 • 3:40:00 PM • High Accuracy of MR T2\*W Sequences compared to CTA for Detection of Intracranial Vessel Thrombus in Middle Cerebral Artery Stroke**

**0-228 • 3:48:00 PM • Does Cerebrovascular Reserve measured by CT Perfusion using Acetazolamide challenge predict future Stroke/TIA in Cerebro-vascular Steno-occlusive Disease**

**0-229 • 3:56:00 PM • Performance of User-independent CT Perfusion Software in Predicting Vasospasm After Aneurysmal Subarachnoid Hemorrhage.**

**0-230 • 4:04:00 PM • White matter lesion penumbra shows abnormalities on structural and functional MRI in the CARDIA study**

**0-231 • 4:12:00 PM • Acquiring and Validating Temporal Information in 4D DSA Reconstructions**

**0-232 • 4:20:00 PM • Improved T1 weighted, black blood, vessel wall imaging using distributed spirals, variable density sampling and constrained reconstruction: Initial clinical experience.**

**0-232a • 4:28:00 PM • Intracranial Vessel Wall MRI: Recommendations for Clinical Practice**

## Tuesday

Roosevelt 1-3 (Exhibition Level)

### SESSION 11D

#### Turbo Talks-16 Shades of Grey and White Matter

**0-233 • 3:00:00 PM • Comparison of 3D FLAIR and 3D T2-w Fast Spin-Echo Sequences for Detection of Infratentorial Multiple Sclerosis Lesions**

**0-234 • 3:03:00 PM • Absolute quantification of normal appearing and lesional tissue in Relapse Remitting Multiple Sclerosis with and without cognitive impairment**

**0-235 • 3:06:00 PM • Can Sequential MR diffusion weighted imaging be used to detect active multiple sclerosis lesions and reduce potential risk of gadolinium deposition in patients with multiple sclerosis?**

**0-236 • 3:09:00 PM • Peripheral Rim of High T1 Signal Intensity in MS Plaques on Unenhanced MRI: Evidence of Progressive Gd Deposition.**

**0-237 • 3:12:00 PM • Natalizumab-PML-IRIS: Multiparametric MRI Findings and Time Course**

**0-238 • 3:15:00 PM • Early MRI Characteristics of Cerebral Lesions in Asymptomatic Boys with X-linked Adrenoleukodystrophy: Focus on the Hot Spots**

**0-239 • 3:18:00 PM • The Current MRI Scoring System for Cerebral Adrenoleukodystrophy does Not Reliably Reflect Disease Progression in Early Lesions**

**0-240 • 3:21:00 PM • Volumetric and Diffusion Tensor Imaging Outcomes Associated with Adult Measures of Criminality in a Cohort with Childhood Lead Exposure**

**0-241 • 3:24:00 PM • Determining tumor infiltration in the normal appearing white matter using radiomic characterization.**

**0-242 • 3:27:00 PM • Altered White Matter Metabolite Concentrations in Diabetic Patients with and without Diabetic Ketoacidosis.**

**0-243 • 3:30:00 PM •** Uremic encephalopathy: MR Imaging findings and Clinical Correlation

**0-244 • 3:33:00 PM •** The Widened Sulcus: A New Imaging Sign for Detection of Meningoencephalocele

**0-245 • 3:36:00 PM •** Microstructural changes within the basal ganglia differ between Parkinson disease subtypes

**0-246 • 3:39:00 PM •** Absence of the "Checkmark" Sign in Patients with Parkinson's Disease.

**0-247 • 3:42:00 PM •** Treatment of Essential Tremors with MRI guided Focused Ultrasound and Post-Procedure Imaging

**0-248 • 3:45:00 PM •** In-vivo T2 Quantification of Brainstem Nuclei in Normal Subjects at 3-T.

## Tuesday

Roosevelt 1-3 (Exhibition Level)

### SESSION 12D

#### Turbo Talks: Hot Topics in Neuro Socioeconomics

**0-249 • 4:45:00 PM •** High Levels of Gadolinium Deposition in the Skin of a Patient with Normal Renal Function

**0-250 • 4:48:00 PM •** Prospective Observational Post-marketing Study on the Safety of Gadoterate Meglumine – Final Results in the pediatric cohort of over 1,600 children.

**0-251 • 4:51:00 PM •** Safety of MRI in patients with implantable cardiac electronic devices.

**0-252 • 4:54:00 PM •** RISE (Radiology International Student Education): Creation and Utilization of Virtual Online Classroom for Global Neuroradiology Education

**0-253 • 4:57:00 PM •** Making Stroke Imaging Better around the World? Global Survey of Radiologists in 20 Countries

**0-254 • 5:00:00 PM •** Centralization Management in Endovascular Treatment of Aneurismal Subarachnoid Hemorrhage The 10 Years Experience of Oversea Transfer in Martinique

**0-255 • 5:03:00 PM •** The Use of High-Risk Criteria in Screening Patients for BCVI: A Survey

**0-256 • 5:06:00 PM •** Cost-Effectiveness Analysis of MRI in Cervical Spine Clearance After Blunt Trauma

**0-257 • 5:09:00 PM •** Utilization of Inpatient Neuroimaging MRI Studies: Do We Need Guidelines Beyond Existing American College of Radiology (ACR) Appropriateness Criteria?

**0-258 • 5:12:00 PM •** Prevalence of Repetitive CT and MR Imaging of the Brain at a Tertiary Care Academic Medical Center

**0-259 • 5:15:00 PM •** Interphysician Variation in the Use and Yield of Non-contrast CT Head Examinations at an Academic Tertiary Emergency Department

**0-260 • 5:18:00 PM •** Collaboration or Confrontation in a Radiology Utilization Management Program – How Often Do Providers and Radiologists Disagree on the Need for Advanced Imaging Studies?

**0-261 • 5:21:00 PM •** Neuroradiology Reading Room Interruptions – Workflow Analysis and Optimization

**0-262 • 5:24:00 PM •** Culture Change in Customer Service in an Academic Radiology Department: Paving the Road to Success in a Competitive Outpatient Radiology Market

**0-263 • 5:27:00 PM •** The Argument for Radiology Business and Marketing Training for Residents in an Academic Radiology Department: Radiology's Future Depends On It

## Tuesday

Roosevelt 4 (Exhibition Level)

### SESSION 12F

#### Interventional: Vascular Malformations

**0-265 • 4:45:00 PM •** Sensitivity and Positive Predictive Value of MRI in Hereditary Hemorrhagic Telangiectasia Patients

**0-266 • 4:53:00 PM •** Comparison of the Diagnostic Utility of 4D DSA with Conventional 2D and 3D DSA

**0-267 • 5:01:00 PM •** Safety of Conventional Cerebral Angiography in Patients with High-risk for Contrast-induced Nephropathy.

**0-268 • 5:09:00 PM •** Outcomes Associated with Treatment of Unruptured Cerebral Arteriovenous Malformations

**0-269 • 5:17:00 PM •** Endovascular Management of Intracranial Arteriovenous Malformations with Various Angioarchitecture Features in the Pediatric Population: Is Spetzler-Martin Grading Predictive?

**0-270 • 5:25:00 PM •** Headway Duo Microcatheter for Cerebral Arteriovenous Malformation Embolization with n-BCA

**0-271 • 5:33:00 PM •** CyberKnife Stereotactic Radiosurgery for Brain Arteriovenous Malformations: Single Center Retrospective Review of Safety and Efficacy.

**0-272 • 5:41:00 PM •** Head and Neck Endovascular Repair of Vascular Malformations

**0-273 • 5:49:00 PM •** Mandibular AVM Diagnosis and Curative Endovascular Treatment

**0-274 • 5:57:00 PM •** Endovascular MR Guided Embolization Using a Magnetically Assisted Remote Controlled (MARC) Catheter System

**0-275 • 6:05:00 PM •** Stentrod: minimally invasive endovascular stent-electrode array for high-fidelity, chronic recordings of cortical neural activity

**0-296 • 6:13:00 PM •** Cytotoxic Edema in Posterior Reversible Encephalopathy Syndrome: Correlation of MRI Features with Serum Albumin Levels

## Wednesday

Roosevelt 1-3 (Exhibition Level)

### SESSION 14D

#### Turbo Talks — Brain Physiology in Practice

**0-276 • 9:00:00 AM •** Establishing a New Susceptibility-Age Baseline to Assess Iron Content in Basal Ganglia and Midbrain Nuclei of Healthy Adults

**0-277 • 9:03:00 AM •** Sub-mSv Cerebral CT Perfusion Imaging using Prior Image Constrained Compressed Sensing: A Prospective Comparison of Image Quality at Reduced Dose versus Standard Dose Imaging

**0-278 • 9:06:00 AM •** A Dedicated Cone-Beam CT System for Detection of Acute Intracranial Hemorrhage at the Point of Care

**0-279 • 9:09:00 AM •** Displacement Encoding with Stimulated Echoes (DENSE) MRI for Noninvasive Assessment of Intracranial Pressure Status

**0-280 • 9:12:00 AM •** Towards quantification of hemodynamic parameters in saline perfusion MRI

**0-281 • 9:15:00 AM •** Diffusion Corrected Aneurysm Wall Permeability Correlates with Rupture Risk

**0-282 • 9:18:00 AM •** Relationship of Brain Temperature and Cerebrovascular Reserve in Patients with Chronic Steno-Occlusive Disease

**0-283 • 9:21:00 AM •** 3D Printing of Diffusion Tensor Tractography: Brave New World of Educational and Surgical Models.

**0-284 • 9:24:00 AM •** Opening the Blood-Brain Barrier via Transcranial Sonication Using a Clinical Body MR-guided Focused Ultrasound System

**0-285 • 9:27:00 AM •** Targeted Release of Anesthetic Agents with Focused Ultrasound

**0-286 • 9:30:00 AM •** Visualization of CSF Dynamics using 4D time Spatial Spin Labeling Magnetic Resonance Imaging

**0-287 • 9:33:00 AM •** Smartphone controlled, angle-adjusted external ventricular drainage insertion

## Wednesday

Roosevelt 4 (Exhibition Level)

### SESSION 14F

#### Venous Disease and CSF Dynamics

**0-288 • 8:35:00 AM •** Imaging Findings in Pediatric Intracranial Hypertension

**0-289 • 8:43:00 AM •** Prevalence and Clinical Significance of Unilateral Absent Flow in a Transverse Dural Sinus (TDS) on MR Venography

**0-290 • 8:51:00 AM •** Cross-Sectional Measurement of Intracranial Dural Venous Sinuses Towards a Better Diagnosis of Obstruction

**0-291 • 8:59:00 AM •** Transverse Sinus Effacement is the most sensitive MR sign of Pseudotumor Cerebri

**0-292 • 9:07:00 AM •** Transverse Sinus Cross Sectional Areas in Pseudotumor Cerebri: A potential Venturi Phenomenon argues for the validity of Stent Treatment

**0-293 • 9:15:00 AM •** Sagging of the Tentorium in Pseudotumor Cerebri, a correlate of Transverse Sinus Collapse

**0-294 • 9:23:00 AM •** Changes in Intracranial Hemodynamics in Patients Treated for Idiopathic Intracranial Hypertension and in Healthy Obese as Measured by MR-Flow Quantification: Preliminary findings.

**0-295 • 9:31:00 AM •** Pericatheter VP shunt catheter fluid collections in adults. Infection, shunt malfunction or worse? Correlation of CT/MR findings with Indium-111 Disodium Pentetate (In-111 DTPA) scan.

**0-297 • 9:47:00 AM •** Hyperdense Paraspinal Vein Sign: A Marker of CSF-Venous Fistula in Spontaneous Intracranial Hypotension

**0-298 • 9:55:00 AM •** Unsupervised Characterization of Adult Hydrocephalus using CSF Flow and Volumetrics

## Wednesday

Roosevelt 1-3 (Exhibition Level)

### SESSION 15D

#### Turbo Talks – Pediatric CNS: Fetal Imaging / Sickle Cell Disease

**0-299 • 10:30:00 AM •** Functional Brain Connectivity is Altered in Fetuses with Congenital Heart Disease

**0-300 • 10:33:00 AM •** The Fetal's "Resting" Brain: Characterizing the Development of the Visual Cortex

**0-301 • 10:36:00 AM •** Validation of In Utero Tractography with Histology-based Structure Tensor Analysis in the Human Fetal Brain

**0-302 • 10:39:00 AM •** Neuronal Injury and Impaired Metabolism in Fetuses with Congenital Heart Disease

**0-303 • 10:42:00 AM •** Robust gestational age prediction framework for cerebral cortical development in healthy and high-risk fetuses

**0-304 • 10:45:00 AM •** Normal Developmental Globe Morphology on Fetal MR

**0-305 • 10:48:00 AM •** Spectrum of Systemic Disorders in Fetuses with Orbital Lesions and their Associations with Cerebral Anomalies.

**0-306 • 10:51:00 AM •** Hypogenesis of the Corpus Callosum: Brain Findings in Fetal MR Imaging

**0-307 • 10:54:00 AM •** Neuroimaging findings in Chiari II malformation on fetal and postnatal MRI

**0-308 • 10:57:00 AM •** Fetal MRI Assessment in Rhombencephalosynapsis

**0-309 • 11:00:00 AM •** Placental Structural Evolution in Healthy and Congenital Heart Disease Fetuses using MRI

**0-310 • 11:03:00 AM •** MRI texture analysis in sickle cell disease

**0-311 • 11:06:00 AM •** Altered Temporal Dynamics in BOLD Measurements of Vascular Reserve in Children with Sickle Cell Disease

**0-312 • 11:09:00 AM •** Physiological Fluctuations in the White Matter of Children with Sickle Cell Disease

**0-313 • 11:12:00 AM •** Quantification of Global Phase-based Venous Oxygenation in Children with Sickle Cell Disease

**0-314 • 11:15:00 AM •** Improvement of Neurocognitive Function, BOLD fMRI Activation and Transcranial Doppler Velocities in Pediatric Sickle Cell Anemia Patients Treated with Hydroxyurea

## Wednesday

Roosevelt 4 (Exhibition Level)

### SESSION 15F

#### Informatics: Analysis Tools and Optimized Workflow

**0-315 • 10:30:00 AM •** Development and Optimization of a Bayesian Expert System for Diagnosis Support in Neuroradiology

**0-316 • 10:38:00 AM •** Validation of an Expert-Based Bayesian Network for Discriminating Diseases Affecting the Basal Ganglia and Thalamus

**0-318 • 10:54:00 AM •** Natural Language Processing to Identify Type 1 Modic Endplate Changes in Older Adults

**0-319 • 11:02:00 AM •** Computer Aided Reporting of Accurate Spine Level and Laterality According to Standardized Nomenclature: "Smart Annotation" in the Value-Based Imaging Era.

**0-320 • 11:10:00 AM •** Interrogating Log File Data to Understand the Effect of Imaged Body Region on the Occurrence of Repeated and Terminated Sequences.

**0-321 • 11:18:00 AM •** Radiological Assessment of Patient Motion Correlated with the Incidence of Repeat Sequences Documented by Log Files.

**0-322 • 11:26:00 AM •** Accessible and Cost-effective 3D Printing in Neuroimaging.

**0-323 • 11:34:00 AM •** Demystifying the Course of the Facial Nerve Utilizing 3D Printing

**0-324 • 11:42:00 AM •** Efficacy of Double-Blinded Peer Review in Neuroradiology

**0-325 • 11:50:00 AM •** Comparison of Citation Frequency and Almetric Score in Articles Published by the American Journal of Neuroradiology

**0-326 • 11:58:00 AM •** It's about time: A Time-Activity Study in Neuroradiology



## Wednesday

Roosevelt 1-3 (Exhibition Level)

### SESSION 16D

#### Turbo Talks – Spine Innovations

**0-327 • 1:15:00 PM** • Novel Interventional Neuroradiology Techniques for the Treatment of Spinal CSF Leak as a Cause of Spontaneous Intracranial Hypotension

**0-328 • 1:18:00 PM** • Evaluation of the Intraforaminal Location of Prominent Anterior Radiculomedullary Arteries Using Flat Panel Catheter Angiotomography.

**0-329 • 1:21:00 PM** • C1-2 Puncture: Prevalence of High-Risk Vascular Variants

**0-330 • 1:24:00 PM** • Percutaneous CT Guided Laminotomy and Fenestration for Treatment of Symptomatic Lumbar Synovial Cysts.

**0-331 • 1:27:00 PM** • Cervical Percutaneous Vertebroplasty: 13 years' Experience in a Single Center

**0-332 • 1:30:00 PM** • Effect of Systemic Therapies on Outcomes Following Vertebroplasty Among Patients with Multiple Myeloma

**0-333 • 1:33:00 PM** • Vertebral Augmentation for Myeloma-Related Spinal Fractures: A 2002-2012 Population-Based SEER-Medicare Study

**0-334 • 1:36:00 PM** • Detection of Stellate Ganglion and Thoracic Sympathetic Chain Ganglia on Noncontrast CISS MRI

**0-335 • 1:39:00 PM** • A comparison of contrast-enhanced portal venous phase CT vs MRI in the assessment of lumbar spinal canal stenosis

**0-336 • 1:42:00 PM** • Cranio-Spinal CSF Redistribution Following Lumbar Puncture in Patients with Idiopathic Intracranial Hypertension

**0-337 • 1:45:00 PM** • Influence of Normative Data on Diffusion Tensor Imaging Metric Comparisons in Cervical Spondylotic Myelopathy

**0-338 • 1:48:00 PM** • Better Look Twice: Incidental Findings in the Extra-Spinal Soft Tissues on Outpatient Thoracic Spine MRI

**0-339 • 1:51:00 PM** • The Clivoaxial Angle Measured on High-Resolution T2-Weighted MR Images in Normal Adult Volunteers with both Flexion and Extension

**0-340 • 1:54:00 PM** • Diffusion Tensor Microscopy of Human Intervertebral Disc-interrogation of mechanics and structure relationships in complete human discs

**0-341 • 1:57:00 PM** • Can STIR "Claw Sign" Differentiate Infectious and Degenerative Intervertebral Disc Space Disease?

**0-342 • 2:00:00 PM** • Cervical MRI vs. CT Myelography: Is That the Anterior Median Fissure or the Central Canal?

## Wednesday

Roosevelt 4 (Exhibition Level)

### SESSION 16F

#### Pediatric Brain Tumors: Pre- and Post-Treatment

**0-343 • 1:15:00 PM** • Assessment of Brain Tumors in Pediatric Patients with Amide Proton Transfer MRI: Preliminary Experience

**0-344 • 1:23:00 PM** • MRI Evaluation of Non-Necrotic T2 Hyperintense Foci in Pediatric Diffuse Intrinsic Pontine Glioma

**0-345 • 1:31:00 PM** • Embryonal tumor with multilayered rosettes: Correlation between Radiographic, Clinical, Histopathologic, and Molecular Findings.

**0-346 • 1:39:00 PM** • Radiographic Response of Tectal Gliomas Following Proton Radiotherapy

**0-347 • 1:47:00 PM** • Imaging characteristics of pediatric diffuse midline gliomas based on the presence of a poor prognostic marker histone H3 K27M mutation

**0-348 • 1:55:00 PM** • Use of ADC Histogram Metrics in Characterization and Survival Prediction in Pediatric Brain Tumors: A Report from the Pediatric Brain Tumor Consortium

**0-349 • 2:03:00 PM** • Utility of Post-contrast FLAIR Imaging in Pediatric Brain Tumors: Initial Experience

**0-350 • 2:11:00 PM** • Intracranial Inflammatory Germinoma: A Pathologic and Imaging Pitfall

**0-351 • 2:19:00 PM** • Radiation Induced Cerebral Microbleeds in Pediatric Patients with Brain Tumors Treated with Proton Radiotherapy

**0-352 • 2:27:00 PM** • Clinical Validation of Synthetic Brain MRI in Children

**0-353 • 2:35:00 PM** • Real-time Rigid Body Registration of Ventricle Check MRI Using Commercial Thin-Client Software: A Feasibility Study.

## Wednesday

Roosevelt 1-3 (Exhibition Level)

### SESSION 17D

#### Turbo Talks-Acute Stroke: Imaging and Intervention

**0-354 • 3:00:00 PM** • Differences in neuroimaging utilization in acute stroke: A population based study

**0-355 • 3:03:00 PM** • ESCAPE to reality: Post-trial outcomes in an ESCAPE centre

**0-356 • 3:06:00 PM** • Imaging-Targeted Late Acute Stroke Intervention: Literature Review and Initial Experience with Endovascular Reperfusion of Select Anterior Circulation Strokes Beyond 6 hours from Onset.

**0-357 • 3:09:00 PM** • Establishing the first Mobile Stroke Unit in Argentina.

**0-358 • 3:12:00 PM** • Stent Retriever Based Endovascular Reperfusion Therapy in Octogenarians

**0-359 • 3:15:00 PM** • Acute Ischemic Infarct Topology: Correlation with Lesion Volume and Severity of Clinical Symptoms

**0-360 • 3:18:00 PM** • Slice Accelerated Isotropic Diffusion Imaging (SAIDWI) of the brain in acute ischemic stroke.

**0-361 • 3:21:00 PM** • TraveStroke (Therapeutic recanalization after vascular events in acute Stroke) Prototype – a clinical software prototype to predict voxelwise time-dependent infarct probability in an acute stroke setting

**0-362 • 3:24:00 PM** • Quantitative T1 Rho MR imaging of Acute Ischemic Infarct

**0-363 • 3:27:00 PM** • Thermal imaging of patients with acute ischemic stroke correlates with perfusion deficit and National Institute of Health Stroke Scale (NIHSS) – results of a pilot study

**0-364 • 3:30:00 PM** • Natural fate of ischemic penumbra is less time dependent and more a measure of collateral flow

**0-365 • 3:33:00 PM** • MR Perfusion to Determine the Status of Collaterals in Patients with Acute Ischemic Stroke: Look Beyond Perfusion Time-maps

**0-366 • 3:36:00 PM** • Recanalization and Outcome Comparisons in Acute Ischemic Stroke Patients Treated with Mechanical Thrombectomy Selected by CT/MR Perfusion Imaging Versus CT Angiography

**0-367 • 3:39:00 PM** • Clinical Utility of Arterial Spin Labeling Perfusion Images in the Emergency Department for the Work-up of Stroke-Like Symptoms

**0-368 • 3:42:00 PM** • Noninvasive assessment of quantitative oxygen extraction fraction in ischemic stroke by MRI susceptibility: a pilot study

**0-369 • 3:45:00 PM** • Extent of Insular Infarct on CT as a Prognostic Indicator of Intraarterial Treatment for Acute MCA Occlusion

## Wednesday

Maryland A/B/C (Lobby Level)

### SESSION 17E

#### Brain Tumors: Diffusion and Perfusion Techniques

**0-370 • 3:00:00 PM** • A MULTI CENTRIC 3T MR ASSESSMENT OF T2 PERFUSION AND T1 PERMEABILITY IN BRAIN GLIOMAS ( MAPPING STUDY): comparison of diagnostic accuracy in preoperative grading.

**0-371 • 3:08:00 PM** • Correlation between Histopathology Defined Percentage Tumor Recurrence, Dynamic Contrast Enhanced (DCE), and Dynamic Susceptibility Contrast (DSC) Perfusion Parameters in Treated High Grade Gliomas.

**0-372 • 3:16:00 PM** • Prognostic Utility of Diffusion Tensor Imaging and Dynamic Susceptibility Contrast MR Perfusion in Patients with Brain Metastases

**0-373 • 3:24:00 PM** • Perfusion Weighted Imaging in the Study of Brain Gliomas: Reproducibility and Comparison of Data Obtained by Using Two Different Software Platforms

**0-374 • 3:32:00 PM** • Arterial Spin Labeling Perfusion in Differentiation of Primary and Secondary Glioblastomas

**0-375 • 3:40:00 PM** • A study of high signal intensity on using ASL outside the contrast-enhanced area in brain tumors using a DSC perfusion technique.

**0-376 • 3:48:00 PM** • A study of high signal intensity on using ASL outside the contrast-enhanced area in brain tumors using a DCE permeability imaging.

**0-377 • 3:56:00 PM** • Additive value of Arterial Spin-Labeling (ASL) to Diagnose Residual or Recurrent Meningioma



**0-378 • 4:04:00 PM • Anaplastic Astrocytoma versus Glioblastoma Histological Grading with MRI DSC Perfusion Technique: Cerebral Blood Volume versus Cerebral Blood Flow Utilizing Standard, Time Insensitive and Bayesian Deconvolution Methods**

**0-379 • 4:12:00 PM • Progressive bevacizumab induced diffusion-restricted lesions indicate coagulative necrosis surrounded by non-enhancing tumor and are associated with decreased survival in recurrent glioblastoma patients**

## Wednesday

Roosevelt 4 (Exhibition Level)

### SESSION 17F

#### Pediatrics: Epilepsy, Autism, & Development

**0-381 • 3:00:00 PM • Is heterogeneity of cortical tubers useful for predicting the epileptogenicity in tuberous sclerosis complex (TSC) patients?: The preliminary results.**

**0-382 • 3:08:00 PM • Predicting the epileptogenic tubers in tuberous sclerosis complex (TSC) patient using machine learning.**

**0-383 • 3:16:00 PM • Brain Network Architecture Predicts Global Intelligence in Pediatric Patients with Localization-related Epilepsy**

**0-384 • 3:24:00 PM • Whole-Brain MEG-Recorded Delta Activity Decreases During Normal Pediatric Brain Maturation**

**0-385 • 3:32:00 PM • Construction of a 3D Printed MEG Phantom for Validation of MEG Source Localization**

**0-387 • 3:48:00 PM • Hemispheric Asymmetry of White Matter Microstructure and Language Ability in Autism**

**0-388 • 3:56:00 PM • In Vivo Assessment of Phase One Pharmacological Intervention Using GABA Spectroscopy in Awake Children with Single Gene (NF1) Autism.**

**0-389 • 4:04:00 PM • Negative Brain Connectivity: A General Maladaptive Trait and Imaging Biomarker For Neurodevelopmental Disorders**

**0-390 • 4:12:00 PM • Childhood Cerebral Adrenoleukodystrophy: MR Perfusion Measurements and their Use in Predicting Clinical Outcome after Hematopoietic Stem Cell Transplantation**

**0-391 • 4:20:00 PM • Inherited Disorders of Sulfite Metabolism: evolution of brain MRI findings**

## Wednesday

Roosevelt 1-3 (Exhibition Level)

### SESSION 18D

#### Turbo Talks – Head and Neck: All Neck Extravaganza

**0-392 • 4:45:00 PM • Comparison of Dual-Energy CT (DECT) Iodine Overlay, Virtual keV Monochromatic Series, and Single-Energy CT in the Visualization of Head and Neck Cancer.**

**0-393 • 4:48:00 PM • Image quality and radiation dose of third generation dual-energy CT of the head and neck compared with a standard acquisition.**

**0-394 • 4:51:00 PM • Quantitative Assessment of Variation in CT Scanning Parameters on Texture Features: Pilot Study Using a Non-Anatomic Phantom**

**0-395 • 4:54:00 PM • CT texture analysis potentially predicts local failure in head and neck squamous cell carcinoma treated with chemoradiotherapy**

**0-396 • 4:57:00 PM • Using texture analysis to differentiate between nasopharyngeal carcinoma and age-matched normal adenoid controls**

**0-397 • 5:00:00 PM • Texture analysis of CT in the larynx between normal subjects and patients with localized amyloidosis**

**0-398 • 5:03:00 PM • Preoperative 18F-FDG-PET/CT versus contrast-enhanced CT to identify regional metastasis among patients with head and neck squamous cell carcinoma**

**0-399 • 5:06:00 PM • PET/CT in patients treated for advanced head and neck cancer: what do you say when the tumor improved, but didn't completely resolve?**

**0-400 • 5:09:00 PM • Should we evolve from whole body 18F-FDG-PET-CT protocol to more disease tailored HN -PET -CT in the management of head and neck cancers?**

**0-401 • 5:12:00 PM • Recurrence Rates Among Category 2 "Questionable Recurrence" Lesions Using NI-RADS Head and Neck Squamous Cell Carcinoma Surveillance Imaging Template: Initial Experience.**

**0-402 • 5:15:00 PM • Recurrence Rates in Category 3 "Highly Suspicious" Lesions Using the NI-RADS Head and Neck Squamous Cell Carcinoma Surveillance Imaging Template: Initial Experience**

**0-403 • 5:18:00 PM •** Testing Susceptibility Weighted Imaging and Double Inversion Recovery Sequences in the Evaluation of Oropharyngeal Squamous Cell Carcinoma

**0-404 • 5:21:00 PM •** Determination of Oropharyngeal Wall Thickness: Implications for Transoral Laser Microsurgery

**0-405 • 5:24:00 PM •** Correlation of neck CT finding of piriform sinus morphologic abnormality with Otolaryngology direct visualization: How specific are we?

**0-406 • 5:27:00 PM •** Accuracy of Preoperative CT in Detecting Pathologic Nodal Extracapsular Spread in Oropharyngeal Squamous Cell Carcinoma.

**0-407 • 5:30:00 PM •** Choi Criteria as a measure of treatment efficacy in patients with metastatic head and neck squamous cell cancer patients treated with axitinib

## Wednesday

Maryland A/B/C (Lobby Level)

### SESSION 18E

#### Excerpta – II

**E-19 • 4:45:00 PM •** Ectodermis Physaliphora: Imaging Characteristics of a Benign Retroclival Embryologic Notocord Remnant

**E-20 • 4:50:00 PM •** Increased Conspicuity of a Skull Base Meningioma Using ASL vs. DSC Perfusion

**E-21 • 4:55:00 PM •** Tracheal Chondrosarcoma, Imaging and Clinical Features of a Rare Entity

**E-22 • 5:00:00 PM •** Myxofibrosarcoma of the Retropharyngeal Space

**E-23 • 5:05:00 PM •** Importance of MR imaging for guiding management in traumatic abducens nerve palsy: A case report.

**E-24 • 5:10:00 PM •** MR Findings in Wyburn-Mason Syndrome, a Rare Syndrome of Multiple Vascular Malformations of the orbit, brain and face.

**E-25 • 5:15:00 PM •** Schwannoma of the Oral Tongue

**E-26 • 5:20:00 PM •** A Neonatal Maxillary Mass: Characterization with Time Resolved MRA

**E-27 • 5:25:00 PM •** MR Imaging of an Acute Contrast Reaction with Oropharyngeal Angioedema

**E-28 • 5:30:00 PM •** Multiple Myeloma Involving the Thyroid Cartilage: Case Report.

**E-29 • 5:35:00 PM •** Dentures Mimicking Traumatic Pharyngeal Blood on a Cervical Spine CT.

**E-30 • 5:40:00 PM •** Supraglottic Laryngeal Paraganglioma

**E-31 • 5:45:00 PM •** Dual Energy CT Cisternography in the Evaluation of CSF Leaks: A Novel Approach

**E-32 • 5:50:00 PM •** Rare case of bilateral hypoglossal nerve enhancement in Guillain Barre syndrome

**E-33 • 5:55:00 PM •** Masticator Space Parasitosis: Rare Presentation for a Common Infection

**E-34 • 6:00:00 PM •** Unique Arterial Cause of Fallopian Canal Enlargement in a Patient with PHACES

**E-35 • 6:05:00 PM •** Don't Pop This Pimple: Facial Varix, a Rare Entity

**E-36 • 6:10:00 PM •** Spontaneous Regression of a Large High-Flow Intracranial Dural Arteriovenous Fistula

## Thursday

Washington 1/2/3 (Exhibition Level)

### SESSION 20C

#### Head and Neck: Parathyroid, Thyroid, and Salivary

**0-408 • 8:35:00 AM •** Diagnostic Accuracy of Parathyroid Imaging: Comparing 4D-CT, Ultrasonography, MIBI and 4D-CT/MIBI Fusion.

**0-409 • 8:43:00 AM •** Confidence Grading System for Parathyroid 4D-CT: How Well Does Radiologist Confidence Predict Surgical Findings?

**0-410 • 8:51:00 AM •** 4D MRI for Preoperative Localization of Parathyroid Adenomas: 2 Year Experience

**0-411 • 8:59:00 AM •** Survey of Radiologists on Parathyroid 4D-CT: Variability in Practice Patterns and Protocol

**0-412 • 9:07:00 AM •** Dynamic 4D CT Imaging of Larynx in Vocal Cord Palsy: Initial Experience using 320 slice MDCT

**0-413 • 9:15:00 AM •** Increasing Incidence of Thyroid Cancer: Impact of Neck Imaging Utilization

**0-414 • 9:23:00 AM •** Imaging of Anaplastic Thyroid Cancer

**0-415 • 9:31:00 AM • Practice Variations in Salivary Gland Imaging and Utility of Virtual Unenhanced Dual-Energy CT Images for the Detection of Major Salivary Gland Stones**

**0-416 • 9:39:00 AM • Instantaneous Responses of Parotid Glands to Gustatory Stimulation Evaluated by High Temporal Resolution Echo-planar Diffusion-weighted Imaging**

**0-417 • 9:47:00 AM • CT and MRI Characteristics of Benign versus Malignant Palpable Parotid Masses**

**0-418 • 9:55:00 AM • Neck Adipose Tissue and Airway Volume: an Imaging Approach to the Obesity Epidemic**

## Thursday

Roosevelt 1-3 (Exhibition Level)

### SESSION 20D

#### Turbo Talks – Neurovascular Imaging Advances

**0-419 • 8:35:00 AM • Extracranial Carotid Artery Imaging and Intervention: Current trends in the U.S. Medicare Population from 2001-2013.**

**0-420 • 8:38:00 AM • CT- Angiography Evaluation of Acute Ischemic Stroke- Study From a Tertiary Care Hospital of North India**

**0-421 • 8:41:00 AM • International, Multicenter Phase 3 Blinded Study (GEMSAV) of the Structural Visualization, Diagnostic Efficacy and Safety of Gadobutrol (Gadavist) Enhanced MRA of the Supra-aortic Vessels compared to Time-of-Flight MRA using CTA as the standard of reference**

**0-422 • 8:44:00 AM • Exploring Other Vascular Dimensions: Comparison of 3-dimensional vs. 2-dimensional Vessel Wall Imaging Techniques for the Evaluation of Large Artery Vasculopathies**

**0-423 • 8:47:00 AM • Non-Contrast, Inflow Enhanced Inversion Recovery with 3D Fast Spin Echo (IFIR-FSE) with Fast Image Acquisition using Compressed Sensing (CS) technique has potential to be a Viable Alternative to Contrast-Enhanced MRA (CE-MRA) for the evaluation of neck vasculature.**

**0-424 • 8:50:00 AM • Reducing Radiation Exposure and Optimizing Cervicocerebral CT Angiographic Quality in Acute Stroke Patients**

**0-425 • 8:53:00 AM • Radiation Dose Reduction in 4-dimensional Intracranial CT angiography by Individualized Estimation of Cerebral Circulation Time**

**0-426 • 8:56:00 AM • Usefulness of carotid wall imaging for early detection of carotid plaque and intraplaque hemorrhage as a screening tool for outpatients**

**0-427 • 8:59:00 AM • Vulnerable Carotid Plaque Imaging and Histopathology Without a Dedicated MRI Receiver Coil**

**0-428 • 9:02:00 AM • Vessel Imaging in young stroke: A prospective comparison of HIV infected and immune competent young adults.**

**0-429 • 9:05:00 AM • Doppler Parameters to Distinguish High Velocity Carotid Near Occlusion from Conventional Stenosis.**

**0-430 • 9:08:00 AM • Carotid Artery Web and Ischemic Stroke: A Case-Control Study**

**0-431 • 9:11:00 AM • Silent Brain Infarction in Patients with Asymptomatic Carotid Artery Atherosclerotic Disease**

**0-432 • 9:14:00 AM • Hemodynamic Changes Before and After Stenting Evaluated with Quantitative Digital Subtraction Angiography in Patients with Carotid Stenosis**

**0-433 • 9:17:00 AM • ASL derived CBF Changes Post Carotid Intervention Predicts Post-Operative Cognitive Impairment**

**0-434 • 9:20:00 AM • Correlation of Vitamin D levels with Quantitative Analysis of Carotid Intraplaque Hemorrhage and Local Vitamin D Receptor Expression**

## Thursday

Roosevelt 4 (Exhibition Level)

### SESSION 20F

#### Pediatrics: Brain Imaging Advances

**0-435 • 8:35:00 AM • LAMA1 mutation analysis in cerebellar dysplasia with cysts**

**0-436 • 8:43:00 AM • White and gray matter abnormalities in children with LAMA2-related muscular dystrophy: more than meets the eye.**

**0-437 • 8:51:00 AM • Evidence Based Imaging in Pediatrics: the Yield of MR Imaging in Investigating Isolated Pediatric Nystagmus.**

**0-438 • 8:59:00 AM • Interhypothalamic Adhesions: No Longer Just a Pediatric Finding**

**0-439 • 9:07:00 AM • Malformations of Cortical Development in HHT**

**0-440 • 9:15:00 AM • Predicting Motor Outcome after Hemispherotomy using Pre-surgical FDG PET**

**0-441 • 9:23:00 AM •** Morphometric Measurements of the Thalamus in the Pediatric Population

**0-442 • 9:31:00 AM •** Effect of Venous Oxygenation on Cerebral Venous Susceptibility Imaging in Pediatric Patients

**0-443 • 9:39:00 AM •** Susceptibility-weighted Imaging as a Non-contrast Technique in the Diagnosis of Developmental Venous Anomalies in Children

**0-444 • 9:47:00 AM •** The Evolution of Pituitary Cysts (PC) in Children With Growth Hormone Deficiency (GHD) and Idiopathic Short Stature (ISS)

**0-445 • 9:55:00 AM •** Atypical Diffusion Restriction Patterns in Pediatric Cerebral Malaria

## Thursday

Washington 1/2/3 (Exhibition Level)

### SESSION 21C

#### Head & Neck: The Orbital Neighborhood

**0-446 • 10:30:00 AM •** Orbital Masses: The Usefulness of Diffusion-Weighted Imaging in Lesion Categorization

**0-447 • 10:38:00 AM •** Using DWI Thermometry to Measure Globe Temperature Differences: Retrospective Case-Control Study of Orbital Cellulitis

**0-448 • 10:46:00 AM •** Infra-orbital nerve involvement on MRI in European patients with IgG4-related ophthalmic disease.

**0-449 • 10:54:00 AM •** Correlation of Quantitative Measurements of Intraorbital Optic Nerve and Clinical Features in Thyroid Eye Disease Patients Using Diffusion Tensor MRI

**0-450 • 11:02:00 AM •** Normal Optic Pathway Value Ranges for Routine Pediatric MRI

**0-451 • 11:10:00 AM •** Prognostic CT Finding for Diplopia after Surgical Repair of Pure Orbital Blowout Fracture

**0-452 • 11:18:00 AM •** Usefulness of Color Doppler Flow Imaging in the Management of Lacrimal Gland Lesions.

**0-453 • 11:26:00 AM •** Effects of MR Imaging Technique on "Classic" MRI Findings of Venous Malformations

**0-454 • 11:34:00 AM •** Gadolinium Enhanced Constructive Interference in Steady State (CISS) Imaging: Depiction of Oculomotor Nerve and Its Distinction from Adjacent Skull Base Masses.

**0-455 • 11:42:00 AM •** Pretreatment Diagnosis of Suprasellar Papillary Craniopharyngioma and Germ Cell Tumors of Adult Patients

**0-456 • 11:50:00 AM •** Significance of Severity of Vascular Compression and Vessel Type with Symptoms in Patients with Trigeminal Neuralgia.

## Thursday

Roosevelt 1-3 (Exhibition Level)

### SESSION 21D

#### Turbo Talks – Intracranial Vascular Procedures

**0-457 • 10:30:00 AM •** The Effect of General Anesthesia on Pressure Gradients in Transverse Sinus Stenosis: Initial Observations

**0-458 • 10:33:00 AM •** The Clot Thickens: A Large Single Center's Experience with Dural Venous Sinus Thrombosis

**0-459 • 10:36:00 AM •** ARTS (Aspiration-Retriever Technique for Stroke)

**0-460 • 10:39:00 AM •** Single Center Experience with the Trevo XP 6x25 mm. as a Primary Device in Acute Ischemic Stroke Patients with Large Vessel Occlusion.

**0-461 • 10:42:00 AM •** With MR Selection, Improved Outcomes after Successful Thrombectomy Beyond 6 Hours in Anterior Circulation Large Vessel Occlusion Stroke

**0-462 • 10:45:00 AM •** The Categories of Hyperperfusion Syndrome after Carotid Stenting

**0-464 • 10:51:00 AM •** Pial Artery Supply as a Treatment Risk for Intracranial Dural Arteriovenous Fistulas

**0-465 • 10:54:00 AM •** High-Resolution Vessel Wall MRI in the Evaluation of Ruptured Cranial Dural Arteriovenous Fistulas: Preliminary Experience

**0-466 • 10:57:00 AM •** Anterior Ethmoidal Dural Arterio-Venous Fistulas (dAVF): Endovascular Treatment Through the Ophthalmic Artery

**0-467 • 11:00:00 AM •** Imaging Characteristics after Intra-arterial Cytoreductive Chemotherapy for Lacrimal Adenoid Cystic Carcinoma

**0-468 • 11:03:00 AM •** Eye lens doses imparted during interventional and non-interventional neuroimaging techniques

**0-469 • 11:06:00 AM •** Estimation of radiation exposure of children undergoing superselective intra-arterial melphalan therapy for retinoblastoma treatment

**0-470 • 11:09:00 AM •** A Novel System Using Multiple Radiophotoluminescence Glass Dosimeters For Radiation Measurements During Diagnostic Cerebral Angiography And Therapeutic Neurointerventional Procedures

**0-471 • 11:12:00 AM •** Significant Dose Reduction During Neurointerventional CT Cases Using Table Side Parameter Controls

## Thursday

Roosevelt 4 (Exhibition Level)

### SESSION 21F

#### Excerpta – III

**E-37 • 10:30:00 AM •** Hemorrhagic Wernicke's Encephalopathy

**E-38 • 10:35:00 AM •** MRI Findings in Thallium Toxicity

**E-39 • 10:40:00 AM •** A Case of Phosphomannomutase 2 deficiency (CDG-Ia): Neurologic and Ophthalmologic Findings

**E-40 • 10:45:00 AM •** Woodhouse Sakati Syndrome

**E-41 • 10:50:00 AM •** A Case of Adult-Onset Adrenoleukodystrophy

**E-42 • 10:55:00 AM •** Venous signal on cervical TOF MRA due to venous subclavian steal

**E-43 • 11:00:00 AM •** Progressive Multifocal Leukoencephalopathy Mimicking Gliomatosis Cerebri on MR Spectroscopy and Perfusion.

**E-44 • 11:05:00 AM •** Pure Alexia and Palinopsia From Glioblastoma Involving Left Inferior Occipital Gyrus Evaluated with fMRI and DTI Tractography

**E-45 • 11:10:00 AM •** Toxic Meningoencephalopathy after Intrathecal Gadolinium Administration

**E-46 • 11:15:00 AM •** Foreign Body Reaction to Bovine Pericardial Duraplasty

**E-47 • 11:20:00 AM •** Amnesia, seizures, and the limbic system – anti-LGI1 Limbic Encephalitis: An evolving clinical syndrome.

**E-48 • 11:25:00 AM •** CNS Graft Versus Host Disease: Clinical and Radiologic Considerations in Diagnosis and Treatment

**E-49 • 11:30:00 AM •** Post-Radiosurgery Cyst Formation in Brain, a Rare and Delayed Complication

**E-50 • 11:35:00 AM •** The Utility of Intraoperative Contrast-Enhanced Ultrasound in the Evaluation of Intracranial Meningiomas.

**E-51 • 11:40:00 AM •** Brain Metastases with Pure Cystic Imaging Appearance Mimicking Neurocysticercosis

**E-52 • 11:45:00 AM •** Primary Leptomeningeal Gliomatosis - Radiologic and Genetic Correlation of a Rare Disease

**E-53 • 11:50:00 AM •** Mycotic Aneurysm from Cardiac Myxoma Emboli: Characterization with High Resolution Vessel Wall MR Imaging

**E-54 • 11:55:00 AM •** A case of secondary degeneration in the striatum subsequent to MCA territory infarction

## Thursday

Roosevelt 1-3 (Exhibition Level)

### SESSION 22D

#### Advances in CNS Tumor Imaging and Treatment

**0-472 • 1:15:00 PM •** Quantitative Imaging Analysis of Glioblastoma on Magnetic Resonance Imaging for the Demonstration of Extant Intratumoral Heterogeneity, Tumor Margins, Hypoxic Malignant Cell Populations and Identification of Subtype Habitats

**0-473 • 1:23:00 PM •** Quantification of Heterogeneity in Peritumoral Edema in Long-Term Glioblastoma Survivors: Correlation With ADC and FLAIR Histogram Metrics.

**0-474 • 1:31:00 PM •** Role of MRI Texture Analysis in Differentiating Post-treatment Changes from Tumor Recurrence in Patients with High Grade Gliomas.

**0-475 • 1:39:00 PM •** Machine learning prediction of 1p19q deletion status in low grade gliomas

**0-476 • 1:47:00 PM •** Value of Amide Proton Transfer Imaging in Correlation with Histopathological Grades of Adult Diffuse Gliomas: Comparison and Incremental Value with Dynamic Susceptibility Contrast-Enhanced MRI and Diffusion Weighted Imaging

**0-477 • 1:55:00 PM •** Noninvasive tracking the kinetic phases of distribution and tumor targeting of EGFRvIII-specific chimeric antigen receptor T cells via MRI

**0-478 • 2:03:00 PM •** Volumetric and Progression-Free Interval Analysis of post MRI-guided Laser Induced Thermal Therapy (LITT) for Intracranial Neoplasms

**0-479 • 2:11:00 PM •** Growth dynamics and measurement bias in pre-operative, treatment naive human glioblastoma

**0-480 • 2:19:00 PM •** Quantitative T1 mapping for therapy monitoring of patients with glioblastoma

**0-481 • 2:27:00 PM •** UMT-CEST Imaging of Human Brain Tumors on 7.0 Tesla

**0-482 • 2:35:00 PM •** Voxel-level Assessment of Cellularity in Recurrent Glioblastoma: A Multiparametric Radiologic-Histopathologic Study

Thursday

Roosevelt 4 (Exhibition Level)

SESSION 22F

Intracranial Plaque and Vessel Wall Imaging

**0-483 • 1:15:00 PM •** Clot Composition and Sensitive MRI Sequences. An In Vitro Analysis with Predetermined Clot Components

**0-484 • 1:23:00 PM •** Comparison of FLAIR hyperintense vascular sign and leptomeningeal collateral on catheter angiography in 100 patients with anterior cerebral artery stenosis or occlusion

**0-485 • 1:31:00 PM •** Progression of Intracranial Atherosclerosis: a 3D High-resolution Vessel Wall MRI Study

**0-486 • 1:39:00 PM •** Utility of Intracranial Vessel Wall Imaging to Identify Culprit Atherosclerotic Lesions: A Systematic Review and Meta-Analysis

**0-487 • 1:47:00 PM •** Intracranial calcification and stenosis and their association with stroke

**0-488 • 1:55:00 PM •** Cryptogenic Stroke Downstream of Nonstenosing Intracranial Atherosclerotic Lesions

**0-489 • 2:03:00 PM •** Differential Diagnosis of Dissection and Atherosclerosis of intracranial Vertebral Artery on High Resolution Vessel Wall MRI

**0-490 • 2:11:00 PM •** High-Resolution MRI Vessel Wall Imaging: Changes in Atherosclerosis and Moyamoya disease in Follow-up Period

**0-491 • 2:19:00 PM •** Quantifying Intracranial Plaque Permeability with Dynamic Contrast Enhanced MRI

**0-492 • 2:27:00 PM •** Arterial-Spin Labeling for Non-Invasive Follow-Up of Cerebral AVMs Following Stereotactic Radiosurgery Treatment.

**0-493 • 2:35:00 PM •** Detailed Analysis of the Persistent Trigeminal Artery

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### ASNR is continuing to have a Greener Meeting ...

ASNR is continuing to make efforts to a greener meeting at the 54<sup>th</sup> Annual Meeting & The Foundation of the ASNR Symposium 2016. ASNR Executive Committee and volunteers have started taking some steps toward our future. ASNR is asking for your help...

- Preview the abstract presentations in advance of the meeting at [www.asnr.org](http://www.asnr.org) by using the program planner.
- Registration Badge will NOT be mailed; pick up badge onsite.
- Evaluate for CME via web link or at the CME Pavilion.

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### **Comparative Effectiveness Research Award**

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**Amy L. Kotsenas, MD**  
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University of California, San Francisco

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FUTURE ANNUAL MEETINGS**



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**April 22-27**

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**June 2-7 • Vancouver Convention Centre  
Vancouver, B.C., Canada**

**ASNR 2019 – 57<sup>th</sup> ANNUAL MEETING**

**May 18-23 • Hynes Convention Center  
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# PROGRAM CONTRIBUTORS

## PLATINUM LEVEL



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