



**ASNR 2018 ■ VANCOUVER**

ASFNR ASHNR ASPNR ASSR SNIS

THE FOUNDATION OF THE ASNR



# **ASNR 56<sup>th</sup> Annual Meeting & The Foundation of the ASNR Symposium 2018**

**June 2-7, 2018**

**Vancouver, BC, Canada**

**Vancouver Convention Centre East**

## **MEETING GUIDE**



**#asnr18**

# Emergency Service Procedures



## Vancouver Convention Centre East

1. House Phone: Dial 7255 or 7500
2. From a cell phone: Dial 604-647-7299 or 604-647-7500

## Pan Pacific Vancouver

From any guestroom or meeting rooms, contact Service 1 by dialing "0" on any house phone. Service 1 will immediately contact the Security team for any emergency.

From a cell phone: 604-662-8111

## The Fairmont Waterfront

1. House Phone: Dial 3333
2. From a cell phone: 604-691-1991 identify it is a medical issue.

## The caller should provide the following:

1. Determine name of specific meeting room location where the situation has occurred.
2. Identify yourself, reference your exact location and provide details on the nature of the emergency situation.
3. Provide a brief but concise description of the problem, be prepared to answer any questions that the operator may ask you, and remain on the line.

## Vancouver Convention Centre East Wifi

You may access complimentary WiFi service in the ASNR meeting areas using the following instructions at the Vancouver Convention Centre East. When using your wireless management software, find the Wireless Network **ASNR** and enter the password **CONNECT2ASNR**

## VANCOUVER CONVENTION CENTRE EAST

1055 Canada Pl  
Vancouver, BC, Canada  
V6C 0C3  
604-665-9000

## ASNR Registration Desk

604-647-7460

## PARKING GARAGE AT THE VANCOUVER CONVENTION

## WestPark Parking Service at Canada Place

999 Canada Place  
Parking Level 1  
Vancouver, BC V6C 3C1  
604-684-2251

## Impark Parking

1055 Canada Place Way (Lot  
1940)  
Vancouver BC V6C 3C1  
604-331-7288

## HOTEL INFORMATION

## Pan Pacific Vancouver

300-999 Canada Place  
Vancouver, BC V6C 3B5  
Canada  
604-662-8111

## Overflow Hotel Information

**Fairmont Waterfront**  
900 Canada Place Way  
Vancouver, BC, V6C 3L5  
Canada  
604-691-1991

## LOCAL HOSPITAL

## St. Paul's Hospital

1081 Burrard Street  
Vancouver, BC, Canada  
BC, V6Z 1Y6  
604-682-2344

## LOCAL PHARMACIES

## Shopper Drug Mart

1202 W Pender St  
Vancouver, BC V6E2S9,  
Canada • 604-605-1200

## Rexall

1055 W Georgia St Unit 122,  
Vancouver, BC V6E 3P3,  
Canada • 604-684-8204

## Shopper Drug Mart (24 Hours)

1125 Davie St  
Vancouver, BC V6E 1N2,  
Canada • 604-669-2424

# Table of Contents

Foundation of the ASNR Information .....	2
Annual Meeting Portal Content and Charging Stations .....	4
Annual Mobile Meeting App .....	5
General Information.....	6-7
Food Service Locations & Schedules.....	8
ASNR Publications.....	10
Special Sessions/How-To Sessions.....	11-13
Important Information for Young Professionals.....	14
Social Programs.....	15
Special Programs.....	16
Technical Exhibits Roster .....	17-18
Technical Exhibits Floor Plan .....	19
Vancouver Convention Centre East Floor Plans .....	20-25
Instructions on How To Use The Audience Response (AR) System.....	26-27
Information for Poster & Exhibit Presenters .....	28-29
Continuing Medical Education (CME).....	30
The Foundation of The ASNR Symposium 2018 .....	31
Accreditation Statement & Target Audience & Educational Objectives .....	35
ASNR 56 <sup>th</sup> Annual Meeting Accreditation Statement &.....	40-41
Target Audience & Educational Objectives.....	37
Self Assessment Module (SAM) and Audience Response (AR) Sessions .....	42-43
The Foundation of The ASNR Symposium 2018 Program Schedule .....	44-48
ASNR 56 <sup>th</sup> Annual Meeting Program Schedule .....	49-74
Parallel Scientific Paper Sessions At-A-Glance.....	75-102
2017-2018 Award Acknowledgements.....	104-105
2018 Award Acknowledgements.....	106
ASNR Future Annual Meetings .....	Inside Back Cover

## Meeting Registration — Convention Lobby (Convention Level) - VCCE

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

Friday, June 1 .....	4:00pm - 8:00pm
Saturday, June 2 .....	6:30am - 6:00pm
Sunday, June 3 .....	6:30am - 6:00pm
Monday, June 4 .....	6:30am - 6:00pm
Tuesday, June 5 .....	6:30am - 6:00pm
Wednesday, June 6 .....	6:30am - 6:00pm
Thursday, June 7 .....	6:30am - 1:00pm

*As a registrant of the ASNR 56<sup>th</sup> Annual Meeting and The Foundation of the ASNR Symposium 2018, ASNR reserves the right to use photos taken for promotional materials for future meetings.*



# Foundation of the ASNR Information



## THE FOUNDATION OF THE ASNR



### MESSAGE FROM THE CO-CHAIRS

On behalf of the Board of Trustees, it is a pleasure to report the Foundation of the American Society of Neuroradiology was able to award \$1,050,000 to 11 investigators in fiscal year 2017 (to be funded over a period of 2 years). Thanks to the generosity of our donors, the Foundation continues to promote the stability and growth of neuroradiology by providing critical research needed to yield expert diagnoses, target patient care and apply sophisticated approaches to complex disease management.

As neuroradiologists and members of ASNR, we play a vital role in promoting the highest standards for training and practice, fostering research in our field, and ensuring the future of our specialty. Research is central to the future of our field; fostering new ideas for clinical practice and enhancing patient care.

Your continued support and donations have allowed the Foundation to grant \$6 million to fund over 100 members in our society as research investigators. The return on your investment is substantial as the research from our neuroradiology investigators is becoming critical in this healthcare environment.

Increased Foundation support by our membership sends a clear message of commitment to preserving the integrity of our specialty and patient care. Your support allows us to "Sustain a Strong Identity and Build a Healthy Future" together.

Thank you for the opportunity to serve as the Co-Chairs of the Foundation and work collaboratively with a dedicated board of neuroradiologists whose vision and commitment allows us to fulfill our mission.

**Please stop by the Donor Lounge in Room 19 & 20 (Meeting Level) to pick up your Donor or Chairman's Society Ribbon and have some refreshments. You can make your contribution to the Foundation in the Lounge if you have not previously had the opportunity. The Donor Lounge is open Sunday, June 3 – Wednesday, June 6 from 8:00am – 4:00pm and Thursday, June 7 from 8:00am – 12:00pm.**

Trusting that our continued efforts will create a greater value for all of neuroradiology,

A handwritten signature in cursive script that reads "Laurie Loevner, MD".

Laurie A. Loevner, MD  
Co-Chair, The Foundation of the ASNR

A handwritten signature in cursive script that reads "Pina Sanelli".

Pina C. Sanelli, MD, MPH, FACR  
Co-Chair, The Foundation of the ASNR



# ASNR

American Society of Neuroradiology

**ACR**<sup>®</sup>  
AMERICAN COLLEGE OF  
RADIOLOGY

QUALITY IS OUR IMAGE

**RSNA**<sup>®</sup>

Radiological Society  
of North America

## **ASNR-ACR-RSNA COMMON DATA ELEMENTS (CDE) NEURORADIOLOGY WORKGROUP**

*The ASNR-ACR-RSNA Common Data Elements (CDE) Neuroradiology Workgroup is charged with cataloging and codifying best-practice concepts or features that should universally appear in neuroradiology reports for specific clinical use-cases. CDEs are not reporting templates - they are granular concepts and controlled responses. Come to the technical exhibits area to learn more about the ASNR CDE effort and get a glimpse of next-generation neuroradiology reporting.*

**It's the next-generation neuroradiology reporting -  
It's not what you think it is!**

### **CDE Demonstrations**

**Monday, June 4<sup>th</sup> through Wednesday, June 6<sup>th</sup>**

**10:00am- 4:00pm**

**Booth #504**

**in Hall B (Convention Level)**



# Meeting Portal Content and Charging Stations



**[HTTPS://WWW.PATHLMS.COM/ASNR](https://www.pathlms.com/asnr)**

This link will be the portal for:

- Program Planner
- The Foundation of the ASNR Symposium 2018 Scientific Power Point Presentations
- Electronic Scientific Posters
- Electronic Educational Exhibits
- ASNR 2018 CME/SAM Evaluation Link
- Disclosures



Join the meeting conversation on Twitter via #asnr18  
Follow us @TheASNR



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



## Charging Station Locations

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

### **Donor Wall by Registration Area Convention Lobby**

Saturday, June 2 – Sunday, June 3,  
6:30am – 6:00pm

Thursday, June 7, 6:30am – 12:00pm

### **Speaker Ready Room – Meeting Room 13 (Meeting Room Level)**

Saturday, June 2, 6:30am – 6:00pm

Thursday, June 7, 6:30am – 1:00pm  
6:30am – 6:00pm

### **Donor Lounge – Meeting Room 19 & 20 (Meeting Room Level)**

Sunday, June 3 – Wednesday, June 6,  
8:00am – 4:00pm

Thursday, June 7, 8:00am – 12:00pm

### **Hall B (Convention Level)**

Monday, June 4 – Wednesday, June 6,  
10:00am – 4:00pm

# Get ASNR's Essential Mobile Meeting App



1. Go to <http://guidebook.com/g/asnr18> or scan this QR code to download the Guidebook App:



2. Once installed, launch the Guidebook app and search for ASNR in the “Find a Guide” box. Select the ASNR 56<sup>th</sup> Annual Meeting Guide and click “Download.”

**guidebook**  
guidebook.com



# General Information

**Vancouver Convention Centre East is the official location for all educational programming and exhibits.**

## **AMERICAN BOARD OF RADIOLOGY (ABR) INFO DESK**

*Convention Lobby (Convention Level)*

## **AMERICAN JOURNAL OF NEURORADIOLOGY (AJNR) BOOTH**

Monday, June 4 - Wednesday, June 6  
*Hall B (Convention Level) Booth #506*

## **AMERICAN SOCIETY OF NEURORADIOLOGY (ASNR) BOOTH**

*Hall B (Convention Level) Booth #508*

Visit the ASNR Booth with inquires and questions about membership and all the benefits that ASNR has to offer to Neuroradiologists.

## **AUDIENCE RESPONSE (AR) HELP DESK**

*Hall A (Convention Level)*

## **PHILIPS**

## **COMMITTEE/SPECIALTY SOCIETY MEETINGS**

*Convention Lobby (Convention Level)*

Please refer to the daily postings on the Meetings & Announcements Boards.

## **CASE OF THE DAY**

*Hall C (Convention Level)*

*Sponsored by Philips Healthcare – Elition MRI*

## **COMMON DATA ELEMENTS BOOTH**

*Hall B (Convention Level) Booth #504*

## **CHARGING STATIONS**

Saturday, June 2 – Sunday, June 3  
& Thursday, June 7

*Speaker Ready Room 13 -  
(Meeting Room Level)*

Monday, June 3 – Wednesday, June 6  
*Hall B (Convention Level)*

THE FOUNDATION OF THE ASNR



## **DONOR LOUNGE**

*Room 19 and 20 (Meeting Room Level)*

Current and Future Donors: Please stop by the Donor Lounge to pick up your ribbons and learn more about The Foundation of the ASNR.

**Hours of Operation:**

Sunday, June 3 - .....8:00am - 4:00pm

Wednesday, June 6

Thursday, June 7 .....8:00am-12:00pm

## **E-ACCESS/SAM RESPONSE AREA**

*Meeting Room 7 (Meeting Room Level)*

e-Access computer terminals will be available to registered attendees that can be used to evaluate attended sessions, print CME certificates and to check email.

Saturday, June 2.....1:00pm - 6:30pm

Sunday, June 3 - .....6:30am - 6:30pm

Wednesday, June 6

Thursday, June 7 .....6:30am - 1:00pm

*Sponsored by Philips Healthcare – Elition MRI*

## **HEADQUARTERS OFFICE**

*Room 14 (Meeting Room Level)*

## **HOUSE OF NEURORADIOLOGY (HONR) BOOTH**

*Hall B (Convention Level) Booth #517*

Stop by the ASNR Greater House of Neuroradiology (HONR) booth and learn about the ASNR-managed Specialty and Regional Societies, including each society's membership benefits and upcoming Annual Meeting.

## **THE INTERNATIONAL HYDROCEPHALUS IMAGING WORKING GROUP (IHIWG) CSF FLOW GROUP**

*Room 2 (Meeting Room Level)*

Wednesday, June 6 - Thursday, June 7

See schedule for details.

# General Information

## LOST AND FOUND

Registration - Convention Lobby  
(Convention Level)

## LUGGAGE/COAT CHECK

Registration Lobby (Convention Level)

### Hours of Operation:

Saturday, June 2 ..... 11:00am - 6:30pm  
Sunday, June 3 ..... 6:30am - 6:00pm  
Monday, June 4 ..... 6:30am - 7:00pm  
Wednesday, June 6  
Thursday, June 7 ..... 6:30am - 1:00pm

## MEETINGS & ANNOUNCEMENTS BOARD

Convention Lobby (Convention Level)  
Please refer to the daily postings on the Meetings & Announcements Board for information on committee meetings.

## 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 & members of the following Specialty Societies (ASFNR, ASHNR, ASPNR, ASSR & SNIS) ..... Blue  
Non-Member and Other Professionals ..... Green  
Exhibitors ..... Orange  
Guests ..... Tan  
Staff ..... Purple

## PRINTED SCIENTIFIC POSTERS, ELECTRONIC SCIENTIFIC POSTERS, EDUCATIONAL EXHIBIT POSTERS, ELECTRONIC EDUCATIONAL EXHIBITS

Hall C (Convention Level)

## REGISTRATION

Convention Lobby (Convention Level)

## SPEAKER READY ROOM

Room 13 (Meeting Room Level)

Saturday, June 2 ..... 7:00am - 6:00pm  
Sunday, June 3 - ..... 6:30am - 6:00pm  
Wednesday, June 6  
Thursday, June 7 ..... 6:30am - 1:00pm

## SPECIAL SESSION/HOW-TO SESSIONS

Hall A (Convention Level)

## TECHNICAL EXHIBITS

Hall B (Convention Level)

## VANCOUVER INFORMATION DESK

Convention Lobby (Convention Level)

## WORLD FEDERATION OF NEURORADIOLOGICAL SOCIETIES (WFNRS)

### Symposium Neuroradiologicum (SNR) XXII

Friday, May 13 - Monday, May 16, 2022

### Preceding ASNR 60th Annual Meeting

Monday, May 16 - Thursday, May 19, 2022  
Hilton New York Midtown, New York, NY

## YOUNG PROFESSIONALS LOUNGE

Meeting Room 17 (Meeting Room Level)

### WIFI

Network: **ASNR**  
Password: **CONNECT2ASNR**



# Food Service Locations



## FOOD SERVICE INFORMATION

ASNR offers morning and afternoon beverage breaks and Grab-and-Go Breakfast and Lunch. (No tickets required). Two easy locations for you to remember for Food and Beverages at the Foundation of the ASNR 2018 and the ASNR 56<sup>th</sup> Annual Meeting.



## ASNR 2018 – VCCE FOOD SERVICE

### Grab-and-Go Breakfast

Sunday, June 2 – Wednesday, June 6, Ballroom A (Convention Level) 5:30am – 8:00am  
Thursday, June 7, Ballroom A (Convention Level) 6:00am – 8:00am

### Continuous Coffee Service (during Technical Exhibition)

Monday, June 4 – Wednesday, June 6, Hall B (Convention Level) 10:00am – 4:00pm

### Morning Beverage Breaks (coffee/hot tea only)(hydration stations)

Sunday, June 3, Ballroom A (Convention Level) 10:00am – 10:30am  
Monday, June 4 – Wednesday, June 6, Hall B (Convention Level) 10:00am – 10:30am  
Thursday, June 7, Ballroom A (Convention Level) 10:00am – 10:30am

### Afternoon Beverage Breaks (coffee/hot tea/sodas)(hydration stations)

Saturday, June 2, Ballroom A (Convention Level) 3:00pm – 3:30pm  
Sunday, June 3, Ballroom A (Convention Level) 3:15pm – 3:45pm  
Monday, June 4 – Wednesday, June 6, Hall B (Convention Level) 2:45pm – 3:15pm

### Grab-and-Go Lunches

Sunday, June 3, Ballroom A (Convention Level) 11:30am – 1:30pm  
Monday, June 4 – Wednesday, June 6, Hall B (Convention Level) 11:30am – 1:30pm



## Continuous Coffee Service (during Technical Exhibition)

*Hall B (Convention Level)*

**Monday, June 4 - Wednesday, June 6 10:00am - 4:00pm**

# PHILIPS

## **CASE OF THE DAY** *Sponsored by the Philips Healthcare - Elition MRI*

**Monday, June 4 – Wednesday, June 6**

*Hall C (Convention Level)*

Test your neuroradiology knowledge and earn a chance to win prizes, including full registration to the ASNR 57th Annual Meeting in 2019 and two (2) nights (standard room) at the Sheraton Boston. 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.*

**Thank you to our Participating Partner, Philips Healthcare, creator of the Philips Elition MRI, for providing this interactive opportunity to all ASNR meeting attendees!**

## **E-ACCESS CENTER** *Sponsored by the Philips Healthcare - Elition MRI*

*Room 7 (Meeting Room Level)*

The E-Access Center provides computer terminals and printers to all registered attendees to evaluate and record credits, answer and record SAM Session credits and print out CME certificates and check/print out email messages, too.

### **Daily Hours:**

- Saturday, June 2, 1:00pm – 6:30pm
- Sunday, June 3 – Wednesday, June 6, 6:30am – 6:30pm
- Thursday, June 7, 6:30am – 1:00pm

**Thank you to our Participating Partner, Philips Healthcare, creator of the Philips Elition MRI, for providing the E-Access Center for all ASNR meeting attendees!**





# ASNR Publications

## AJNR BOOTH – TECHNICAL EXHIBIT HALL B (BOOTH #506)

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

**Monday, June 4.....10:00am – 4:00pm**

**Tuesday, June 5.....10:00am – 4:00pm**

**Wednesday, June 6.....10:00am – 4:00pm**

## 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 at the ASNR Annual Meeting. *Neurographics* is available free online at [www.neurographics.org](http://www.neurographics.org). ASNR members can earn free AMA PRA Category 1™ SA-CME credit for each *Neurographics* review article by completing an online quiz at ASNR's eCME site.

neurographics

Want to stay up-to-date with the newest articles? Follow *Neurographics* on Facebook (@Neurographics) and Twitter (@asnrographics) to read the latest and greatest content!



# Go Green

---

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



# DIY and Special Sessions

## MONDAY, JUNE 4 – HALL A (CONVENTION LEVEL)

9:10AM-10:00AM



### Gadolinium Deposition in Clinical Practice: What Does It Mean for My Patients?

**Donna R. Roberts, MD**

**Alexander Radbruch, MD, JD**

#### Accreditation Statement

The Institute for Advanced Medical Education (IAME) is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians. IAME designates this live CME activity for a maximum of 1.0 AMA/PRA Category 1 Credit™. Physicians should only claim credit commensurate with the extent of their participation in the activity.

This program is supported through an unrestricted educational grant from Guerbet, LLC.

**This Special Panel Session is not part of The Foundation of the ASNR Symposium 2018 or ASNR Annual Meeting.**

## TUESDAY, JUNE 5 – HALL A (CONVENTION LEVEL)

9:10AM-10:00AM



IMAGING FORUMS, INC.

### GBCA Use in Neuroradiology: What's New?

**Emanuel Kanal, MD, FACR, FISMRM, MRMD, AANG**

**Howard A. Rowley, MD**

#### Accreditation and CME Statement

This CME activity has been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education thru the joint providership of The Institute for Medical Studies (IMS) and Northwest Imaging Forums, Inc. IMS is accredited by the ACCME to provide continuing medical education for physicians. The Institute for Medical Studies designates this live activity for a maximum of 1.0 AMA PRA Category 1 Credits™. Physicians should only claim credit commensurate with the extent of their participation in the activity. Nurses may claim credit for activities approved for AMA PRA Category 1 Credits™ in most states, for up to 50% of the nursing requirement for recertification. This activity is designated for up to 1.0 AMA PRA Category 1 Credits™.

This program has been submitted for approval of 0.5 hour of Category A CE credit as designated by The Society for MR Radiographers & Technologists (SMRT) RCEEM. This activity may be available in multiple formats or from different sponsors. ARRT regulations state that an individual may not repeat a live activity for credit if it was reported in the same or any subsequent biennium. Supported by an educational grant from Bracco Diagnostics, Inc.

**This Special Panel Session is not part of The Foundation of the ASNR Symposium 2018 or ASNR Annual Meeting.**



#asnr18

# How-To Sessions



## 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.

*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.*

### WEDNESDAY, JUNE 6 - HALL A (CONVENTION LEVEL) 9:10AM-10:00AM

#### RAPID

#### **How to Incorporate the New Stroke Imaging Guidelines Into Your Practice Selection of Stroke Patients for Late Window Thrombectomy: What Do the New Guidelines Recommend?**

**Greg Albers, MD**

*Panelists:*

**Jeremy Heit, MD, PhD**

**Howard Rowley, MD**

**Achala Vagal, MD**

### THURSDAY, JUNE 7, 2018 - HALL A (CONVENTION LEVEL) 9:10AM-10:00AM

#### **Canon**

#### **Genesis Stroke Capabilities**

**Kenneth V. Snyder, MD, PhD**

**MONDAY, JUNE 4 – HALL A (CONVENTION LEVEL)**  
**1:00-1:08PM**



*Siemens Healthineers*

**Streamlining Stroke Care with the Nexaris  
Angio-CT**

**Reade De Leacy, MD, MBBS (Hons), BSc, FRANZCR**

**TUESDAY, JUNE 5 – HALL A (CONVENTION LEVEL)**  
**1:00-1:08PM**

*Philips*

# PHILIPS

**Neuro MRI with Philips Compressed SENSE**

**TBD**

**WEDNESDAY, JUNE 6 – HALL A (CONVENTION LEVEL)**  
**1:00-1:08PM**

# PHILIPS

*Philips*

**Philips MR in Neuro Oncology – 3D APT (Amide  
Proton Transfer)**

**TBD**



# Important Information for Young Professionals



## YOUNG PROFESSIONALS

**Fellows, Resident, Medical Student or Neuroradiologists  
in the first 3 years of practice.**

***Be our guest!***

### YOUNG PROFESSIONAL LOUNGE

*Room 17 (Meeting Level)*

A “home base” for Fellows, Residents, Young Professionals & Medical Students to network and share knowledge and experience throughout the meeting.

Saturday, June 2 ..... 1:00pm – 6:00pm

Sunday, June 3 – Wednesday, June 6 ..... 6:30am – 6:00pm

Thursday, June 7 ..... 6:30am – 12:00pm

### SPEED MENTORING

**NEW IN  
2018  
SPEED  
MENTORING**

**Fellows, Residents, Medical Students and Neuroradiologists  
in the first 3 years of practice**, you are invited to join “Speed

Mentoring” organized by the ASNR Young Professional Committee.

Enjoy round table discussions with a mentor. All you have to do is show up “first come first serve” no sign-up required. It will be a fun, relaxing way to network and learn from mentors in the field of Neuroradiology.

When: **Sunday, June 3 – 5:00pm**

Location: **Pan Pacific Vancouver – Gazebo 1 & 2**  
(prior to the Closing Reception of the ASNR Symposium)

Participate in several of the following Topics:

- Maintaining Work Life Balance
- Making the Decision: Academic vs. Private Practice
- Taking the Professional Leap from Trainee to Attending
- Interviewing Advice
- How to Get Promoted
- How to Become Involved in Neuroradiology Advocacy / Health Policy

### YOUNG PROFESSIONAL PROGRAMMING

#### Young Professional Sessions

ASNR has designed specific program topics for learning during the ASNR Annual Meeting. You won't want to miss the following sessions. For details, please see schedule.

#### **Tuesday, June 5**

10:30am-12:00pm

#### **Session 13D**

**Bringing Value to Our  
Imaging Reports**

*Room 1 (Meeting Room Level)*

#### **Wednesday, June 6**

4:45pm-6:15pm

#### **Session 23C**

**Non-Clinical Advice  
for Early Career  
Neuroradiologists**

*Ballroom C*

*(Convention Level)*

#### **Thursday, June 7**

9:00am-10:00am

#### **Session 25B**

**Leveraging Social  
Media to Enhance  
Neuroradiology**

*Ballroom C*

*(Convention Level)*



## CLOSING RECEPTION OF THE SYMPOSIUM

**Pan Pacific Vancouver**

**Sunday, June 3**

**6:30PM – 7:30PM PST, Crystal Pavilion Ballroom (Lobby Level)**

Symposium attendees and exhibitors representatives are invited to spend time networking at the Pan Pacific Vancouver after the busy day at The Foundation of the ASNR Symposium 2018. Enjoy pre-dinner hors d'oeuvres.



## ANNUAL MEETING RECEPTION WITH TECHNICAL EXHIBITORS

**Vancouver Convention Centre East**

**Monday, June 4**

**6:15PM – 7:30PM PST, Hall B (Convention Level)**

Enjoy a fun night with your ASNR colleagues at the Annual Meeting Reception. Stop by and mingle with the ASNR Technical Exhibitors at the reception too. Located in the Technical Exhibits Hall, a pre-dinner reception will include light food and beverages. We look forward to an enjoyable exchange!



# Special Programs



## STUDY GROUPS

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 56<sup>th</sup> 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 Diffusion MRI Study Group**

**Monday, June 4**  
**4:45pm – 6:15pm**  
*Meeting Room 11/12*  
*(Meeting Room Level)*

The ASNR Study Group for the Clinical Translation of Functional and Diffusion MRI represents an international multi-disciplinary 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 inter-disciplinary perspective to develop a strategic framework of key action items to address these knowledge gaps. To this end, the Study Group has been 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, June 5**  
**4:45pm – 6:15pm**  
*Meeting Room 11/12*  
*(Meeting Room Level)*

With the recent success of high-resolution cervical vessel wall imaging for defining stroke risk beyond that achievable by angiography, the Study Group has now turned its attention to the intracranial vessel wall, a new frontier in neurovascular imaging. Recognizing this, the ASNR has supported the formation of this Study Group which is mandated to take a leading role in advancing both clinical applications and research in this new and growing field.

This Study Group is composed of a multidisciplinary team organized to develop methodologies and share expertise for redefining knowledge of both cervical and intracranial vasculopathies. Its primary goals are to establish uniform imaging protocols, promote multiinstitutional research, and develop educational programs and materials. This group offers a variety of opportunities for making seminal and impactful contributions in this field.

### **Imaging Genomics Study Group**

**Wednesday, June 6**  
**4:45pm – 6:15pm**  
*Meeting Room 11/12*  
*(Meeting Room 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 this Study Group is working on the development and validation of imaging genomics biomarkers and biomarker signatures. This Study Group seeks to pool genomic data from multicenter image-guided tumor biopsies in combination with quantitative data from anatomic and physiologic MR. Imaging genomics correlates and investigates the relationship between imaging features of tumors and metabolomic and proteomic expression data to form the most complete imaging-molecular data analysis possible. This Study Group is 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 paradigms within these fields. This 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.

# Technical Exhibits Roster

## VANCOUVER CONVENTION CENTRE EAST – HALL B (CONVENTION LEVEL)

*Map of booth placements is on page 19.*

**Monday, June 4.....10:00am – 4:00pm**

**Tuesday, June 5 .....10:00am – 4:00pm**

**Wednesday, June 6 .....10:00am – 4:00pm**

**American Journal of Neuroradiology (AJNR).....Booth #506**

**American Society of Neuroradiology (ASNR).....Booth #508**

**House of Neuroradiology (ASNR).....Booth #512**

**Bayer .....Booth #106**

1 Bayer Drive, Indianola, PA 15022

**Bracco Diagnostics Inc. ....Booth #218**

259 Prospect Plains Road, Bldg. H, Monroe Township, NJ 08831

**CANON MEDICAL SYSTEMS USA, INC.....Booth #108**

2441 Michelle Drive, Tustin, CA 92780

**Common Data Elements (CDE) .....Booth #504**

**CorTechs Labs .....Booth #410**

4690 Executive Drive, Suite 250, San Diego, CA 92121

**Elsevier, Inc. ....Booth #104**

1600 JFK Blvd., Suite 1600, Philadelphia, PA 19103

**Envision Physician Services .....Booth #207**

7700 West Sunrise Blvd., Plantation, FL 33322

**GE Healthcare .....Booth #411**

3200 N. Grandview Boulevard, Waukesha, WI 53188-1678

**GOLD STANDARD PHANTOMS.....Booth #205**

Unit 103 Belgravia Workshops, 159 – 163 Marlborough Rd., London. N19 4NF

**Guerbet, LLC .....Booth #304**

821 Alexander Road, Suite 204, Princeton, NJ 08540

**Hitachi Healthcare Americas.....Booth #318**

1959 Summit Commerce Park, Twinsburg, OH 44087

*Blue font signifies first time exhibitor*



# Technical Exhibits Roster

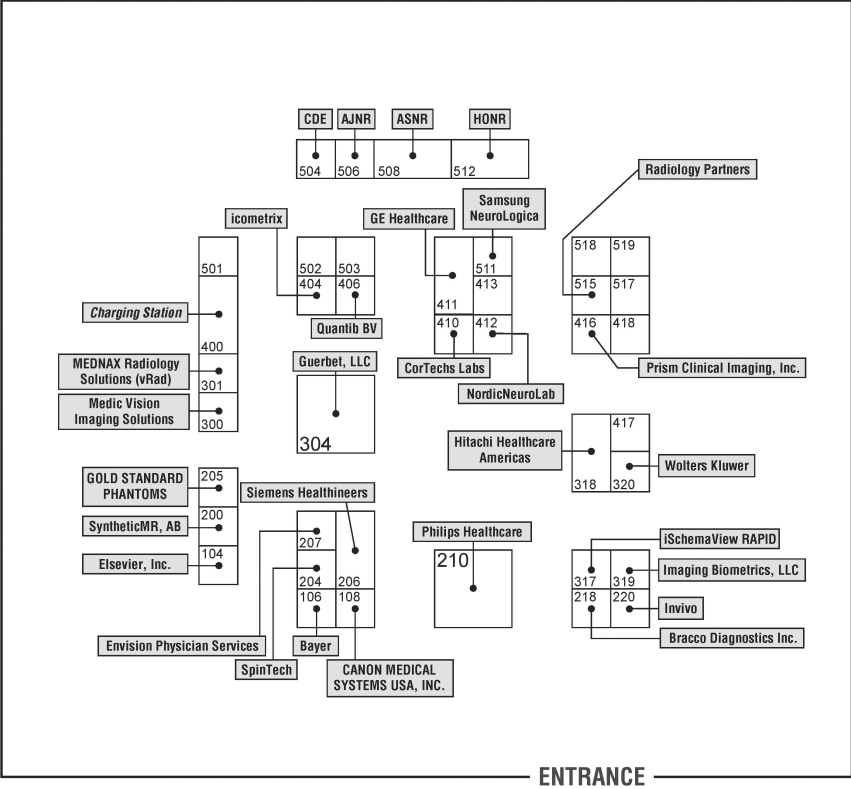


<b>icometrix</b> .....	<b>Booth #404</b>
1 Broadway, 14th Floor – icometrix, Cambridge, MA 02142	
<b>Imaging Biometrics, LLC</b> .....	<b>Booth #319</b>
13416 Watertown Plank Road, Suite 260, Elm Grove, WI 53122	
<b>Invivo</b> .....	<b>Booth #220</b>
N27 W23676 Paul Road, Pewaukee, WI 53072	
<b>iSchemaView RAPID</b> .....	<b>Booth #317</b>
405 El Camino Real, Suite 601, Menlo Park, CA 94025	
<b>Medic Vision Imaging Solutions</b> .....	<b>Booth #300</b>
3 Hayozma, Tirat Carmel, Israel 39032	
<b>MEDNAX Radiology Solutions (vRad)</b> .....	<b>Booth #301</b>
11995 Singletree Lane, Eden Prairie, MN 55344	
<b>NordicNeuroLab</b> .....	<b>Booth #412</b>
234 W. Florida St., Suite 205, Milwaukee, WI 53204	
<b>Philips Healthcare</b> .....	<b>Booth #210</b>
595 Miner Rd, Cleveland, OH 44143	
<b>Prism Clinical Imaging, Inc</b> .....	<b>Booth #416</b>
890 Elm Grove Rd., Ste 209, Elm Grove, WI 53122	
<b>Quantib BV</b> .....	<b>Booth #406</b>
Westblaak 3012 KM Rotterdam, The Netherlands	
<b>Radiology Partners</b> .....	<b>Booth #515</b>
2101 E. El Segundo Blvd., Suite # 401, El Segundo, CA 90245	
<b>Samsung NeuroLogica</b> .....	<b>Booth #511</b>
14 Electronics Ave, Danvers, MA 01923	
<b>Siemens Healthineers</b> .....	<b>Booth #206</b>
40 Liberty Boulevard, Malvern, PA 19355	
<b>SpinTech</b> .....	<b>Booth #204</b>
30200 Telegraph Road, Suite 140, Bingham Farms, MI 48025	
<b>Synthetic MR, AB</b> .....	<b>Booth #200</b>
Storgatan 11, Linköping, Sweden, SE-582 23	
<b>Wolters Kluwer</b> .....	<b>Booth #320</b>
Two Commerce Sq. 2001 Market Street, Philadelphia, PA 19103	

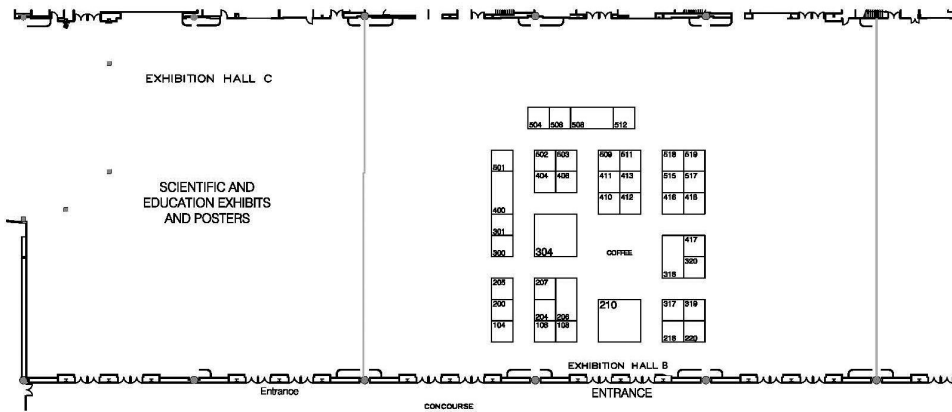
*Blue font signifies first time exhibitor*



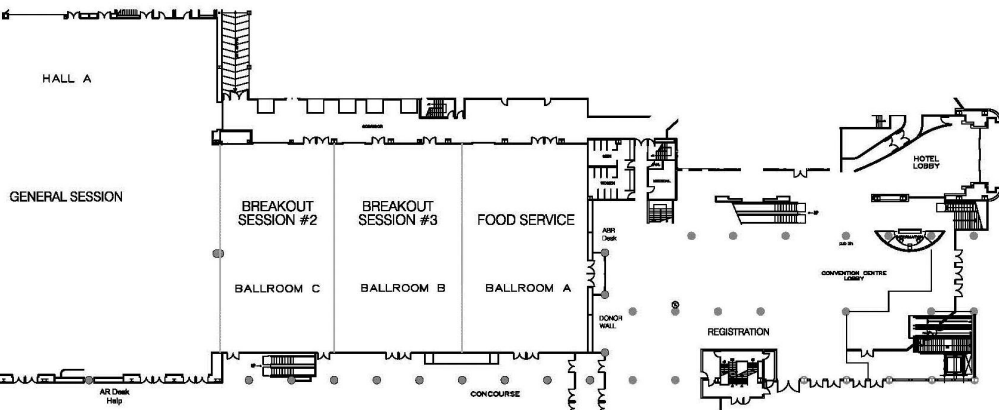
# Technical Exhibits Floor Plan

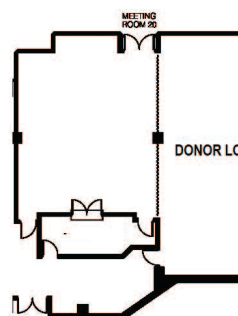


# Convention Level Floor Plan



# Convention Level Floor Plan





# Meeting Level Floor Plan







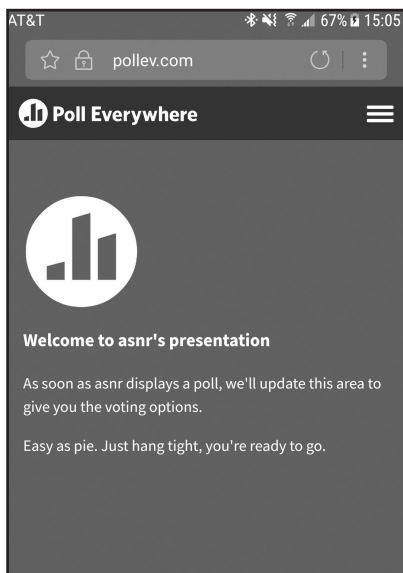
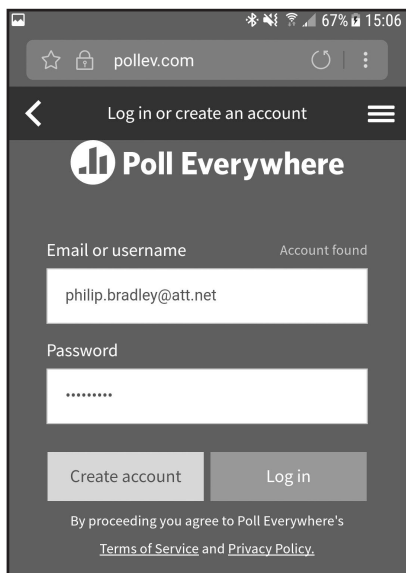
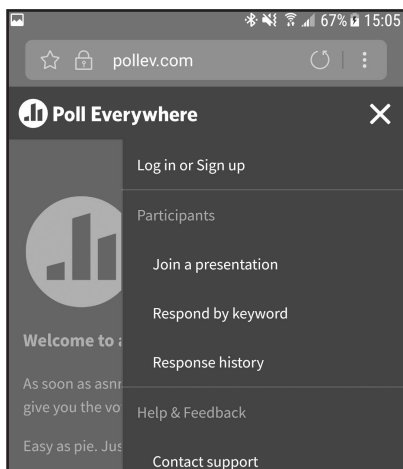
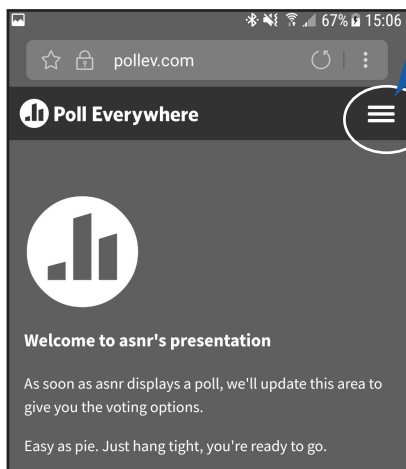
# Audience Response (AR) System Features



## SMART POLLING WEB INSTRUCTIONS

- Go to [www.pollev.com/asnr](http://www.pollev.com/asnr)
- Click on the three lines in the top right corner to get the screen to login
- You will see the following screen:

[Click here](#)



To reconfirm your login information, click on the Icon in the black bar beside @asnr's presentation and you will see your login status. Then click 'Back'.



# Audience Response (AR) Q&A

## WIFI CONNECTION

Please connect your device to the WiFi network named ASNR and enter the password WHATSACDE? 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 e-Access/Alternate SAM Response Area in East Meeting Room 7 (Meeting Room Level).

## 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 e-Access/Alternate SAM Response Area. Please allow two hours following the session conclusion for the credits to be transferred to the e-Access/Alternate SAM Response Area.

## LOGIN

### SAM Instructions

1. Go to <https://ww3.aievolution.com/asnr1801/> and login using your username and password
2. You will land on your “My Credits” page
3. Select “My SAMs” from the top of the page
4. On this page you can select “List Self-Assessments” to see the self-assessments that are available to you
5. From this page you can Start Self-Assessment from the right side of the screen
6. If you have not already done so, you will be asked to claim your AMA credit for this session before completing your posttest to complete your SAM credit.



### WIFI

**Network:** ASNR

**Password:** CONNECT2ASNR



# Information for Poster & Exhibit Presenters



## 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\* is in the Convention Lobby (Convention Level) and 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

- Sunday, June 3 | 9:00am – 5:00pm
- Monday, June 4 | 9:00am – 1:00pm

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 Hall C 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 Hall C outside of poster 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 Lobby). We will be happy to meet with you personally to discuss any aspect of the meeting.

### Exhibit Set-up/Installation Hours – Hall C (Convention Level)

All exhibits must be set-up by 9:00pm on Sunday, June 3.

# Information for Electronic Scientific Poster & Electronic Education Exhibits

## INFORMATION FOR SCIENTIFIC POSTER AND EDUCATION EXHIBIT PRESENTERS (CONTINUED)

### Educational Exhibit and Scientific Poster Location and Hours

*Hall C (Convention Level)*

- Monday, June 4 through Wednesday, June 6 | 6:30am – 9:00pm
- Thursday, June 7 | 6:30am – 12:00pm

### Exhibit Dismantle Hours

Removal of exhibits may begin at 11:00am to 1:00pm on Thursday, June 7. Any items still remaining in the Hall C at 1:00pm will be discarded at that time.

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, at [vgeisendorfer@asnr.org](mailto:vgeisendorfer@asnr.org) or directly onsite.

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

### Electronic Poster, and Electronic Education Exhibits Location and Hours:

*Hall C (Convention Level)*

- Monday, June 4 through Wednesday, June 6 | 6:30am – 9:00pm
- Thursday, June 7 | 6:30am – 9:00pm

It is suggested that all presenters review their exhibits/posters in Hall C, prior to Monday, June 4 to check/view their presentations. For changes to your presentation visit Hall C.



# Continuing Medical Education (CME)



## 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 2018 and ASNR 56<sup>th</sup> Annual Meeting, go to any terminal in the e-Access and follow the simple directions for printing out an official The Foundation of the ASNR Symposium 2018 and ASNR 56<sup>th</sup> Annual Meeting CME Certificate.

*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 Lobby of the Vancouver Convention Centre East.

## CONTINUING THIS YEAR!

**Evaluations available online with remote access 24/7 through the meeting at <https://ww3.aievolution.com/asn1801/> until Monday, June 25, 2018 to evaluate.**

## CME Instructions

1. Go to <https://ww3.aievolution.com/asn1801/> and login using your username and password
2. You will land on your My Credits page
3. From this page, you can search events or browse the sessions to find the sessions you attended
4. Once you find the session you attended, select Add Credit from the left side of the screen. This will bring you into the confirmation of credits and evaluation for that session. Complete the confirmation and evaluate the session to claim your credit.
5. Once you have completed step 4, you will be returned to the My Credits Page. From here you can email or print your certificate. You will be prompted to complete the meeting evaluation before your certificate will be available to print. You will only have to complete the meeting evaluation one time.

## e-Access

*Sponsored by the Philips Healthcare - Elition MRI*

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://ww3.aievolution.com/asn1801/>. 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 2018 and ASNR 56<sup>th</sup> Annual Meeting, all evaluations must be entered by June 25, 2018.*

# The Foundation of the Symposium 2018 CME Information

## 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 12.75 *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 Symposium 2018 will focus on adding value and improving healthcare in neuroradiology. It will center on how neuroimaging adds value in many subspecialty areas, including brain, spine, head & neck, pediatric and neurointerventional procedures. The target audience will include practicing neuroradiologists, other radiologists charged with interpreting neuroimaging studies, radiology fellows and residents, neuroscientists interested in the latest advances, and non-radiology colleagues whose practices include neuroimaging. Dedicated topic areas include screening and diagnostic neuroimaging, evidence based neurointerventional treatment, emergency neuroimaging use and usefulness, advanced imaging strategies, and healthcare reform.

## OBJECTIVES

- Discuss neuroimaging adding value in clinical care by improving health outcomes and healthcare delivery.
- Explore the extensive utilization of neuroimaging in the emergency setting.
- Diagnose low back pain and recommend other spine imaging and interventions.
- Report on incidental findings and how to manage follow-up evaluations.
- Review normal imaging and understand how negative exams are identified as positive results for patients.
- Evaluate head and neck imaging and determine patient management and treatment.
- Describe ways to improve quality and safety in pediatric neuroimaging.
- Review methods to improve patient outcomes utilizing advanced neuroimaging.
- Discuss the meaning and future of healthcare reform for Neuroradiologists.



# ASNR 56<sup>th</sup> Annual Meeting CME Information



## 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 28.0 *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 56<sup>th</sup> Annual Meeting is the premiere Neuroradiology meeting in the world. The target audience includes:

- Neuroradiologists in practice and research
- General radiologists who interpret neuroimaging studies
- Young Professionals, Trainees and Students
- Brain, Spine and Head & Neck imaging Scientists
- Non-radiology Physicians and Trainees from related disciplines
- Research Scientists

The ASNR 56<sup>th</sup> Annual Meeting is designed to help us deal with the healthcare challenges today and what's new in the advancing field of neuroimaging. These challenges are seen in the clinical, scientific, educational and socio-economic arenas. A variety of learning formats will be offered, to allow for individual learning preferences, featuring educational focus sessions, parallel scientific paper presentations, electronic and traditional posters, Self-Assessment Modules (SAMs), interactive audience response for case-based learning and programming of particular interest to young professionals in training or early practice.

# ASNR 56<sup>th</sup> Annual Meeting CME Information

## OBJECTIVES

- Discuss the value and future developments of the clinical fMRI service.
- Determine how healthcare reform is impacting Radiologists and Neuroradiologists today.
- Examine solutions for better healthcare while reviewing different payment modules.
- Identify the roles and devices of aneurysm treatment.
- Discuss the role of CT, CTA, Perfusion and Vessel Wall Imaging in acute ischemic stroke.
- Review imaging biomarkers in vascular diseases.
- Define and discuss current stroke therapy.
- Review artificial intelligence and machine learning in neuroimaging.
- Review the value of neuroimaging for psychiatric disorders.
- Define the value of imaging in spinal oncology.
- Explore ways to bring value to the imaging report.
- Review tools in Neuroradiology education and training.
- Define value in PET-MRI for neurological disorders.
- Learn about training across the education continuum.
- Comprehend the basis for and applications of Evidence-Based Medicine as applied to Neuroradiology.
- Identify safety and toxicity to the pediatric brain for MR imaging.
- Review the evidence of spinal interventions.
- Identify and discuss how radiologists are compensated around the world.
- Discuss the value of head and neck imaging in tumor staging.
- Review sinonasal cavity and anterior cranial base anatomy and pathology.
- Identify and discuss lifelong learning for Neuroradiologists.
- Discuss Gadolinium use in neuroimaging.
- Interpret cases in pediatric head & neck imaging.
- Define and discuss temporal bone imaging.
- Review best practices for Neuroradiologists in their early years of their career.
- Analyze imaging genomics for brain tumors.
- Identify social media tools to enhance Neuroradiology practice.
- Discuss vascular lesions in the head & neck.



# Self-Assessment Modules (SAM) and Audience Response



## SYMPOSIUM

Saturday, June 2 (5:00pm-6:30pm)	SY3-Emergency Neurimaging: What? When? And Why?(SAM)	1.5hours
Sunday, June 3 (10:30am-12:00pm)	Sy5-Head & Neck Imaging: Changing Patient Management and Treatment (SAM)	1.5hours
Sunday, June 3 (1:15pm-3:15pm)	Sy6-Pediatric Neuroimaging: Improving Quality & Safety (SAM)	2hours

## ANNUAL MEETING

Monday, June 4 (7:00am-8:00am)	02A-One Hour Sam Session: Brain (SAM)	1 hour
Monday, June 4 (1:15pm-2:45pm)	07A-SNIS programming: Stroke Therapy: Where Are We Now? (SAM)	1.5hours
Monday, June 4 (4:45pm-6:15pm)	09A-Healthcare Policy Programming: Value Matters in Health Policy (SAM)	1.5hours
Tuesday, June 5 (7:00am-8:00am)	10A-One Hour Sam Session: Spine (SAM)	1 hour
Tuesday, June 5 (1:15pm-2:45pm)	14A-Education programming: Learn to Love Life Long Learning (SAM)	1.5hours
Tuesday, June 5 (4:45pm-6:15pm)	16A-ASSR Programming: Spinal Interventions: Show Me the Evidence (SAM)	1.5hours
Wednesday, June 6 (7:00am-8:00am)	17A-One Hour Sam Session: Forget K Space...This is the Case-Base! (SAM)	1 hour
Wednesday, June 6 (10:30am-12:00pm)	20A-ASFNR Programming: Value of 7T MRI for Neurological Disorders (SAM)	1.5hours
Wednesday, June 6 (1:15pm-2:45pm)	21A-ASPNR Programming: Placenta and Imaging of the Immature Brain (SAM)	1.5hours
Thursday, June 7 (7:00am-8:00am)	24A-One Hour Sam Session: Head and Neck Cases: Everybody's Favorite! (SAM)	1.5hours
Thursday, June 7 (10:30am-12:00pm)	27A-ASHNR Programming: Update on Vascular Lesions of the Head & Neck (SAM)	1.5hours

This SAM meets the ABR's criteria for self-assessment CME (SA-CME) in the ABR Maintenance of Certification program. This SAM will earn the same number of SA-CME credits as the stated CME credits. Please login to myABR annually <https://myabr.theabr.org> to complete your MOC attestations with 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 520-519-5152 for assistance.

Audience Response (AR) Session Wednesday, June 6 (4:45pm – 6:15pm)

23A-ASPNR Programming: Pediatric Cased Based Session

(AR): Case Review Series Pediatric Head and Neck



# The Foundation of the ASNR Symposium 2018

## DAY 1 - SATURDAY, JUNE 2, 2018



**1:00pm – 3:00pm**

*Location: Hall A  
(Convention Level)*

**1:00 PM - 1:30 PM**

**1:30 PM - 2:00 PM**

**2:00 PM - 2:30 PM**

**2:30 PM - 3:00 PM**

**3:00pm – 3:30pm**

*Ballroom A  
(Convention Level)*

**3:30pm – 5:00pm**

*Location: Hall A  
(Convention Level)*

**3:30 PM - 4:00 PM**

**4:00 PM - 4:20 PM**

**4:20 PM - 4:40 PM**

**4:40 PM - 5:00 PM**

### **Do No Harm: The Importance of Incidental Findings**

Moderators: Erin Simon Schwartz, MD, FACR and  
Jeffrey S. Ross, MD

#### **Costs of Incidental Findings: Mannerism in Radiology**

Faculty: David J. Seidenwurm, MD, FACR

#### **BRAIN: Incidental or Not:**

##### **You Know It When You See It**

Faculty: Robert E. Watson, MD, PhD

#### **SPINE: Incidental or Not:**

##### **Get Famous Calling Stuff Normal**

Faculty: Robert E. Morales, MD

#### **HEAD & NECK: Silence Can be Golden**

Faculty: Suresh Mukherji, MD, MBA, FACR

### **Afternoon Beverage Break**



### **New (and Improved?) Spine Imaging and Interventions - What You Should Know**

*(Convention Level)* **But May Not**

Moderators: Jeffrey G. Jarvik, MD, MPH and  
David Kallmes, MD

#### **Evidence for Non-surgical Treatment of Back Pain**

Faculty: Janna Friedly, MD

#### **Intrathecal Gad for Spine Imaging - Safety, Risks and Benefits**

Faculty: Bradley Buchbinder, MD

#### **Evidence for Spine DTI and How To Do It Well**

Faculty: Mahmud Mossa-Basha, MD

#### **Treating Headache (Wait, That's Not a Spine Topic): Targeted Blood Patching Technique and Evidence**

Faculty: Peter Kranz, MD



# The Foundation of the ASNR Symposium 2018



## DAY 1 - SATURDAY, JUNE 2, 2018



**5:00pm – 6:30pm**

*Location: Hall A  
(Convention Level)*

**5:00 PM - 5:20 PM**

**5:20 PM - 5:40 PM**

**5:40 PM - 6:00 PM**

**6:00 PM - 6:20 PM**

**6:20 PM - 6:30 PM**

### **Emergency Neuroimaging: What? When? and Why? (SAM)**

Moderators: Robert M. Barr, MD, FACR and  
Amy L. Kotsenas, MD, FACR

**Use and Usefulness of Emergency  
Neuroimaging**

Faculty: Danny Hughes, PhD

**How Much Imaging is Critical to Stroke Care?**

Faculty: Howard A. Rowley, MD

**Head Trauma: Rules of Engagement**

Faculty: Christopher T. Whitlow, MD, PhD, MHA

**Syncope and Dizziness:**

**When and How Much to Image?**

Faculty: Pamela W. Schaefer, MD

**SAM Questions & Answers**

## DAY 2 - SUNDAY, JUNE 3, 2018



**6:30am – 8:00am**

*Ballroom A  
(Convention Level)*

**7:30am – 9:00am**

*Location: Hall A  
(Convention Level)*

**7:30 AM - 7:50 AM**

**7:50 AM - 8:10 AM**

**8:10 AM - 8:30 AM**

**8:30 AM - 8:50 AM**

### **Breakfast**



### **Don't Underestimate the Value of Normal Imaging Exams: Turning Negative Exams into Positive Results!**

Moderators: William D. Donovan, MD, MPH, FACR  
and Rona Woldenberg, MD

**Cervical Spine Imaging in Mild Trauma: Is It All  
Just A Pain in the Neck?**

Faculty: Gordon K. Sze, MD, FACR

**How Much Imaging is Needed in the Work-up of  
Intracranial Hemorrhage?**

Faculty: Michael H. Lev, MD, FACR, FAHA

**Imaging in Headache:**

**Why Do We Continue To Do It?**

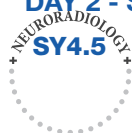
Faculty: John E. Jordan, MD, FACR

**Neuroimaging and Other Biomarkers in the  
Workup of Dementia: The Value of Negative  
Tests**

Faculty: Jeffrey R. Petrella, MD

# The Foundation of the ASNR Symposium 2018

## DAY 2 - SUNDAY, JUNE 3, 2018



**9:00am – 10:00am**

Hall A

(Convention Level)

### How-To Session

*This session is supported by an unrestricted grant from Bayer.*

The Value of Gadolinium Contrast: Past, Present and Future

Faculty: Jennifer L. Becker, MD

**10:00am – 10:30am**

Ballroom A

(Convention Level)

### Morning Beverage Break



**10:30am – 12:00pm**

Location: Hall A

(Convention Level)

### Head & Neck Imaging: Changing Patient Management and Treatment (SAM)

Moderators: Yoshimi Anzai, MD, MPH and Laurie A. Loevner, MD, FACR

**10:30 AM - 10:50 AM**

#### Doctors' Doctor - Value Added Head & Neck Radiologists

Faculty: Christine M. Glastonbury, MBBS

**10:50 AM - 11:10 AM**

#### String of Pearls Around the Neck: Key Imaging to Add More Value

Faculty: Nancy J. Fischbein, MD

**11:10 AM - 11:30 AM**

#### Patients' Doctor-Patient Centered Head and Neck Imaging - It Takes a Village

Faculty: Patricia A. Hudgins, MD

**11:30 AM - 11:50 AM**

#### Embrace the Power of Imaging - Where You Can Make A Difference

Faculty: Richard H. Wiggins III, MD

**11:50 AM - 12:00 PM**

#### SAM Questions & Answers

**11:30am – 1:30pm**

Ballroom A

(Convention Level)

### Lunch



**1:15pm – 3:15pm**

Location: Hall A

(Convention Level)

### Pediatric Neuroimaging: Improving Quality & Safety (SAM)

Moderators: Raymond K. Tu, MD, MD, FACR and Tina Young Poussaint, MD

**1:15 PM - 1:35 PM**

#### Rapid Pediatric MRI: Finding the Just Right Protocol

Faculty: Gregory D. Avey, MD



# The Foundation of the ASNR Symposium 2018



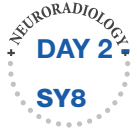
## DAY 2 - SUNDAY, JUNE 3, 2018 - SY6 Continued

1:35 PM - 1:55 PM	<b>Radiation and Anesthesia: Dialing Down the Dose in Pediatrics</b> Faculty: Dennis W. Shaw, MD
1:55 PM - 2:05 PM	<b>Gadolinium Deposition Review: State of the Art</b> Faculty: Donna R. Roberts, MD
2:15 PM - 2:35 PM	<b>Impact of Health Care Reform on Pediatric Neuroradiology</b> Faculty: Richard L. Robertson, MD
2:35 PM - 2:55 PM	<b>Age of Precision Medicine in Pediatric Neuroradiology</b> Faculty: Susan Palasis, MD
3:05 PM - 3:15 PM	<b>SAM Questions &amp; Answers</b>
<b>3:15pm – 3:45pm</b> <i>Ballroom A (Convention Level)</i>	<b>Afternoon Beverage Break</b>
<b>3:45pm – 5:15pm</b> <i>Location: Hall A (Convention Level)</i>	<b>Does Advanced Imaging Really Improve Outcomes?</b> Moderators: Timothy P.L. Roberts, PhD and Christopher G. Filippi, MD
3:45 PM - 4:08 PM	<b>Looking Back How Advanced Imaging Has Improved Healthcare and Patient Outcomes</b> Faculty: Max Wintermark, MD
4:08 PM - 4:31 PM	<b>Wait, Not Yet...Lessons Learned and New Discoveries Still In-Progress</b> Faculty: Pratik Mukherjee, MD, PhD
4:31 PM - 4:55 PM	<b>Challenges in Incorporating Innovations in Practice: Are We Moving Too Fast?</b> Faculty: Alexander M. Norbash, MD
4:55 PM - 5:15 PM	<b>Panel Discussion</b> Faculty: Timothy P. L. Roberts, PhD Alexander M. Norbash, MD, Max Wintermark, MD



# The Foundation of the ASNR Symposium 2018

Pratik Mukherjee, MD, PhD



**DAY 2 SUNDAY, JUNE 3, 2018**

**SY8**

**5:15pm – 6:30pm**

*Location: Hall A  
(Convention Level)*

**5:15 PM - 5:25 PM**

**5:25 PM - 5:45 PM**

**5:45 PM - 6:30 PM**

**6:30pm-7:30pm**

*Location: Pan Pacific –  
Crystal Pavilion  
(Lobby Level)*

## **Deciphering the Current Healthcare Landscape: Hear from the Experts**

Moderators: Jacqueline A. Bello, MD and  
Patrick A. Turski, MD, FACR

### **Healthcare Reform and ACA**

Faculty: Joshua A. Hirsch, MD, FACR, FSIR, FSNIS

### **MACRA and RUC: All You Need to Know**

Faculty: Gregory Nicola, MD

### **Panel Discussion**

Faculty: Robert M. Barr, MD, FACR,  
David I. Seidenwurm, MD, FACR,  
Danny R. Hughes, PhD,  
William D. Donovan, MD, MPH, FACR,  
Geraldine B. McGinty, MD, MBA

## **Symposium Reception**

## MONDAY JUNE 4TH, 2018

**6:00 AM - 6:45 AM**

*Ballroom A*

*(Convention Level)*

**6:55 AM - 7:00 AM**

*Room: Hall A*

*(Convention Level)*

**7:00 AM - 8:00 AM**

*Room: Hall A*

*(Convention Level)*

**7:00 AM - 7:25 AM**

**7:25 AM - 7:50 AM**

**7:50 AM - 8:00 AM**

**8:00 AM - 9:00 AM**

**9:10 AM - 10:00 AM**

*Room: Hall A*

*(Convention Level)*

**10:00 AM - 10:30 AM**

*Room: Ballroom A*

*(Convention Level)*

**10:30 AM - 12:00 PM**

*Room: Hall A*

*(Convention Level)*

**10:30 AM - 10:50 AM**

### Breakfast



### 01A-Opening Remarks

Pina C Sanelli, MD

### 02A-One Hour SAM Session: Brain (SAM) (AR)

Moderators: Noriko Salamon and  
Jeremy J. Heit, MD, PhD

### Sustain the Brain: Intriguing Neoplastic, Infectious Inflammatory Cases

Behroze Vachha DR, MD, PHD

### Sustain the Brain: Intriguing Cerebrovascular Cases

Pamela W. Schaefer, MD

### SAM Questions and Answers

### 03A-Keynote Speaker: The Radiology Renaissance: Shaping the Future of Healthcare

Introduction: Pina C. Sanelli, MD

Keynote Speaker: Andy DeLaO

### 04A-Gadolinium Deposition in Clinical Practice: What Does it Mean for my Patients?

*This session is supported by an unrestricted grant  
from Applied Radiology Expert Forums*

Donna R. Roberts, MD

Alexander Radbruch, MD, JD

### Morning Beverage Break



### 05A-ASFNR Programming: Value of Clinical fMRI Service

Moderators: Haris Sair, MD and  
Timothy P.L. Roberts, PhD

### The Economics of Clinical fMRI Service

Jay J. Pillai, MD

## MONDAY JUNE 4TH, 2018 - 05A Continued

10:50 AM - 11:10 AM	Why I Need fMRI: Neurosurgeon's Perspective Chetan Bettegowda, MD, PhD
11:10 AM - 11:30 AM	Interpretation of fMRI to Optimize Value for Neurosurgeons Kirk M. Welker, MD
11:30 AM - 11:50 AM	More Value? Future Developments in Clinical Functional MRI Andrei I. Holodny, MD
1:50 AM - 12:00 PM	Panel Discussion
<b>10:30 AM - 12:00 PM</b> <i>Room: Ballroom C (Convention Level)</i>	<b>05B-Healthcare Policy Programming: Alternative Payment Models and the Diagnostic Radiology</b> Moderators: Melissa Chen, MD and Gregory N. Nicola, MD
10:30 AM - 10:55 AM	Alternative Payment Models: Current and Future Opportunities for the Diagnostic Radiologist Joshua A. Hirsch, MD, FACR, FSIR, FSNIS
10:55 AM - 11:20 AM	Harvey Neiman Health Policy Institute Update on Resources for Radiologists Participating in a APM Danny R. Hughes, PhD
11:20 AM - 11:45 AM	Lessons Learned from the Physician-Focused Payment Model Technical Advisory Panel for the Radiologist Lauren Golding, MD, Triad Radiology Associates
11:45 AM - 12:00 PM	Panel Discussion
<b>10:30 AM - 12:00 PM</b> <i>Room: Ballroom B (Convention Level)</i>	<b>05C-SNIS Programming: Coils, Pipes and Webs: State of the Art Treatment</b> Moderators: Edward A. Michals, MD and Gregory G. Zaharchuk, MD, PhD
10:30 AM - 10:55 AM	Novel Aneurysm Treatment Devices: Why, When and How? TBD



## MONDAY JUNE 4TH, 2018 - 05C Continued

10:55 AM - 11:20 AM

Imaging Post Intra-Arterial Device Treatment  
Reade De Leacy, MD

11:20 AM - 11:45 AM

An Update on Embolization Treatment of dAVF and AVM  
Cameron G. McDougall, MD

11:45 AM - 12:00 PM

**10:30 AM - 12:00 PM**

*Room: Meeting Room 1  
(Meeting Room Level)*

Discussion

**05D-Parallel Paper Session: Stroke Treatment Strategies**

Moderators: Christopher P. Hess, MD, PhD and Nancy J. Benedetti, MD

**10:30 AM - 12:00 PM**

*Room: Meeting Room 11/12  
(Meeting Room Level)*

**05E-Parallel Paper Session: Advanced Techniques in Brain Tumor Imaging I**

Moderators: Rivka R. Colen, MD and Arindam Rano Chatterjee, MD

**10:30 AM - 12:00 PM**

*Room: Meeting Room 8/15  
(Meeting Room Level)*

**05F-Excerpta: Adult Brain: Degenerative and Inflammatory, Infectious Disease**

Moderators: Anne G. Osborn, MD and Benjamin White, MD

**10:30 AM - 12:00 PM**

*Room: Meeting Room 2/3  
(Meeting Room Level)*

**05G-Parallel Paper Session: Education and Training**

Moderators: Anandh Rajamohan, MD and James C. Anderson, MD

**11:30 AM - 1:15 PM**

*Exhibit Hall B  
(Convention Level)*

**Lunch**



**1:00 PM - 1:08 PM**

*Room: Hall A  
(Convention Level)*

**Streamlining Stroke Care with the Nexaris Angio-CT**

*This session is supported by an unrestricted grant from Siemens Healthineers.*

Reade De Leacy, MD, MBBS, BSc, FRANZCR

**1:15 PM - 2:45 PM**

*Room: Hall A  
(Convention Level)*

**07A-SNIS Programming: Stroke Therapy: Where Are We Now? (SAM) (AR)**

Moderators: Mahesh V. Jayaraman, MD and Guilherme Dabus, MD

1:15 PM - 1:35 PM

What We Know: Show Me the Evidence  
Ryan McTaggart, MD



## MONDAY JUNE 4TH, 2018 - 07A Continued

1:35 PM - 1:55 PM	<b>What We Don't Know and Future Directions</b> Mayank Goyal, MD, FRCPC
1:55 PM - 2:15 PM	<b>Value in Vessel Imaging in All Stroke Patients</b> Thabele M. Leslie-Mazwi, MD
2:15 PM - 2:35 PM	<b>TIA Imaging and Beyond</b> Gregory G. Zaharchuk, MD, PhD
2:35 PM - 2:45 PM <b>1:15 PM - 2:45 PM</b> <i>Room: Ballroom C</i> <i>(Convention Level)</i>	<b>SAM Questions and Answers</b> <hr/> <b>07B-ASSR Programming: Spinal Imaging: State of the Art and Beyond</b> Moderators: Gregory J. Lawler, MD and Nikdokht Farid, MD
1:15 PM - 1:30 PM	<b>Spectral CT/Dual Energy CT</b> John L. Go, MD, FACR
1:30 PM - 1:45 PM	<b>DWI &amp; Perfusion Imaging</b> Adam E. Flanders, MD
1:45 PM - 2:00 PM	<b>Spinal Angiography</b> Philippe E. Gailloud, MD
2:00 PM - 2:15 PM	<b>MRA &amp; CTA</b> Roland R. Lee, MD, FACR
2:15 PM - 2:30 PM	<b>MR Neurography</b> Cynthia T. Chin, MD
2:30 PM - 2:45 PM <b>1:15 PM - 2:45 PM</b> <i>Room: Ballroom B</i> <i>(Convention Level)</i>	<b>Discussion</b> <hr/> <b>07C-CSI Programming: Artificial Intelligence and Machine Learning</b> Moderator: Edward H. Herskovits, MD, PhD
1:15 PM - 1:35 PM	<b>Basic Overview</b> Tim O'Connell, MD
1:35 PM - 1:55 PM	<b>The MGH ER Experience</b> Michael H. Lev, MD, FACR, FAHA
1:55 PM - 2:15 PM	<b>ACR Assist and Artificial Intelligence</b> Sumit N. Niogi, MD, PhD
2:15 PM - 2:35 PM	<b>Radiometric and Artificial Intelligence</b> Christopher T. Whitlow, MD, PhD, MHA
2:35 PM - 2:45 PM	<b>Discussion</b>



## MONDAY JUNE 4TH, 2018

### 1:15 PM - 2:45 PM

Room: Meeting Room 1  
(Meeting Room Level)

### 1:15 PM - 1:45 PM

### 1:45 PM - 2:15 PM

### 2:15 PM - 2:45 PM

### 1:15 PM - 2:45 PM

Room: Meeting Room 11/12  
(Meeting Room Level)

### 1:15 PM - 2:45 PM

Room: Meeting Room 8/15  
(Meeting Room Level)

### 1:15 PM - 2:45 PM

Room: Meeting Room 2/3  
(Meeting Room Level)

### 2:45 PM - 3:00 PM

Room: Hall B  
(Convention Level)

### 3:00 PM - 4:30 PM

Room: Hall A  
(Convention Level)

### 3:00 PM - 3:15 PM

## 07D-ESNR Programming: Imaging Biomarkers in Vascular Diseases

Moderators: Osamu Sakai, MD, PhD and Alex Rovira, MD

### Small Vessel Diseases

Meike Vernooji, MD, PhD

### Cerebral Microbleeds and Cortical Superficial Siderosis

Prof. H. Rolf Jager

### Brain Aneurysms

Ajay Malhotra, MD

## 07E-Parallel Paper Session: Advanced Techniques in Brain Tumor Imaging II

Moderators: Kevin A. Hsu, MD and John D. Port, MD, PhD

## 07F-Parallel Paper Session: Epilepsy Imaging Techniques

Moderators: Jana Ivanidze, MD, PhD and Ramin R. Sakit, MD

## 07G-Parallel Paper Session: Imaging Neurodegenerative Diseases

Moderators: Gordon K. Sze, MD, FACR and Neil Uttam Lall, MD

## Afternoon Beverage Break



## 08A-Evidence Based Medicine Programming: Comparative Effective Research Training (CERT)

Moderators: Annette J. Johnson, MD, MS and J. Paul Jacobson

### What is Comparative Effective Research and Why Is It Vital to the Future of Neuroradiology

Pina C Sanelli, MD

## MONDAY JUNE 4TH, 2018 - 08A Continued

3:15 PM - 3:30 PM

Overview of the RSNA-ASNR Comparative Effective Research Training Program

Yoshimi Anzai, MD, MPH

3:30 PM - 4:30 PM

Panel Discussion: What Did We Get Out of the CERT Program?

Ajay Malhotra, MD

Lubdhra M. Shah, MD

Prakash Muthusami, MBBS, MD, PDCC

Timothy J. Amrhein, MD

**3:00 PM - 4:30 PM**

*Room: Ballroom C*

*(Convention Level)*

**08B-Parallel Paper Session: New Findings in Multiple Sclerosis**

Moderators: Gloria Chiang, MD and

Joel R. Meyer, MD

**3:00 PM - 4:30 PM**

*Room: Ballroom B*

*(Convention Level)*

**08C-Parallel Paper Session: Pediatric Imaging**

Moderators: Kambiz Nael, MD and

Susan Palasis, MD

**3:00 PM - 4:30 PM**

*Room: Meeting Room 1*

*(Meeting Room Level)*

**08D-Parallel Paper Session: Spine Interventions**

Moderators; Courtney M. Tomblinson, MD and

Patricia A. Hadgins, MD

**3:00 PM - 4:31 PM**

*Room: Meeting Room 11/12*

*(Meeting Room Level)*

**08E-Parallel Paper Session: Cerebral Aneurysms Management and Treatment**

Moderators: Daniel Mandell, MD, PhD, FRCPC and

Jana Ivanidze, MD, PhD

**3:00 PM - 4:30 PM**

*Room: Meeting Room 8/15*

*(Meeting Room Level)*

**08F-Excerpta: Adult Brain: Infectious Disease/Vascular Diagnosis and Neoplasms**

Moderators: Reza Forghani, MD, PhD and

TBD

**3:00 PM - 4:30 PM**

*Room: Meeting Room 2/3*

*(Meeting Room Level)*

**08G-Parallel Paper Session: Brain: New and Advanced Techniques**

Moderators; Daniel P. Barboriak, MD and

Mai-Lan Ho, MD

**4:45 PM - 6:15 PM**

*Room: Hall A*

*(Convention Level)*

**09A-Health Policy Programming: Value Matters in Health Policy (SAM) (AR)**

Moderators: William D. Donovan, MD, MPH, FACR

and Patrick A. Turski, MD, FACR



## MONDAY JUNE 4TH, 2018 - 09A Continued

4:45 PM - 5:10 PM

**Radiologists' Initiatives and Services for Creating Value - Value Matters**

Geraldine B. McGinty, MD, MBA

5:10 PM - 5:35 PM

**Marketing Value from the Radiologist's Perspective**

Frank J. Lexa VII, MD, MBA, FACR

5:35 PM - 6:00 PM

**Value Perspectives and Controversies: A Closer Look**

John E. Jordan, MD

6:00 PM - 6:15 PM

**4:45 PM - 6:15 PM**

*Room: Ballroom C  
(Convention Level)*

**SAM Questions and Answers**

**09B-ASFNR Programming: Value of Neuroradiology for Psychiatric Disorders**

Moderators: Jay Phai, MD and  
TBD

4:45 PM - 5:05 PM

**Using Genetic Animal Models of Neuropsychiatric Disease to Dissect the Contributions of Genetic and Environmental Factors to Psychiatric Disorders**

John-Paul J. Yu, MD, PhD

5:05 PM - 5:25 PM

**Role of Neuroimaging for Schizophrenia**

John D. Port, MD, PhD

5:25 PM - 5:45 PM

**Computational Approach in Neuropsychiatric Imaging/Data Repository**

R. Cameron Craddock, PhD

5:45 PM - 6:05 PM

**Translation of Advanced Neuroimaging for Psychiatric Diseases to the Clinics**

Leanne Williams, PhD

6:05 PM - 6:15 PM

**4:45 PM - 6:15 PM**

*Room: Ballroom B  
(Convention Level)*

**Panel Discussion**

**09C-Canadian Session: Comparing Current Physician (Fee for Service) Payment Systems Between Canada and the USA**

Moderators: William D. Miller, MD and  
Joshua A. Hirsch, MD, FACR, FSIR, FSNIS

## MONDAY JUNE 4TH, 2018 - 09C Continued

4:45 PM - 5:10 PM	Fee for Service Radiology, A Look at Private Payers and Government Based Insurance Raymond K. Tu, MD, FACR
5:10 PM - 5:35 PM	Alternative Payments Models for the Radiologists: Present and Future Melissa Chen, MD
5:35 PM - 6:00 PM	Fees for Service and Models of The Radiologist from a Canadian Expert Jason Sutherland, PhD, MSc
6:00 PM - 6:15 PM	Panel Discussion
<b>4:45 PM - 6:15 PM</b> <i>Room: Meeting Room 1 (Meeting Room Level)</i>	<b>09D-Evidence Based Medicine Programming: Gadolinium in Neuroimaging: To Give or Not to Give - What is the Evidence?</b> Moderators: TBD and TBD
4:45 PM - 5:05 PM	Gadolinium Deposition in the Brain-Reason for Concern? Risk Benefit Assessment Howard Rowley, MD
5:05 PM - 5:25 PM	The Indications of Gadolinium Administration in the Brain - What is the Evidence? Emanuel Kanal, MD
5:25 PM - 5:45 PM	The Indications of Gadolinium Administration in the Spine - What is the Evidence? Lubdhra M. Shah, MD
5:45 PM - 6:05 PM	Gadolinium Administration for Pediatric and Lactating Patients Susan Palasis, MD
6:05 PM - 6:15 PM	Discussion
<b>4:45 PM - 6:15 PM</b> <i>Room: Meeting Room 11/12 (Meeting Room Level)</i>	<b>09E-Study Group (non-cme)</b>



# ASNR 56<sup>th</sup> Annual Meeting



## MONDAY JUNE 4TH, 2018

### **4:45 PM - 6:15 PM**

*Room: Meeting Room 8/15  
(Meeting Room Level)*

### **4:45 PM - 6:15 PM**

*Room: Meeting Room 2/3  
(Meeting Room Level)*

### **6:15 PM - 7:30 PM**

*Room: Exhibit Hall B  
(Convention Level)*

---

### **09F-Parallel Paper Session:**

#### **Spine: New Findings**

Moderators: Wende N. Gibbs, MD, MA and  
Adam E. Flanders, MD

---

### **09G-Parallel Paper Session: Interventional:**

#### **Aneurysms, AVMs and Tumors**

Moderators: Gloria J. Gozman, MD and  
Christopher G. Filippi, MD

---

### **Annual Meeting Reception with Technical Exhibitors**

# ASNR 56<sup>th</sup> Annual Meeting

**TUESDAY JUNE 5TH, 2018**

**5:30 AM - 8:00 AM**

*Ballroom A*

*(Convention Level)*

**7:00 AM - 8:00 AM**

*Room: Hall A*

*(Convention Level)*

**7:00 AM - 7:25 AM**

**7:25 AM - 7:50 AM**

**8:00 AM - 9:00 AM**

*Room: Hall A*

*(Convention Level)*

**8:00 AM - 8:10 AM**

**8:10 AM - 8:20 AM**

**8:20 AM - 8:30 AM**

**8:30 AM - 8:40 AM**

**8:40 AM - 8:50 AM**

**8:50 AM - 9:00 AM**

**8:00 AM - 9:00 AM**

*Room: Ballroom C*

*(Convention Level)*

**Breakfast**



---

## **10A-One Hour SAM Session: Spine (SAM) (AR)**

Moderators: Carl E. Johnson, MD and  
William E. Mehan, Jr., MD

**Refine the Spine: Amazing Pediatric Cases**  
Erin Simon Schwartz, MD, FACR

**Refine the Spine: Amazing Adult Cases**  
Vinil N. Shah, MD

---

## **11A-Special Session: Past President's Perspective: Impactful Trends in Neuroradiology**

Moderators: Carolyn Cidis Meltzer, MD, FACR and  
Michael S. Huckman, MD

**Welcome and Introductions**  
Carolyn Cidis Meltzer, MD, FACR

**Comments on 50+ Years of Society Leadership**  
Michael S. Huckman, MD

**Structure Diagnosis and Treatment**  
Pamela W. Schaefer, MD

**The Impact of Machine Learning on  
Neuroradiology Practice: What Have We to Fear?**  
R. Nick Bryan, MD, PhD

**Neuroradiology Education: From Testing to  
Life-Long Learning**  
Robert D. Zimmerman, MD, FACR

**Discussion**

---

## **11B-Parallel Paper Session: Computer Assisted and Deep Learning Methods in Stroke Imaging**

Moderators: Christopher P. Wood, MD and  
Sameer A Ansari, MD, PhD

---

## TUESDAY JUNE 5TH, 2018

### 8:00 AM - 9:00 AM

Room: Ballroom B  
(Convention Level)

### 8:00 AM - 9:00 AM

Room: Meeting Room 1  
(Meeting Room Level)

### 8:00 AM - 9:00 AM

Room: Meeting Room 11/12  
(Meeting Room Level)

### 8:00 AM - 9:00 AM

Room: Meeting Room 8/15  
(Meeting Room Level)

### 9:10 AM - 10:00 AM

Room: Hall A  
(Convention Level)

### 10:00 AM - 10:30 AM

Ballroom A  
(Convention Level)

### 10:30 AM - 12:00 PM

Room: Hall A  
(Convention Level)

### 10:30 AM - 10:50 AM

### 10:50 AM - 11:10 AM

### 11:10 AM - 11:30 AM

### 11:30 AM - 11:50 AM

### 11C-Parallel Paper Session: Brain: Traumatic Injury

Moderators: Christie M. Lincoln, MD and  
Asim Z. Mian, MD

### 11D-Parallel Paper Session: Imaging Brain Metastases

Moderators: Vaios Hatzoglou, MD and  
Robert J. McDonald, MD, PhD

### 11E-Parallel Paper Session: Brain: New Findings

Moderators: Charles L. Truwit, MD, HCMC and  
Elizabeth S. Lustrin, MD

### 11F-Parallel Paper Session: Pediatric: Advanced Techniques I

Moderators: Judith A. Gadde, DO, MSH and  
Camilla E. Lindan, MD

### 12A-GBCA Use in Neuroradiology: What's New?

*This session is supported by an unrestricted grant by NW Imaging Forums.*

Emanuel Kanal, MD, FACR, FISMRM, MRMD, AANG  
Howard A. Rowley, MD

### Morning Beverage Break



### 13A-SNIS Programming: Novel Neurovascular Imaging Techniques

Moderator: Philip M. Meyers, MD, FACR, FSIR, FAHA  
Cerebral Perfusion Imaging in Acute Ischemic Stroke: Beyond Dynamic Contrast  
Susceptibility Imaging  
Jeremy J. Heit, MD, PhD

Vessel Wall Imaging for ICAD, etc  
Sameer A. Ansari, MD, PhD

Intracranial Flow Analysis with Perfusion (CT/MR)  
Jeffrey L. Saver, MD

Intracranial Velocity Analysis (MR Based)  
Waleed Brinjikji, MD



## TUESDAY JUNE 5TH, 2018

### 10:30 AM - 12:00 PM

Room: Ballroom C

(Convention Level)

10:30 AM - 10:55 AM

10:55 AM - 11:20 AM

11:20 AM - 11:45 AM

11:45 AM - 12:00 PM

### 10:30 AM - 12:00 PM

Room: Ballroom B

(Convention Level)

10:30 AM - 11:00 AM

11:00 AM - 11:30 AM

11:30 AM - 12:00 PM

### 10:30 AM - 12:00 PM

Room: Meeting Room 1

(Meeting Room Level)

10:30 AM - 10:50 AM

10:50 AM - 11:10 AM

11:10 AM - 11:30 AM

---

### 13B-ASSR Programming: How To Improve the Value of Imaging in Spinal Oncology

Moderator: Robert M. Quencer, MD

Critical Imaging Findings for Clinical Management of Adults with Spinal Metastases

Wende N. Gibbs, MD, MA

Multimodal Advanced Imaging of the Spine

Lawrence N. Tanenbaum, MD, FACR

Can Artificial Intelligence Help Us Improve Diagnostic Accuracy for Metastases?

Richard H. Wiggins III, MD

Panel Discussion

---

### 13C-Advanced Imaging Programming

Moderators: Timothy P.L. Roberts, PhD and

TBD

Multimodal Imaging of Brain Structure and Function

Jeffrey I. Berman, PhD

Accelerating Edited MRS

Richard A.E. Edden, MSc, PhD

Putting It All Together-Comprehensive Imaging of Genetic Syndromes

Elliott Sherr, MD

---

### 13D-Young Professional Programming: Bring Value to Our Imaging Reports

Moderators: Kambiz Nael, MD and

Yvonne W. Lui, MD

Reporting in Traumatic Brain Injury

Yvonne W. Lui, MD

Reporting in Head & Neck Cancer Staging

Claudia F.E. Kirsch, MD

Reporting in Back Pain Patients

Amish Doshi, MD



## TUESDAY JUNE 5TH, 2018 - 13D Continued

**11:30 AM - 11:50 AM**

**How Can Structured Reporting Assist in Adding Value?**

Annette J. Johnson, MD, MS

**11:50 AM - 12:00 PM**

**10:30 AM - 12:00 PM**

*Room: Meeting Room 11/12  
(Meeting Room Level)*

**Discussion**

**13E-Parallel Paper Session: Policy and Quality**

Moderators: Carolyn Cidis Meltzer, MD, FACR and Jerrold Boxerman, MD, PhD

**10:30 AM - 12:00 PM**

*Room: Meeting Room 8/15  
(Meeting Room Level)*

**13F-Excerpta: Neoplasms, Stroke and Interventional**

Moderators: Mauricio Castillo, MD, FACR and Valerie Stine, MD

**10:30 AM - 12:00 PM**

*Room: Meeting Room 2/3  
(Meeting Room Level)*

**13G-Parallel Paper Session: Pediatric: Developmental and Congenital**

Moderators: Gilbert Vezina, MD and Francisco A. Perez, MD, PhD

**11:30 AM - 1:15 PM**

*Exhibit Hall B  
(Convention Level)*

**1:00 PM - 1:08 PM**

*Room: Hall A  
(Convention Level)*

**Lunch**



**Neuro MRI with Philips Compressed SENSE**

*This session is supported by an unrestricted grant from Philips.*

TBD

**1:15 PM - 2:45 PM**

*Room: Hall A  
(Convention Level)*

**14A-Education Programming: Learning to Love Life Long Learning (SAM) (AR)**

Moderators: TBD and  
TBD

**1:15 PM - 1:35 PM**

**Cool Teaching Tools and Techniques**

Harprit S. Bedi, MD

**1:35 PM - 1:55 PM**

**Neuroradiology Education Update**

Christie M. Lincoln, MD

**1:55 PM - 2:15 PM**

**Fellow View of Neuroradiology, Teaching, Jobs and Opportunities**

Matthew H. Kulzer, MD  
Barton F. Branstetter IV, MD  
Vikas Agarwal, MD

## TUESDAY JUNE 5TH, 2018 - 14A Continued

2:15 PM - 2:35 PM

Teaching Resources (ASNR, ACR, RSNA, AUR, etc)

Atul K Mallik 4127162, MD, PhD

2:35 PM - 2:45 PM

**1:15 PM - 2:45 PM**

*Room: Ballroom C  
(Convention Level)*

**SAM Questions and Answers**

**14B-ASFNMR Programming: Value of PET-MRI for Neurological Disorders**

Moderators: TBD and  
TBD

1:15 PM - 1:35 PM

**PET/MRI for Cerebrovascular Disease**

Gregory G. Zaharchuk, MD, PhD

1:35 PM - 1:55 PM

**PET/MRI as a First Line Imaging Modality for Epilepsy**

Derek Richard Johnson, MD

1:55 PM - 2:15 PM

**PET/MRI in the Work-up of Dementia**

Timothy M. Shepherd, MD/PhD

2:15 PM - 2:35 PM

**PET/MRI for Brain Tumors**

Jonathan E. McConathy, MD, PhD

2:35 PM - 2:45 PM

**1:15 PM - 2:45 PM**

*Room: Ballroom B  
(Convention Level)*

**Discussion**

**14C-Evidence Based Medicine Programming: Speed Journal Club in Neuroimaging: What are the "Hot Topics" You Should Know**

Moderator: Susan T. Sotardi, MD, MS

1:15 PM - 1:30 PM

**Brain I-Brain Tumors**

Andrei I. Holodny, MD

1:30 PM - 1:45 PM

**Brain II-Traumatic Brain Injury**

Christopher G. Filippi, MD

1:45 PM - 2:00 PM

**Spine**

Peter G. Kranz, MD

2:00 PM - 2:15 PM

**Head and Neck**

Eugene Yu, MD

2:15 PM - 2:30 PM

**Pediatrics**

David M. Mirsky, MD

2:30 PM - 2:45 PM

**Neuro Interventional**

Matthew D. Alexander, MD



## TUESDAY JUNE 5TH, 2018

**1:15 PM - 2:45 PM**

*Room: Meeting Room 1  
(Meeting Room Level)*

**1:15 PM - 1:30 PM**

**1:30 PM - 1:45 PM**

**1:45 PM - 2:00 PM**

**2:00 PM - 2:15 PM**

**2:15 PM - 2:30 PM**

**2:30 PM - 2:45 PM**

**1:15 PM - 2:45 PM**

*Room: Meeting Room 11/12  
(Meeting Room Level)*

**1:15 PM - 1:55 PM**

**1:35 PM - 1:55 PM**

### **14D-ASSR Programming:**

#### **International Review:**

#### **State-of-the-Art Spinal Interventions**

Moderators: Allan L. Brooks, MD, FSIR and  
TBD

#### **MR Evaluation of LBP-Valuable and Appropriate for the Right Patients**

Johan W. Van Goethem, MD, PhD

#### **RF Ablation and Cryoablation for Treatment of Vertebral Joint Pain**

Stefano Marcia

#### **Pulsed Radiofrequency Stimulation for Pain Syndromes**

Salvo A. Masala, MD

#### **Advanced Ablation and Augmentation for Treatment of Spinal Metastases**

Mario Muto, MD

#### **CT Guided Treatment of Spinal Canal and Foraminal Stenosis**

Luigi Manfre, MD

### **Discussion**

### **14E-SILAN Programming: Update on CNS**

#### **Infections in the 21st Century:**

#### **What You Need to Know!**

Moderators: Rafael Rojas, MD and  
TBD

#### **Neuroimaging Findings of Congenital Zika Virus Syndrome: The History of the Disease that is Still Being Written**

Maria de Fatima Vasco Aragao, MD, PhD

#### **The Many Faces of Bacterial CNS Infections: Unusual Suspects and Beyond!**

Carlos H. Torres, MD, FRCPC

## TUESDAY JUNE 5TH, 2018 - 14E Continued

1:55 PM - 2:15 PM

Imaging of Parasitic Infections of the CNS

Lazaro L.F. Amaral, MD

2:15 PM - 2:35 PM

Update on PML Infection in the 21st Century

Alex Rovira, MD

2:35 PM - 2:45 PM

**1:15 PM - 2:46 PM**

Room: Meeting Room 8/15

(Meeting Room Level)

**1:15 PM - 2:45 PM**

Room: Meeting Room 2/3

(Meeting Room Level)

**2:45 PM - 3:00 PM**

Room: Hall B

(Convention Level)

**3:00 PM - 4:30 PM**

Room: Hall A

(Convention Level)

**3:00 PM - 4:30 PM**

Room: Ballroom C

(Convention Level)

**3:00 PM - 4:30 PM**

Room: Ballroom B

(Convention Level)

**3:00 PM - 4:30 PM**

Room: Meeting Room 1

(Meeting Room Level)

Discussion

---

**14F-Parallel Paper Sessions:**

**Skull Base and Sinus**

Moderators: Nancy J. Fischbein, MD and

Kristen Lloyd Bairnson, MD

---

**14G-Parallel Paper Session:**

**Fetal Brain Imaging**

Moderators: Kim M. Cecil, PhD and

Thierry A.G.M. Huisman, MD

---

**Afternoon Beverage Break**



---

**15A-Parallel Paper Session: Head and Neck: New (Techniques) and Deep (Spaces)**

Moderators: William P. Dijkxxxxx? and

Karen L. Salzman, MD

---

**15B-Parallel Paper Session:**

**Pediatrics: New Findings**

Moderators: Caroline D. Robson, MB, ChB and

TBD

---

**15C-Parallel Paper Session:**

**Spine: Advanced Techniques**

Moderators: Jeffrey S. Ross, MD and

Arthur Wong, MD

---

**15D-Parallel Paper Session:**

**Interventional: Stroke Trials**

Moderators: Matthew Alexander, MD and

Bruno A. Policeno, MD

---



## TUESDAY JUNE 5TH, 2018

**3:00 PM - 4:30 PM**

*Room: Meeting Room 11/12  
(Meeting Room Level)*

**3:00 PM - 4:30 PM**

*Room: Meeting Room 8/15  
(Meeting Room Level)*

**3:00 PM - 4:30 PM**

*Room: Meeting Room 2/3  
(Meeting Room Level)*

**4:45 PM - 6:15 PM**

*Room: Hall A  
(Convention Level)*

**4:45 PM - 5:00 PM**

**5:00 PM - 5:15 PM**

**5:15 PM - 5:30 PM**

**5:30 PM - 5:45 PM**

**5:45 PM - 6:00 PM**

**6:00 PM - 6:15 PM**

**4:45 PM - 6:15 PM**

*Room: Ballroom C  
(Convention Level)*

### **15E-Parallel Paper Session:**

#### **Deep Learning Techniques and Methods**

Moderators: Arastoo Vossough, PhD, MD and  
Jennifer L. Becker, MD

### **15F-Parallel Paper Session:**

#### **Brain Tumor Imaging: New Findings**

Moderator: Robert J. Young, MD and  
Linda J. Bagley, MD

### **15G-Parallel Paper Session: Brain:**

#### **Inflammatory and Infectious Diseases**

Moderators: Osamu Sakai, MD, PhD and  
TBD

### **16A-ASSR Programming:**

#### **Spinal Interventions: Show Me the Evidence (SAM) (AR)**

Moderators: Mario Mento, MD and  
TBD

**Evidence Based Medicine for PVA in 2018**  
Michele H. Johnson, MD

**Evidence Based Medicine MILD returns to the Armamentarium**  
John D. Barr, MD, FACR, FSIR, FAHA

**Evidence Based Medicine for ESI**  
Walter S Bartyński, MD

**Evidence Based Medicine Basi-Vertebral Nerve Ablation**  
Dan Nguyen, MD

**Evidence Based Medicine HIFU for Facet Pain**  
Lubdhra M. Shah, MD

### **SAM Questions and Answers**

#### **16B-Comparative Effectiveness Research Session: Optimal Imaging of Acute Ischemic Stroke - Evidence Updates for the Era of Mechanical Thrombectomy**

Moderator: Ajay Mehrotra, MD and  
TBD

## TUESDAY JUNE 5TH, 2018 - 16B Continued

4:45 PM - 5:05 PM	What is the Role of CT and CTA Imaging for Acute Ischemic Stroke Marish Joshi, MD, PhD, FRCPC
5:05 PM - 5:25 PM	What is the Role of the MRI in the Assessment of Acute Ischemic Stroke? Max Wintermark, MD
5:25 PM - 5:45 PM	What is the Role of Perfusion and Collateral Imaging in Acute Ischemic Stroke? Achala S. Vagal, MD
5:45 PM - 6:05 PM	What is the Role of Vessel Wall Imaging in Acute Ischemic Stroke? Mahmud Mossa-Basha, MD
6:05 PM - 6:15 PM	Discussion
<b>4:45 PM - 6:15 PM</b>	<b>16C-ASPNR/ESNR Collaboration Session: Safety and Toxicity to the Pediatric Brain</b>
<i>Room: Ballroom B (Convention Level)</i>	Moderator: Ashok Panigrahy, MD
4:45 PM - 5:10 PM	MagnetVision™: A New Safety Paradigm and Approach to Assessing and Evaluating MR Safety for Patients with Implants/Devices/Foreign Bodies Emanuel Kanal, MD
5:10 PM - 5:30 PM	Updates in Toxic and Metabolic Disorders in the Pediatric Brain Thierry A G M Huisman, MD
5:30 PM - 5:50 PM	Rapid Imaging Protocol and Leveraging MR Fingerprinting Techniques in Pediatric Neuroradiology Giulio Zuccoli, MD
5:50 PM - 6:10 PM	Speed Versus Information and Safety Issues in Fetal MRI Andrea Righini, MD
6:10 PM - 6:15 PM	Discussion



## TUESDAY JUNE 5TH, 2018

### **4:45 PM - 6:15 PM**

*Room: Meeting Room 1  
(Meeting Room Level)*

### **4:45 PM - 6:15 PM**

*Room: Meeting Room 11/12  
(Meeting Room Level)*

### **4:45 PM - 6:15 PM**

*Room: Meeting Room 8/15  
(Meeting Room Level)*

### **4:45 PM - 6:15 PM**

*Room: Meeting Room 2/3  
(Meeting Room Level)*

---

### **16D-Parallel Paper Session: Advanced Diagnostic Techniques in Cerebral Aneurysms and AVMs**

Moderators: Prakash Muthusami, MBBS, MD, PDCC and Robert D. Zimmerman, MD, FACR

---

### **16E-Study Group (non-cme)**

---

### **16F-Excerptas: Pediatric Head & Neck**

Moderators: Susan T. Sotardi, MD, MS and Timothy N. Booth, MD

---

### **16G-Parallel Paper Session: Brain Tumors: New Diagnostic Considerations I**

Moderator: Lawrence N. Tanenbaum, MD, FACR and Lex A. Mitchell, MD



# ASNR 56<sup>th</sup> Annual Meeting

## WEDNESDAY JUNE 6TH, 2018

**5:30 AM - 7:00 AM**

Ballroom A  
(Convention Level)

**7:00 AM - 8:00 AM**

Room: Hall A  
(Convention Level)

**7:00 AM - 7:25 AM**

**7:25 AM - 7:50 AM**

**7:50 AM - 8:00 AM**

**8:00 AM - 9:00 AM**

Room: Hall A  
(Convention Level)

**8:00 AM - 9:00 AM**

Room: Ballroom C  
(Convention Level)

**8:00 AM - 9:00 AM**

Room: Ballroom B  
(Convention Level)

**8:00 AM - 9:00 AM**

Room: Meeting Room 1  
(Meeting Room Level)

**8:00 AM - 9:00 AM**

Room: Meeting Room 11/12  
(Meeting Room Level)

**Breakfast**



**17A-One Hour SAM Session - Forget K Space, This is Case Base! (SAM) (AR)**

Moderators: Wende N. Gibbs, MD, MA and  
TBD

(Hopefully) Interesting Cases

Joshua P. Nickerson, MD

Interesting Cases II

Mark E. Mullins, MD, PhD

**SAM Questions and Answers**

**18A-Special Session: Brain in Flame: Pathology and Imaging of Noninfectious CNS Inflammation**

Moderators: Anne G. Osborn, MD and  
TBD

**18B-Parallel Paper Session: Cerebrovascular Imaging: New**

Moderators: Bing Wang, MD and  
Andrew Steven, MD

**18C-Parallel Paper Session: Spine: Fluoroscopy-Guided Techniques**

Moderators: Walter S. Bartynski, MD and  
Miriam Peckham, MD

**18D-Parallel Paper Session: Vessel Wall Imaging: Advanced Techniques**

Moderators: TBD and  
TBD

**18E-Parallel Paper Session: Carotid Artery Stenosis Imaging**

Moderators: Edward D. Greenberg, MD and  
Theodore C. Larson, III, MD



## WEDNESDAY, JUNE 6TH, 2018

**8:00 AM - 9:00 AM**

*Room: Meeting Room 8/15  
(Meeting Room Level)*

**8:00 AM - 9:00 AM**

*Room: Meeting Room 2/3  
(Meeting Room Level)*

**8:00 AM - 8:25 AM**

**8:25 AM - 8:50 AM**

**8:50 AM - 9:00 AM**

**9:10 AM - 10:00 AM**

*Room: Hall A  
(Convention Level)*

**10:00 AM - 10:30 AM**

*Ballroom A  
(Convention Level)*

**10:30 AM - 12:00 PM**

*Room: Hall A  
(Convention Level)*

**10:30 AM - 10:50 AM**

**10:50 AM - 11:10 AM**

### **18F-Parallel Paper Session:**

#### **Gadolinium Effects in the Brain**

Moderators: Yvonne W. Lui, MD and  
John E. Jordan, MD

### **18G-CSF Flow Group: Chiari I (Part I)**

Moderators: Harold L. Rekate, MD and  
TBD

#### **Chiari Definition, Craniocervical Junction**

A. James Barkovich, MD

#### **CSF Dynamics in the Pathogenesis of Syringomyelia**

Victor M. Haughton, MD

### **Discussion**

### **19A-How to Incorporate the New Stroke**

#### **Imaging Guidelines Into Your Practice**

#### **Selection of Stroke Patients for Late**

#### **Window Thrombectomy: What Do the New Guidelines Recommend?**

*This session is supported by an unrestricted grant  
from Rapid.*

Moderators: Greg Albers, MD and  
TBD

#### **Panelists:**

Jeremy Heit, MD, PhD

Howard Rowley, MD

Achala Vagal, MD

### **Morning Beverage Break**



### **20A-ASFNR Programming: Value of 7T MRI for Neurological Disorders (SAM) (AR)**

Moderators: TBD and  
TBD

#### **Overview of Clinical Uses of 7T**

Stephen E Jones, MD, PhD

#### **7T for Alzheimer's Disease**

Michael Zeineh, MD, PhD

# ASNR 56<sup>th</sup> Annual Meeting

## WEDNESDAY, JUNE 6TH, 2018 - 20A Continued

11:10 AM - 11:30 AM

7T for Epilepsy

Ali R. Khan, PhD

11:30 AM - 11:50 AM

7T Functional MRI

Steven M. Stuffelbeam, MD

11:50 AM - 12:00 PM

SAM Questions and Answers

---

**10:30 AM - 12:00 PM**

*Room: Ballroom C*

*(Convention Level)*

**20B-ASNR/SNMMI (Society of Nuclear Medicine and Molecular Imaging)  
Collaboration Session: Emerging Frontiers  
for PET of the Brain**

Moderators: TBD and

TBD

10:30 AM - 11:00 AM

PET Tau and Amyloid Imaging

John Seibyl, MD

11:00 AM - 11:30 AM

PET for Neuroinflammation

Robert B. Innis, MD, PhD

11:30 AM - 12:00 PM

PET/MRI for the Brain

Jonathan E. McConathy, MD, PhD

**10:30 AM - 12:00 PM**

*Room: Ballroom B*

*(Convention Level)*

**20C-Healthcare Policy Programming:  
How Radiologists are Paid Around  
the World**

Moderators: Danny Mardell, MD and

TBD

10:30 AM - 10:50 AM

Canadian Perspective

Allan J. Fox, MD, FRCPC, FACR

10:50 AM - 11:10 AM

Europe

O. Petter Eldevik, MD, PhD

11:10 AM - 11:30 AM

Australia

Simon R. Khangure Dr, MBBS, BMedSc, FRANZCR

11:30 AM - 11:50 AM

South America

Luiz Celso Hygino da Cruz, MD, PhD

11:50 AM - 12:00 PM

Panel Discussion

---

**10:30 AM - 12:00 PM**

*Room: Meeting Room 1*

*(Meeting Room Level)*

**20D-Parallel Paper Session - Jaw, Neck  
and Orbit**

---



## WEDNESDAY, JUNE 6TH, 2018

**10:30 AM - 12:00 PM**

*Room: Meeting Room 11/12  
(Meeting Room Level)*

### **20E-AOSNHNR Programming: From BBB, Vessel Wall and PVS to Glymphatic System**

Moderators: Wan-Yuo Guo, MD, PhD and  
Yukunori Korogi, MD, PhD and  
Kook Jin Ahn, MD

**10:30 AM - 10:50 AM**

### **Vessel Wall Imaging and Neurovascular Diseases**

Dittapong Songsaeng, MD, MSc

**10:50 AM - 11:10 AM**

### **High Resolution Vessel Wall Imaging of Vertebrobasilar Stenosis: Diagnosis and Endovascular Management**

Moderators: Feng Chi Chang, MD and  
TBD

**11:10 AM - 11:30 AM**

### **DCE Application for BBB Evaluation**

Seung Hong Choi, MD

**11:30 AM - 11:50 AM**

### **Controversies on Glymphatic Systems**

Toshiaki Taoka, MD, PhD

**11:50 AM - 12:00 PM**

**10:30 AM - 12:00 PM**

*Room: Meeting Room 8/15  
(Meeting Room Level)*

### **Discussion**

### **20F-Excerpta: Spine**

Moderators: Mariza O Clement, MD, MSE  
and William Keyes, MD

**10:30 AM - 12:00 PM**

*Room: Meeting Room 2/3  
(Meeting Room Level)*

### **20G-CSF Flow Group: Chiari I (Part II)**

Moderators: Ari M. Blitz, MD and  
TBD

**10:30 AM - 11:00 AM**

### **The Chiari Anomaly**

Concezio di Rocco, MD

**11:00 AM - 11:30 AM**

### **The Chiari Deformation**

Charles Raybaud, MB, ChB, MD, FRCPC

**11:30 AM - 12:00 PM**

### **Clinical Assessment of Chari I**

Ash Singhal, BSc MSc MD FRCSC

**10:30 AM - 12:00 PM**

*Room: Meeting Room 2/3  
(Meeting Room Level)*

### **20G-CSF Flow Group: Chiari I (Part II)**

Moderators: Ari M. Blitz, MD and  
TBD

**10:30 AM - 11:00 AM**

### **The Chiari Anomaly**

Concezio di Rocco, MD

# ASNR 56<sup>th</sup> Annual Meeting

## WEDNESDAY, JUNE 6TH, 2018 - 20G Continued

11:00 AM - 11:30 AM

The Chiari Deformation

Charles Raybaud, MB, ChB, MD, FRCPC

11:30 AM - 12:00 PM

Clinical Assessment of Chari I

Ash Singhal, BSc MSc MD FRCSC

**11:30 AM - 1:15 PM**

*Exhibit Hall B*

*(Convention Level)*

**12:15 PM - 1:15 PM**

*Room: Room 15*

*(Meeting Room Level)*

**1:00 PM - 1:08 PM**

*Room: Hall A*

*(Convention Level)*

**1:15 PM - 2:45 PM**

*Room: Hall A*

*(Convention Level)*

1:15 PM - 1:35 PM

A Primer of Fetal Neuroimaging: Value Added

Orit A. Glenn, MD

1:35 PM - 1:55 PM

Twin Gestational Pregnancies: Imaging the Immature Brain and Placental Correlates

Beth M. Kline-Fath

1:55 PM - 2:15 PM

Infection and the Immature Brain:

Placental Correlates and Advanced Ultrasound Imaging

Denise Pugash, BSc, MD, CM, FRCPC

2:15 PM - 2:35 PM

Clinical Value and Counselling of Patients in Relation to Fetal and Neonatal Neuroimaging

Dawn Gano, MD, MAS

2:35 PM - 2:45 PM

**SAM Questions and Answers**

**Lunch**



**ASPNR Business Meeting**

**Philips MR in Neuro Oncology – 3D APT (Amide Proton Transfer)**

*This session is supported by an unrestricted grant from Philips.*

TBD

**21A-ASPNR Programming: Placenta and Imaging of the Immature Brain (SAM) (AR)**

Moderators: Arastoa Vossough, MD and

TBD



## WEDNESDAY, JUNE 6TH, 2018

**1:15 PM - 2:45 PM**

*Room: Ballroom C  
(Convention Level)*

### **21B-ASHNR Programming: Radiologist Value in Head and Neck Tumor Staging**

Moderators: TBD and  
TBD

**1:15 PM - 1:35 PM**

**The New AJCC 8th Edition: Changes from the  
7<sup>th</sup> with Emphasis on Critical Imaging  
Contributions**  
Lawrence Ginsberg, MD

**1:35 PM - 1:55 PM**

**CT or MRI or PET/CT? Value Added Cancer  
Imaging Optimized for Head and Neck Site**  
Barton F. Branstetter IV, MD

**1:55 PM - 2:15 PM**

**NIRADS: Structured Reporting for Head and  
Neck Cancer**  
Kristen Lloyd Baugnon, MD

**2:15 PM - 2:35 PM**

**Radiologist Participation in Tumor Boards and  
Other Clinical Conferences: Is There A Viable  
Reimbursement Model?**  
Christine M. Glastonbury, MBBS

**2:35 PM - 2:45 PM**

**1:15 PM - 2:45 PM**

*Room: Ballroom B  
(Convention Level)*

### **Discussion**

### **21C-Evidence Based Medicine Programming: Introductions to CER Methods**

Moderators: TBD and  
TBD

**1:15 PM - 1:35 PM**

**Systematic Review and MetaAnalysis**  
Ajay Gupta, MD

**1:35 PM - 1:55 PM**

**Decision-Analysis and Cost-Effectiveness  
Analysis**  
Ankur Pandya, PhD, MPH

**1:55 PM - 2:15 PM**

**Using Big Data in Comparative Effectiveness  
Research**  
Jeffrey G. Jarvik, MD, MPH

## WEDNESDAY, JUNE 6TH, 2018 - 21C Continued

2:15 PM - 2:35 PM

Applications of CER: Building a Clinical Care Pathway

Maria (Gabriela) Martinez, PhD

2:35 PM - 2:45 PM

**1:15 PM - 2:45 PM**

Room: Meeting Room 1  
(Meeting Room Level)

Discussion

**21D-Parallel Paper Session: Advanced Techniques in Quantitative Imaging**

Moderators: Mykol Larvic, MD and Whitney B. Pope

**1:15 PM - 2:45 PM**

Room: Meeting Room 11/12  
(Meeting Room Level)

**21E-Parallel Paper Session - Decision Support, Value, and Safety**

Moderator: Ryan B. Peterson, MD and TBD

**1:15 PM - 2:45 PM**

Room: Meeting Room 8/15  
(Meeting Room Level)

**21F-Parallel Paper Session - Head and Neck: Congenital, Salivary, and Temporal Bone**

Moderator: C. Douglas Phillips, MD and TBD

**1:15 PM - 2:45 PM**

Room: Meeting Room 2/3  
(Meeting Room Level)

**21G-CSF Flow Group: Hydrocephalus**

Moderators: Frank Mihlon, MD and TBD

1:15 PM - 1:35 PM

Classification of Hydrocephalus

Ari M. Blitz, MD

1:35 PM - 1:55 PM

The Effect of Shunt Failure and Revision on Brain Stiffness

Mark Wagshul, PhD

1:55 PM - 2:15 PM

MR Elastography Differentiates NPH from the Other Common Dementias

John Huston III, MD

2:15 PM - 2:35 PM

Advanced Neuroimaging in Infant Ferrets with Post-Hemorrhagic Hydrocephalus

James P. (Pat) McAllister II, PhD

2:35 PM - 2:45 PM

**2:45 PM - 3:00 PM**

Room: Hall B  
(Convention Level)

Discussion

**Afternoon Beverage Break**



## WEDNESDAY, JUNE 6TH, 2018

### 3:00 PM - 4:30 PM

*Room: Hall A  
(Convention Level)*

### 22A-ASHNR Programming: Value-Added Imaging of the Sinonasal Cavity and Anterior Cranial Base

Moderators: TBD and  
TBD

3:00 PM - 3:20 PM

**Chronic Rhinosinusitis:  
What Do Our Referrers Want to Know**  
C. Douglas Phillips, MD, FACR

3:20 PM - 3:40 PM

**Imaging Red Flags in Acute and Aggressive  
Sinonasal Inflammatory Diseases**  
Daniel E. Meltzer, MD

3:40 PM - 4:00 PM

**Sinonasal Tumors with Emphasis on  
Resectability Determination**  
Laurie A. Loevner, MD

4:00 PM - 4:20 PM

**Imaging Guidance CT in Sinonasal and  
Cranial Base Tumors: Where Can We Add Value  
to Our Reports?**  
Ilona M. Schmalfuss, MD

4:20 PM - 4:30 PM

**Discussion**

### 3:00 PM - 4:30 PM

*Room: Ballroom C  
(Convention Level)*

### 22B-CSI Programming: Virtual Lifelong Learning for the Neuroradiologist

Moderators: John L. Go, MD and  
TBD

3:00 PM - 3:20 PM

**Social Media: Podcasts**  
Nicholas A. Kootz, MD

3:20 PM - 3:40 PM

**Online Teaching Files**  
Ryan B. Peterson, MD

3:40 PM - 4:00 PM

**3D Virtual Radiology**  
Justin Cramer, MD

4:00 PM - 4:30 PM

**ABR, MOC and CAQ Panel**  
Vincent P. Mathews, MD  
Christopher P. Wood, MD



# ASNR 56<sup>th</sup> Annual Meeting

## WEDNESDAY, JUNE 6TH, 2018

### 3:00 PM - 4:30 PM

Room: Ballroom B  
(Convention Level)

### 22C-Special Session: Subspecialty & Regional Society Papers, Cornelius G. Dyke Memorial Award, The Foundation of the ASNR Papers

Moderator: Laurie A. Loeuner, MD

3:00 PM - 3:10 PM

Awards Announcements

3:10 PM - 3:20 PM

Norman E. Leeds Award (ESNR) - Evaluation of White Matter Integrity in Multiple Sclerosis with Advanced MRI Techniques  
Fang F. Yu, MD

3:20 PM - 3:30 PM

Stephen A. Kieffer Award-Best Mentor Paper (ESNR)-Automated Detection of Volume-Changing Metastatic Brain Tumors on Longitudinal Brain MRIs Based on Jacobian Operator Field  
Omid Shearkhani, MD

3:30 PM - 3:40 PM

Louis A. Gilula, MD Mentor Award (ASSR)-Implementation of Evidence-based Appropriateness Guidelines for Epidural Steroid Injection for Patients with Chronic Low Back  
Scott M. Johnson, MD

3:40 PM - 3:50 PM

Gabriel H. Wilson Award (WNRS)

3:50 PM - 4:00 PM

4:00 PM - 4:10 PM

2018 Cornelius G. Dyke Memorial Award

### 3:00 PM - 4:30 PM

Room: Meeting Room 1  
(Meeting Room Level)

### 22D-Parallel Paper Session - Pediatric: Advanced Techniques

Moderators: Rafael Cechin, MD and  
Blaise Jones, MD

### 3:00 PM - 4:30 PM

Room: Meeting Room 11/12  
(Meeting Room Level)

### 22E-Parallel Paper Session: Brain Tumors: New Diagnostic Considerations II

Moderators: TBD and  
TBD

### 3:00 PM - 4:30 PM

Room: Meeting Room 8/15  
(Meeting Room Level)

### 22F-Excerpta: Pediatrics and Head & Neck Cases

Moderators: Thierry A.G.M. Huismer, MD and  
TBD



## WEDNESDAY, JUNE 6TH, 2018

### 3:00 PM - 4:30 PM

*Room: Meeting Room 2/3*

*(Meeting Room Level)*

### 3:00 PM - 3:20 PM

### 3:20 PM - 3:40 PM

### 3:40 PM - 4:00 PM

### 4:00 PM - 4:20 PM

### 4:20 PM - 4:30 PM

### 4:45 PM - 6:15 PM

*Room: Hall A*

*(Convention Level)*

### 4:45 PM - 5:05 PM

### 5:05 PM - 5:25 PM

### 5:25 PM - 5:45 PM

### 5:45 PM - 6:05 PM

### 4:45 PM - 6:15 PM

*Room: Ballroom C*

*(Convention Level)*

### 4:45 PM - 5:15 PM

## 22G-CSF Flow Group: CSF Pulsatility

Moderators: Olivier Balédent and

TBD

### Morphology of DTI Profiles in MPH

Nicole Keong, MBBS, MPH, MD

### Accumulation Visco-Elastic Hypothesis for the Onset of Normal Pressure

Juan C. Lasheras, PhD

### Intracranial Pulsatility and CSF Flow in NPH

Per Kristian Eide, MD, PhD

### Separating the Effects of Pulsation and Resistance to Flow in Hydrocephalus

Harold L. Rekate, MD

## Discussion

## 23A-ASPNR Programming: Pediatric Cased Based Session (AR): Case Review Series Pediatric Head and Neck

Moderators: Susan Pelero, MD and

TBD

### Cystic Lesions and Neoplasms in Pediatric Head and Neck

Caroline D. Robson, MB, ChB

### Pediatric Temporal Bone

Timothy N Booth, MD

### Vascular Anomalies in Pediatric Head and Neck

Aylin Tekes-Brady, MD

### Fetal Head and Neck and Orbital Imaging

Ashley J. Robinson, MB, ChB

## 23B-ASHNR Programming: Temporal Bone Imaging: The Basics

Moderators: TBD and

TBD

### Temporal Bone Anatomy and Traum

Tabassum A. Kennedy, MD

## WEDNESDAY, JUNE 6TH, 2018 - 23B Continued

5:15 PM - 5:45 PM

Temporal Bone Inflammatory  
John I. Lane, MD

5:45 PM - 6:15 PM

Tumors of the Temporal Bone  
Hugh D. Curtin, MD, FACR

**4:45 PM - 6:15 PM**

*Room: Ballroom B  
(Convention Level)*

---

**23C-Young Professional Programming:  
Non-Clinical Advice for Early Career  
Neuroradiologists**

Moderators: TBD and  
TBD

4:45 PM - 5:15 PM

Managing Work-Life Balance: Pearls and Pitfalls  
Gul Moonis, MD, MB, BS

5:15 PM - 5:45 PM

Burn-out Phenomenon: How Does It Affect the  
New Generation of Radiologists?  
Bryan A. Pukenas, MD

5:45 PM - 6:15 PM

Value of Professional Networking  
Edward P. Quigley, MD, PhD

**4:45 PM - 6:15 PM**

*Room: Meeting Room 1  
(Meeting Room Level)*

---

**23D-Parallel Paper Session: Applications of  
Functional MR**

Moderators: Astrok Srinivasan, MD and  
Kirk M. Welker, MD

**4:45 PM - 6:15 PM**

*Room: Meeting Room 11/12  
(Meeting Room Level)*

---

**23E-Study Group (non-CME)**

**4:45 PM - 6:15 PM**

*Room: Meeting Room 8/15  
(Meeting Room Level)*

---

**23F-Parallel Paper Session: Stroke  
Imaging: Diagnosis and Prognosis**

Moderators: Achala S. Vagal, MD and  
TBD

**4:45 PM - 6:15 PM**

*Room: Meeting Room 2/3  
(Meeting Room Level)*

---

**23G-CSF Flow Group:CNS Solute Transport  
(Part I)**

Moderator: Vartan Kurtwoglu, MD

4:45 PM - 5:05 PM

Modeling of Perivascular Flow  
Lynne Bilston, MD

5:05 PM - 5:25 PM

Numerical Modeling Predicts that Basement  
Membrane Solute Transport in the CNS Cannot be  
Explained by Bulk Flow Nor By Shear  
M. Keith Sharp, ScD



# ASNR 56<sup>th</sup> Annual Meeting



## WEDNESDAY, JUNE 6TH, 2018 - 23G Continued

5:25 PM - 5:45 PM

Human and Non-human Primate Meninges Harbor  
Lymphatic Vessels That Can Be Visualized  
Non-invasively by MRI  
Daniel S. Reich, MD, PhD

5:45 PM - 6:05 PM

Outflow of CSF is Predominantly Through  
Lymphatic Vessels in Mice  
Steven Proulx, PhD

6:05 PM - 6:15 PM

**6:15 PM - 6:45 PM**

*Hall A*

*(Convention Level)*

Discussion

---

**ASNR Business Meeting**  
**Strategic Plan Update**

---

# ASNR 56<sup>th</sup> Annual Meeting

## THURSDAY, JUNE 7TH, 2018

**6:00 AM - 8:00 AM**

Ballroom A  
(Convention Level)

**7:00 AM - 8:00 AM**

Location: Hall A  
(Convention Level)

7:00 AM - 7:25 AM

7:25 AM - 7:50 AM

7:50 AM - 8:00 AM

**8:00 AM - 9:00 AM**

Location: Hall A  
(Convention Level)

8:00 AM - 8:10 AM

8:10 AM - 8:20 AM

8:20 AM - 8:30 AM

8:30 AM - 8:40 AM

8:40 AM - 9:00 AM

**8:00 AM - 9:00 AM**

Room: Ballroom C  
(Convention Level)

8:00 AM - 8:15 AM

8:15 AM - 8:30 AM

**Breakfast**



**24A-One Hour SAM Session: Head and Neck Cases: Everybody's Favorite (SAM) (AR)**

Moderators: TBD and  
TBD

Orbits, Sinonasal Cavity, Skull Base  
Tabassum A. Kennedy, MD

Neck Cases  
Ilona M. Schmalfuss, MD

**SAM Questions & Answers**

**25A-General Programming: Value of Imaging Genomics for Brain Tumors**

Moderator: Daniel S Chow, MD

From Genomics to Advanced "Omics" -  
A Primer for the Neuroimager  
James Y. Chen, MD

Imaging Genomics and Radiomics in GBM and  
Brain Metastases  
Rivka R. Colen, MD

Biostatistical and Bioinformatic Approach in  
Imaging Genomics  
Olivier Gevaert, PhD

Deep Learning Approaches in Imaging  
Adam E. Flanders, MD

**Discussion**

**25B-Young Professional Programming:  
Leveraging Social Media to Enhance  
Neuroradiology**

Networking/Stay Connected to Colleagues  
Jennifer McCarty, MD

Medical Education  
Judith A Gadde, DO



## THURSDAY, JUNE 7TH, 2018 - 25B Continued

8:30 AM - 8:45 AM

Do's and Don't of Social Media  
TBD

8:45 AM - 9:00 AM

**8:00 AM - 9:00 AM**

Room: Ballroom B  
(Convention Level)

Discussion

**25C-Parallel Paper Session: Imaging Utilization and Population Health Outcomes in Acute Stroke**

Allan L. Brook, MD, FSIR and  
TBD

**8:00 AM - 9:00 AM**

Room: Meeting Room 1  
(Meeting Room Level)

**25D-Parallel Paper Session: Interventional: Aneurysms and AVMs**

Moderator: Jai Shankar, MD and  
Edward D. Greenberg, MD

**8:00 AM - 9:00 AM**

Room: Meeting Room 11/12  
(Meeting Room Level)

**25E-Parallel Paper Session: Interventional: Advanced Techniques**

Moderators: Todd R. Peebles, MD and  
TBD

**8:00 AM - 9:00 AM**

Room: Meeting Room 2/3  
(Meeting Room Level)

**25G-CSF Flow Group: CNS Solute Transport (Part II)**

Moderator: Bryn A. Martin, PhD

8:00 AM - 8:20 AM

Modelling Cerebral Interstitial Flows and Their Failure in Alzheimer's Disease  
Roxana Ndea, PhD, BSc, MSc

8:20 AM - 8:40 AM

Anatomy and Physiology of Cerebral Intramural Periarterial Drainage  
TBD

8:40 AM - 9:00 AM

Next Steps in the Study of CNS Solute Transport  
Vartan Kurtcuoglu, PhD

**9:10 AM - 10:00 AM**

Room: Hall A  
(Convention Level)

**Genesis Stroke Capabilities**

*This session is supported by an unrestricted grant from Canon Medical Systems*

Kenneth V. Snyder, MD, PhD

**10:00 AM - 10:30 AM**

Ballroom A  
(Convention Level)

**Morning Beverage Break**



# ASNR 56<sup>th</sup> Annual Meeting

## THURSDAY, JUNE 7TH, 2018

**10:30 AM - 12:00 PM**

*Room: Hall A  
(Convention Level)*

10:30 AM - 10:50 AM

10:50 AM - 11:10 AM

11:10 AM - 11:30 AM

11:30 AM - 11:50 AM

11:50 AM - 12:00 PM

**10:30 AM - 12:00 PM**

*Room: Ballroom C  
(Convention Level)*

10:30 AM - 11:00 AM

11:00 AM - 11:30 AM

11:30 AM - 12:00 PM

---

### **27A-ASHNR Programming: Update on Vascular Lesions of the Head & Neck (SAM) (AR)**

Moderators: TBD and  
TBD

Review of Modern Classification and  
Nomenclature of Vasoformative Lesions  
Deborah R. Shatzkes, MD

Imaging of Hemangiomas and Related  
Vascular Tumors  
Bernadette L. Koch, MD

Imaging of Vascular Malformations  
Ashok Srinivasan, MD

Neurointervention in the Management of  
Head and Neck Vascular Lesions  
Alejandro Berenstein, MD

### **SAM Questions and Answers**

---

### **27B-ASPNR Programming: Healthcare Artificial Intelligence and Application to Pediatric Neuroradiology**

Moderators: Aylin Tekes, MD and  
Bindy N. Setty, MD

Artificial Intelligence: Hype, Myth and How It Will  
Add Value to Your Practice  
Eliot L. Siegel, MD

Top of License Practice for Machines: The  
Impending of Artificial Intelligence and Machine  
Learning on Healthcare Delivery  
Daniel J. Durand, MD

A Basic Primer of Machine Learning for the  
Pediatric Neuroradiologist  
Rafael Ceschin, PhD

---



## THURSDAY, JUNE 7TH, 2018

### 10:30 AM - 12:00 PM

*Room: Ballroom B  
(Convention Level)*

### 10:30 AM - 10:55 AM

### 10:55 AM - 11:25 AM

### 11:30 AM - 11:50 AM

### 11:55 AM - 12:00 PM

### 10:30 AM - 12:00 PM

*Room 1  
(Meeting Room Level)*

### 10:30 AM - 12:00 PM

*Room: Meeting Room 11/12  
(Meeting Room Level)*

### 10:30 AM - 12:00 PM

*Room: Meeting Room 2/3  
(Meeting Room Level)*

### 10:30 AM - 10:50 AM

### 10:50 AM - 11:10 AM

### 11:10 AM - 11:30 AM

### 11:30 AM - 11:50 AM

### 11:50 AM - 12:00 PM

### 27C-CSI Programming: Adding Value as a Neuroradiologist

Moderators: Adam E. Flanders, MD and  
Vaies Hatzoglou, MD

### 3D Printing

Jonathan M. Morris, MD

### Structured Reporting - Is it Time for Everyone to Jump on Board?

Barton F. Branstetter IV, MD

### Managing Errors in Diagnosis and Management

Jay Acharya, MD

### Discussion

### 27D-Parallel Paper Session: Updates in Interventional Neuro

Moderators: Michele H. Johnson, MD and

### 27E-Parallel Paper Session: Quantitative Imaging: Advanced Techniques and Methods

Moderators: Jacqueline A. Belle, MD, FACR and

### 27G-CSF Flow Group: CSF Flow

Moderators: Mark Wagshul, PhD and  
TBD

### ICP Modeling During Infusion Test

Vegard Vinje, PhD

### CSF Flow Verses Cerebral Blood Flow

Olivier Balédent

### Volumetric Assessment of IIH

Claudia F.E. Kirsch, MD

### Steady Streaming: Computational Fluid Dynamics Predicts Non-Zero Time-Averaged Intrathecal CSF Flow

Bryn A. Martin, PhD

### Discussion



# Parallel Scientific Paper Sessions At-A-Glance

---

## MONDAY, JUNE 4

### Room #

#### 05D-PARALLEL PAPER SESSION: STROKE TREATMENT STRATEGIES

---

O-01 • 10:30:00 AM • Endovascular Treatment for Acute Ischaemic Stroke in Routine Clinical Practice: Results from the MR CLEAN Registry

---

O-02 • 10:37:00 AM • Impact of Endovascular Recanalization in Patients with Low Initial ASPECTS Score on Edema Formation and Clinical Outcome in Acute Anterior Circulation Strokes

---

O-03 • 10:44:00 AM • Thrombus Perviousness in Endovascular and Intravenous Treatment for Acute Ischemic Stroke: Analysis of the HERMES Collaboration Data

---

O-04 • 10:51:00 AM • Endovascular Management of Acute Stroke in the Elderly: A Systematic Review and Meta-Analysis

---

O-05 • 0:58:00 AM • Drip-and-Ship Vs. Mothership: Conditional Probability Modelling for Patients with Suspected Large Vessel Occlusion

---

O-06 • 11:05:00 AM • Drip-and-Ship Vs. Mothership: A Comparison of Two Different Conditional Probability Models

---

O-07 • 11:12:00 AM • Drip-and-Ship Vs. Mothership: The Effect of Large-Vessel Occlusion Screening Tools on Conditional Probability Modelling

---

---

O-08 • 11:19:00 AM • Drip-and-Ship Vs. Direct Transfer to Comprehensive Stroke Center: A Modelling-Based Analysis

---

O-09 • 11:26:00 AM • House Calls: New Generation Mobile Stroke Unit Brings CT into the Field Reducing Time to Diagnosis

---

O-10 • 11:33:00 AM • Modelling the Impact of Multiple Mobile Stroke Unit Surrounding a Metropolitan Area

---

O-11 • 11:40:00 AM • When Does Having a Mobile Stroke Unit Make Sense in a Metropolitan Area from a Patient-Outcome Perspective?

---

O-12 • 11:47:00 AM • Modelling the Impact of Mobile Stroke Unit Dispatcher Accuracy on Patient Outcomes

---

## MONDAY, JUNE 4

### Room #

#### 05E-PARALLEL PAPER SESSION: ADVANCED TECHNIQUES IN BRAIN TUMOR IMAGING I

---

O-13 • 10:30:00 AM • "Revised Nomogram Combining Advanced MR Imaging Radiomics, Clinical Parameters, and Genomics in Patients with Newly Diagnosed Glioblastoma: Improved Prognostication Over Established Clinical Model"

---

O-14 • 10:37:00 AM • Hypermutated Gliomas Exhibit a Unique MRI-Based Radiomic-Texture Phenotype

---



# Parallel Scientific Paper Sessions At-A-Glance



O-15 • 10:44:00 AM • Development and External Validation of Diffusion and Perfusion MR Radiomics Model as a Diagnostic Biomarker for Differentiating Between Pseudoprogression and True Progression in Patients with Newly Diagnosed Glioblastoma

O-16 • 10:51:00 AM • Radiogenomics Analysis of Tumor Hemodynamic Characteristic in Patients with Newly Diagnosed Glioblastomas: Combination with TCIA Database

O-17 • 10:58:00 AM • Quantitative Radiomics and Machine Learning to Distinguish True Progression from Pseudoprogression in Patients with GBM

O-18 • 11:05:00 AM • Genome-Wide Copy Number Abundance Correlation with Imaging Phenotype and Survival in IDH-Mutated Astrocytomas

O-19 • 11:12:00 AM • Can Preoperative Seizures Predict IDH Mutation?

O-20 • 11:19:00 AM • Prediction of 1p/19q Codeletion Status in IDH-mutant Low-Grade Gliomas: How Accurate Can the Neuroradiologist Be?

O-21 • 11:26:00 AM • Identification of IDH Mutant Glioblastomas by Using Diffusion and Perfusion MR Imaging

O-22 • 11:33:00 AM • Imaging Prediction of Isocitrate Dehydrogenase (IDH) Mutation in Patients with Glioma: A Systematic Review and Meta-Analysis

O-23 • 11:40:00 AM • Radiogenomic Analysis of TERT Promoter Mutation Status in IDH Wild-Type Glioblastoma: Assessing Differences in Imaging Phenotype and Quantitative Apparent Diffusion Coefficient

O-24 • 11:47:00 AM • Radiogenomic Analysis of TCGA-LGG Data Set and Automatic MRI Segmentation Illuminates Biologically Distinct Molecular Subsets and Pathways

## MONDAY, JUNE 4

### Room #

### 05F-EXCERPTA: ADULT BRAIN: DEGENERATIVE AND INFLAMMATORY, INFECTIOUS DISEASE

E-1 • 10:30:00 AM • Rare Case of Autoimmune GFAP Astrocytopathy Encephalomyelitis

E-2 • 10:34:00 AM • Capecitabine-Induced Leukoencephalopathy

E-3 • 10:38:00 AM • "MDMA (3,4-Methylenedioxymethamphetamine) Overdose Causing Anoxic-Ischemic Encephalopathy"

E-4 • 10:42:00 AM • CT and MRI Findings in Two Siblings with Pompe's Disease

E-6 • 10:50:00 AM • Case Report: A 53-Year-Old Female with History of Diabetes Mellitus Presents with Involuntary Movements

E-7 • 10:54:00 AM • CNS Findings of Secondary Hemochromatosis in  $\beta$  Thalassemia

# Parallel Scientific Paper Sessions At-A-Glance

---

E-8 • 10:58:00 AM • Wallerian Degeneration of the Splenium of the Corpus Callosum: MRI Findings and Symptoms

---

E-9 • 11:02:00 AM • How About DaT? A Rare Case of Young-Onset Parkinson Disease

---

E-10 • 11:06:00 AM • Unusual Imaging Findings in Chronic Hepatic Encephalopathy/Acquired Hepatocerebral Degeneration

---

E-11 • 11:10:00 AM • Beyond Dawson's Fingers: Critical Findings Pointing to Multiple Sclerosis

---

E-12 • 11:14:00 AM • Ectopic Cerebellar Brain Parenchyma

---

E-13 • 11:18:00 AM • Multifocal Calvarial Tuberculosis Mimicking Metastatic Tumor

---

E-14 • 11:22:00 AM • Neuro-Behcet's Disease Presenting with Mixed Parenchymal and Vascular Features

---

E-16 • 11:30:00 AM • Granulomatous Hypophysitis

---

E-17 • 11:34:00 AM • Autosomal Dominant TREX 1 Angiopathy: Imaging Findings with Histopathological Correlation

---

E-18 • 11:38:00 AM • An Unusual Manifestation of Tuberculosis with Isolated Skull-Base and Pachymeningeal Involvement

---

E-19 • 11:42:00 AM • Multimodality Imaging of Ipilimumab-Induced Hypophysitis in the Treatment of Metastatic Melanoma

---

---

E-20 • 11:46:00 AM • Neurosarcoidosis Mimicking Tumor on Conventional MR and Multiparametric Advanced Brain Imaging with Long-Term Follow-Up

---

E-21 • 11:50:00 AM • A Rare Case of Nonfatal Powassan Encephalitis in Northern New Jersey

---

## MONDAY, JUNE 4

### Room #

### 05G-PARALLEL PAPER SESSION: EDUCATION AND TRAINING

---

O-25 • 10:30:00 AM • Radiology Resident Boot Camp: Simulating the On-Call Experience Utilizing An Open-Source Web-Based Platform-Independent DICOM Viewer

---

O-26 • 10:37:00 AM • Beyond Static Pictures for Teaching Medical Imaging in the Age of Digital-Online Stroke Education and ASPECTS Training Website Revisited

---

O-27 • 10:44:00 AM • Development of a Customized Pediatric Neuroradiology Curriculum for Neuroradiology and General Pediatric Radiology Fellows Using an LMS (Learning Management System)

---

O-28 • 10:51:00 AM • Current Status of Training Environments in Neurointerventional Practice

---

O-29 • 10:58:00 AM • The Unseen AJNR Twitter Impact: A "Silent" but Active Twitter Following

---

O-30 • 11:05:00 AM • "Clinical, Demographic and Technical Predictors of Neuroradiological MRI Exam Duration"

---



# Parallel Scientific Paper Sessions At-A-Glance



O-31 • 11:12:00 AM • Fluoroscopically Guided Lumbar Puncture: Evaluation of the Cytological Diagnosis

O-32 • 11:19:00 AM • Role of Spinal Imaging in the Care Pathway of Patients with Angiogram-Negative Spontaneous Subarachnoid Hemorrhage: Single-Center Experience

## MONDAY, JUNE 4

### Room #

### 07E-PARALLEL PAPER SESSION: ADVANCED TECHNIQUES IN BRAIN TUMOR IMAGING II

O-33 • 1:15:00 PM • "A Comparison of Low Flip-Angle, No-Preload DSC-MRI to Intermediate Flip-Angle, Preload-Based DSC-MRI as a Reference Standard"

O-34 • 1:22:00 PM • Dual Iron and Gadolinium Contrast-Enhanced MRI Specifically Diagnoses Glioblastoma Pseudoprogression

O-35 • 1:29:00 PM • "Utility of Percent Signal Recovery and Average Baseline Signal in DSC-MRI Optimized for rCBV Measurement for Differentiation of GBM, Metastasis, Lymphoma and Meningioma"

O-36 • 1:36:00 PM • Quantification of DSC-MRI Derived Fractional Tumor Burden (FTB) is Predictive of Survival in Newly Diagnosed Glioblastoma Following Concomitant Chemoradiotherapy

O-37 • 1:43:00 PM • "Overshoot": Induced Underestimation of MR-DSC PWI rCBV Without Contrast Leakage Correction in Post-Treatment Evaluation of Patients With Malignant Cerebral Tumors

O-38 • 1:50:00 PM • Spatial Correlation of Different DCE Perfusion Markers in High-Grade Gliomas

O-39 • 1:57:00 PM • Concordance of Published FDG PET and DCE MR Perfusion Cutoffs in Detecting Recurrent High-Grade Glioma Using Hybrid PET-MRI

O-40 • 2:04:00 PM • The Use of MRI Arterial Spin-Labeling Blood Flow Over Four Years to Characterize Intracranial Metastasis Blood Flow and the Value of Obtaining Base-Line Data to Distinguish Between Tumor Recurrence and Radiation Change in the Enlarging Lesion Following Gamma Knife SRS

O-41 • 2:11:00 PM • "The Use of MRI Arterial Labelling Blood Flow in Characterizing Brain Metastasis Both Prior to and Following Gamma Knife Radiosurgery: Histology, Size and Blood Flow Characterization Collected Over Four Years"

O-42 • 2:18:00 PM • Can Perfusion Imaging Predict CyberKnife Treatment Response in Cerebral Metastatic Disease?

O-43 • 2:25:00 PM • MR Perfusion and Diffusion Imaging in the Follow-Up of Recurrent Glioblastoma Treated with Programmed Death (PD)-1 Immunotherapy

O-44 • 2:32:00 PM • Simultaneous Imaging of Brain Tumor Cellularity and Perfusion Using MR Neuroimmune Imaging

# Parallel Scientific Paper Sessions At-A-Glance

---

## MONDAY, JUNE 4

### Room #

---

#### 07F-PARALLEL PAPER SESSION: EPILEPSY IMAGING TECHNIQUES

---

O-45 • 1:15:00 PM • Clinical Utility of FDG PET/MR Imaging in Mesial Temporal Sclerosis (MTS): Correlations with Disease Severity

---

O-46 • 1:22:00 PM • Epileptogenic Pathologies of the Temporal Lobe Prompt Distinct Changes in the Functional Language Connectome

---

O-47 • 1:29:00 PM • Paravascular Spaces as a Potential Neuroimaging Biomarker for Post-Traumatic Seizures

---

O-48 • 1:36:00 PM • Psuedocontinuous Arterial Spin-Labeling in Epilepsy: A Case Review

---

O-49 • 1:43:00 PM • Image Processing for Detection of Mesial Temporal Sclerosis in Adults: A Case-Control Study

---

O-50 • 1:50:00 PM • Automated and Manual Diffusion Tractography in Presurgical Diagnostic of Patients with Temporal Lobe Epilepsy

---

O-51 • 1:57:00 PM • "Simulation of Implantation of EEG Electrodes, Strips and Grids Utilizing 3-D Printing of Mesh-Like Cerebral Cortex and Deep Brain Structures"

---

O-52 • 2:04:00 PM • Diffusion-Tensor Tractography and Magnetic Resonance Guided Focused Ultrasound Modeling in the Treatment of Mesial Temporal Sclerosis: A Proof of Concept Study

---

---

O-53 • 2:11:00 PM • Efficacy of 7T Neuroimaging of Epilepsy Lesions

---

O-54 • 2:18:00 PM • Identification of Epileptogenic Lesions Using Ultrafast 7T EEG-fMRI and 3-D Paradigm-Free Modeling

---

O-55 • 2:25:00 PM • Association of DVA Location and Metabolic Activity with EEG Localization of Epilepsy

---

O-56 • 2:32:00 PM • Automatic Detection of Fiducial Markers in MRI Images Using 2-D Convolutional Neural Networks for MEG Coregistration

---

O-57 • 1:15:00 PM • Allopregnanolone as a Regenerative Therapeutic for Alzheimer's Disease: Phase 1B/2A MRI Outcomes and Interactions with APOE4 Genotype

---

O-58 • 1:22:00 PM • "Allopregnanolone as a Regenerative Therapeutic for Alzheimer's Disease: Phase 1B/2A MRI Outcomes and Interactions with APOE4 Genotype has been Submitted to the ASNR Abstract Submission Site by: Meng Law, Keck Medical Center of USC, Los Angeles, CA, United States, [meng.law@usc.edu](mailto:meng.law@usc.edu). I am co-author"

---

O-59 • 1:29:00 PM • Spatial Patterns of Correlation Between Regional Cortical Amyloid and Cortical Thickness in a Cohort of Alzheimer's Patients

---



# Parallel Scientific Paper Sessions At-A-Glance



O-60 • 11:36:00 PM • "MRI of the Relationship Between White-Matter Hyperintensities, Hemosiderin Deposition and Paravascular Spaces for a Possible Mechanism of Brain Injury in Vascular Cognitive Impairment and Alzheimer's Disease"

O-61 • 11:43:00 PM • Which Reference Regions Are Suitable for Sodium Signal Intensity Normalization in the Evaluation of Early Alzheimer's Disease at 3T MRI?

O-62 • 1:50:00 PM • Machine Learning of Quantified Volumetric MR Imaging for Diagnostic Delineation of Alzheimer's Dementia and Mild Cognitive Impairment in the Alzheimer's Disease Neuroimaging Initiative

O-63 • 1:57:00 PM • "3-D Convolutional Neural Networks for Classifying Brain MRIs from Alzheimer's Disease, Mild Cognitive Impairment and Normal Subjects"

O-64 • 2:04:00 PM • Myeloperoxidase PET Imaging Mapping Neuroinflammation in Alzheimer's Disease

O-65 • 2:11:00 PM • Diagnostic and Prognostic Value of the Entorhinal Cortex Atrophy (ERICA) Score in Mild Cognitive Impairment

O-66 • 2:18:00 PM • Concordance of Quantitative SUVR with Visual Assessment of [18F]-AV-1451 Tau PET/MRI and Relation to Off-Target Sites

O-67 • 2:25:00 PM • "The Associations Among Physical Frailty, Cognitive Impairment, and Brain Structural Alteration in Patients with Parkinson Disease"

O-68 • 2:32:00 PM • Optimized Imaging at 3.0 T of the Rostral Zona Incerta (rZI) for Deep-Brain Stimulation in Parkinson's Disease

O-222 • 2:39:00 PM • Effectiveness of Brain Volumetric Software as an Objective Tool for Determining Patient Risk for Normal Pressure Hydrocephalus

## MONDAY, JUNE 4

### Room #

### 07G-PARALLEL PAPER SESSION: IMAGING NEURODEGENERATIVE DISEASES

O-69 • 3:00:00 PM • Hyperintensity in Deep-Brain Structures on Unenhanced T1-Weighted MR in a Large Cohort of Patients with Secondary Progressive Multiple Sclerosis: Relationship with Dose and Ionization of Linear Gadolinium-Based Contrast Agent

O-70 • 3:07:00 PM • MRI Identification of Central Vein Sign in Radiologically Isolated Syndrome: Perivenous White-Matter Pathology in Asymptomatic Individuals

O-71 • 3:14:00 PM • Conventional MRI Imaging Features and Histogram Analysis of New T2 Lesions Correlates with Outcome in Multiple Sclerosis Patients

O-72 • 3:21:00 PM • Contrast Enhancement Does Not Increase Sensitivity in Detecting New Multiple Sclerosis Lesions in Routine Follow-Up MRI

# Parallel Scientific Paper Sessions At-A-Glance

---

O-73 • 3:28:00 PM • Gadolinium Enhancing White-Matter Lesions on Follow-Up MR Imaging in Patients with Multiple Sclerosis: Is Contrast Always Necessary?

---

O-74 • 3:35:00 PM • Functional Network Connectivity and Clinical Phenotypes of Multiple Sclerosis: The CONNECTIMS Study

---

O-75 • 3:42:00 PM • Predicting Conversion from Clinically Isolated Syndrome to Multiple Sclerosis: A MRI Feature-Based Machine-Learning Approach

---

O-76 • 3:49:00 PM • Automatic Detection of New MS Lesions on Longitudinal Subtraction Images

---

O-77 • 3:56:00 PM • "Multiple Sclerosis, Cannabis, and Clinical Disability: A Molecular Imaging Study with 18F-FDG Positron Emission Tomography"

---

O-78 • 4:03:00 PM • Longitudinal Assessment of the Microstructural Substrates Underlying Gad-Enhancing Lesions in MS Using Multishell Neurite Orientation Dispersion and Density Imaging (NODDI)

---

O-79 • 4:10:00 PM • Cortical or Juxtacortical Lesion? Evaluation of Phase-Sensitive Inversion Recovery Sequence in Characterization and Follow-Up of Multiple Sclerosis Patients

---

O-80 • 4:17:00 PM • Quantitative Myelin Water Imaging Detects Age-Dependent Demyelinating Alterations of the Cerebral White-Matter Microstructure: A Multiparametric MRI Study

---

---

## MONDAY, JUNE 4

### Room #

### 08C-PARALLEL PAPER SESSION: PEDIATRIC IMAGING

---

O-81 • 3:00:00 PM • Segmentation of Pediatric Hindbrain at 7 Tesla: First Steps Toward Developing a Hindbrain Atlas

---

O-82 • 3:07:00 PM • Quantitative Assessment of Regional Brain Myelination During Development using Synthetic MRI

---

O-83 • 3:14:00 PM • "Quantitative Assessment of Regional Brain T1, T2, and PD Values During Development Using Synthetic MRI"

---

O-84 • 3:21:00 PM • MR Venography Predicts Increased Intracranial Hypertension in Children with Hydrocephalus

---

O-85 • 3:28:00 PM • Time Dependent Changes in Extra-Axial Structures of Term Newborns: A Prospective Single-Center Transfontanelle Ultrasound Study

---

O-86 • 3:35:00 PM • Structural MRI Brain Findings in a Group of Typically Developing Adolescents Enrolled in the Adolescent Brain Cognitive Development (ABCD) Cohort

---

O-87 • 3:42:00 PM • CNS Involvement in Patients with Overgrowth Syndromes

---

O-88 • 3:49:00 PM • Abnormal Foramen Magnum as a Novel Imaging Feature in Joubert Syndrome

---





# Parallel Scientific Paper Sessions At-A-Glance



O-89 • 3:56:00 PM • T2 Hypointensity Can Reliably Identify the Primary Motor and Somatosensory Cortices in Children

O-90 • 4:03:00 PM • Abnormal Cortical and Subcortical Cerebral Morphology in Neurofibromatosis Type 1: A Potential Novel Biomarker for Disease Pathophysiology and Progression

O-91 • 4:10:00 PM • Neurofibromatosis Type 1 Patients with Optic Pathway Gliomas: Accuracy of Noncontrast MR in Imaging Surveillance

O-92 • 4:17:00 PM • Subependymal Giant Cell Astrocytoma Size Measurement In Tuberosus Sclerosis Complex: Noncontrast Versus Contrast-Enhanced 3-D T1-Weighted MRI

## MONDAY, JUNE 4

### Room #

### 08D-PARALLEL PAPER SESSION: SPINE INTERVENTIONS

O-93 • 3:00:00 PM • CT-Guided Percutaneous Synovial Cyst Rupture Using a 11G Jamshidi Needle: Early Experience and Results of a Novel Therapeutic Technique

O-94 • 3:07:00 PM • Implementation of Evidence-Based Appropriateness Guidelines for Epidural Steroid Injection for Patients with Chronic Low Back Pain

O-95 • 3:14:00 PM • Spread of Injectate During Cervical Interlaminar Epidural Steroid Injections: Reassessing Ventral Epidural and Craniocaudal Spread with Axial Imaging

O-96 • 3:21:00 PM • Can RF Ablation Followed with PMMA Augmentation for Osteolytic Spine Metastasis Provide Both Pain Relief and Structural Stability?

O-97 • 3:28:00 PM • When is Too Long? Time Course for Enhancement in Postdiscectomy Patients

O-98 • 3:35:00 PM • Efficacy of a Vertebral Augmentation System Used for Bone Remodelling as Treatment of Vertebral Fractures

O-99 • 3:42:00 PM • Recent Imaging of Vertebral Compression Fractures is Beneficial in Preoperative Planning for Vertebral Augmentation

O-100 • 3:49:00 PM • Efficacy of Euthermic Discolysis with Ho Laser in Treatment of Radicular Pain

O-101 • 3:56:00 PM • Motion Characteristics of the Functional Spinal Unit During Lumbar Disc Injection

O-102 • 4:03:00 PM • Whether Vertebroplasty Based on Clinical Plus Imaging (MRI With or Without Bone Scan) Selection Criteria is Related to Higher Efficacy on Pain Scale Among Patients with Painful Osteoporotic Vertebral Compression Fractures Anywhere in the World: A Systematic Review and Meta-Analysis

O-103 • 4:10:00 PM • Initial Single-Center Experience: New Generation of RadioFrequency Heat Ablation Device and Kyphoplasty in Spinal Metastases Treatment



# Parallel Scientific Paper Sessions At-A-Glance

O-104 • 4:17:00 PM • Efficacy of Lumbosacral Spine Phantom in Improving Trainee Proficiency and Confidence in CT-Guided Spine Procedures

## MONDAY, JUNE 4

### Room #

### 08E-PARALLEL PAPER SESSION: CEREBRAL ANEURYSMS MANAGEMENT AND TREATMENT

O-105 • 3:00:00 PM • Management of Unruptured Intracranial Aneurysms in the Elderly: A Cost-Effectiveness Analysis

O-106 • 3:07:00 PM • Screening for Intracranial Aneurysms in Patients with Adult Polycystic Kidney Disease: A Cost-Effectiveness Analysis

O-107 • 3:14:00 PM • Impact of Early Endovascular Aneurysm Treatment on Clinical Outcome in Subarachnoid Hemorrhage

O-108 • 3:21:00 PM • Factors Influencing Confidence of Diagnostic Rating and Retreatment Recommendation in Coiled Aneurysms

O-109 • 3:28:00 PM • Customizable 3-D Printed Simulation Model of Aneurysms in the Circle of Willis: A Step Closer to Reality

O-110 • 3:35:00 PM • Creation of Different Size of Aneurysms by Adjusting the Position of Sheath During Elastase Incubation

O-111 • 3:42:00 PM • "The Use of Flow Diverters to Treat Small and Very Small Ruptured, Saccular Aneurysms"

O-112 • 3:49:00 PM • Long-Term Visual Outcome in Patients Treated by Flow Diversion for Carotid-Ophthalmic Aneurysms

O-113 • 3:56:00 PM • Parent Artery Occlusions Following Use of SILK Flow Diverters for Treatment of Intracranial Aneurysms

O-114 • 4:03:00 PM • Flow Diversion for the Treatment of Basilar Apex Aneurysms

O-115 • 4:10:00 PM • Multiparametric MRI Follow-Up of Intracranial Aneurysms Treated with the Woven EndoBridge (WEB): A Case of Faraday's Cage?

O-116 • 4:17:00 PM • Aneurysm Remnants After Flow Diversion: Clinical and Angiographic Outcomes

O-116a • 4:24:00 PM A Deep-Learning Approach to Automated Cerebral Aneurysm Detection on Magnetic Resonance Angiograms

## MONDAY, JUNE 4

### Room #

### 08F-EXCERPTA: ADULT BRAIN: INFECTIOUS DISEASE/VASCULAR DIAGNOSIS AND NEOPLASMS

E-22 • 3:00:00 PM • Leptomeningeal Inflammation in Multiple Sclerosis as a Link to Cortical Pathology: An Unfamiliar Entity to Many Radiologists



# Parallel Scientific Paper Sessions At-A-Glance



E-23 • 3:04:00 PM • Hyperintense CSF on FLAIR Imaging After Previous Gadolinium Administration

E-24 • 3:08:00 PM • Reversible Sulcal FLAIR Hyperintensity on MRI in a Patient with Migraine with Aura

E-25 • 3:12:00 PM • 4-D Flow MRI Shows Vascular Flow and Waveform Responses to Stereotactic Radiosurgery (SRS) for Brain Arteriovenous Malformations (AVMs) As Early As Two Months Post Treatment

E-26 • 3:16:00 PM • Primary Angiitis of the Central Nervous System: Lymphocytic Type

E-27 • 3:20:00 PM • High-Resolution Vessel-Wall Imaging and Vasculopathy Related to Herpes Zoster Ophthalmicus

E-28 • 3:24:00 PM • Moyamoya-Type Occlusion of the Left Internal Carotid Terminus Related to Neuro-Behcet's Vasculitis

E-29 • 3:28:00 PM • Cerebellopontine Angle Cistern Arteriovenous Malformations – Understanding the Distinctive Angioarchitecture of a Unique and Challenging Entity

E-30 • 3:32:00 PM • Thyroid Storm Presenting with Moyamoya Syndrome

E-31 • 3:36:00 PM • Persisting Embryonal Infundibular Recess

E-32 • 3:40:00 PM • Primary Leptomeningeal Medullo-<sup>o</sup>blastoma: First Reported Case of Desmoplastic/Nodular Medulloblastoma without a Discrete Parenchymal Mass

E-33 • 3:44:00 PM • Assessment of

Radiation Treatment Response of a Skull-Base Meningioma Using Arterial Spin Labeling

E-34 • 3:48:00 PM • Dural Inflammatory Pseudotumor from Combination Immunotherapy for Metastatic Melanoma

E-35 • 3:52:00 PM • An Interesting Case of Gorham-Stout Disease with Craniofacial Involvement

E-36 • 3:56:00 PM • Subependymal Giant Cell Astrocytoma Arising in the Absence of Tuberous Sclerosis Complex

E-37 • 4:00:00 PM • Cerebellopontine Angle Glioblastoma

E-38 • 4:04:00 PM • Brainstem Leptomeningeal Pseudoprogression in Glioblastoma Following Radiation Therapy

E-39 • 4:08:00 PM • Intracranial Lipoma with Associated Cortical Calcification and Leptomeningeal Enhancement – A Rare Variant of Sturge-Weber Syndrome Type 3?

E-40 • 4:12:00 PM • Malignant Melanoma as a Coalescent Tumor within Intracerebral Epidermoid – A Rare Case Report

E-41 • 4:16:00 PM • Rare Case of Cavernous Sinus Hemangioma and Unique Application of Tc-99m Labeled RBC Scan in Diagnosis

E-42 • 4:20:00 PM • Primary Cerebral Histiocytic Sarcoma

E-43 • 4:24:00 PM • Suprasellar Osteolipoma: A Rare Entity

E-15 • 4:28:00 PM • LIG1 Encephalitis – A

# Parallel Scientific Paper Sessions At-A-Glance

Newly Understood Autoimmune Encephalitis

---

## MONDAY, JUNE 4

### Room #

---

#### 08G-PARALLEL PAPER SESSION: BRAIN: NEW AND ADVANCED TECHNIQUES

---

O-117 • 3:00:00 PM • The Ability of Compressed SENSE MR Imaging to Evaluate the Brain Relative to Conventional Fully Acquired MR Imaging: A Prospective Evaluation

---

O-119 • 3:14:00 PM • Improved T2-Weighted 3-D FLAIR from a Compact 3T Scanner with High-Performance Gradients

---

O-120 • 3:21:00 PM • Age-Related Measurements of the Myelin Water Fraction Derived from 3-D Multi-Echo GRASE Reflect the Cerebral White-Matter Microstructure

---

O-121 • 3:28:00 PM • Measures of Tissue Coherency in Clinical MRI Reflect Myelin Integrity in Multiple Sclerosis Patients

---

O-122 • 3:35:00 PM • T1 Mapping Does Not Lead to Significant Differences in an eTofts Model Parameters for Brain DCE-MRI

---

O-123 • 3:42:00 PM • Properties of Path Tracing (Cinematic) Rendering for Medical Imaging

---

O-124 • 3:49:00 PM • Motion Artifact Detection with Gradient Entropy

---

O-125 • 3:56:00 PM • Relationship Between Cough-Associated Changes in CSF Flow and Disease Severity in Chiari I

Malformation: An Exploratory Study Using Real-Time MRI

---

O-126 • 4:03:00 PM • Preoperative Evaluation of Intracranial Tumor Stiffness and Adhesion Using MR Elastography

---

O-127 • 4:10:00 PM • Partial Volume Correction is Important for Quantitative Sodium  $^{23}\text{Na}$ -MRI Brain at 3T

---

O-128 • 4:17:00 PM • "Z Effective and Electron-Density Values of Structures of the Brain and Head, Derived From Spectral CT"

---

O-128a • 4:24:00 PM • Optimizing Resources for Endovascular Clot Retrieval for Acute Ischemic Stroke Using a Discrete-Event Simulation model

---

## MONDAY, JUNE 4

### Room #

---

#### 09F-PARALLEL PAPER SESSION: SPINE: NEW FINDINGS

---

O-129 • 4:45:00 PM • The Normal Lumbosacral Disc Herniation: Incidence of Vertebral Anatomic Variants and Nomenclature 2.0

---

O-130 • 4:52:00 PM • Radiologists Agree More on Assessment of Change Than Degree of Stenosis on Follow-Up Cervical Spine MRIs

---

O-131 • 4:59:00 PM • Radiologists Agree More on Assessment of Change Than Degree of Stenosis on Follow-Up Lumbar Spine MRIs

---

O-132 • 5:06:00 PM • Posterior Spinal Cord Indentation: Imaging Findings and Clinical Outcome



# Parallel Scientific Paper Sessions At-A-Glance



O-133 • 5:13:00 PM • Bone Mineral Density in Opportunistic Quantitative Computed Tomography is the Main Predictive Factor of One-Year Reoperation After Posterior Lumbar Instrumentation

O-134 • 5:20:00 PM • Magnetic Resonance-Guided High-Intensity Focused Ultrasound for the Treatment of Facetogenic Pain

O-135 • 5:27:00 PM • Clinical Utility of a Novel Ultrafast T2-Weighted Sequence for Spine Imaging

O-136 • 5:34:00 PM • Epidural Fat Distortion Sign: Tool for Localizing Spinal Canal Pathologies

O-137 • 5:41:00 PM • "The Spinal Lines that Divide: Imaging, Identification, and Localization of Collections and Leaks of the Spine with Focus on Digital Subtraction Myelography Technique"

O-138 • 5:48:00 PM • In Vivo Monitoring of Peripheral Nerve Lesions in Symptomatic and Asymptomatic Familial Amyloid Polyneuropathy by a New Imaging Biomarker

O-139 • 5:55:00 PM • Magnetization Transfer Ratio in Peripheral Nerve Tissue: Location and Age-Dependent Differences

O-140 • 6:02:00 PM • "Comparison of Radiation Doses Imparted During Multidetector CT Scanners and Cone Beam Computed Tomography for the Postoperative, Spinal Fusion Assessment"

## MONDAY, JUNE 4

### Room #

### 09G-PARALLEL PAPER SESSION: INTERVENTIONAL: ANEURYSMS, AVMS AND TUMORS

O-141 • 4:45:00 PM • Factors Influencing Confidence of Treatment Recommendation of Unruptured Intracranial Aneurysms and Estimated Risk of Procedure-Related Neurological Complications

O-142 • 4:52:00 PM • Increased Rupture Risk of Intracranial Aneurysms Associated with Methamphetamine Use

O-143 • 4:59:00 PM • To Study the Factors Predicting Aneurysms Regrowth Following Endovascular Treatment

O-144 • 5:06:00 PM • Management of Small Unruptured Intracranial Aneurysms: A Survey of Neuroradiologists

O-145 • 5:13:00 PM • Technical Feasibility of the Use of the PulseRider Implant for Wide-Neck Bifurcation Aneurysm Endovascular Treatment - IonInitial Experience

O-146 • 5:20:00 PM • High Prevalence of Venous Outflow Stenosis in Brain AVM: Is It a Cause or Result?

O-147 • 5:27:00 PM • Feasibility of Intra-Arterial Chemotherapy for Retinoblastoma: Experiences in a Large Single-Center Cohort Study

O-148 • 5:34:00 PM • Clinical and Angiographic Features of Noninvoluting Congenital Hemangiomas (NICH)

# Parallel Scientific Paper Sessions At-A-Glance

---

O-511 • 5:41:00 PM • Isolated Dissections and Dissecting Aneurysms of the Posterior Inferior Cerebellar Artery: A Single-Institutional Experience

---

O-391 • 5:48:00 PM • Dural Arteriovenous Fistulas of the Foramen Magnum: A Multi-Institutional Experience and Classification System for Prognosis and Optimal Management

---

O-391a • 5:55:00 PM • Imaging of infectious intracranial aneurysms- a report of 8 cases

---

O-391b • 6:02:00 PM • Results of long term outcome of flow diverter placement – a single institutional experience

---

## MONDAY, JUNE 4

### Room #

### 11B-PARALLEL PAPER SESSION: COMPUTER ASSISTED AND DEEP LEARNING METHODS IN STROKE IMAGING

---

O-149 • 8:00:00 AM • Comparison of CT Grayscale Versus Colorized ASPECTS in Patients with Emergent Large-Vessel Occlusion Stroke

---

O-150 • 8:07:00 AM • Detection of Early Infarction Signs with a Computer-Aided Assessment of the Alberta Stroke Program Early CT Score (ASPECTS) in the Clinical Routine

---

O-151 • 8:14:00 AM • Impact of CT Ischemic Lesion Location on Modified Rankin Scale Score in Patients with Acute Ischemic Stroke: A Voxel-Based Approach

---

---

O-152 • 8:21:00 AM • "Differentiation of Infarct Core, Penumbra and Normal Brain on Noncontrast CT in Acute Stroke Using Texture Analysis"

---

O-153 • 8:28:00 AM • Artificial Intelligence Detection of Cerebrovascular Large Vessel Occlusion – VIZ Algorithm Diagnostic Accuracy and Clinical Notification Times in a Retrospective Evaluation

---

O-154 • 8:35:00 AM • Prediction of the Final Infarct from Acute Stroke Neuroimaging Using Deep Learning

---

O-155 • 8:42:00 AM • Deep-Learning Quantification of Parenchymal Hemorrhage Volume Correlates With Patient Clinical Outcome

---

O-156 • 8:49:00 AM • Hybrid 3-D/2-D Convolutional Neural Network for Hemorrhage Detection on Head C

---

## TUESDAY, JUNE 5

### Room #

### 11C-PARALLEL PAPER SESSION: BRAIN: TRAUMATIC INJURY

---

O-157 • 8:00:00 AM • Computed Tomography Findings and Their Correlation to Glasgow Coma Score and Other Risk Factors

---

O-158 • 8:07:00 AM • Utility of CT Angiography in Patients with Acute Subdural Hematoma

---

O-159 • 8:14:00 AM • Contrast Extravasation on CTA in Acute Head Trauma

---



# Parallel Scientific Paper Sessions At-A-Glance




---

O-160 • 8:21:00 AM • Role of Brain MRI in Evaluation of Trauma Patients

---

O-161 • 8:28:00 AM • MRI Findings in Patients with a Clinical Diagnosis of Postconcussion Syndrome: Toronto Neuroimaging Criteria for Postconcussion Syndrome

---

O-162 • 8:35:00 AM • Correlation of Cavum Septum Pellucidum and Cavum Vergae In Fighters to Neuropsychiatric Scores and Brain Volumes

---

O-163 • 8:42:00 AM • Five-Year Arterial Spin-Labeling MR Perfusion Evaluation of Concussive Blast Injury with Associated Neuropsychological Measures

---

O-164 • 8:49:00 AM • Dynamic Contrast-Enhanced MR Imaging for Quantitative Assessment of Blood-Brain Barrier Disruption in Mild Traumatic Brain Injury Patients with Postconcussion Syndrome

---

## TUESDAY, JUNE 5

### Room #

#### 11D-PARALLEL PAPER SESSION: IMAGING BRAIN METASTASES

---

O-165 • 8:00:00 AM • Texture Features as a Biomarker for Melanoma Brain Metastasis Response to Immune Checkpoint Inhibitors

---

O-166 • 8:07:00 AM • Location of Brain Metastases from Breast Cancer Depending on the HER2 Receptor Status

---

O-167 • 8:14:00 AM • Metastatic Brain Cancer: Insights from Mathematical Modeling of Tumor Size and Growth Patterns

---



---

O-168 • 8:21:00 AM • Response Patterns of Brain Metastases Following Immunotherapy

---

O-169 • 8:28:00 AM • Volumetric Analysis of Brain Metastases Treated with Laser Interstitial Thermal Therapy (LITT) and Correlation with Clinical Outcome

---

O-170 • 8:35:00 AM • Precision Imaging of Metastatic and Primary Brain Tumors After Radiation with 18F-FDOPA Hybrid PET-MRI Is Feasible and Cost-Effective

---

O-171 • 8:42:00 AM • Imaging of Laser Interstitial Thermal Therapy (LITT) for the Treatment of Brain Metastasis and Radiation Necrosis: A Review of 82 Treated Lesions at Our Institution

---

O-172 • 8:49:00 AM • Accuracy of T2-Weighted Images for Detection of Intracranial Meningioma Growth – Towards Lowering Gadolinium Administration

---

## TUESDAY, JUNE 5

### Room #

#### 11E-PARALLEL PAPER SESSION: BRAIN: NEW FINDINGS

---

O-173 • 8:00:00 AM • Using Diffusion-Tensor Tractography to Evaluate Cortical Spinal Tracts in Patients with Supratentorial Intracerebral Hemorrhage With and Without Evacuation in the Acute to Early Subacute Stage

---

O-174 • 8:07:00 AM • "A Chemobrain Study: Clinical, Genetic and Imaging Evaluation of the Cognitive Effects of Chemotherapy in Patients with Colorectal Cancer"

---

# Parallel Scientific Paper Sessions At-A-Glance

---

O-175 • 8:14:00 AM • A CT-Based Diagnostic Index to Differentiate Between Progressive Supranuclear Palsy and Parkinson's Disease for DaT-SPECT/CT

---

O-176 • 8:21:00 AM • Comparison Between Task Activation and Resting-State Connectivity Maps in the Motor and Language Networks for Presurgical Planning

---

O-177 • 8:28:00 AM • A Voxel-Based Analysis of Cerebral Blood Flow Abnormalities in Obsessive-Compulsive Disorder Using Pseudocontinuous Arterial Spin-Labeling MRI

---

O-178 • 8:35:00 AM • Deep-Seated Intracranial Hemorrhages: When Is Angiographic Imaging Required?

---

O-179 • 8:42:00 AM • The Visual Cortex Sign in Anoxic Brain Injury

---

O-180 • 8:49:00 AM • Invisible Cortex Sign: A New and Highly Accurate Feature to Localize the Inferolateral Central Sulcus

---

## TUESDAY, JUNE 5

### Room #

### 11E-PARALLEL PAPER SESSION: BRAIN: NEW FINDINGS

---

O-181 • 8:00:00 AM • DTI Assessment of Regional White-Matter Changes in the Cervical and Thoracic Spinal Cord in Pediatric Subjects

---

---

O-182 • 8:07:00 AM • Comparison of Arterial Spin-Labeling (ASL) and 18F Fluorodeoxyglucose Positron Emission Tomography (FDG-PET) in Localization of Epileptogenic Focus for Presurgical Evaluation of Intractable Epilepsy

---

O-183 • 8:14:00 AM • Alternating Hemiplegia of Childhood: Voxel-Based Analysis at 3T Exploring Ictal and Interictal Disease Mechanisms

---

O-184 • 8:21:00 AM • Impaired Structural Connectivity of Frontal Eye Field and Posterior Parietal Cortices with Pulvinar Mediates the Impact of Prematurity on Adult Perceptual Organization

---

O-185 • 8:28:00 AM • Quantitative Susceptibility Mapping (QSM) and Diffusion-Kurtosis Imaging (DKI) for Detection of Early Radiation-Induced White-Matter Injury in Children with Primary Brain Tumors

---

O-186 • 8:35:00 AM • Machine-Learning Analysis of Edge-Density Imaging for Identification of Children with Sensory Over-Responsivity

---

O-187 • 8:42:00 AM • Multimodality PET-MRI Image Joint Reconstruction

---

O-188 • 8:49:00 AM • Comparing Efficacy of Different Paradigms Utilized for Language Mapping in Pediatric Functional MRI Studies

---



# Parallel Scientific Paper Sessions At-A-Glance



## TUESDAY, JUNE 5

### Room #

#### 13E-PARALLEL PAPER SESSION: POLICY AND QUALITY

O-189 • 10:30:00 AM • Contemporary National Trends for Head CT Use in Emergency Department: Insights from National Hospital Ambulatory Medical Care Survey (NHAMCS) 2007-2014

O-190 • 10:37:00 AM • Trends on Head CT and MRI Use in Emergency Department Visits for Stroke and Transient Ischemic Attack: Insights from National Hospital Ambulatory Medical Care Survey (NHAMCS) 2007-2014

O-191 • 10:44:00 AM • Clinical Utility of a Brain MRI After a Negative Head CT in the Emergent Setting

O-192 • 10:51:00 AM • Effective and Ineffective Tools in Increasing Referring Providers' Utilization of Radiology Clinical Decision Support

O-193 • 10:58:00 AM • Steering the Course to Success in Outpatient Imaging and Inpatient Throughput in a Large Academic Medical Center

O-194 • 11:05:00 AM • Results of the Second Comprehensive Survey of the United States' Neuroradiology Workforce

O-195 • 11:12:00 AM • Influences for Gender Disparity in Academic Neuroradiology

O-196 • 11:19:00 AM • "Longevity As the Measure of Health Care Benefit Comparing the Canadian Versus United States (U.S.) Health Care Systems: Cost, Complexity, Insurance Coverage and Number of CT and MRI Units Installed: An Incomplete Truth?"

O-197 • 11:26:00 AM • Social Determinants of Health (SDH): An Essential Element in the Measure of Benefit Versus Cost of Neuroradiology in Canada Vs. United States (U.S.)

O-198 • 11:33:00 AM • Low Back Pain and Cancer: Are We Imaging in a Timely Manner?

O-199 • 11:40:00 AM • Effect of a Standardized Reporting Tool on the Rate and Concordance of Management Recommendations for Incidental Thyroid Nodules on CT and MRI

O-200 • 11:47:00 AM • Significant Quality Improvement of Results and Patient Satisfaction in Medical Information for Radiological Examinations Applying Video Information Techniques ("Patient Information App")

## TUESDAY, JUNE 5

### Room #

#### 013F-EXCERPTA: NEOPLASMS, STROKE AND INTERVENTIONAL



## Parallel Scientific Paper Sessions At-A-Glance

---

E-44 • 10:30:00 AM • Multiple Meningiomas Confined to the Right Cerebral Hemisphere with a Third Ventricular Meningioma Causing Acute Obstructive Hydrocephalus

---

E-45 • 10:34:00 AM • Intraventricular Glioblastoma with Neuronal Component

---

E-46 • 10:38:00 AM • Collision Tumor: A Rare Case of Metastatic Breast Carcinoma Invasion into a Skull-Base Meningioma

---

E-47 • 10:42:00 AM • "Two Unusual Cortical-Based Tumors of a Common Entity: Clinical, Imaging and Histopathological Correlation"

---

E-48 • 10:46:00 AM • Acutely Hemorrhagic Meningioma with 'Spot Sign' on CT Angiogram

---

E-49 • 10:50:00 AM • Cerebral Venous Air Embolism

---

E-50 • 10:54:00 AM • Direct-Puncture and Percutaneous nBCA Embolization of a Traumatic Head and Neck Pseudoaneurysm

---

E-52 • 11:02:00 AM • Glue Embolization of Artery of Adamkiewicz Pseudoaneurysm with Active Extravasation Following MDMA Abuse

---

E-53 • 11:06:00 AM • Dual Pathology: Coexistence of Calcifying Pseudoneoplasm of the Neuraxis (CAPNON) and Primary Intracranial Mesenchymal Chondrosarcoma

---

---

E-54 • 11:10:00 AM • Complex Revascularisation Angioplasty in a Patient with a Combined Type A Aortic Dissection and Hemispheric Hypoperfusion Syndrome

---

E-55 • 11:14:00 AM • Anterior Cerebral Artery Vasospasm and Infarction Secondary to Pituitary Tumor Apoplexy

---

E-56 • 11:18:00 AM • Lymphomatoid Granulomatosis: A Case Report of a Challenging Presentation of a Rare Entity

---

E-57 • 11:22:00 AM • Cerebral Air Embolism Due to Atrioesophageal Fistula – A Rare but Devastating Complication of Catheter Ablation for Atrial Fibrillation

---

E-58 • 11:26:00 AM • Adult-Onset Atypical Teratoid/Rhabdoid Tumor in the Sellar Region – A Distinct Variant of an Exceptionally Rare Tumor?

---

E-59 • 11:30:00 AM • Multifocal Symptomatic Intracranial Plaque Enhancement: Is There an Underlying Systemic Inflammatory Process?

---

E-60 • 11:34:00 AM • Tumefactive Demyelination Coexisting with Primary Central Nervous System Lymphoma

---

E-61 • 11:38:00 AM • Granulocytic Sarcoma (Chloroma) Presenting as Multifocal Intraparenchymal Masses

---

E-62 • 11:42:00 AM • Angry-Looking Textiloma Mimicking Recurrent Glioblastoma on Conventional MR and Multiparametric Advanced Brain Tumor Imaging

---



# Parallel Scientific Paper Sessions At-A-Glance



E-5 • 11:46:00 AM • Critical Illness-Associated Cerebral Microbleeds Related to Heat Stroke

E-115 • 11:50:00 AM • Tumor Regurgitation: A Dramatic and Rare Presentation

## TUESDAY, JUNE 5

### Room #

### 13G-PARALLEL PAPER SESSION: PEDIATRIC: DEVELOPMENTAL AND CONGENITAL

O-201 • 10:30:00 AM • Volumetric Analysis of the Gray and White Matter of Patients with Allan-Herndon-Dudley Syndrome During Childhood

O-202 • 10:37:00 AM • Textural Analysis of Ambulatory and Nonambulatory Children with Muscle Disorders Using T1-Weighted MRIs of the Midcalf and Mid thigh

O-203 • 10:44:00 AM • Comparison of MR Scoring Systems in Predicting Neurologic Outcomes in Neonates with Hypoxic-Ischemic Encephalopathy: Deep-Gray Injury Associated Best with Seizures

O-204 • 10:51:00 AM • Perfusion and Diffusion Imaging in Distinguishing Pilocytic Versus Piloxyoid Astrocytomas Above and Below the Tentorium

O-205 • 10:58:00 AM • "Synthetic MRI in Tuberous Sclerosis: Quantitative Assessment of Parenchymal and CSF Volumes and of Lesional T1, T2 and PD Values"

O-206 • 11:05:00 AM • Fast MRI for Shunted Children: Single-Sequence Axial FAST T2 Could Replace Current Protocols

O-207 • 11:12:00 AM • Radiation Dose Reduction Strategies for Intrathecal Spinraza (Nusinersen) Administration in Spinal Muscular Atrophy

O-208 • 11:19:00 AM • Radiographically Occult Tethered Cord in Pediatric and Adult Patients

## TUESDAY, JUNE 5

### Room #

### 14F-PARALLEL PAPER SESSIONS: SKULL BASE AND SINUS

O-209 • 1:15:00 PM • Magnetic Resonance Imaging-Based Evaluations of Olfactory Bulb Atrophy in Patients with Olfactory Dysfunction

O-210 • 1:22:00 PM • Prospective Evaluation of Blood-Brain-Barrier Dysfunction in Patients with Aneurysmal Subarachnoid Hemorrhage: Correlation with Clinical Outcomes in a Pilot Cohort

O-211 • 1:29:00 PM • Automatic Detection of Cerebral Microbleeds (CMBs) Using STRategically Acquired Gradient Echo (STAGE) Imaging

O-212 • 1:36:00 PM • Volumetric Brain MRI and Neonatal Neurobehavioral Correlates in Infants of Zika-Infected Mothers

# Parallel Scientific Paper Sessions At-A-Glance

---

O-213 • 1:43:00 PM • Multiparametric Quantitative and Functional Magnetic Resonance Imaging in Differentiation of Central Nervous System Tuberculoma and Neurocysticercosis

---

O-214 • 1:50:00 PM • Relationship Between Pineal Cyst Size and Aqueductal CSF Flow Measured by Phase Contrast MRI

---

O-215 • 1:57:00 PM • Prospective Evaluation of Blood-Brain-Barrier Integrity and Cerebrospinal Fluid Lipocalin-2 Protein Levels in Aneurysmal Subarachnoid Hemorrhage: Correlation with Disease Severity

---

O-217 • 2:11:00 PM • Scan-Rescan Repeatability of Hippocampal Volume Measurements in Patients with Low-Grade Glioma: Comparison of Automated Software Packages

---

O-218 • 2:18:00 PM • Spinal Imaging Findings of Open Spinal Dysraphism on Fetal and Postnatal MRI

---

O-219 • 2:25:00 PM • Measuring Thalamic Lesion Extent Following Focused Ultrasound Thalamotomy

---

O-220 • 2:32:00 PM • Leptomeningeal Enhancement on FLAIR Imaging in Patients with Cerebral Aneurysms Treated with Endovascular Therapy

---

O-221 • 2:39:00 PM • Added Value of Arterial Spin-Labeling Perfusion in the Emergency Department: A Six-Month Institutional Experience

---

---

## TUESDAY, JUNE 5

### Room #

### 14G-PARALLEL PAPER SESSION:FETAL BRAIN IMAGING

---

O-223 • 1:15:00 PM • Accuracy of MRI for Determining Extent of Perineural Tumor Spread at the Skull Base: A Radiology-Pathology Correlation Study

---

O-224 • 1:22:00 PM • "The Rostral Migratory Stream in the Human Fetal Brain: Postmortem MRI, Correlation with Histology and Preliminary Results with In Utero Fetal MRI"

---

O-225 • 1:29:00 PM • Feasibility and Applicability of FLAIR-EPI in the Evaluation of the Fetal Brain

---

O-226 • 1:36:00 PM • Fetoscopic Repair of Myelomeningocele as an Alternative to Open Fetal Surgery: Neuroimaging Analysis with Pre and Post-Treatment MRI from Center for Fetal Therapy at the Johns Hopkins Hospital

---

O-227 • 1:43:00 PM • Effect of Isolated Congenital Heart Disease on Fetal Brain Maturation

---

O-228 • 1:50:00 PM • Brain Volumetry in Fetuses with Congenital Diaphragmatic Hernia Based on Fetal MRI: A Pilot Study

---

O-229 • 1:57:00 PM • Fluid-Attenuated Inversion Recovery Sequences in the Diagnosis of Lissencephaly on Fetal MRI

---



# Parallel Scientific Paper Sessions At-A-Glance



O-230 • 2:04:00 PM • Magnetic Resonance Morphological Signs of Fetal Inflammatory Response Syndrome as Potential Biomarkers of Cytomegalovirus Infection

O-231 • 2:11:00 PM • Taking the 'Dental' Out of Incidental: Prevalence and Reporting Rates of Incidental Dental Disease on Head CT Examinations

O-232 • 2:18:00 PM • Comparison of T2 Single-Shot Fast-Spin Echo and FLAIR Sequences in Assessment of Fetal Ventriculomegaly

O-216 • 2:25:00 PM • Vascular Disruption: A Possible Underlying Mechanism for Fetal Brain "Malformation"

## **TUESDAY, JUNE 5**

### **Room #**

### **15A-PARALLEL PAPER SESSION - HEAD AND NECK: NEW (TECHNIQUES) AND DEEP (SPACES)**

O-233 • 3:00:00 PM • Dual-Layer CT-Derived Virtual Noncontrast Images: Could Both Intrinsic and Extrinsic Thyroid Glandular Iodine Be Successfully Suppressed?

O-234 • 3:07:00 PM • Optimal Adaptive Statistical Iterative Reconstruction Settings for the Evaluation of the Neck Using Low-Energy Dual-Energy CT Virtual Monochromatic Images

O-235 • 3:14:00 PM • A CAD System to Track Cervical Adenopathy on CT Over Time

O-236 • 3:21:00 PM • DSA-like Bone Subtraction Iodine Imaging Using Area Detector CT for Evaluation of Skull-Base Invasion by Nasopharyngeal Carcinoma

O-237 • 3:28:00 PM • Sonographic Features of Melanoma Nodal Metastasis in the Head and Neck

O-238 • 3:35:00 PM • Differential Diagnosis of Necrotic Cervical Lymphadenopathy: Tree Analysis

O-239 • 3:42:00 PM • The Utility of FDG-PET Scanning in Head and Neck Cancer Patients: Search for the Unknown Primary

O-240 • 3:49:00 PM • Retrospective Analysis of Strangulation/Hanging Injuries Via CT Angiography

O-241 • 3:56:00 PM • Acute Ischemic Optic Neuropathy: Value of High-Resolution Diffusion Imaging for Optic Nerve Lesions

O-242 • 4:03:00 PM • Negative Predictive Value of MRI Following Resection of Pituitary Macroadenoma

O-243 • 4:10:00 PM • Utility of Dual-Energy CT Iodine Material Decomposition Maps and Low-Energy Virtual Monochromatic Images for Detection of Perineural Spread in Head and Neck Malignancy

O-244 • 4:17:00 PM • Correlation of Pretreatment SUV-Derived Quantitative FDG-PET Indices of Head and Neck Adenoid Cystic Carcinoma with Pathologic Grade and Metastatic Potential: Preliminary Results

# Parallel Scientific Paper Sessions At-A-Glance

## TUESDAY, JUNE 5

### Room #

#### **15B-PARALLEL PAPER SESSION: PEDIATRICS: NEW FINDINGS**

O-245 • 3:00:00 PM • Perfusion

Abnormalities at 3-D ASL in Patients with Acute Encephalopathy with Biphasic Seizures and Late Reduced Diffusion

O-246 • 3:07:00 PM • Differentiation of Pediatric-Onset Neuromyelitis Optica from Acute Disseminated Encephalomyelitis on Brain Magnetic Resonance Imaging

O-247 • 3:14:00 PM • A CAD System to Track Brain White-Matter Lesions of Multiple Sclerosis in Pediatric Patients on MRI Over Time

O-248 • 3:21:00 PM • Evaluation of Brain's Viscoelasticity in Children Using MR Elastography

O-249 • 3:28:00 PM • Pediatric Brain and Whole-Spine CSF Flow Imaging Using Phase Contrast Cine for New Clinical Application

O-250 • 3:35:00 PM • Time-STAMP and Time-SLIP CSF Imaging in Pediatric Patients and Adult Volunteers

O-251 • 3:42:00 PM • Impact of Iterative Model Reconstruction Combined with Low Dose on the Image Quality of Head and Neck CT Angiography for Pediatric Patients

O-252 • 3:49:00 PM • Radiation Dose and Image Quality in Pediatric Neck CT: Findings Before and After a Quality Improvement Project

O-253 • 3:56:00 PM • Synthetic MRI in Children: Relationship Between Automated Intracranial Volumetrics and Head Circumference

O-254 • 4:03:00 PM • Brain Iron Deposition After Ferumoxytol-Enhanced MRI: A Study of Porcine and Pediatric Brains

O-255 • 4:10:00 PM • Gadolinium Deposition in the Pediatric Brain: No Increased Intrinsic T1-Weighted Signal Intensity Within the Dentate Nucleus Following the Repeated Administration of the Macrocyclic Agent Gadobutrol

O-256 • 4:17:00 PM • Thalamic and Dentate Nuclei Abnormalities in Children with Gaucher Disease

## TUESDAY, JUNE 5

### Room #

#### **15C-PARALLEL PAPER SESSION: SPINE: ADVANCED TECHNIQUES**

O-257 • 3:00:00 PM • MRI Predictors of Recurrence After an Acute Transverse Myelitis of Unidentified Etiology

O-258 • 3:07:00 PM • Volumetric Analysis of the Cervical Cord in Neuromyelitis Optica and Multiple Sclerosis

O-259 • 3:14:00 PM • "Variations in Fluid Movement in a Syrinx With Changes in Syrinx Size, Heart Rate and CSF Velocity"

O-260 • 3:21:00 PM • Spinal Arachnoid Webs – Multimodality Imaging with Focus on Intraoperative Spinal Ultrasound



# Parallel Scientific Paper Sessions At-A-Glance



O-261 • 3:28:00 PM • Differences in Velocity Distributions in Supine Vs. Prone CSF Pulsations in the Cervical Spinal Canal Support Local Arterial Contributions to CSF Pulsatilities

O-262 • 3:35:00 PM • The Diagnostic Performance of ADC in the Differentiation of Acute Spinal-Cord Ischemia Syndrome (ASCIS) from Other Causes of Acute Noncompressive Myelopathies

O-263 • 3:42:00 PM • Curved Planar Reformation Images from Neck CTA Used for Screening Blunt Cerebrovascular Injury

O-264 • 3:49:00 PM • Perineural Spread from Metastatic Prostate Cancer Identified on MR Neurography with Quantitative ADC

O-265 • 3:56:00 PM • Dynamic Contrast-Enhanced MRI in Evaluation of Treated and Untreated Vertebral Tumors

O-266 • 4:03:00 PM • Role of Whole-Body MR Diffusion Imaging in Identifying Active Myeloma Lesions: Comparative Analysis with Histopathology

O-267 • 4:10:00 PM • Imaging Findings in Spinal Neurosarcoidosis at Presentation: A Review of Thirteen Cases

O-268 • 4:17:00 PM • Fluoroscopically Guided Lumbar Punctures to Evaluate for Meningitis: An Institutional Review of Incidence and Factors Associated with Positive Results

## TUESDAY, JUNE 5

### Room #

### 15D-PARALLEL PAPER SESSION: INTERVENTIONAL: STROKE TRIALS

O-269 • 3:00:00 PM • Endovascular Treatment Correlated with Clinical and Imaging Outcome in the DEFUSE 3 Study

O-270 • 3:07:00 PM • External Validation of DAWN: Benefit Seems Similar But Restrictive Selection Criteria Might Omit Potential Responders

O-271 • 3:14:00 PM • Endovascular Technique and Patients Outcomes Following Mechanical Thrombectomy for Acute Ischemic Stroke Treatment

O-272 • 3:21:00 PM • Single-Institution Experience with Endovascular Versus Medical Therapy for Large-Vessel Occlusive Strokes Presenting with Mild Symptoms

O-273 • 3:28:00 PM • Thromboaspiration of Downstream and New Territory Emboli Using the 3MAX Catheter During Mechanical Thrombectomy of Large-Vessel Occlusions

O-274 • 3:35:00 PM • Management of Tandem Occlusions in Acute Ischemic Stroke--Intracranial Versus Extracranial First and Extracranial Stenting Versus Angioplasty Alone: A Systematic Review and Meta-Analysis

O-275 • 3:42:00 PM • Complications During Thrombectomy for Acute Ischemic Stroke: Results from the MR CLEAN Registry

# Parallel Scientific Paper Sessions At-A-Glance

---

O-276 • 3:49:00 PM • Emergency Conversion to General Anesthesia During Mechanical Thrombectomy

---

O-277 • 3:56:00 PM • Mechanical Thrombectomy in Acute Ischemic Stroke: Does Patient Selection by MRI Improve Patient Outcomes Over Patient Selection by CT?

---

O-278 • 4:03:00 PM • Worse Endovascular Recanalization Results for Patients with In-Hospital Onset Acute Ischemic Stroke

---

O-279 • 4:10:00 PM • Impact of CTA Collateral Status and Treatment Delay on Functional Outcome after Endovascular Stroke Treatment: Results from the MR CLEAN Registry

---

O-280 • 4:17:00 PM • Acute Thrombectomy in the Ageing Population: A Retrospective Analysis of Radiological and Clinical Outcomes in Acute Thrombectomies Performed in Patients Over 80 Years with an Intention to Treat Analysis

---

## TUESDAY, JUNE 5

### Room #

### 15E-PARALLEL PAPER SESSION: DEEP LEARNING TECHNIQUES AND METHODS

---

O-281 • 3:00:00 PM • Deep Learning for Automated Differentiation of Head CT Protocols

---

O-282 • 3:07:00 PM • Improved Hemorrhage Detection on Noncontrast Head CT Using a Robust Artificial Intelligence Pipeline

---

---

O-283 • 3:14:00 PM • Real-Time Decision Support for Cerebral Vasospasm Detection on Conventional Angiograms Using Deep Learning

---

O-284 • 3:21:00 PM • Disease Detection in Resting-State fMRI with Unsupervised Deep Learning Trained on Normal Subjects

---

O-285 • 3:28:00 PM • Building a Predictive Analytics Foundation to Assess Radiologically Identifiable Encephalopathies

---

O-287 • 3:42:00 PM • Predicting Glioblastoma Tumor Recurrence Versus Pseudoprogression Utilizing Convolutional Neural Networks

---

O-288 • 3:49:00 PM • Evaluation of Dynamic Susceptibility Contrast MRI Perfusion Using Principal Component Analysis and Machine Learning to Detect Occult Infiltration of Glioblastoma

---

O-289 • 3:56:00 PM • Using Deep-Learning Technique to Synthesize High-Quality Cerebral Full-Dose Positron Emission Magnetic Resonance Images (PET-MRI) from Low-Dose Ones

---

O-290 • 4:03:00 PM • Improving Workflow by Using Deep Learning to Label Brain and Spine MRI Sequences

---

O-291 • 4:10:00 PM • Image Super Resolution and Radiation Reduction Via Deep Learning

---



# Parallel Scientific Paper Sessions At-A-Glance



---

O-292 • 4:17:00 PM • Machine Learning-Based Iterative Image Reconstruction Algorithm Allows Significant Reduction in Brain MRI Scan Times

---

## TUESDAY, JUNE 5

### Room #

#### **15F-PARALLEL PAPER SESSION: BRAIN TUMOR IMAGING: NEW FINDINGS**

---

O-293 • 3:00:00 PM • Distinguishing True Progression from Pseudoprogression in Glioblastoma Patients Treated with Immunotherapy Using Standard MRI Sequences

---

O-294 • 3:07:00 PM • "Evaluation of Therapeutic Response of Glioblastoma to Insulin-Like Growth Factor Receptor Type 1 (IGF-1R) Antisense Treatment Protocol, Using Dynamic Susceptibility Contrast (DSC) Perfusion Imaging"

---

O-295 • 3:14:00 PM • ADC Map-Based Classification of Glioma Subtypes in Diffusion-Weighted MR Imaging

---

O-296 • 3:21:00 PM • Simultaneous pH- and Oxygen-Weighted Metabolic MRI of Human Gliomas at 3T

---

O-297 • 3:28:00 PM • Development of an Automatic Tumor Detection and Segmentation Algorithm Using Multicontrast MR and Linear Discriminant Analysis

---

---

O-298 • 3:35:00 PM • Prediction of Recurrent Glioblastoma After Laser Interstitial Thermal Therapy: Early Changes in the Pattern of DWI with Apparent Diffusion Coefficient Maps

---

O-299 • 3:42:00 PM • Histological Validation of Glioblastoma Radiomic Profiles at Autopsy

---

O-300 • 3:49:00 PM • Involvement of the Olfactory Apparatus by CNS Glial Tumors

---

O-301 • 3:56:00 PM • Correlation Between Von Willebrand Factor Antigen Plasmatic Levels (VWF:Ag) and Dynamic Contrast-Enhanced (DCE) Ktrans in Grade IV Gliomas (GBM): Preliminary Results

---

O-302 • 4:03:00 PM • Visually Accessible Rembrandt Images Assessment Features Predict Recurrent Gbm Prognostic Outcomes

---

O-303 • 4:10:00 PM • Use of Quantitative Diffusion-Weighted MR Imaging in Differentiating Between Glioblastoma and Primary Central Nervous System Lymphoma

---

O-304 • 4:17:00 PM • ADC Edge Metrics in the Differentiation of PCNSL from GBM

---

## TUESDAY, JUNE 5

### Room #

#### **15G-PARALLEL PAPER SESSION: BRAIN: INFLAMMATORY AND INFECTIOUS DISEASES**

---



# Parallel Scientific Paper Sessions At-A-Glance

---

O-305 • 3:00:00 PM • Cerebrovascular Manifestations in Neurosarcoidosis at Presentation and Follow-Up: An Under-Recognized Spectrum of the Imaging Manifestation

---

O-306 • 3:07:00 PM • Imaging Findings in Neurosarcoidosis at Presentation: Looking at the Bigger Picture

---

O-307 • 3:14:00 PM • Brain Imaging in Serology Positive Dengue Cases with Neurological Symptoms – a Clinico-Radiological Correlation

---

O-308 • 3:21:00 PM • Alterations in BBB Permeability in Antineuronal Antibody-Positive Lupus Patients

---

O-309 • 3:28:00 PM • White-Matter Cellularity Change and Its Association with CSF  $\beta$ -Amyloid in Preclinical and Early Symptomatic AD

---

O-310 • 3:35:00 PM • Brain Microstructure Changes Revealed by Diffusional-Kurtosis Imaging and Cognitive Impairment in Cirrhotic Patients Without Overt Hepatic Encephalopathy

---

O-311 • 3:42:00 PM • High-Volume Lumbar Puncture (HVLP) as a Predictor of Shunt Response in Normal-Pressure Hydrocephalus: MRI Features of HVLP Responders Compared to Nonresponders

---

O-312 • 3:49:00 PM • Altered Structural Brain Connectome and Cognitive Impairment in Cirrhotic Patients with Prior Overt Hepatic Encephalopathy

---

---

O-314 • 4:03:00 PM • Multimodal MRI Staging Improves Clinico-Imaging Correlations in sJCD.

---

O-315 • 4:10:00 PM • "Acute Toxic Leukoencephalopathy: Etiologies, Imaging Findings and Outcomes in One Hundred Patients"

---

O-316 • 4:17:00 PM • Insoluble Gd Salts May Increase T1 Signal in Deep-Brain Nuclei and Other Tissues

---

## TUESDAY, JUNE 5

### Room #

### **16D-PARALLEL PAPER SESSION: ADVANCED DIAGNOSTIC TECHNIQUES IN CEREBRAL ANEURYSMS AND AVMS**

---

O-317 • 4:45:00 PM • How Good is CTA in Detecting Blood-Blister Aneurysms? Our 12-Years Experience

---

O-318 • 4:52:00 PM • An Ultrafast Contrast-Enhanced MRA for Grading Residual Aneurysm After Treatment: Comparison to Time-of-Flight (TOF) MRA and Digital Subtraction Angiography (DSA)

---

O-319 • 4:59:00 PM • Efficacy of Virtual Reality for Clinical Education to Improve Detection of Intracranial Aneurysms

---

O-320 • 5:06:00 PM • Relative Pressure Measurements Acquired Using 4D-Flow MRA Compared with Intravascular Catheter Measurements in Patients with Cerebral Aneurysms

---



# Parallel Scientific Paper Sessions At-A-Glance



O-321 • 5:13:00 PM • Biomechanical Changes of Intracranial Aneurysms Using 4D Flow and Vessel-Wall Imaging: A Comparative Analysis Between Evolving Vs. Stable Aneurysms

O-322 • 5:20:00 PM • Intracranial Aneurysms at Higher Clinical Risk for Rupture Demonstrate Increased Wall Enhancement on Vessel Wall MRI

O-323 • 5:27:00 PM • Correlating Wall Shear Stress and Permeability of Intracranial Aneurysms

O-324 • 5:34:00 PM • Efficacy of an AVM Classification System that Directs Endovascular Therapies Accurately

O-325 • 5:41:00 PM • Angiogram Negative Spontaneous Subarachnoid Hemorrhage: The Yield of Repeated Angiogram

O-326 • 5:48:00 PM • Transradial Diagnostic Cerebral Angiography: Feasibility and Safety in a Community Hospital Setting

O-327 • 5:55:00 PM • Utility of Follow-Up Imaging in Isolated Perimesencephalic Hemorrhage: An Updated Meta-Analysis

O-328 • 6:02:00 PM • Utility of Angiography for Etiology of Primary Intraventricular Hemorrhage

## TUESDAY, JUNE 5

### ROOM #

### 16F-EXCERPTAS: PEDIATRIC HEAD & NECK

E-63 • 4:45:00 PM • Coronoid-process Hyperplasia: A Rare Disorder Masquerading As Temporomandibular Joint Disease

E-64 • 4:49:00 PM • Spontaneous Lateral Sphenoid Sinus Cephalocele Presenting After a Big Sneeze!

E-65 • 4:53:00 PM • Liposarcoma of the Retropharyngeal Space

E-66 • 4:57:00 PM • Giant Cell Tumor of the Carotid Sheath

E-67 • 5:01:00 PM • Proximal Tracheal Recurrence in HPV-Positive Squamous Cell Carcinoma of the Base of Tongue: A Rare Occurrence

E-68 • 5:05:00 PM • A Rare Case of IgG4-Related Pseudotumor of the Middle Cranial Fossa

E-69 • 5:09:00 PM • Spontaneous Salivary Gland Hemorrhage After Anticoagulation for Acute Bilateral Carotid Arterial Thrombosis in a Pregnant Female with Antiphospholipid Syndrome

E-70 • 5:13:00 PM • Erdheim Chester Isolated to the Skull Base

E-71 • 5:17:00 PM • Bisphosphonate-Induced Inflammation of the Orbit

E-72 • 5:21:00 PM • Phosphaturic Mesenchymal Tumor: An Uncommon Entity with an Interesting Presentation

E-73 • 5:25:00 PM • An Atypical Case of Progressive Biparietal Thinning

# Parallel Scientific Paper Sessions At-A-Glance

E-74 • 5:29:00 PM • Granulomatous Invasive Fungal Sinusitis: Back to Visit... After 25 Years

E-75 • 5:33:00 PM • On the Nose Diagnosis: A Case of Nasal Extranodal NK/T Cell Lymphoma

E-76 • 5:37:00 PM • Masticator Space Mass in a Two-Year-Old

E-77 • 5:41:00 PM • Epstein-Barr Virus Associated Smooth Muscle Tumor in the Head and Neck

E-78 • 5:45:00 PM • Uncommon Appearance of Peritonsillar Abscess

E-79 • 5:49:00 PM • Stop and Smell the Rosai: Sinonasal Rosai-Dorfman Disease Presenting with Isolated Nasal Obstruction

E-80 • 5:53:00 PM • Styloid Process Osteoradionecrosis

## TUESDAY, JUNE 5

### Room #

### 16G-PARALLEL PAPER SESSION: BRAIN TUMORS: NEW DIAGNOSTIC CONSIDERATIONS I

O-329 • 4:45:00 PM • The Status of the MGMT Promoter is Associated with Magnetic Resonance Imaging Characteristics and Prognosis in Glioblastomas

O-330 • 4:52:00 PM • Differentiation Primary Central Nervous System Lymphoma from Glioblastoma: Probabilistic Analysis Using Voxel-Based Morphometry

O-331 • 4:59:00 PM • A Move Towards Structured Reporting for Post-Treatment Glioma Response

O-332 • 5:06:00 PM • Visually Accessible Rembrandt Images (VASARI) Assessment Features Predict Recurrent GBM Prognostic Outcomes

O-333 • 5:13:00 PM • Usefulness of Turbo Spin-Echo Diffusion-Weighted Imaging for Evaluating Various Pituitary Lesions

O-334 • 5:20:00 PM • White Matter Matters: Consequences of ROI Misplacements in MR Perfusion Analysis Pretreatment Primary Brain Tumor

O-335 • 5:27:00 PM • Assessment of Early Wallerian Degeneration Using Synthetic MRI and MR Fibrography

O-336 • 5:34:00 PM • Robustness of Multiparametric and Multiregional MRI Derived Radiomics Features in GBM

O-337 • 5:41:00 PM • Robustness of Multiparametric and Multiregional MRI Derived Radiomics Features in GBM

O-338 • 5:48:00 PM • Identification of Thalamic Substructures in High b-Value DWI

O-339 • 5:55:00 PM • Long-Term Stability of Microbleeds in Susceptibility Weighted Imaging and Quantitative Susceptibility Mapping

O-340 • 6:02:00 PM • Comparison of the MR Signal Intensities of Iodinated Contrast Agents Mixed with Normal Saline and That Mixed with Blood: Phantom Study



# Parallel Scientific Paper Sessions At-A-Glance



---

## WEDNESDAY, JUNE 6

### Room #

#### **18B-PARALLEL PAPER SESSION: CEREBROVASCULAR IMAGING: NEW APPLICATIONS**

---

O-341 • 8:00:00 AM • Arterial Spin-Labeling Perfusion MRI Can Indicate Early Development of Moyamoya-Like Vasculopathy in Neurofibromatosis Type I Patients

---

O-342 • 8:07:00 AM • CT Perfusion in Pediatric Patients: A Single-Center 10-Year Experience

---

O-343 • 8:14:00 AM • MRI Brain Injury and Neurodevelopmental Outcomes in Neonatal Hypoxic-Ischemic Encephalopathy Treated with Therapeutic Hypothermia. Does Early Treatment Affect the Outcome?

---

O-344 • 8:21:00 AM • Number of Cerebral Microhemorrhages Correlates with Worse Long-Term Neurologic Outcomes Among Pediatric Patients After Cardiopulmonary Bypass

---

O-345 • 8:28:00 AM • Resistive Index Values Measured by Head Ultrasound Can Predict Impaired Autoregulation in Cooled Neonates for Hypoxic Ischemic Injury (HII)

---

O-346 • 8:35:00 AM • Hypoxic-Ischemic Injuries in Abusive Head Trauma

---

O-347 • 8:42:00 AM • Brain and Cerebrovascular Response to Jugular Compression: Preliminary Evaluation of a Novel Intracranial Protective Mechanism

---

O-348 • 8:49:00 AM • Establishing Dominance: Incidence of Vertebral Artery Dominance in the Pediatric Population

---

## WEDNESDAY, JUNE 6

### Room #

#### **18C-PARALLEL PAPER SESSION: SPINE: FLUOROSCOPY-GUIDED TECHNIQUES**

---

O-349 • 8:00:00 AM • Imaging Evaluation of Spontaneous Intracranial Hypotension

---

O-350 • 8:07:00 AM • Treatment of Spontaneous Intracranial Hypotension

---

O-351 • 8:14:00 AM • Blood Patch Rates Following Lumbar Puncture with Whitacre Versus Quincke Needles: A Randomized Comparative Trial

---

O-352 • 8:21:00 AM • A Randomized Pilot Study with Fluoroscopy-Guided Lumbar Puncture: Postlumbar Puncture Headache Incidence According to Needle Type

---

O-353 • 8:28:00 AM • Fluoroscopy Guided Epidural Blood Patch: Success Rates

---

O-354 • 8:35:00 AM • Transforaminal Lumbar Puncture. A Novel Technique in Patients with Challenging Access

---

O-355 • 8:42:00 AM • A Multilayer Realistic Tiered Fluoroscopy-Guided Lumbar Puncture Phantom Utilizing 3-D Printing with Tactile Feedback

---

O-356 • 8:49:00 AM • Time to Switch Sides: A Retrospective Comparative Analysis of Fluoroscopic-Guided Lumbar Puncture in the Lateral Decubitus Versus the Routine Prone Position

---

# Parallel Scientific Paper Sessions At-A-Glance

---

## MONDAY, JUNE 4

### Room #

#### **18D-PARALLEL PAPER SESSION: VESSEL WALL IMAGING: ADVANCED TECHNIQUES**

---

O-357 • 8:00:00 AM • Evaluation of Vessel Wall Magnetic Resonance Imaging In Differentiation of Intracranial Vasculopathies: A New Brick in the Wall?

---

O-358 • 8:07:00 AM • Intracranial Vessel-Wall Imaging and Etiologic Classification of Ischemic Stroke: Analysis of the First 205 Patients at the Toronto Western Hospital

---

O-359 • 8:14:00 AM • Reproducibility of 3-D High-Resolution Intracranial Vessel-Wall Magnetic Resonance Imaging for Intracranial Atherosclerotic Disease

---

O-360 • 8:21:00 AM • Correlation of 3-D Time-of-Flight MRA and High-Resolution Vessel-Wall Magnetic Resonance Imaging in the Presence of Vessel-Wall Enhancement

---

O-361 • 8:28:00 AM • Systemic Redox Status and Carotid Intraplaque Hemorrhage

---

O-362 • 8:35:00 AM • Validation of Quantitative Vessel-Size Imaging (VSI) in Human Gliomas Using Image-Guided Stereotactic Biopsies

---

O-363 • 8:42:00 AM • 3-D Vessel-Wall Imaging of Scalp Arteries: Feasibility and Normal Appearance

---

O-364 • 8:49:00 AM • Utility of High-Resolution Vessel-Wall Imaging in Hypertensive Angiopathy

---

---

## WEDNESDAY, JUNE 6

### Room #

#### **18E-PARALLEL PAPER SESSION: CAROTID ARTERY STENOSIS IMAGING**

---

O-365 • 8:00:00 AM • Systemic Oxidative Stress and MRI-Detected Carotid Intraplaque Hemorrhage

---

O-366 • 8:07:00 AM • Carotid Plaque Beta Amyloid Precursor Protein Expression Correlates with Inflammation and MRI-Detected Intraplaque Hemorrhage

---

O-367 • 8:14:00 AM • Identification of Patients with Carotid Stenosis Using Natural Language Processing

---

O-368 • 8:21:00 AM • More than Morphologic Stenosis and Hemodynamic Impairment: Machine Learning Enables Digital Subtraction Angiography to Define the Clinical Impact of Carotid Stenosis

---

O-369 • 8:28:00 AM • Preventive Effect of Residual Stenosis on Hyperperfusion Syndrome After Carotid Artery Stenting Not Followed by Balloon Dilatation

---

O-370 • 8:35:00 AM • Carotid Webs: Survey of Current Clinical Practices

---

O-371 • 8:42:00 AM • Imaging of Spontaneous and Traumatic Cervical Artery Dissection: Comparison of Typical CT-Angiographic Features

---

O-372 • 8:49:00 AM • Intracranial and Extracranial Atherosclerosis and Cerebral Infarction Patterns with 3T Vessel-Wall Magnetic Resonance Imaging

---



# Parallel Scientific Paper Sessions At-A-Glance



## WEDNESDAY, JUNE 6

### Room #

#### 18F-PARALLEL PAPER SESSION: GADOLINIUM EFFECTS IN THE BRAIN

O-373 • 8:00:00 AM • Prior Scans and Intravenous Gadolinium: Radiologists' Friend or Foe?

O-374 • 8:07:00 AM • Assessment of Adverse Neurologic Effects from Intracranial Gadolinium Deposits Following Intravenous Gadolinium-Based Contrast Administration in a Preclinical Animal Model

O-375 • 8:14:00 AM • Detection of Chelated GBCA in Human Postmortem Brain and Bone Tissue: Distribution by Different Chelate Species

O-376 • 8:21:00 AM • Gadolinium Deposition in the Brain: Quantitative T1 Brain Changes Measured Using a Modified MOLLI Technique in Patients Receiving Two Doses of Gadolinium (MultiHance)

O-377 • 8:28:00 AM • MRI Assessment of Diffusion-Tensor Imaging (DTI) Parameter Changes Within Fiber Tracts Traversing the Globus Pallidus and Dentate Nucleus Related to Deposition of Gadolinium Following Administration of a Linear Gadolinium-Based Contrast Agent (GBCA) Gadolinium Dimethylglumine (MultiHance)

O-378 • 8:35:00 AM • Actively Demyelinating Disease May Predispose to Increased Gadolinium Deposition in the Globus Pallidus and Dentate Nucleus

O-379 • 8:42:00 AM • Manganese-Enhanced MRI (MEMRI) of the Brain in Humans

O-380 • 8:49:00 AM • Intravenous Iron Compound Contrast Effects on MR Imaging

O-380a • 8:56:00 AM • Retinography based on fast axonal transport of TtC-488 in a rodent glaucoma model

## WEDNESDAY, JUNE 6

### Room #

#### 20D-PARALLEL PAPER SESSION - JAW, NECK AND ORBIT

O-381 • 10:30:00 AM • Differentiating Nonsyndromic and Syndromic Odontogenic Keratocysts Using CT Texture Analysis

O-382 • 10:37:00 AM • Using CT Texture Analysis to Differentiate Cystic and Cystic-Appearing Odontogenic Lesions

O-383 • 10:44:00 AM • Utility of Likert Scale (Deauville Criteria) and The Value of Quantitative PET Parameters in Assessment of Radiochemotherapy Response of the Primary Oropharyngeal SCC: Preliminary Results

O-384 • 10:51:00 AM • Age-Related Prevalence of Calcification in the Cartilaginous Eustachian Tube

O-385 • 10:58:00 AM • Negative Predictive Value of NI-RADS Category 2 First Post-Treatment FDG PET/CT in Head and Neck Squamous Cell Carcinoma

# Parallel Scientific Paper Sessions At-A-Glance

---

O-386 • 11:05:00 AM • Quantitative T2 Mapping and Fat Fraction Measurements of Extraocular Muscles in Thyroid Eye Disease

---

O-387 • 11:12:00 AM • Hyperintensity of the Optic Nerve on 3-D FLAIR Imaging is a Sensitive and Specific Sign of Papilledema in Patients with Idiopathic Intracranial Hypertension

---

O-388 • 11:19:00 AM • 3-D Printing and Visualization of Orbital Trauma: New Tools in Education

---

O-389 • 11:26:00 AM • Reproducibility of Globe Temperature Measurement using Diffusion-Based Thermometry

---

O-390 • 11:33:00 AM • Diagnostic Yield of MRI for Investigation of Sensorineural Hearing Loss

---

O-392 • 11:47:00 AM • Evaluation of Flow Within the Sigmoid Sinus in Patients with Intracranial Hypertension Before and Following Lumbar Puncture Using 4D flow and 2-D Velocity-Encoded Phase Contrast MRI

---

## WEDNESDAY, JUNE 6

### Room #

### 20F-EXCERPTA: SPINE

---

E-81 • 10:30:00 AM • Onyx Embolism: A Feared Complication of Neck Tumor Devascularization

---

E-82 • 10:34:00 AM • A Novel Percutaneous Approach to Retrieve an Ingested Extra-Esophageal Foreign Body Using Advanced Interventional Radiology Techniques

---

---

E-83 • 10:38:00 AM • Image-Guided Percutaneous Drainage of Epidural Abscess

---

E-84 • 10:42:00 AM • Sacral Insufficiency Fracture as Complication of Palliative Radiotherapy to Lumbosacral Spine

---

E-85 • 10:46:00 AM • Giant Collapsible Intraspinal Varix Mimicking an Epidural Enhancing Mass

---

E-86 • 10:50:00 AM • Unusual Case of Intradural Extramedullary Cervical Spine Hemangioblastoma

---

E-87 • 10:54:00 AM • Dialysis-Related Amyloidosis of the Spine – A Mimic of Osseous Metastatic Disease

---

E-88 • 10:58:00 AM • Unusual Location of a Well-Known Entity for Radiologists: Extensive Cervical Paraspinal Tumoral Calcinosis in Scleroderma

---

E-89 • 11:02:00 AM • Avoiding a Bloody Mess: Keys to the Imaging Diagnosis of Intraosseous Hemangioblastoma

---

E-90 • 11:06:00 AM • Diffuse Large B- and T-Cell Neurolymphomatosis Preceding Systemic Symptoms of Lymphoma

---

E-91 • 11:10:00 AM • Osteosclerotic Multiple Myeloma

---

E-92 • 11:14:00 AM • Phosphaturic Mesenchymal Tumor of the Cervical Spine

---

E-93 • 11:18:00 AM • "Osteitis Fibrosa Cystica of the Spine, Imaging Features and Clinical Presentation"

---





# Parallel Scientific Paper Sessions At-A-Glance



E-94 • 11:22:00 AM • Utility Of Spine Steady-State Fast-Filled Echo (FFE) Sequence in the Diagnosis of Chordoma Nonenhancing Leptomeningeal Drop Metastases

E-95 • 11:26:00 AM • Organizing Hematoma Mimicking Spinal Cord Neoplasm After Transplantation of Olfactory Ensheathing Cells

E-96 • 11:30:00 AM • Serous Atrophy of the Bone Marrow in Anorexia Nervosa

E-97 • 11:34:00 AM • Subarachnoid and Intraventricular Fat Emboli Secondary to a Sacral Fracture Through a Perineural Cyst

## WEDNESDAY, JUNE 6

### Room #

### 21D-PARALLEL PAPER SESSION: ADVANCED TECHNIQUES IN QUANTITATIVE IMAGING

O-393 • 1:15:00 PM • Preclinical Detection-Based Spectral CT Scanner Produces Improved Intracranial Vascular Enhancement and Gray-White Matter Differentiation with Virtual Monoenergetic Reconstructions Compared to Conventional CTA

O-394 • 1:22:00 PM • Dual-Energy CT Iodine Markers for Assessment of Intracranial Hematoma Expansion Risk

O-395 • 1:29:00 PM • Dual-Energy CT Angiography-Derived Virtual Noncontrast Images in Patients with Surgically Clipped Aneurysms

O-396 • 1:36:00 PM • Longitudinal Analysis of Quantitative Brain MRI in Astronauts Following Microgravity Exposure

O-397 • 1:43:00 PM • Utility of Minimum and Maximum Intensity Projection Images From 3-D Volumetric Sequences For Detection of Focal Cortical Dysplasias

O-398 • 1:50:00 PM • On the Potential Role of Fast Multispectral qMRI and Synthetic MRI in Ischemic Stroke Patients with Unknown Time of Onset

O-399 • 1:57:00 PM • Comparison of Velocity-Selective and Pulsed ASL Perfusion MRI in Patients with Suspected Cerebral Cortical Ischemia

O-400 • 2:04:00 PM • Quantitative Susceptibility Mapping of Intracranial Calcification and Hemorrhage: Preliminary Results from a Human Trial

O-401 • 2:11:00 PM • Axonal Water Fraction (AWF)-Based Corpus Callosum Registration for Voxel-Wise Analysis: A Diffusion Study

O-402 • 2:18:00 PM • Reversing the Frequency Encoding Direction in Brain MRI Mitigates Susceptibility Ghost Artifact Caused by Dental Metal

O-403 • 2:25:00 PM • A Novel Computer Vision Voxel-Based Imaging Tool for Surgical Planning in Skull-Base Tumors

O-404 • 2:32:00 PM • Texture Analysis Utilization for Differentiating Pituitary Adenomas and Normal Pituitary Gland



# Parallel Scientific Paper Sessions At-A-Glance

## WEDNESDAY, JUNE 6

### Room #

#### **21E-PARALLEL PAPER SESSION - DECISION SUPPORT, VALUE, AND SAFETY**

O-405 • 1:15:00 PM • Implementation of Imaging Clinical Decision Support: Does CDS Lead to Appropriate Use of Imaging Order?

O-406 • 1:22:00 PM • "Use of Radiology Support, Communication and Alignment Network to Improve Lumbar Spine MRI Appropriateness for Low Back Pain: A Two-Year Follow-Up"

O-407 • 1:29:00 PM • Deleterious Effects of Poor Histories on Emergency MRI Neuroimaging

O-408 • 1:36:00 PM • Effectiveness of a Hospital System Intervention for Cord Compression: Are We Casting Our Net Too Wide?

O-409 • 1:43:00 PM • Computed Tomography Perfusion Aides in the Prognostication of Comatose Postcardiac Arrest Patients

O-410 • 1:50:00 PM • Analysis of MRI Report Quality in Patients with Painful Osteoporotic Vertebral Compression Fractures

O-411 • 1:57:00 PM • Transverse Venous Sinus Stenosis in the Setting of Idiopathic Intracranial Hypertension: Are We Under-Reporting and Can Education Improve Its Identification?

O-412 • 2:04:00 PM • Utility of Routine Neck MRA in a Pediatric MRI Stroke Protocol

O-413 • 2:11:00 PM • Does Including Neck CTA Imaging for the Workup of Suspected Intracranial Hemorrhage Add Value?

O-414 • 2:18:00 PM • Instituting a Protocol for MRIs in Patients with Cardiac Devices: Promote Patient Safety and Billing Compliance

O-415 • 2:25:00 PM • Integrative Neuroradiology Medical Physics Curriculum Enhances Resident Education

O-416 • 2:32:00 PM • "Acute Adverse Reactions Following Gadolinium-Based Contrast Agent Administration: A Single-Center Review of 281,945 Injections"

## WEDNESDAY, JUNE 6

### Room #

#### **21F-PARALLEL PAPER SESSION - HEAD AND NECK: CONGENITAL, SALIVARY, AND TEMPORAL BONE**

O-417 • 1:15:00 PM • The Spectrum of Stylohyoid Anomalies with Embryologic Considerations

O-418 • 1:22:00 PM • Quantitative Evaluation of Imaging Quality and Diagnostic Performance PROPELLER Diffusion-Weighted MR Imaging in Parotid Gland Tumors

O-419 • 1:29:00 PM • Assessing Abnormal FLAIR Signal Changes in the Cochlea Pre and Posthearing Preservation Surgery



# Parallel Scientific Paper Sessions At-A-Glance




---

O-420 • 1:36:00 PM • Audiometric Implications of Isolated Internal Auditory Canal Diverticula

---

O-421 • 1:43:00 PM • A Color-Coded 3-D Printed Modular Puzzle of the Temporal Bone As A Novel Conceptual Anatomy Teaching Tool

---

O-422 • 1:50:00 PM • Effectiveness of a Conceptual 3-D Printed Model of the Middle Ear in Teaching Complex Neuroanatomy

---

O-423 • 1:57:00 PM • Characterizing Enhancement in the Internal Auditory Canal on Postcontrast Radial VIBE

---

O-424 • 2:04:00 PM • Pre and Postflight Size Comparison of the Major Dural Venous Sinuses in Astronauts

---

O-425 • 2:11:00 PM • Ultra High-Resolution CT Scan of the Temporal Bone

---

O-426 • 2:18:00 PM • Three-Dimensional Printing the Intra and Extracranial Segments of the Cranial Nerves Utilizing High-Resolution MRI and CT Coregistration

---

O-427 • 2:25:00 PM • Importance of Scout Images in Cross-Sectional Imaging

---

O-428 • 2:32:00 PM • Craniocervical and Posterior Fossa Dimensions Can Affect Need for Decompressive Craniotomy in Posterior Fossa Hemorrhage

---

## WEDNESDAY, JUNE 6

### Room #

### 22D-PARALLEL PAPER SESSION - PEDIATRIC: ADVANCED TECHNIQUES

---

O-429 • 3:00:00 PM • Impact Exposure Threshold Changes in Gray Matter and Cerebrospinal Fluid Volumes in the Absence of Concussion

---

O-430 • 3:07:00 PM • Cerebral Peduncle White Matter Modeling Abnormalities Related to Head Impact Exposure After a Season of High School Football

---

O-431 • 3:14:00 PM • MEG Measured Delta Waves Increase After Concussion

---

O-432 • 3:21:00 PM • Diffusion Metric Variability in the Normal Pediatric Spinal Cord

---

O-433 • 3:28:00 PM • Volumetric Analysis of Pediatric Spinal Cord Structural MRI Data Using SCT

---

O-434 • 3:35:00 PM • Single-Institution Experience of Intraspinal Tumors Presenting with Leptomeningeal Disease in the Pediatric Population

---

O-435 • 3:42:00 PM • Driver Mutations in Pediatric Diffuse Gliomas with Histone H3 K27M Mutation

---

O-436 • 3:49:00 PM • Proliferative Index Influences Early Radiological Response Pattern of Pediatric High-Grade Recurrent Gliomas Treated with HSV-1 G207 Oncolytic Immunovirotherapy

---

# Parallel Scientific Paper Sessions At-A-Glance

---

O-437 • 3:56:00 PM • Textural Analysis of Posterior Fossa Pediatric Brain Tumors on T2 Weighted MRI Images

---

O-438 • 4:03:00 PM • Volumetry of Pediatric Low-Grade Gliomas Compared to Linear Tumor Measurements

---

O-439 • 4:10:00 PM • An Image Processing Algorithm to Aid Diagnosis of Mesial Temporal Sclerosis in Children: A Case-Control Study

---

O-440 • 4:17:00 PM • Image Processing to Allow Distinction of MTS-Affected and Normal Hippocampi In Children Undergoing Epilepsy Surgery

---

## WEDNESDAY, JUNE 6

### Room #

### 22E-PARALLEL PAPER SESSION: BRAIN TUMORS: NEW DIAGNOSTIC CONSIDERATIONS II

---

O-441 • 3:00:00 PM • Features of Diffuse Gliomas that are Misdiagnosed on Initial Neuroimaging

---

O-442 • 3:07:00 PM • MR Fractal Analysis and Diffusion MR Metrics in Benign and Atypical Meningiomas: Multicenter Study

---

O-443 • 3:14:00 PM • Radiological-Pathological Correlations and Imaging Signatures for Gliomas

---

O-444 • 3:21:00 PM • Foretelling the Genotype: Predicting Lower-Grade Glioma Classification Based on the Preoperative MRI

---

---

O-445 • 3:28:00 PM • Quantification of Perihematoma Edema on CT in the Discrimination of Tumorous and Intracerebral Hemorrhage from Benign Causes

---

O-446 • 3:35:00 PM • Comparison of T1 Mapping and Fixed T1 Method in Quantification and Diagnostic Accuracy of Dynamic Contrast-Enhanced MRI Perfusion Biomarkers in Gliomas

---

O-447 • 3:42:00 PM • 3-D High-Resolution Postcontrast Imaging at 3T for the Delineation of Enhancing Brain Tumors: A Comparison of MPRAGE with SPACE and VIBE Techniques

---

O-448 • 3:49:00 PM • White-Matter Changes in Patients with Primary Central Nervous System Lymphoma Following High-Dose Methotrexate Treatment With or Without Rituximab

---

O-449 • 3:56:00 PM • Third Ventricular Colloid Cysts: Correlation of MRI Findings with Clinical Outcome

---

O-450 • 4:03:00 PM • Pretreatment ADC Values to Predict Response of Vestibular Schwannoma to Gamma Knife Radiosurgery

---

O-451 • 4:10:00 PM • Delayed Diagnosis Worsens Outcome in Primary Central Nervous System Lymphoma (PCNSL): A Single-Center Review

---

O-452 • 4:17:00 PM • "Laser Interstitial Thermal Therapy In Brain Tumors: Immediate, Short- and Long-Term Appearance on DWI with Apparent Diffusion Coefficient Maps"

---



# Parallel Scientific Paper Sessions At-A-Glance



## WEDNESDAY, JUNE 6

### Room #

### 22F-EXCERPTA: PEDIATRICS AND HEAD & NECK CASES

E-98 • 3:00:00 PM • Atlanto-Axial Instability with Displacement of the Dens Behind the Transverse Ligament

E-99 • 3:04:00 PM • "A Rare Case of Gallbladder Polyposis in Juvenile Subtype of Metachromatic Leukodystrophy: An MR, Spectroscopy, and US Correlation"

E-100 • 3:08:00 PM • A Case of Parry-Romberg Syndrome with Abnormal Perfusion

E-101 • 3:12:00 PM • 'Mogging' Between NMO and MS : Can Anti-MOG Antibody Save Your Day?

E-102 • 3:16:00 PM • PML Posterior Fossa in a Child

E-103 • 3:20:00 PM • Cerebral Mucormycosis Mimicking a Brain Tumor

E-104 • 3:24:00 PM • Congenital Trigeminal Nerve Agenesis as a Cause of Childhood Neurotrophic Keratitis and Near Blindness

E-105 • 3:28:00 PM • Stroke-like Migraine Attacks after Radiation Therapy (SMART) Syndrome: Case Report of a Pediatric Brain Tumor Survivor Presenting 24 Years Following Radiation Therapy

E-106 • 3:32:00 PM • Large Scalp Congenital Hemangioma with Internal Necrosis and Calcifications Masquerading Teratoma or Sarcoma: Four Illustrative Cases

E-107 • 3:36:00 PM • Hairy Polyp

E-108 • 3:40:00 PM • MR Imaging and Spectroscopy in Adenlyosuccinate Lyase Deficiency

E-109 • 3:44:00 PM • Rubinstein-Taybi Syndrome: A Case of Corpus Callosal Agenesis and Intracranial Diffuse B-Cell Lymphoma

E-110 • 3:48:00 PM • Temporomandibular Joint Synovial Chondromatosis

E-111 • 3:52:00 PM • Aneurysmal Bone Cyst within Fibrous Dysplasia: A Rare Association in the Sinuses

E-112 • 3:56:00 PM • Bilateral Cranial Nerve VI Palsy Secondary to Radiation Treatment of Nasopharyngeal Carcinoma: A Unique Cause of Diplopia

E-113 • 4:00:00 PM • Temporal Encephalocele: An Uncommon Cause of Acute Otitis Media and Meningitis

E-114 • 4:04:00 PM • Riedel's Thyroiditis

E-116 • 4:12:00 PM • Lobular Capillary Hemangioma of the Mandible

E-117 • 4:16:00 PM • Reversible Hypoglossal Nerve Denervation: A Rare Diagnosis of Exclusion

## WEDNESDAY, JUNE 6

### Room #

### 23D-PARALLEL PAPER SESSION: APPLICATIONS OF FUNCTIONAL MR IMAGING

# Parallel Scientific Paper Sessions At-A-Glance

---

O-453 • 4:45:00 PM • Feasibility of Resting-State Functional Magnetic Resonance Imaging (RS-fMRI) in Localizing Eloquent Cortex in Pretreatment Planning in Arteriovenous Malformation

---

O-454 • 4:52:00 PM • Comparison Between Task Activation and Resting-State Connectivity Maps in the Motor and Language Networks for Presurgical Planning

---

O-455 • 4:59:00 PM • Functional Outcome Following Temporal Lobe Surgery for Refractory Epilepsy Based on Memory Functional MRI

---

O-456 • 5:06:00 PM • Correlation of Functional MRI with WADA Test and Surgical Outcomes for Hemispheric Language Lateralization in Refractory Epilepsy

---

O-457 • 5:13:00 PM • Altered Dynamic Functional Connectivity in Default Mode Network in Minimal Hepatic Encephalopathy

---

O-458 • 5:20:00 PM • Effect of Sedation on Resting-State Functional Magnetic Resonance Imaging: A Single-Center Experience

---

O-459 • 5:27:00 PM • Aberrant Topological Organization of the Functional Brain Network Associated with Prior Overt Hepatic Encephalopathy in Cirrhotic Patients

---

O-460 • 5:34:00 PM • Disrupted Resting-State Functional Connectivity in Patients with Traumatic Anosmia

---

---

O-461 • 5:41:00 PM • Altered Variability in Functional Connectivity of the Anterior Cingulate Cortex in Patients with Treatment-Resistant and Nontreatment-Resistant Depression

---

O-462 • 5:48:00 PM • Segmentation of the Globus Pallidus Internus Using Probabilistic Diffusion Tractography for Deep-Brain Stimulation Targeting in Parkinson's Disease

---

O-463 • 5:55:00 PM • Tracing Ventral and Dorsal Language Streams of the Human Brain Using High-Resolution Diffusion-Tensor Tractography on 3T

---

O-464 • 6:02:00 PM • Prediction of Remission to Pharmacotherapy in Late-Life Depression Using Baseline and Single-Dose Neural Activation

---

## WEDNESDAY, JUNE 6

### Room #

## 23F-PARALLEL PAPER SESSION: STROKE IMAGING: DIAGNOSIS AND PROGNOSIS I

---

O-465 • 4:45:00 PM • Contralateral Cerebral Blood Flow Measured with Arterial Spin-Labeling MRI Predicts Outcome in Acute Ischemic Stroke

---

O-466 • 4:52:00 PM • Resting-State Functional Connectivity MRI and Outcome After Acute Stroke

---



# Parallel Scientific Paper Sessions At-A-Glance



O-467 • 4:59:00 PM • "Impact of a Multidisciplinary Stroke Improvement Event, Postprocessing Automation, and Standardized Radiologist Workflow on CT Perfusion Departmental and Radiologist Turnaround Time in Acute Stroke Evaluation"

O-468 • 5:06:00 PM • DWI-ASPECTS and DWI-FLAIR Mismatch in Thrombectomy Candidates: An Interrater and Intrarater Agreement Study

O-469 • 5:13:00 PM • DWI Prognostic Scores in Acute Basilar Artery Occlusion: A Literature Systematic Review and an Interrater and Intrarater Agreement Study

O-470 • 5:20:00 PM • Relationship Between Infarct Growth and Collateral Status Assessed by Perfusion CT and CT Angiography

O-471 • 5:27:00 PM • Qualitative MR Diffusion and Perfusion-Weighted Imaging Patterns in Symptomatic Intracranial Atherosclerotic Disease

O-473 • 5:34:00 PM • Imaging Predictors of Recurrent Ischemic Stroke: A Systematic Review and Meta-Analysis

O-472 • 5:41:00 PM • Prediction of Recurrent Ischemic Stroke Using Baseline CT

O-474 • 5:48:00 PM • Tours Stroke Imaging Project (TOSIP): New Algorithm for Stroke Outcome

O-475 • 5:55:00 PM • Predicting Final Infarct Volume in Stroke Patients Following Endovascular Treatment Using Dual-Energy CT Virtual Noncontrast Imaging

O-476 • 6:02:00 PM • Individual Edema Correction in Early Follow-Up CT Accurately Estimates Final Infarct Volumes After Ischemic Stroke

O-476a • 6:09:00 PM • Evaluating the diagnostic value of different imaging modalities in cerebral venous thrombosis

## THURSDAY, JUNE 7

### Room #

### 25C-PARALLEL PAPER SESSION: IMAGING UTILIZATION AND POPULATION HEALTH OUTCOMES IN ACUTE STROKE

O-477 • 8:00:00 AM • Sensitivity and Interrater Reliability of Stroke Protocol CT in the Early Detection of Stroke Mimics

O-483a • 8:00:00 AM • Imaging Utilization and Population Health Outcomes in Acute Stroke

O-478 • 8:07:00 AM • Hemorrhagic Transformation and Aspirin Prescription After Thrombectomy: An Interrater and Intrarater Agreement Study

O-479 • 8:14:00 AM • Predicting Recanalization in Acute Stroke Patients After Intravenous Thrombolysis

O-480 • 8:21:00 AM • CTA Collaterals Versus CT Perfusion CBF Maps for Core Infarct Volume Assessment in Patient Selection for Intra-Arterial Thrombectomy?

O-481 • 8:28:00 AM • Solving the Puzzle of Brain Infarction Versus Stroke Mimics in Young Patients

# Parallel Scientific Paper Sessions At-A-Glance

---

O-482 • 8:35:00 AM • The Influence of CT Perfusion on the Selection of Stroke Patients for Endovascular Therapy

---

O-483 • 8:42:00 AM • Predicting Neurological Outcome After Cardiac Arrest Using Quantitative Diffusion-Weighted Imaging Analysis

---

## THURSDAY, JUNE 7

### Room #

### 25D-PARALLEL PAPER SESSION: INTERVENTIONAL: ANEURYSMS AND AVMS

---

O-484 • 8:00:00 AM • Nonischemic Cerebral Enhancing Lesions Secondary to Endovascular Aneurysm Therapy: A French National Registry

---

O-485 • 8:07:00 AM • Embolization of Dural Cavernous Fistulas Via Image-Guided Superior Ophthalmic Vein Access: Report of 20 Cases and Review of Literature

---

O-486 • 8:14:00 AM • Ear Arteriovenous Malformation Management

---

O-487 • 8:21:00 AM • Mandibular AVM Diagnosis and Curative Endovascular Treatment

---

O-488 • 8:28:00 AM • Head and Neck Endovascular Repair of Vascular Malformations

---

O-489 • 8:35:00 AM • Cost-Effectiveness of CT Angiography in Management of Tiny UIAs

---

---

O-490 • 8:42:00 AM • Comparison of Wall Shear Stress and Flow Morphology in a Patient with an Intracranial Aneurysm with Aneurysm Model of the Same Patient Generated Using 3-D Printing

---

O-491 • 8:49:00 AM • Angiogram-Negative Spontaneous Intracranial Subarachnoid Hemorrhage: A Multicenter Study of Rebleeding Rate and Pattern of Hemorrhage

---

O-491a • 8:56:00 AM • Application of the intracranial arterial pulsatility index for determination of lacunar infarct prognosis

---

## THURSDAY, JUNE 7

### Room #

### 25E-PARALLEL PAPER SESSION: INTERVENTIONAL: ADVANCED TECHNIQUES

---

O-492 • 8:00:00 AM • Sofia Intermediate Catheter and the SNAKE Technique: Safety and Efficacy of the Sofia Catheter Without Guidewire or Microcatheter Construct

---

O-493 • 8:07:00 AM • Endovascular Management of Severe Stenosis of Supra-Aortic Arteries in Patients of Takayasu Arteritis

---

O-494 • 8:14:00 AM • The pCANvas Neck Bridging Device for the Treatment of Wide-Necked Bifurcation Aneurysms – Initial Results

---



# Parallel Scientific Paper Sessions At-A-Glance




---

O-495 • 8:21:00 AM • The pCONus2 Neck Bridging Device – Early Clinical Experience and Immediate Angiographic Results

---

O-496 • 8:28:00 AM • Intrasaccular Flow Diversion for Bifurcation and Terminal Aneurysms: Buenos Aires Experience and Long-Term Follow-Up with pCANvas

---

O-497 • 8:35:00 AM • Hydrophilic Polymer Coating Inhibits Platelet Adhesion In Vitro and In Vivo

---

O-498 • 8:42:00 AM • Clinico-Imaging Outcome of Dural Sinus Thrombectomy Using Fogarty Balloon – A Single-Center Experience

---

O-499 • 8:49:00 AM • Novel Angiographic Phantom and Method for Evaluating Spatial and Contrast Resolution of Digital Subtraction Angiography on Neuroangiographic Systems

---

## THURSDAY, JUNE 7

### Room #

### 27D-PARALLEL PAPER SESSION: UPDATES IN INTERVENTIONAL NEURO

---

O-500 • 10:30:00 AM • Impact of Different Reconstruction Algorithms and Different Slice Thicknesses on an Automated Stroke Software Tool to Detect Early Ischemic Changes

---

O-501 • 10:37:00 AM • Predicting Final Infarct Volume in Stroke Patients Following Endovascular Treatment Using Dual-Energy CT Mixed Images

---



---

O-502 • 10:44:00 AM • Failure of Recanalization is More Frequent in Proximal ICA and Multiple-Vessel Occlusions

---

O-503 • 10:51:00 AM • TIC1 0/1 Recanalization: Analysis of Reasons Contributing to Unsuccessful Endovascular Recanalization in Stroke Patients

---

O-504 • 10:58:00 AM • Influence of the Time of Day on the Care of Stroke Patients Undergoing Endovascular Stroke Therapy

---

O-505 • 11:05:00 AM • Applicability of the SWIFT-PRIME Inclusion Criteria on an Unselected Patient Population

---

O-506 • 11:12:00 AM • Degree of Conjugate Gaze Deviation on Computed Tomography Scan Predicts Proximal Vessel Occlusion and Expedites Candidates for Endovascular Therapy

---

O-507 • 11:19:00 AM • Early Cerebral Vein After Endovascular Ischemic Stroke Treatment Predicts Symptomatic Reperfusion Hemorrhage

---

O-508 • 11:26:00 AM • Examination of Radiation Exposure Imparted to Adults Undergoing Various Procedures in the Neurointerventional Setting

---

O-509 • 11:33:00 AM • Percutaneous Radial Arterial Approach as an Alternative Access for Neurointerventional Stroke Treatment and Coil Embolization: Report of 14 Cases and Review of Literature

---



# Parallel Scientific Paper Sessions At-A-Glance

O-510 • 11:40:00 AM • Comparative Effectiveness Analysis of Pipeline Device Versus Coiling in Unruptured Aneurysms <10 mm

## THURSDAY, JUNE 7

### Room #

### 27E-PARALLEL PAPER SESSION: QUANTITATIVE IMAGING: ADVANCED TECHNIQUES AND METHODS

O-512 • 10:30:00 AM • Understanding Impact of Rotation of Encoding Vector During Image Preprocessing on Tract Specific Diffusion Metrics in Deterministic Tractography

O-513 • 10:37:00 AM • Tract-Based Fractional Anisotropy as a Function of Tract Length Using Deterministic 3-D Tractography

O-514 • 10:44:00 AM • Neuroimaging Microglia: Development of a Quantitative Multicompartment Diffusion MRI Biomarker of Microglial Activation and Neuroinflammation

O-515 • 10:51:00 AM • Diffusion-Tensor Imaging to Investigate Diet-Induced Changes in Neuronal Tissue Microstructure and Organization

O-516 • 10:58:00 AM • Track Density Imaging to Visualize Thalamolimbic Fiber Tracts at 3 Tesla

O-517 • 11:05:00 AM • Longitudinal Assessment of the Microstructural Integrity of the Superior Longitudinal Fasciculus in Head Injury Survivors with Language Disorders

O-518 • 11:12:00 AM • Evaluation of the Lymphatic System with DTI in Idiopathic Normal Pressure Hydrocephalus

O-519 • 11:19:00 AM • Methylene Blue Modulates Resting Functional Connectivity in the Healthy Elderly Human Brain

O-520 • 11:26:00 AM • Amide Proton Transfer Imaging Can Reflect Tissue Acidosis and Its Reversal: Demonstration with Transient Occlusion to Permanent Occlusion in a Rat Middle Cerebral Artery Occlusion Model

O-521 • 11:33:00 AM • The Application of Dual-Clustering Segmentation for Brain Hemorrhage and Edema Detection Using CT Images

O-522 • 11:40:00 AM • Intravoxel Incoherent Motion (IVIM) Perfusion Imaging to Predict the Post-Treatment Cerebral Infarct Volume After Endovascular Reperfusion Therapy and Its Consistency with Routine Perfusion MR Imaging: Initial Clinical Experience

O-523 • 11:47:00 AM • "Adaptive Statistical Iterative Reconstruction (ASIR) Improves Noncontrast Head CT Sensitivity to Detect lacunar Infarction Compared to Filtered Back Projection (FBP), Particularly in Neuroradiology Trainee/Early Career"

Abstract No • Presented During Starts On Time • Abstract Title



# THE FOUNDATION OF THE ASNR



## **2018 OUTSTANDING CONTRIBUTIONS IN RESEARCH AWARD**

**Thomas A. Tomsick, MD**

The University Hospital/University of Cincinnati College of Medicine

## **2017 TRAINEE RESEARCH AWARD IN NEURORADIOLOGY**

**Mariam Aboian, MD, PhD**

University of California, San Francisco

## **2017 WOMEN IN NEURORADIOLOGY LEADERSHIP AWARD**

**Alyssa T. Watanabe, MD**

University of Southern California School of Medicine

## **2017-2018 AJNR EDITORIAL FELLOWSHIP SPONSORED BY THE FOUNDATION OF THE ASNR**

**Vahe Zohrabian, MD**

Yale School of Medicine

# ASNR

## **2018 ASNR GOLD MEDAL AWARD**

**Mauricio Castillo, MD, FACR**

The University of North Carolina School of Medicine

## **2018 ASNR GOLD MEDAL AWARD**

**Ajax E. George, MD**

NYU Langone Medical Center

## **2018 ASNR HONORARY MEMBER**

**Professor Didier Dormont, MD**

Hopital Universitaire Pitié-Salpêtrière Sorbonne Université

## **2018 ASNR CORNELIUS G. DYKE MEMORIAL AWARD**

**Peter Chang, MD**

University of California San Francisco

## **2018 J. ARLISS POLLOCK MEMORIAL AWARD**

**TBD**



# **ASNR 57<sup>th</sup> Annual Meeting**

**May 18 – 23**

**Hynes Convention Center  
Boston, Massachusetts**

## **ASNR 2020 – 58<sup>TH</sup> ANNUAL MEETING**

May 30 – June 4 • Caesars Palace • Las Vegas, Nevada

## **ASNR 2021 – 59<sup>TH</sup> ANNUAL MEETING**

May 22 – 27 • San Francisco Marriott Marquis • San Francisco, California

## **2022 WORLD FEDERATION OF NEURORADIOLOGICAL SOCIETIES (WFNRS) SYMPOSIUM NEURORADIOLOGICUM (SNR XXII)**

Friday, May 13 – Monday, May 16

&

## **AMERICAN SOCIETY OF NEURORADIOLOGY (ASNR) 60<sup>TH</sup> ANNUAL MEETING**

Monday, May 16 – Thursday, May 19

New York Hilton Midtown • New York, New York

## **ASNR 2023 – 61<sup>ST</sup> ANNUAL MEETING**

April 29 – May 4 • Sheraton Grand Chicago • Chicago, Illinois

# PARTNER PROGRAM CONTRIBUTORS

## Sustaining Partner



## Collaborating Partners



LIFE FROM INSIDE

