ASNR 57th Annual Meeting &
The Foundation of the ASNR Symposium 2019

MAY 18-23, 2019
HYNES CONVENTION CENTER
BOSTON, MASSACHUSETTS
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ASNR REGISTRATION INFORMATION

Hynes Convention Center, 2nd Floor Lobby
Saturday . . . . . . . . . . . . . . . . . . . . . . . 8:00 AM - 6:00 PM
Sunday, Monday, Tuesday, Wednesday . . . 7:00 AM - 6:00 PM
Thursday . . . . . . . . . . . . . . . . . . . . . . . 7:00 AM - 12:00 PM

CME ACCESS CENTER HOURS AND LOCATION

Hynes Convention Center, Room 208
Saturday . . . . . . . . . . . . . . . . . . . . . . . 10:00 AM - 6:00 PM
Sunday, Monday, Tuesday, Wednesday . . . 7:00 AM - 6:00 PM
Thursday . . . . . . . . . . . . . . . . . . . . . . . 7:00 AM - 12:00 PM

WIFI ACCESS (COMPLIMENTARY)

Hynes Convention Center
Access complimentary WiFi service by selecting the Hynes Wireless network - no password is required.

Sheraton Boston Hotel
Your Conference Code: ASNR19
1. Check for any available wireless signals.
2. Connect to SSID: SHERATON MEETING.
3. Launch a web browser.
4. When prompted, enter the Conference Code ASNR19 and click “submit”.
5. The conference Welcome Page or hotel main page will display and you can now browse the internet.

FOUNDATION OF THE ASNR DONOR LOUNGE

Donors are invited to the Donor Lounge to pick up your ribbons, enjoy some refreshments and connect with fellow contributors to The Foundation of the ASNR. If you would like to donate, please visit the Donor Lounge.

Hynes Convention Center, Room 200
Sunday, Monday, Tuesday, Wednesday . . . 8:00 AM - 4:00 PM
Thursday . . . . . . . . . . . . . . . . . . . . . . . 8:00 AM - 12:00 PM

• Complimentary refreshments
• Donor ribbons
• Goodie bags

LOST AND FOUND

Public Safety Office, Level 1 Main Lobby
To inquire about a lost item or report a found item, please contact the Public Safety Department at 617.954.2111 or go to the following internet link: https://signatureboston.com/attend/lost-and-found
LUGGAGE/COAT CHECK:

Room 206
Wednesday . . . 7:00 AM - 7:00 PM
Thursday . . . 7:00 AM - 7:00 PM

SPEAKER READY ROOM

Room 312
Saturday . . . . . . . . . . . . . . . . . . . . . . . 8:00 AM - 6:00 PM
Sunday, Monday, Tuesday, Wednesday . . . 7:00 AM - 6:00 PM
Thursday . . . . . . . . . . . . . . . . . . . . . . . 7:00 AM - 11:00 AM

NAME BADGES

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

For General Attendees:
The colored pennant represents the region of your fellowship program. Be sure to reference this for Monday Night’s First Annual ASNR Fellowship Reunion Night Reception.

West . . . . . . Orange
Southwest . . Light Blue
Southeast . . Yellow
Northeast . . Purple
Midwest . . . Dark Blue
International . . Black

Exhibitors and Sponsors will be noted with verbiage that identifies them as such.

★ = Award Winners
M = Session Moderators
= Speaker
= Fun Run registrant, with the date and time of your run

On the back of the badge, you may see a note regarding your pre-registered dietary request.
THE FOUNDATION OF THE ASNR

2019 OUTSTANDING CONTRIBUTIONS IN RESEARCH AWARD
David F. Kallmes, MD
Mayo Clinic, Rochester, Minnesota

2018 FOUNDATION AWARDS
ASNR/RSNA Research Scholar Grant
Jamal J. Derakhshan, MD, PhD
Washington University

Comparative Effectiveness Research Award
Akash Kansagra, MD
Washington University School of Medicine

Research Scientist Award in Neuroradiology
Kevin Chen, PhD
Stanford University

Scholar Award in Neuroradiology Research
Douglas Martin, MD \ Hediyeh Baradaran, MD
Stanford University \ Boston University Medical Center

Trainee Research Award in Neuroradiology
Mikell Yuhasz, MD
New York University, Langone Medical Center

Women in Neuroradiology Leadership Award
Tammie L.S. Benzinger, MD
Washington University

2019 ASNR GOLD MEDAL AWARDS
Carolyn C. Meltzer, MD, FACR \ Michael Brant-Zawadzki, MD
Emory University School of Medicine, Atlanta, Georgia \ Hoag Memorial Hospital, Newport Beach, California

2019 ASNR HONORARY MEMBER AWARD
Peter J. Basser, PhD
Eunice Kennedy Shriver National Institute of Child Health and Human Development, Bethesda, Maryland

2019 CORNELIUS G. DYKE MEMORIAL AWARD
Niloufar Saadat, MD
University of Chicago, Chicago, Illinois

2019 J. ARLISS POLLOCK MEMORIAL AWARD
William Sage, MD
University of Texas
SOCIAL EVENTS

**FUN RUNS**
Saturday, May 18
7:30 AM
Sheraton Lobby

Tuesday, May 21
7:00 AM
Sheraton Lobby

Boston is a thriving city known for its renowned educational institutions, world champion sports franchises, cultural facilities, and its place in American history. What better way to experience the host location of our conference than by getting out and enjoying it by foot?

Come see historic and beautiful Boston with us the mornings of May 18 at 7:30 am and May 21 at 7:00 am by participating in an organized run or walk, led by a guide familiar with the area. Our 2-3 mile mornings will be a great way to kick off the day, allowing you fresh air, sights of the city, and historic facts...all before our first session of the day! Registration is required and includes a snack, water, baseball hat and map. Come be a part of the fabric of the city of Boston, home of the world’s oldest annual Marathon. Sweat and sightsee, simultaneously. To sign up, visit the ASNR registraton desk.

**YOUNG PROFESSIONALS PROGRAMMING: MENTORING RECEPTION (INVITATION ONLY)**
6:15 PM - 7:30 PM
Room 313

**WELCOME RECEPTION**
Sunday, May 19
6:15 PM - 7:30 PM
TE Hall, 2nd Floor

**FELLOWSHIP REUNION NIGHT RECEPTION**
Monday, May 20
6:15 PM - 8:15 PM
Boylston Foyer, 3rd Floor
VISIT AJNR

ASNR Connection Lounge (TE Hall, Booth #317)
All attendees are invited to stop by the booth anytime to tour the AJNR Web site, AJNR Blog, and AJNR Digest.

Monday . . . . . . 10:00 AM - 4:00 PM
Tuesday . . . . . 10:00 AM - 4:00 PM
Wednesday . . . . 10:00 AM - 4:00 PM

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.

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.

ASNR members can earn free AMA PRA Category 1 Credits™ (SA-CME credit) for each Neurographics review article by completing an online quiz at ASNR’s eCME site.

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

Stop by the Education Exhibits Hall to view and interact with Electronic Exhibits and Posters (Education and Scientific). Overall awards are given to the best exhibits and posters in each type and category, to be announced at the end of the meeting.

Hall C, 2nd Floor
Sunday . . . . . . . . . . . . . . . . . . . . . . . . 3:00 PM - 7:00 PM
Monday, Tuesday, Wednesday . . . . . . . . . 7:00 AM - 7:00 PM
Thursday . . . . . . . . . . . . . . . . . . . . . . . . 7:00 AM - 1:00 PM

CASE OF THE DAY

Monday, May 20 - Wednesday, May 22

Hall C, 2nd Floor
Test your neuroradiology knowledge and earn a chance to win prizes, including full registration to the ASNR 58th Annual Meeting in 2020 and two (2) nights hotel stay for the ASNR 2020 Annual Meeting in Las Vegas. This interactive programming presents six new cases each day on Monday through Wednesday. Submit your preferred diagnoses by 5:00 PM each day via the ASNR Annual Meeting Mobile App. Each correct submission earns you a entry in the drawing to win prizes (the more correct answers you submit, the better your chance of winning!).

Note: No CME credit is available for this activity.
SPECIAL SESSION: MR CONTRAST USE: HOT TOPICS FOR NEURORADIOLOGISTS

Sunday, May 19 / 9:10 AM - 10:00 AM (Northwest Imaging Forums, Inc.)
Ballroom A/B/C

Fact Versus Fiction: Gadolinium Retention and What's Important for Neuroradiologists Today
Howard A. Rowley, MD

Acute Reactions to Gadolinium-Based Contrast Agents: An Update
Matthew Kuhn, MD, FACR

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 claim only the credit commensurate with the extent of their participation in the activity. Nurses may claim credit for activities approved for 1.0 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 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 Session is not part of The Foundation of the ASNR Symposium 2019 or ASNR Annual Meeting.

CLINICAL UPDATE

Monday, May 20 / 9:40 AM - 10:30 AM (Canon Medical Systems USA)
Ballroom A/B/C

Leveraging Technology for Improved Stroke Care
Kenneth V. Snyder, MD, PhD, Jacobs School of Medicine and Biomedical Services

Tuesday, May 21 / 9:40 AM - 10:30 AM (iSchemaViewRAPID)
Ballroom A/B/C

Recent Advances in Neuroimaging of Acute Stroke
Greg Albers, MD, Stanford University

Panel Discussion: Challenging Stroke Cases
Moderator: Greg Albers, MD, Stanford University
Panel: Jeremy Heit, MD, Stanford University
Samir A. Ansari, MD, Northwestern University
Benjamin Friedrich, MD, Technische Universität München

Wednesday, May 22 / 9:40 AM - 10:30 AM (Siemens-Healthineers)
Ballroom A/B/C

Improving Timely Access to Mechanical Thrombectomy: First Experiences with a Biplane System Located Directly in the Emergency Room
Ryan A. McTaggart, MD, Associate Professor Diagnostic Imaging (Clinical), Warren Alpert Medical School of Brown University
**SYMPOSIUM WORKSHOP**

**Sunday, May 19 / 10:30 AM - 12:00 PM  (SpinTech)**
Room 203

**Overview of STAGE: The Future of Rapid, Quantitative, Standardized Brain Imaging**
E. Mark Haacke, PhD - Chief Science Officer at SpinTech, Inc.

**STAGE Clinical Research Highlights**
Sean Sethi, MS - Research Engineer at SpinTech, Inc.

**Enabling the Future of AI**
Paul Kokeny, PhD - Software Engineer at SpinTech, Inc.

**INNOVATION THEATER IN THE TECHNICAL EXHIBIT HALL**

**Monday, May 20 / 10:35 AM - 10:55 AM  (Bracco)**
A New Look at ProHance (Gadoteridol) Injection 279.3 mg/ml, a Macrocyclic Contrast for CNS MRI
Noelle Heber, Sr. Director MR, Bracco Diagnostics

**Monday, May 20 / 12:10 PM - 12:30 PM  (icometrix)**
Hitting the Bull’s AI - efficient and more consistent reading in neuroradiology
Wim Van Hecke, PhD, CEO Icometrix

**Monday, May 20 / 12:35 PM - 12:55 PM  (Philips)**
Philips Neuro Solutions: Enhancing Diagnostics & Patient Care with Spectral CT
Dr. Chip Truwit, Philips Healthcare

**Monday, May 20 / 3:15 PM - 3:35 PM  (Philips)**
Philips Neuro Solutions: HD EEG & MRI Dynamic Brain Activity with Patient Comfort
Mr. Rob Rubio, Philips Healthcare

**Tuesday, May 21 / 10:20 AM - 10:40 AM  (SyntheticMR)**
SyMRI Innovations and Myelin Segmentation in Clinical Routine
Marcel Warntjes, PhD, SyntheticMR

**Tuesday, May 21 / 12:35 PM - 12:55 PM  (Philips)**
Philips Neuro Solutions: Patient Centric MR Imaging
Dr. Lawrence Tanenbaum, RadNet

**Tuesday, May 21 / 3:15 PM - 3:35 PM  (Philips)**
Philips Neuro Solutions: MRI Compressed SENSE in Clinical Practice
Dr. Lawrence Tanenbaum, RadNet

**Wednesday, May 22 / 10:20 AM - 10:40 AM  (Philips)**
Philips Neuro Solutions: Adaptive Intelligence
Dr. Christopher Filippi, Northwell Health

**Wednesday, May 22 / 12:10 PM - 12:30 PM  (Cortex Labs)**
NeuroQuant for Neuroradiology: AI-Powered, MRI-Based Brain Volumetrics for Better Clinical Decisions
Lisa Kjonigsen, PhD, CorTechs Labs

**Wednesday, May 22 / 12:35 PM - 12:55 PM  (Philips)**
Philips Neuro Solutions: Functional MRI Imaging to Analysis
Mr. Erik Peterson, Philips Healthcare
### TECHNICAL EXHIBITORS

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**ASNR Connect Lounge**
- Booth #317

**ABR (American Board of Radiology)**
- Booth #316
  - 5441 E. Williams Circle, Tucson, AZ 85711-7412

**Bayer**
- Booth #305
  - 250 Ridge Road, Dayton NJ 08810

**Bracco Diagnostics Inc.**
- Booth #507
  - 259 Prospect Plains Rd Bldg H, Monroe Township, NJ 08831

**CANON MEDICAL SYSTEMS USA, INC**
- Booth #306
  - 2441 Michelle Drive, Tustin, CA 92780

**CDE**
- Booth #314

**Cercare Medical**
- Booth #410
  - Inge Lehmans Gade 10, Room 06.030, Aarhus, Denmark 8000

**Combinostics Ltd.**
- Booth #506
  - Hatanpäään valtatie 24, Tampere, Finland 33100

**CorTechs Labs**
- Booth #404
  - 4690 Executive Drive, Suite 250, San Diego, CA 92121

**Elsevier, Inc**
- Booth #302
  - 1600 JFK Blvd., Ste. 1600, Philadelphia, PA 19103

**Envision Physician Services**
- Booth #402
  - 7700 West Sunrise Blvd., Plantation, FL 33222

**ESNR (European Society of Neuroradiology)**
- Booth #318

**GE Healthcare**
- Booth #611
  - 9900 Innovation Drive, Wauwatosa, WI 53226

**Guerbet, LLC**
- Booth #403
  - 821 Alexander Road, Suite 204, Princeton, NJ 08540

**HealthLytix**
- Booth #310
  - 4747 Executive Drive, Suite 820, San Diego, CA 92121

**Hitachi Healthcare Americas**
- Booth #503
  - 1959 Summit Commerce Park, Twinsburg, OH 44087

**icometrix**
- Booth #406
  - 1 N State Street, Suite 1500 icometrix, Chicago, IL 60602

**Imaging Biometrics LLC**
- Booth #602
  - 13416 Watertown Plank Road, Suite 260, Elm Grove WI 53122

**iSchemaView**
- Booth #502
  - 405 El Camino Real, Suite 601, Menlo Park, CA 94025
**Kineticor** 3465 Waialae Ave, Suite 300A, Honolulu, HI 96816

**MaxQ-AI** 96 Yigal Alon Street, Entrance A, Tel Aviv, Israel 6789140

**MD Health Care Supplies** 355 Green Drive, Las Vegas, NV 89148

**Medic Vision Imaging Solutions** Yozma 3, Tirat Carmel, Israel, 39032

**Olea Medical** 93 Avenue Des Sorbiers, La Ciotat, France 13600

**PaxeraHealth** 300 Washington St, Newton, MA 02458

**Philips Healthcare** 595 Miner Road, Cleveland, OH 44143

**Prism Clinical Imaging** 890 Elm Grove Rd, Suite 209, WI 53122

**Quantib BV** Westblaak 106, Rotterdam, The Netherlands 3012KM

**Radiology Partners** 2101 E El Segundo Blvd, St. 401, El Segundo, CA 90245

**Retrophin, Inc.** 3721 Valley Centre Dr., San Diego, CA 92130

**Siemens Healthineers** 40 Liberty Blvd, Malver, PA 19355

**SpinTech** 30200 Telegraph Rd., Ste 140, Bingham Farms MI 48025

**Stryker Interventional Spine** 1901 Romence Parkway, Portage, MI 49002

**SyntheticMR** Storgatan 11, Linköping, Sweden 58223

**The American Board of Radiology** 5441 E. Williams Circle, Tucson, AZ 85711

**VIZ.AI** 555 De Haro Street, Suite 400, San Francisco, CA 94107

**vRAD** 11995 Singletree Ln # 500, Eden Prairie, MN 55344

**Wolters, Kluwer** Two Commerce Sq. 2001 Market Street, Philadelphia, PA 19103
ASNR 57TH ANNUAL MEETING CME
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.

The American Society of Neuroradiology designates this live activity for a maximum of 28.0 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

The ASNR 57th 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 57th Annual Meeting is designed to help us deal with the healthcare challenges today and to learn what’s new in the advancing field of neuroimaging. These challenges are seen in the clinical, scientific, educational and socioeconomic 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.

THE FOUNDATION OF THE ASNR SYMPOSIUM 2019 CME
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.

The American Society of Neuroradiology designates this live activity for a maximum of 12.75 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

The Foundation of the ASNR Symposium 2019 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.

Upon completion of this activity, participants should gain strategies to:
- 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.
CONTINUING MEDICAL EDUCATION (CME) INFORMATION

ONLINE ACCESS TO CERTIFICATES
CME credit may be claimed online at https://ww3.aievolution.com/asn1901 through Monday, June 10.

INSTRUCTIONS FOR ONLINE ACCESS TO CERTIFICATES
1. Visit https://ww3.aievolution.com/asn1901 (login info emailed to you before the meeting).
2. Logging in will bring you to your My Credits page.
3. You can search for events or browse the program to find the sessions you attended.
4. Select the sessions you attended to claim your credit and evaluate sessions.
5. After submitting, you can email or print your certificate from the My Credits Page.

TAKE YOUR CME CERTIFICATE HOME WITH YOU!
To print your CME certificate for the Foundation of the ASNR Symposium 2019 and ASNR 57th Annual Meeting, visit the CME Access Center in Room 208. You will be able to print or email your 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.

SAM CREDITS
If you use the audience response system to answer SAM questions during a session, please allow three hours following the session conclusion for the credits to be transferred to the online CME system.

ALTERNATIVE SUBMISSION OF SAM ANSWERS
1. Visit https://ww3.aievolution.com/asn1901 (login info emailed to you before the meeting).
2. Logging in will bring you to your My Credits page.
3. Select “My SAMs“ from the top of the page.
5. Click “Start Self-Assessment“ to begin the process.
6. If you have not already done so, you will be asked to claim your AMA PRA Category 1 Credits™ for this session before completing your post-test for SAM credit.
AUDIENCE RESPONSE POLLING INSTRUCTIONS

To participate during audience response sessions (available in Ballroom A/B/C):
2. You can log-in by clicking on the menu in the upper right (three lines).
3. To log-in, enter the email address used to register (password: asnr2019). To reconfirm your log-in information, click on the icon in the black bar beside @asnr’s presentation, and you will see you log-in status. Then click “Back”.

Welcome to asnr’s presentation
As soon as asnr displays a poll, we’ll update this area to give you the voting options.
Easy as pie. Just hang tight, you’re ready to go.
SELF ASSESSMENT MODULES (SAMs)

SYMPOSIUM

Sunday, May 19
10:30 AM - 12:00 PM
Demyelinating Disease 1.5 hours

ANNUAL MEETING

Monday, May 20
7:30 AM - 8:30 AM
Morning Case Session: Brain/Functional 1 hour

Monday, May 20
1:00 PM - 2:30 PM
ASPNR Programming: Pediatric Neuroimaging for the Adult Neuroradiologist 1.5 hours

Tuesday, May 21
7:30 AM - 8:30 AM
Morning Case Session: Pediatrics 1 hour

Tuesday, May 21
11:00 AM - 12:00 PM
Computer Science/Informatics Programming: Introduction to ML/AI for the Neuroradiologist 1 hour

Tuesday, May 21
1:00 PM - 2:30 PM
Health Policy Programming: Connection: Science and Practice and Health Policy Perspectives 1.5 hours

Tuesday, May 21
4:30 PM - 6:00 PM
Education Committee Programming: Neuroradiology Education at Home and Abroad 1.5 hours

Wednesday, May 22
7:30 AM - 8:30 AM
Morning Case Session: A Case-Based Review of Interesting & Difficult Spine Diagnoses 1 hour

Wednesday, May 22
11:00 AM - 12:00 PM
ASHNR Programming: Errors in Head and Neck Imaging 1 hour

Thursday, May 23
8:30 AM - 9:30 AM
Morning Case Session: Head and Neck 1 hour

These SAMs meet the ABR’s criteria for self-assessment CME (SA-CME) in the ABR Maintenance of Certification program. These SAMs will earn the same number of SA-CME credits as the stated CME credits. Please login to myABR annually at 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.
ASNR members are able to join one of our four study groups, including:

**Wednesday, May 21, 1:00 PM - 2:30 PM**

**Vessel Wall Imaging**
Vessel Wall Imaging Study Group advances our understanding of cerebrovascular diseases by developing and support vessel wall imaging protocols and clinical / translational studies.

**Thursday, May 23, 10:45 AM - 12:15 PM**

**Imaging Genomics**
The study group focuses on the application of imaging-genomics to high grade gliomas and in particular glioblastoma, attempting to identify further areas of exploration where understanding the relationship between imaging data and tumor molecular features has potential in achieving optimally personalized medicine.

**Thursday, May 23, 10:45 AM - 12:15 PM**

**Artificial Intelligence**
This study group was created for the purposes of facilitating the exchange of information and knowledge amongst experts and fostering collaborative research that will propulse neuroradiology in the next phase of its evolution, ensuring that neuroradiologists will provide the best possible care to their patients.

**Thursday, May 23, 10:45 AM - 12:15 PM**

**Clinical Translation of Functional and Diffusion MRI**
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.
YPS SESSION 1:

Monday, May 20, 11:00 AM - 12:00 PM

Finding Your Niche
Room 302
Moderators: Erik Middlebrooks, MD and Kambiz Nael, MD

Roadmap to Expertise: Tips for Defining and Excelling in Your Neuroradiology Niche on the National Stage
Jenny Hoang, MBBS (Duke)

Intro to Comparative Effectiveness Research Training
Vahe M. Zohrabian, MD (Yale)

Early Career Impacts of Neuroradiology Economics/Health Policy Expertise
Melissa Chen, MD (MD Anderson)

YPS SESSION 2:

Monday, May 20, 2:55 PM - 4:25 PM

Transition to Early Career
Room 302
Moderators: Jonathan Lee, MD and Brent Weinberg, MD, PhD

Getting Ahead in Your Practice from Early On
Mark Mamlouk, MD (Kaiser)

Tips for Getting Your First Promotion
Tabassum Kennedy, MD (Wisconsin)

The Mentor-Mentee Relationship: One Way or Two Way Street?
Christie Lincoln, MD (Baylor)

Personal Finance for Early Career Physicians
David Yousem, MD (Hopkins)

YPS SESSION 3:

Wednesday, May 22, 1:00 PM - 2:30 PM

Wellness
Room 304/306
Moderators: Cynthia Wu, MD and Puneet Belani, MD

Balancing Vulnerability and Professionalism/Learning from Challenges in Early Career Radiology
Christine Glastonbury, MBBS (UCSF)

Wellness Strategies for Your Radiology Career
Erin Simon Schwartz, MD, FACR (CHOP)

A “Taste” of Wellness Training
Nicholas Beamon
SCHEDULE: SCIENTIFIC SYMPOSIUM

SATURDAY, MAY 18, 2019

7:30 AM
Morning Fun Run
Sheraton Lobby
Full details on page 7

8:00 AM - 6:00 PM
ASNR Registration & Help Desk
2nd Floor Lobby

1:00 PM - 2:30 PM
Brain Mapping and the Human Connectome
Ballroom A/B/C
Moderators: Lawrence Wald, PhD and William Dillon, MD

- High Resolution Functional Brain Imaging: Successes and Limits
  Jonathan Polimeni, PhD

- Studying Brain Organization with Functional Connectivity: From Brain Networks in Individuals to Genetics and Disease
  Todd Constable, PhD

- Insights into Brain Architecture from Neuroimaging
  Van J. Wedeen, MD

2:30 PM - 3:00 PM
Afternoon Beverage Break
Boylston Foyer

3:00 PM - 4:30 PM
(When) Is Connectivity Ready for Prime Time? Early Promise for Pediatric Neuroradiology
Ballroom A/B/C
Moderators: Patricia Grant, MD and A. James Barkovich, MD

From Abnormal Gyral Folding to Altered Connectivity: Examples from Pediatric Brain Disorders
Kiho Im, PhD

Should Connectivity Analysis Guide Surgical Decisions in Epilepsy?
Elysa Widjaja, MBBS, MRCP, FRCR, MD

Can Structural and Functional Connectivity in Neonates Predict Later Language Function?
Nadine Gaab, PhD

Fetal MRI: Potential Clinical Tool for Early Detection of Developmental Disorders?
Moriah Thomason, PhD

4:30 PM - 6:00 PM
Traumatic Disconnect: Imaging Brain Injury
Ballroom A/B/C
Moderators: David Seidenwurm, MD, FACR and Pratik Mukherjee, MD, PhD

- What Neurosurgeons Wish You Could Tell Us: Unmet Needs in Pediatric TBI Imaging
  Ann-Christine Duhaime, MD

- Imaging Adult Mild TBI: Are We Making a Difference in Patient Care?
  Apostolos Tsiouris, MD

- Advanced Imaging of TBI: What’s on the Near Horizon?
  Pratik Mukherjee, MD, PhD

6:15 PM - 7:30 PM
Young Professionals Programming:
Mentoring Reception (Invitation Only)
Room 313
SUNDAY, MAY 19, 2019

7:00 AM - 8:00 AM
Breakfast
Boylston Foyer

7:00 AM - 6:00 PM
ASNR Registration & Help Desk
2nd Floor Lobby

7:30 AM - 9:00 AM
Stroke and Stroke Recovery
Ballroom A/B/C
Moderators: Vivek Prabhakaran, MD, PhD and Howard Rowley, MD

Brain Imaging for Stroke Patients Who Present Late
Greg Albers, MD

Stroke Recovery: Neuroimaging Evidence
Gottfried Schlaug, MD, PhD

Big Data Neuroimaging for Stroke Recovery: ENIGMA Stroke Recovery
Sook-Lei Liew, PhD

9:10 AM - 10:00 AM
Special Session: MR Contrast Use: Hot Topics for Neuroradiologists
Ballroom A/B/C

Fact Versus Fiction: Gadolinium Retention and What’s Important for Neuroradiologists Today
Howard A. Rowley, MD

Acute Reactions to Gadolinium-Based Contrast Agents: An Update
Matthew Kuhn, MD, FACP

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 claim only the 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 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 Session is not part of The Foundation of the ASNR Symposium 2019 or ASNR Annual Meeting.

10:30 AM - 12:00 PM
Demyelinating Disease (SAM)
Ballroom A/B/C
Moderators: Haris Sair, MD and Jennifer Soun, MD

White Matter Disease: Beyond Demyelination
Carlos Torres, MD, FRCPC

More than 50 Shades of Gray: Atypical Demyelinating Disease and NMOSD
Christopher Filippi, MD

Imaging Markers of Axonal Damage and Remyelination in MS: Progress and Challenges
Susie Huang, MD, PhD

Beyond McDonald Criteria: Which Advanced MS Imaging Markers Should Make It to Your Workstation?
Daniel Reich, MD, PhD

10:30 AM - 12:00 PM
SpinTech Symposium Workshop
Room 203
Preregistration Required

Overview of STAGE: The Future of Rapid, Quantitative, Standardized Brain Imaging
E. Mark Haacke, PhD, Chief Science Officer at SpinTech, Inc.
STAGE Clinical Research Highlights
Sean Sethi, MS, Research Engineer at SpinTech, Inc.
Enabling the Future of AI
Paul Kokeny, PhD, Software Engineer at SpinTech, Inc.

12:00 PM - 1:00 PM
Lunch
Boylston Foyer

1:00 PM - 2:30 PM
Multidisciplinary Connections and Connectivity in Alzheimer Disease
Ballroom A/B/C
Moderators: Kirk Welker, MD and Mykol Larvie, MD, PhD

- Cellular and Molecular Neuropathology and Physiology of Alzheimer Disease
  Dennis Selkoe, MD
- Amyloid and Tau PET Imaging in Alzheimer Disease
  Kejal Kantarci, MD
- Functional Connectivity in the Aging Brain and Alzheimer Disease-Affected Brain
  David Jones, MD
- Current Best Practices in Neuroimaging of Alzheimer Disease
  Jeffrey Petrella, MD

2:30 PM - 3:00 PM
Afternoon Beverage Break
Boylston Foyer

3:00 PM - 4:30 PM
Psychiatric Disorders of Connection
Ballroom A/B/C
Moderators: Donna Roberts, MD and Jody Tanabe, MD

- Psychiatric Imaging: What the Radiologist Needs to Know Now and in the Future
  Jody Tanabe, MD

4:30 PM - 6:00 PM
How Does Neuroimaging Help Us Understand What It Means to Be Human?
Ballroom A/B/C
Moderators: Michael Lev, MD, FACR, FAHA and Randy Buckner, PhD

- Cognitive Neuroscience and the Role of Neuroimaging
  Randy Buckner, PhD
- Are We Wired for Social Connection? Bridging the Neuroscience and Social Aspects of Connection
  Matthew Lieberman, PhD
- Neuroimaging’s Burgeoning Role in Understanding the Mind, Health, and Wellness
  Michael Lev, MD, FACR, FAHA

6:15 PM - 7:30 PM
Welcome Reception
TE Hall
MONDAY, MAY 20, 2019

7:00 AM - 8:30 AM
Breakfast
Boylston Foyer

7:00 AM - 6:00 PM
ASNR Registration & Help Desk
2nd Floor Lobby

7:30 AM - 8:30 AM
Morning Case Session: Brain/Functional (SAM)
Ballroom A/B/C
Moderators: Vaishali Phalke, MD and Aaron Kamer, MD
Brain (1)
Achala Vagal, MD
Brain (2)
Ryan Peterson, MD
Functional
Michael Iv, MD

8:35 AM - 9:35 AM
Introduction and Keynote Address
Ballroom A/B/C
Moderators: Robert Barr, MD, FACR and Tina Young Poussaint, MD
President's Welcome
Pina C. Sanelli, MD, MPH, FCR
A New Era for Schizophrenia Research: Implications of Emerging Success in Genetics for Human Neurobiology
Steven Hyman, MD

9:40 AM - 10:30 AM
Clinical Update: Canon Medical Systems USA: Leveraging Technology for Improved Stroke Care
Ballroom A/B/C
Kenneth V. Snyder, MD, PhD

10:30 AM - 11:00 AM
Morning Beverage Break
TE Hall

11:00 AM - 12:00 PM
ASFNR Programming: Imaging Dementia
Ballroom A/B/C
Moderators: Jody Tanabe, MD and Gregory Zaharchuk, MD, PhD
State-of-the-Art MR Imaging of Dementia
Sumit Niogi, MD, PhD
Role of MRI and PET for Diagnosis of Alzheimer’s Disease: Lessons from the Alzheimer’s Disease Neuroimaging Initiative (ADNI)
Michael Weiner, MD
PET/MRI for Dementia
Timothy Shepherd, MD, PhD

11:00 AM - 12:00 PM
Young Professionals Programming: Finding Your Niche
Room 304/306
Moderators: Erik Middlebrooks, MD and Kambiz Nael, MD
Roadmap to Expertise: Tips for Defining and Excelling in Your Neuroradiology Niche on the National Stage
Jenny Hoang, MBBS
Introduction to Comparative Effectiveness Research Training
Vahe Zohrabian, MD
Early Career Impacts of Neuroradiology Economics/Health Policy Expertise
Melissa Chen, MD

11:00 AM - 12:00 PM
Joint ESNR-ASPNR Session: Connecting to the Very Young: Neuroimaging of the Neonate
Room 302
Moderators: Tina Young Poussaint, MD, FCR and Giulio Zuccoli, MD
11:00 AM - 12:00 PM

Neuroinflammatory Diseases: Adult Brain (Scientific Abstract Session)
Room 210
Moderators: David Hackney, MD, FACR and Maura Ryan, MD

11:00 AM - 12:00 PM

AI/Faster Scans, Less Contrast, Better Diagnoses? (Scientific Abstract Session)
Room 310
Moderator Name: TBD

11:00 AM - 12:00 PM

Practice & Training Issues (Scientific Abstract Session)
Room 311
Moderators: Patrick Turski, MD, FACR and Sapna Rawal, MD, FRCPC

This session contains the Comparative Effectiveness Research Award Abstract: Systems of Care: Simulating Care Delivery and Patient-Centered Health Outcomes in Acute Ischemic Stroke

12:00 PM - 1:00 PM

Lunch
TE Hall

1:00 PM - 2:30 PM

ASPNR Programming: Pediatric Neuroimaging for the Adult Neuroradiologist (SAM)
Ballroom A/B/C
Moderators: Laurence Eckel, MD and Karuna Shekdar, MD

Imaging of Craniofacial Malformations
Susan Blaser, MD, FRCP(C)

Imaging Approach to Abusive Head Trauma
Michelle Silvera, MD

Presurgical Mapping in Children
James Leach, MD

Imaging of Conductive Hearing Loss in Children
Timothy Booth, MD

1:00 PM - 2:30 PM

ASFNR Programming: Perfusion Imaging for the Clinician
Room 304/306
Moderators: Pamela Schaefer, MD and Jerrold Boxerman, MD, PhD

Basics of Perfusion Imaging
Audrey Fan, PhD

Clinical Value of Perfusion Imaging
Jalal Andre, MD

Value of Cerebrovascular Reserve Imaging
Ajay Gupta, MD

PET or Perfusion for Brain Tumors?
Whitney Pope, MD, PhD

1:00 PM - 2:30 PM

Evidence-Based Medicine Programming: Speed Journal Club
Room 302
Moderators: Jenny Hoang, MBBS and Hediye Baradaran, MD

Brain 1
Pina C. Sanelli, MD, MPH, FACR

Brain 2
Kirk Welker, MD

Spine
Lubdha Shah, MD
SCHEDULE: ANNUAL MEETING

1:00 PM - 2:30 PM

AI/Advanced Imaging in Vascular Disease and Tumors (Scientific Abstract Session)
Room 210
Moderator: Mark Mullins, MD, PhD

1:00 PM - 2:30 PM

Adult Brain Excerpta 1 (Scientific Abstract Session)
Room 309
Moderators: Philip Chapman, MD and Robert Young, MD

1:00 PM - 2:30 PM

Adult Brain Potpourri Topics 1 (Scientific Abstract Session)
Room 310
Moderators: Ichiro Ikuta, MD, MMSc and Vivek Gupta, MD

1:00 PM - 2:30 PM

CT Imaging in Stroke (Scientific Abstract Session)
Room 311
Moderators: Ryan Peterson, MD and Rona Woldenberg, MD

2:30 PM - 2:55 PM

Afternoon Beverage Break
TE Hall

2:55 PM - 4:25 PM

ASPNR Programming: Pairing the Rare and Complex: Leukodystrophies and Neurometabolic Disorders
Ballroom A/B/C
Moderators: Zoltan Patay, MD, PhD and Sumit Pruthi, MD, MS

Imaging Approach to Leukodystrophies and Neurometabolic Disorders
Bruno Soares, MD

Imaging of Mitochondrial Disorders
Arastoo Vossough, PhD, MD

Imaging of “Common” Leukodystrophies
Paul A. Caruso, MD

What’s New in Leukodystrophies?
Edward Yang, MD, PhD

2:55 PM - 4:25 PM

CSNR Programming: Difficult Cerebrovascular Diagnoses
Room 304/306
Moderators: Richard Aviv, MD and Daniel Mandell, MD, PhD, FRCPC

Is It Vasculitis?
Daniel Mandell, MD, PhD, FRCPC

What’s Wrong with This Perfusion Map?
Amanda Murphy, MD, PhD

Which of These Patients Has an AVM/AVF?
Dana Iancu, MD

Is There Brain Death?
Manish Joshi, MD, PhD, FRCPC

2:55 PM - 4:25 PM

Young Professionals Programming: Transition to Early Career
Room 302
Moderators: Jonathan Lee, MD and Brent Weinberg, MD, PhD

Getting Ahead in Your Practice from Early On
Mark Mamlouk, MD

Tips for Getting Your First Promotion
Tabassum Kennedy, MD
The Mentor-Mentee Relationship: One Way or Two Way Street?
Christie Lincoln, MD

Personal Finance for Early Career Physicians
David Yousem, MD, MBA

2:55 PM - 4:25 PM

AI/Advanced Imaging in Preoperative Planning and Beyond (Scientific Abstract Session)
Room 210
Moderators: Paggie Kim, MPH and Barton F. Branstetter IV, MD, FCR

Diagnostic Imaging of Brain Tumors for Characterization and Differentiation (Scientific Abstract Session)
Room 309
Moderator: Rona Woldenberg, MD

Stroke: Clinical Outcomes (Scientific Abstract Session)
Room 310
Moderators: Guilherme Dabus, MD and Matthew Amans, MD, MSc

Vascular Malformations (Scientific Abstract Session)
Room 311
Moderator: Joshua Nickerson, MD

4:30 PM - 6:00 PM

Computer Science/Informatics Programming: Using Technology and Informatics to Stay Better Connected
Room 304/306
Moderators: Joshua Nickerson, MD and Matthew Amans, MD, MSc

ASNR CDE Update: Using Technology to Improve Radiology Workflow
Adam Flanders, MD

Maintaining Connections Through Novel Online Educational Methods
Luke Ledbetter, MD

CSI: Using SoMe to Stay Connected. Best Social Media Practices for Neuroradiologists
James Chen, MD

Utilizing Software AI to Help Achieve Standardization in Approaches to MR Safety Risk Assessment of Device Patients
Room 302
Moderators: Emanuel Kanal, MD, FCR, FISMRM, MRMD, MRSE, AANG and Laurie A. Loevner, MD

National and International Efforts at Standardization in Training and Certification in MR Safety
Robert Watson, MD, PhD

MR Safety Update: Redefining Our Approach for 2020 and Beyond
Michael Hoff, PhD, DABR

Utilizing Software AI to Help Achieve Standardization in Approaches to MR Safety Risk Assessment of Device Patients
Emanuel Kanal, MD, FCR, FISMRM, MRMD, MRSE, AANG
4:30 PM - 6:00 PM
AI/Advanced Imaging in the Spine and Brain (Scientific Abstract Session)
Room 210
Moderator: Noriko Salamon, MD

4:30 PM - 6:00 PM
Machine Learning, Automated Processing and Lesion Segmentation Brain Applications (Scientific Abstract Session)
Room 309
Moderator: R. Nick Bryan, MD, PhD

4:30 PM – 6:00 PM
Stroke: Technical Outcomes (Scientific Abstract Session)
Room 310
Moderators: Gaurav Jindal and Mariya Gusman, MD

4:30 PM - 6:00 PM
Neuroimaging in Brain Tumor Prognostication (Scientific Abstract Session)
Room 311
Moderator: Otto Rapalino, MD

6:15 PM - 8:15 PM
Fellowship Reunion Night Reception
Boylston Foyer, 3rd Floor
TUESDAY, MAY 21, 2019

7:00 AM - 8:30 AM
Breakfast
Boylston Foyer

7:00 AM - 6:00 PM
ASNR Registration & Help Desk
2nd Floor Lobby

7:30 AM - 8:30 AM
Morning Case Session: Pediatrics (SAM)
Ballroom A/B/C
Moderators: Aylin Tekes-Brady, MD and Milad Yazdani, MD

Presentation #1
Judith Gadde, DO, MBA

Presentation #2
Gilbert Vezina, MD

8:35 AM - 9:35 AM
Keynote Address: AI Special Session
Ballroom A/B/C
Moderators: Christopher Hess, MD, PhD and Ramon Gonzalez, MD, PhD

Fixing Health Care, Powered by Machine Learning
Vivian Lee, MD, PhD, MBA

Fellow in a Box: AI in Radiology and Neuroradiology
R. Nick Bryan, MD, PhD

9:40 AM - 10:30 AM
Clinical Update: iSchemaViewRAPID
Ballroom A/B/C

Recent Advances in Neuroimaging of Acute Stroke
Greg Albers, MD

Panel Discussion: Challenging Stroke Cases
Jeremy J. Heit, MD, PhD
Sameer A. Ansari, MD, PhD
Benjamin Friedrich, MD

10:30 AM - 11:00 AM
Morning Beverage Break
TE Hall

11:00 AM - 12:00 PM
Computer Science/Informatics Programming: Introduction to ML/AI for the Neuroradiologist (SAM)
Ballroom A/B/C
Moderators: Richard Wiggins, MD and Christopher Wood, MD

AJNR’s Role in AI and ML
Christopher Filippi, MD

AI Primer: Nomenclature and Basics of How to Evaluate Algorithms
Alyssa Watanabe, MD

Deep Dive into Deep Learning
Peter Chang, MD

11:00 AM - 12:00 PM
Evidence-Based Medicine Programming: What Is the Evidence? Imaging of Spine Metastases
Room 304/306
Moderators: Peter Kranz, MD and J. Levi Chazen, MD

Diagnostic Imaging to Detect Spine Metastases: What Is the Evidence?
Jeffrey Ross, MD

Imaging Assessment of Treatment Response of Spine Metastasis: What Is the Evidence?
Sasan Karimi, MD

Interventional Procedures for Spine Metastasis: What Is the Evidence?
Jack Jennings, MD, PhD
### Schedule: Annual Meeting

**Tuesday, May 21**

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

**SNIS Programming: Update on NeuroIntervention**

**Room 302**

Moderator: James Rabinov, MD  

- **NeuroIR in the Pediatric Population**
  Darren Orbach, MD, PhD
- **Percutaneous Single-Level Non-Fusion Stabilization: The Future Is Now: SAIF**
  Alessandro Cianfoni, MD
- **Venous Angioplasty and Stenting for Intracranial Idiopathic Hypertension: Indication, Techniques and Results**
  Athos Patsalides, MD

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

**Cerebral Perfusion to Spine Diffusion (Scientific Abstract Session)**

**Room 210**

Moderators: Hemant Parmar, MD and Neel Madan, MD

This session includes the 2018 ASSR Mentor Award Abstract.

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

**Adding Value with Advanced Imaging (Scientific Abstract Session)**

**Room 310**

Moderators: Aryeh Stollman, MD and Sylvie Destain, MD

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

**Glymphatic Imaging and MRI Contrast (Scientific Abstract Session)**

**Room 311**

Moderators: Eliot Siegel, MD and Yen-Chu Huang, MD

**12:00 PM - 1:00 PM**

**Lunch**

**TE Hall**

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

**ASFNR Programming: AI Applications to Neuroradiology**

**Ballroom A/B/C**

Moderators: Yvonne Lui, MD and Julie Price, MD, PhD

- **AI Applications to Ischemic Stroke Imaging**
  Kim Mouridsen, Professor
- **Applications of AI to Brain Tumor Imaging**
  Jayashree Kalpathy-Cramer, PhD
- **Selecting Optimal AI Models for Functional Neuroimage Diagnostics and Analysis**
  Albert Montillo, PhD
- **AI for Brain CT Hemorrhage Detection: Triage, Workflow & Future Directions**
  Michael Lev, MD, FACR, FAHA

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

**Health Policy Programming: Connection: Science and Practice and Health Policy Perspectives (SAM)**

**Room 304/306**

Moderators: Virginia Hill, MD and Melissa Chen, MD

- **Low Back Pain: Data-Driven Efficiency in Imaging and Management**
  Ryan Lee, MD, MBA, MRMD
- **Headache Imaging: Clinical Management Dilemmas and Policy Perspective**
  John Jordan, MD, MPP, FACR
- **Efficient Stroke Imaging: Triage and Management**
  Suresh Mukherji, MD, MBA, FACR
1:00 PM - 2:30 PM

SNIS Programming: Ischemic Stroke Imaging and Intervention

Room 302
Moderators: Yasha Kayan, MD and Guilherme Dabus, MD

- Imaging and Patient Selection in Acute Stroke: What Do We Know?
  Mayank Goyal, MD, FRCPC

- Is There a Best Thrombectomy Technique? Lessons from Multiple Trials
  Mahesh Jayaraman, MD

- Update on Carotid Imaging and Intervention
  Don Heck, MD

- Cerebral Venous Sinus Thrombosis: Imaging and Interventional Results
  Ian Kaminsky, MD

1:00 PM - 2:30 PM

Breaking the Mold in Pediatric Neuroimaging (Scientific Abstract Session)

Room 210
Moderators: Manohar Shroff, MD, FRCPC and Neil Lall, MD

1:00 PM - 2:30 PM

Adult Brain Potpourri 2 (Scientific Abstract Session)

Room 309
Moderators: Geoffrey Young, MD and John Benson, MD

The session contains the 2018 Scholar Award in Neuroradiology Research Abstract: Carotid Intima-Media Thickness Progression and Subclinical Brain Ischemia, Brain Aging, and the Incidence of Dementia: Framingham Study

1:00 PM - 2:30 PM

Aneurysms Interventional (Scientific Abstract Session)

Room 310
Moderators: James Rabinov, MD and Luisa Biscoito, MD

This session contains the 2018 ENRS Award Abstract: Radiogenomic Analysis of Blood-Brain Barrier Disruption in Aneurysmal Subarachnoid Hemorrhage Utilizing CT Perfusion Imaging and Micro RNA Profiling

1:00 PM - 2:30 PM

Let’s Talk Techniques in H&N (Scientific Abstract Session)

Room 311
Moderators: Rebecca Cornelius, MD, FACR and Rihan Khan, MD

This session contains the SENRS Award Abstract: Orphan Lesions of the Head and Neck: Uncommon Non-Thyroid Masses

2:30 PM - 2:55 PM

Afternoon Beverage Break
TE Hall

2:55 PM - 4:25 PM

Computer Science/Informatics Programming: Practical ML and AI Applications

Ballroom A/B/C
Moderators: Alyssa Watanabe, MD and Peter Chang, MD

- Leveraging AI to Improve Neuroradiology
  Richard Wiggins, MD

- Machine Learning Applications to Brain Tumors
  Sam Payabvash, MD

- Advanced Applications of ML/AI in Spine Imaging
  John Go, MD, FACR

- Creating Data Pipelines for ML/AI in Clinical Practice
  Reza Forghani, MD, PhD
2:55 PM - 4:25 PM

**Neuroimaging in the Emergency Department: What You Need to Know!**

*Room 304/306*

Moderators: Luisa Biscoito, MD and Carlos Torres, MD, FRCP

- **Non-Traumatic Neurological Emergencies**
  Rafael Rojas, MD

- **MR in Spinal Trauma: Beyond Spinal Cord Lesions**
  Roy Riascos, MD

- **Imaging of Vascular Injuries of Head and Neck Trauma: The Quiet Threat**
  Javier Romero, MD

- **Stop It! Endovascular Treatment of Vascular Lesions of the Head and Neck**
  Juan Tejada, MD

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2:55 PM - 4:25 PM

**SNIS Programming: Aneurysm Imaging and Therapy**

*Room 302*

Moderators: Reade De Leacy, MBBS and Dheeraj Gandhi, MD

- **MR Vessel Wall Imaging for Intracranial Aneurysms: Ready for Prime Time?**
  Sameer Ansari, MD, PhD

- **Decision-Making in Endovascular Aneurysm Treatment: Which Technique to Use?**
  Aquilla Turk, DO

- **MCA Aneurysms: EVT Is at Least as Good as Clipping!**
  Guilherme Dabus, MD

- **Flow Diverter for Distal Aneurysms**
  Ajit Puri, MD, DM

- **Vertebrobasilar Aneurysms and Flow Diversion: Current Thoughts**
  Christopher Moran, MD

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2:55 PM - 4:25 PM

**Adult Brain and Head and Neck Mixed Session (Scientific Abstract Session)**

*Room 210*

Moderator: Nicholas Koontz, MD

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2:55 PM - 4:25 PM

**Radiomics and Extra-Axial Lesions (Scientific Abstract Session)**

*Room 309*

Moderators: Osamu Sakai, MD, PhD and Karen Buch, MD

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2:55 PM – 4:25 PM

**Innovative Imaging of Anatomy and Pathology (Scientific Abstract Session)**

*Room 310*

Moderator: TBD

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2:55 PM - 4:25 PM

**Keys to Understanding the Developing CNS (Scientific Abstract Session)**

*Room 311*

Moderators: Orit Glenn, MD and Bernadette Koch, MD

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4:30 PM - 6:00 PM

**Education Committee Programming: Neuroradiology Education at Home and Abroad (SAM)**

*Ballroom A/B/C*

Moderators: Joshua Nickerson, MD and Gopi Nayak, MD

- **The ASNR Neuroradiology Curricula Project**
  Ajay Malhotra, MD

- **How to Build a Local Curriculum for Residents**
  Michael Bazylewicz, MD

- **How to Build a Local Curriculum for Fellows**
  Tabassum Kennedy, MD

- **The Anne G. Osborn Outreach Professorship International Teaching Experience**
  Christopher Filippi, MD
  Susan Palasis, MD
  Mark Mullins, MD, PhD
  Joshua Nickerson, MD
4:30 PM - 6:00 PM

**AOSHNR Programming: Future Connected Neuroradiology: Beyond the Current Practice**

**Room 304/306**
Moderators: Wan-Yuo Guo, MD, PhD and Stephen Stuckey, MBBS and Turgut Tali, MD

- **Introduction: About AOSHNR**
  Yukunori Korogi, MD, PhD

- **Radiomics/Radiogenomics in Glioblastoma**
  Arian Lasocki, MBBS(Hons), MMed, FRANZCR

  Mika Kitajima, MD

- **Quantifying Cerebral Hemodynamics: From Diagnostic to Intervention**
  Chung-Jung Lin, MD

- **Theragnostics: Advances of Theragnostic Nanoparticle Application for Neurological Diseases**
  Roh-Eul Yoo, MD

4:30 PM - 6:00 PM

**Evidence-Based Medicine Programming: Artificial Intelligence and Machine Learning in Neuroradiology - Where’s the Evidence?**

**Room 302**
Moderators: Ajay Gupta, MD and Yoshimi Anzai, MD, MPH

- **AI/ML Application for Diagnostic Accuracy and Efficiency**
  Gregory Zaharchuk, MD, PhD

- **AI/ML Application in Improvement of Workflow Radiology and Report Standardization**
  Falgun Chokshi, MD, MS

- **How to Generate Evidence for Practice: Designing AI/ML Research Studies**
  Yvonne Lui, MD
WEDNESDAY, MAY 22, 2019

7:00 AM - 7:30 AM
ASNRE Annual Business Meeting
Room 302

7:00 AM - 8:30 AM
Breakfast
Boylston Foyer

7:00 AM - 6:00 PM
ASNRE Registration & Help Desk
2nd Floor Lobby

7:30 AM - 8:30 AM
Morning Case Session: Spine & Interventional (SAM)
Ballroom A/B/C
Moderators: Sandra Rincon, MD and Wende Gibbs, MD, MS

     Speakers:
     Spine:
     Jennifer McCarty, MD
     Interventional:
     Ferdinand Hui, MD

8:35 AM - 9:35 AM
Special Plenary Session: What Lurks Beyond the Neural Foramina?
Ballroom A/B/C
Moderators: Chip Truwit, MD, FACR and Anne G. Osborn, MD

     Important Incidental Findings in the Abdomen and Pelvis
     Paula Woodward, MD
     Important Incidental Findings in the Chest
     Gopal Punjabi, MD
     How to Handle Incidental Findings During Spine Imaging
     Chip Truwit, MD, FACR

9:40 AM - 10:30 AM
Clinical Update: Siemens-Healthineers
TE Hall
Ballroom A/B/C

     Improving Timely Access to Mechanical Thrombectomy: First Experiences with a Biplane System Located Directly in the Emergency Room
     Ryan A. McTaggart, MD, Associate Professor Diagnostic Imaging (Clinical), Warren Alpert Medical School of Brown University

10:30 AM - 11:00 AM
Morning Beverage Break
TE Hall

11:00 AM - 12:00 PM
ASHNR Programming: Errors in Head and Neck Imaging (SAM)
Ballroom A/B/C
Moderators: C. Douglas Phillips, MD, FACR and Tabassum Kennedy, MD

     The How and Why of Misses and Misinterpretations in Head and Neck Imaging
     Christine Glastonbury, MBBS
     Adult Head and Neck Cases “Lessons Learnt”
     Philip Chapman, MD
     Pediatric Head and Neck Cases “Lessons Learnt”
     Caroline Robson, MBChB

11:00 AM - 12:00 PM
ASSR Programming: Spine Boot Camp
Room 304/306
Moderator: Jennifer McCarty, MD

     Trauma
     Carlos Torres, MD, FRCPC
     Degenerative Disease
     Lubdha Shah, MD
     Tumors
     Johan Van Goethem, MD, PhD
     Infectious and Inflammatory Disorders
     John Go, MD, FACR
11:00 AM - 12:00 PM
Health Policy Programming: Measuring Quality and Cost of the Neuroradiologist
Room 302
Moderators: Gordon Sze, MD, FACR and Ryan Lee, MD, MBA, MRMD

- Measuring a Neuroradiologist’s Quality
  Ari Blitz, MD
- Creating High-Quality Cost and Quality Measures for the QPP
  David Seidenwurm, MD, FACR

11:00 AM - 12:00 PM
Pediatrics Potpourri Topics (Scientific Abstract Session)
Room 210
Moderators: David Nascene, MD and Gaurang Shah, MD

11:00 AM - 12:00 PM
Imaging of Neurodegenerative Diseases and Aging (Scientific Abstract Session)
Room 310
Moderator: Stuart Pomerantz, MD

This session contains the 2018 Wilson Award Presentation: Wilson Award Presentation: The Effect of Voxel Position and Tissue Composition on the Level of Brain Metabolites in PET-Guided MR Spectroscopy in Alzheimer’s Disease

11:00 AM - 12:00 PM
Adult Brain: Stroke (Scientific Abstract Session)
Room 311
Moderators: Sathish Kumar Dundamadappa, MBBS and Jeffrey Guenette, MD

12:00 PM - 1:00 PM
Lunch
TE Hall

1:00 PM - 2:30 PM
ESNR-ASNR Joint Session: Connection and the Connectome Outside the Adult Brain
Ballroom A/B/C
Moderators: Johan Van Goethem, MD, PhD and Pia Maly Sundgren, MD, PhD

- Spine Boot Camp
  Johan Van Goethem, MD, PhD
- The Connectome, an Overview of Pediatric Brain Connections in Health and Disease
  Domenico Tortora, MD, PhD
- Pattern Recognition in Spinal Medullary Lesions: Lost Connection between the Brain and the Body
  Majda Thurnher, MD
- Sensory Cranial Nerve Lesions: Lost Connection to the Outside World
  Paul Parizel, MD, PhD

1:00 PM - 2:30 PM
Study Group: Vessel Wall Imaging
Room 304/306
Moderators: Bruce Wasserman, MD and David Saloner, PhD

- An Approach to a Retrospective Analysis of Vessel Wall Imaging in Application to Intracranial Aneurysms
  Charles Matouk, MD
- Management of Intracranial Aneurysms: Potential Role for VWI
  David Saloner, PhD
- Considerations for a Multicenter Study: VWI in Assessing Evolution of Untreated Intracranial Aneurysms
  Ye Qiao, MS, PhD
- Differences and Standardization of Vessel Wall Imaging Across Vendors and Platforms
  Julia Patriarche, PhD, A.I. Analysis, Inc.
1:00 PM - 2:30 PM

Young Professionals Programming: Wellness
**Room 302**
Moderators: Maria Gule-Monroe, MD and Puneet Belani, MD

- **Wellness Strategies for Your Radiology Career**
  Erin Simon Schwartz, MD, FACR

- **Balancing Vulnerability and Professionalism: Learning from Challenges in Early Career Radiology**
  Christine Glastonbury, MBBS

- **Resilience and Well-Being: Building a Foundation of Sustainable Success**
  Nicholas Beamon

2:30 PM - 2:55 PM

Afternoon Beverage Break
**TE Hall**

2:55 PM - 4:25 PM

**ASHNR Programming: Applied Anatomy & What the Surgeon Needs to Know**
**Ballroom A/B/C**
Moderators: Amy Juliano, MD and John Lane, MD

- **Pre-Operative Imaging in Sinonasal Inflammatory Disease: Key Anatomy**
  Ilona Schmalfuss, MD

- **Pre-Operative Imaging in Sinonasal Tumors: Key Anatomy**
  Deborah Shatzkes, MD

- **Pre-Operative Temporal Bone Imaging: Key Anatomy**
  Amy Juliano, MD

- **T-Bone Surgery: Post-Operative Complications; What the Radiologist Needs to Know**
  Dennis Poe, MD

1:00 PM - 2:30 PM

**Spine Excerpta (Scientific Abstract Session)**
**Room 210**
Moderator: Troy Hutchins, MD

1:00 PM - 2:30 PM

**Trauma Neuroimaging (Scientific Abstract Session)**
**Room 309**
Moderators: Christopher Whitlow, MD, PhD, MHA and Esther Yuh, MD, PhD

1:00 PM - 2:30 PM

**Head and Neck Potpourri Topics (Scientific Abstract Session)**
**Room 310**
Moderators: Kristen Baugnon, MD and Paul Bunch, MD

1:00 PM - 2:30 PM

**Tackling Tumors of the Pediatric CNS (Scientific Abstract Session)**
**Room 311**
Moderators: Aaron McAllister, MS, MD and Bernadette Koch, MD

2:55 PM – 4:25 PM

**ASSR Programming: Spine Interventions 2019: An Update**
**Room 304/306**
Moderator: John Go, MD

- **Optimizing Imaging before Intervention**
  Amish Doshi, MD

- **Evidence-Based Intervention**
  John D. Barr, MD, FACR, FSIR, FAHA

- **Post-Intervention Imaging: The Expected and the Unexpected**
  Richard Silbergleit, MD

- **New Techniques on the Horizon**
  Dan Nguyen, MD

- **Controversies in Spine Intervention**
  Bassem A. Georgy, MD

- **Regenerative Medicine: The Hype, The Science**
  Blake Arnold Johnson, MD, FACR
2:55 PM – 4:25 PM
CSF Study Group: MRI as a Powerful Tool for Neurophysiology
Room 302
Moderator: James P. (Pat) McAllister, PhD
- In Vivo Quantification of Cardiac-Driven Brain Tissue Strain
  Soroush Pahlavian, MS
- MR Elastography: State-of-the-Art
  Ingolf Sack, PhD
- Brain Hyperemia in Abnormalities of ICP and CSF
  Grant Bateman, MD
- CSF Flow in Chiari I Malformations
  Rafeeqeque Bhadelia, MD
- MR Elastography in Children
  Mark Wagshul, PhD

2:55 PM - 4:25 PM
Stroke (Scientific Abstract Session)
Room 210
Moderators: Daniel Barboriak, MD and Jared Narvid, MD

2:55 PM - 4:25 PM
Neurovascular Imaging Adult Brain (Scientific Abstract Session)
Room 309
Moderators: Bruce Wasserman, MD and Vance Lehman, MD

2:55 PM - 4:25 PM
Brain Tumors: Post-Treatment Imaging (Scientific Abstract Session)
Room 310
Moderators: Timothy Kaufmann, MD and Jennifer Nathan, MD

2:55 PM - 4:25 PM
The Fast and the Curious: Pediatric CNS Diseases (Scientific Abstract Session)
Room 311
Moderators: Jill Hunter, MD and Francisco Perez, MD, PhD

4:30 PM - 6:00 PM
ASHNR Programming: Evidence-Based Head and Neck Cancer Imaging
Ballroom A/B/C
Moderators: Karen Salzman, MD and Ashok Srinivasan, MD
- Pre-Treatment Imaging in Head and Neck Cancer: Doing Our Best for Every Patient
  Lawrence Ginsberg, MD
- Peri-natal Tumor Spread
  Hilda Stambuk, MD
- Imaging Surveillance After Treatment for HN CA: ACR NI-RADS Recommendations
  Ashley Aiken, MD

4:30 PM – 6:00 PM
ASSR Programming: Spine Diagnostic
Room 304/306
Moderator: Meng Law, MD MBBS, FRACR
- Minimizing Artifacts and Optimizing Imaging With Implants
  Lawrence N. Tanenbaum, MD
- Advances in Spine Tumor Imaging
  Wende N. Gibbs, MD, MS
- Spinal Cord Imaging Update
  Eric D. Schwartz, MD
- CTA and MRA: Optimizing Your Imaging
  Michele H. Johnson, MD
- Nomenclature and Common Data Elements
  Adam E. Flanders, MD
- Advances in MR Imaging of the Spine
  Meng Law, MD, MBBS, FRACR
4:30 PM - 6:00 PM

Health Policy Programming: Economics
Room 302
Moderators: William D. Donovan, MD, MPH, FACR and David B. Hackney, MD, FACR

- **Fracking Health Care**
  William Sage, MD

- **RUC/CPT Update**
  Raymond K. Tu, MD, FCR

- **QPP Update Year Three**
  Melissa Chen, MD

4:30 PM - 6:00 PM

New MR Imaging Techniques
(Scientific Abstract Session)
Room 210
Moderators: Raag Airan, MD, PhD and David Black, MD

4:30 PM – 6:00 PM

MRI of Neurovascular Diseases
(Scientific Abstract Session)
Room 310
Moderators: Jian Yi Li, MD and Leo P. Sugrue, MD, PhD

4:30 PM – 6:00 PM

Epilepsy and Neuropsychiatric
(Scientific Abstract Session)
Room 311
Moderators: Geoffrey S. Young, MD and Salil Soman, MD, MS
THURSDAY, MAY 23, 2019

7:00 AM - 8:30 AM
Breakfast
Boylston Foyer

7:00 AM - 12:00 PM
ASNR Registration & Help Desk
2nd Floor Lobby

8:30 AM - 9:15 AM
Morning Case Session: Head and Neck (SAM)
Ballroom A/B/C
Moderators: Hillary Kelly, MD and Mai-Lan Ho, MD
- Adult Head and Neck Cases
  Nancy Fischbein, MD
- Pediatric Head and Neck Cases
  Karen Moeller, MD

9:30 AM - 10:30 AM
Health Policy Analytics
Room 304/306
Moderators: Gaurang Shah, MD and Neil Lall, MD
- Changing Characteristics of Inpatient Hospital Stays and Associated Neuroimaging in Brain Cancer Patients
  Gracie Tewkesbury
- Clinical Impact of Emergent Total Spine MRI Scans Performed at a Major Academic Medical Center
  Aamir Ali, MD
  Hardik Valand, Hon. B.Sc
- Disproportionate National Contributions to Subspecialties of Neuroradiology
  Sahra Emamzadeh-Fard, MD, MPH
- Standardization of Imaging Strategies in Acute Stroke Care: A Cost-Effectiveness Approach
  Gabriela Martinez, PhD

9:30 AM - 10:30 AM
CSF Study Group: Intracranial Hypotension: Diagnosis and Management
Room 302
Moderators: Ari Blitz, MD and James Holsapple, MD
  Fluid-Structure Interaction in the Cerebral Venous Circulation
  Thomas Heldt, PhD
  High Resolution 3D Skull Base MRI for Detection of CSF Leakage from the Cranium
  Ari Blitz, MD
  Percutaneous Diagnostic and Therapeutic Measures for Spinal CSF Leaks
  Linda Leithe, MD
  Imaging Algorithm for the Diagnosis and Treatment of Intracranial Hypotension
  Abdul Khan, MD

9:30 AM - 10:30 AM
Vascular Malformations and Embolization (Scientific Abstract Session)
Room 210
Moderators: Juan Tejada, MD and Yasha Kayan, MD

9:30 AM - 10:30 AM
Head and Neck Potpourri Topics 2 (Scientific Abstract Session)
Room 309
Moderators: Michelle Peterson, MBBS and Karen Moeller, MD

9:30 AM - 10:30 AM
Adult Brain Excerpta 2 (Scientific Abstract Session)
Room 310
Moderator: Ashley Kalor, MD

9:30 AM - 10:30 AM
Temporal Bone Hour (Scientific Abstract Session)
Room 311
Moderators: Mary Cunnane, MD and Nicholas Koontz, MD
10:30 AM - 10:45 AM
Morning Beverage Break
Boylston Foyer

10:45 AM - 12:15 PM
Study Group: Clinical Translation of Functional and Diffusion MRI
Room 304/306
Moderators: Christopher Whitlow, MD, PhD, MHA and Thomas Druzgal, MD, PhD

- Barriers to Clinical Translation of Advanced Diffusion MRI
  Sumit Niogi, MD, PhD

- Barriers to Clinical Translation of Resting-State BOLD fMRI
  Haris Sair, MD

- Clinical Translation of Advanced Diffusion and Functional MRI: Industry Perspective
  Keith Heberlein, PhD

10:45 AM - 12:15 PM
CSF Study Group: Hydrocephalus in Children and Adults
Room 302
Moderators: Harold (Hal) Rekate, MD and Aristotelis Filippidis, MD, PhD

- Perspectives On Management of Infantile Hydrocephalus
  Benjamin Warf

- Animal Models of Pediatric and Adult Hydrocephalus for Neuroimaging
  James P. (Pat) McAllister, PhD

- Imaging of Pediatric Hydrocephalus and Its Mimics
  Leonardo Macedo, MD

- Perspectives in Adult Hydrocephalus
  Mark Luciano, MD, PhD

- A Proposal for Preventing Shunt Dependence in Infantile Hydrocephalus
  Harold (Hal) Rekate, MD

10:45 AM - 12:15 PM
Study Group: Imaging Genomics
Room 210
Moderators: Whitney Pope, MD, PhD and Rivka Colen, MD

- Machine and Deep Learning in Radiomics: Connecting the Web of Big Data
  Peter Chang, MD

- Radiomics and Radiogenomics in Brain Metastasis and Primary Brain Cancer: Connecting the Web of Imaging and Genomic Networks
  Rivka Colen, MD

- Radiomics and Radiogenomics in Pediatric Tumors: Connecting the Radiogenomic Web in Pediatric Tumors
  Kristen Yeom, MD

10:45 AM - 12:15 PM
Data Crunching, Pretty (and Pretty Useful) Pics in H&N (Scientific Abstract Session)
Room 309
Moderators: Blaise Jones, MD and Paul Bunch, MD

10:45 AM - 12:15 PM
Study Group: Artificial Intelligence
Room 311
Moderator: TBD

10:45 AM – 12:15 PM
Adult Brain Excerpta 3 (Scientific Abstract Session)
Room 310
Moderators: Bing Wang, MD and Francisco Sepulveda, MD

12:15 PM
Meeting Adjourns
MONDAY, MAY 20, 2019

11:00 AM - 12:00 PM

Neuroinflammatory Diseases: Adult Brain
Room 210
Abnormal Brain FDG PET Findings in Post-Treatment Lyme Disease Syndrome
Automated Segmentation in Multiple Sclerosis: Clinical Imaging Completion by 3D Volumetry
Common and Uncommon Imaging Findings in Neuromyelitis Optica: A Retrospective Review
Fluorescence Molecular Imaging of Myeloperoxidase in Bacterial Cerebritis
Measurement of ADC Values to Differentiate Tumefactive Active Demyelinating Lesions from Primary CNS Lymphoma and Glioblastoma
Temporal Evolution of DWI and Gadolinium Enhancement in Balo’s Variant of Multiple Sclerosis Suggests a Cytotoxic Oligodendrocytopathy Preceding Blood-Brain Barrier Breakdown in Acute Demyelination
Tumefactive Primary Central Nervous System Vasculitis: MRI Findings of a Rare and Underrecognized Neuroinflammatory Disease

AI/Faster Scans, Less Contrast, Better Diagnoses?
Room 310
10x Reduction of Gadolinium Dosage in Clinical Contrast-Enhanced Brain MRI Using Deep Learning
3x Acceleration of Clinical Brain and Spine MRI Using Deep Learning and Generative Adversarial Network
A Generalizable Deep Learning Network for Imaging Neuropathology with Ultra-Low-Dose PET/MRI
Artificial Intelligence-Based Clinical Diagnostic Decision Support System in Neuroradiology
Contrast-Free MRI Contrast Enhancement with Deep Learning
Creating Realistic T1-Weighted Magnetic Resonance Images from Diffusion-Weighted Acquisitions Using a Generative Adversarial Network
Deep Learning Enables High-Quality One-Minute EPIMix Brain MRI Scans
DIR and FLAIR Correlate of Gadolinium-Enhancing Lesions in Multiple Sclerosis: Is Contrast Needed for Follow-Up MRI?
Fully Automated Diagnosis in Neuroradiology: Combining Deep Learning and Bayesian Networks

Practice & Training Issues
Room 311
Comparative Effectiveness Research Award: Systems of Care: Simulating Care Delivery and Patient-Centered Health Outcomes in Acute Ischemic Stroke
Accuracy of On-Call Residents’ Interpretation of Spinal Cord and Cauda Equina Compression
An Economic Implication: Variation in Brain MRI Interpretation Time Based on Practice Setting
Critical Care Radiology Shift Simulation: A Neuroradiology Educational Assessment Tool
Effectiveness of Prophylactic Strategies in Preventing Acute Allergic-Like Reactions to Gadolinium-Based Contrast Agents in Patients with a History of Reaction
Out with the Old and in with the New: Streamlining, Modernizing and Automating Radiology Scheduling in a Large Academic Medical Center
Productivity Data of First-Year Neuroradiology Fellows at a Large Academic Institution
What Are Neuroradiology Ordering Practices from the Emergency Department at an Academic Tertiary Referral Center

1:00 PM - 2:30 PM

AI/Advanced Imaging in Vascular Disease and Tumors
Room 210
Assessment of Global and Regional Difference of Resting-State Cerebral Vascular Reactivity Index in Patient with Brain Tumor
Automated Detection and Segmentation of Brain Metastases Using Deep-Learning Neural-Networks Utilizing Multimodal MRI
Automated Detection of Acute Infarction in Multiparametric Brain MRI Using an Artificial Intelligence 3D Pipeline
Clinical Feasibility of Multiband Diffusion Tensor Imaging (DTI) Using Simultaneous Multislice Acquisition for Presurgical Planning: Comparisons with Standard DTI in Patients with Brain Tumor

Deep Learning-Based Imaging Classifier for Improving Differential Diagnosis between Primary and Metastatic Brain Tumors with Highly Overlapping MRI Morphologies

Determining Whether Susceptibility-Weighted Imaging (SWI) Is Useful in Improving the Accuracy of DSC-MRI Parameters in Low-Grade Glioma

Early Detection of Malignant Transformation in Non-Enhancing Low-Grade Gliomas Using Multiparametric MRI

Evaluation of AI-Powered Identification of LVOs in a Comprehensive Stroke Center

Overall Survival Prediction of High-Grade Glioma Based on Deep Transfer Learning in Combination with Radiomics Features

Real-World Performance of Deep Learning-Based System for Intracranial Hemorrhage Detection

Resting-State Functional Connectivity of the Supplementary Motor Area to Motor and Language Networks in Patients with Brain Tumors

**Adult Brain Excerpta 1**

**Room 309**

Anaplastic Meningioma Associated with Leptomeningeal Carcinomatosis

A Precise Comparison of Heterogeneous Pathological Features of Glioblastoma at Autopsy with T1 Subtraction Maps

Atypical Presentation of Medulloblastoma

Ferumoxytol: A Potential Neuroimaging Pitfall

Lymphoma with Incomplete Ring Enhancement Mimicking Demyelination

Persistence of Gadolinium in a Patient with Chronic Kidney Disease – Imaging Appearance of a Potential Diagnostic Pitfall

Pilocytic Astrocytoma Manifesting as a Cystic Mass of the Third Ventricle

Pre-Operative Diagnosis of Suprasellar Hemangioblastoma in a Patient without VHL Disease

Primary Intracranial Leiomyosarcoma in an Immunocompetent, EBV-Negative Patient

Primary CNS Lymphoma Presenting as Enhancing Cortical Ribboning and Hemorrhage: Lessons from Atypical Presentation of a Usual Suspect

Pseudoresponse of Non-Small Cell Lung Cancer Brain Metastases to Corticosteroid Therapy

Septum Pellucidum Malignant Germinoma - A Rare Case Report

Trigeminocardiac Reflex during Onyx Embolization of a Posterior Fossa Hemangioblastoma

Unusual Presentation and Imaging Findings of a Rare Supratentorial Neurenteric Cyst

**Adult Brain Potpourri Topics 1**

**Room 310**

A Case Report on Intracranial Metastasizing Pleomorphic Adenoma from Parotid Gland

Brain Tumor Reporting and Data Systems (BT-RADS): Novel Structured Template for More Reliable Reporting of Brain Tumors

Computed Tomography Perfusion Can Predict In-Hospital Mortality in Patients with Severe Traumatic Brain Injury at Hospital Presentation - A Pilot Study

Contrast Staining on Post-Thrombectomy Dual-Energy CT in MTICI 2B and 3 Reperfusion Predicts Post-Procedural Intracerebral Hemorrhage

Does Variant Anatomy Affect Normal RAPID Posterior Circulation CT Perfusion?

Evaluation of 3D-FatNav-Based Motion Correction in the Clinical Setting of Patients with Brain Tumors

Highly Accelerated 3D T1-Weighted SPACE for Rapid Intracranial Vessel Wall Imaging Using Wave-CAIPI: Implementation and SNR Considerations

Olfactory Neuroblastoma (Esthesioneuroblastoma): Variable Imaging Features

Pointwise Encoding Time Reduction with Radial Acquisition (PETRA) in the Follow-Up after Stent-Assisted Coil Embolization for Anterior Circulation Aneurysms

Spindle Cell Oncocytoma of the Pituitary Gland: An Oddball with a Twist

The Atypical “Diving” Lesion: Congenitally Dilated Imperforate Submandibular Duct

Utility of CT Angiography (CTA) for Evaluation of Acute Vision Loss from Emergency Department
CT Imaging in Stroke Room 311

- Dual-Energy CT Iodine Map ASPECTS in Acute Ischemic Stroke Setting
- Accuracy of CT Perfusion-Defined Core in Large Vessel Occlusion Ischemic Strokes: A Stroke Registry Real-World Experience
- Achieving Comparable Perfusion Results across Vendors: The Next Step in Standardizing Stroke Care
- Dual-Energy Computed Tomography (DECT) Evaluation of Dense Intracranial Artery Sign
- Iodine Staining on Post-Thrombectomy Dual-Energy Head CT: What Is the Fate of the Iodine-Stained Tissue?
- Changes in Automatically Thresholded CT Perfusion Volumes with Alterations in CT Perfusion Technique
- Low-Dose Computed Tomographic Angiography (CTA) for Evaluation of Cerebral Vasculature
- Maximum Intensity Projections from CTA Are a Better Predictor of Final Infarct Volume on MRI than CT Perfusion
- Outcome in Patients with Contrast Staining after Endovascular Treatment for Acute Ischemic Stroke
- Portable CT Head Exams May Overestimate Findings of Cerebral Edema in Neurosurgical ICU Patients
- Reconstruction of Perfusion CT Data in Acute Stroke Demonstrates High Diagnostic Yield for MCA M2 Occlusions
- Initial Experience in the Analysis of Acute Stroke Utilizing RAPIDTM at a Major Stroke Center

DeepSPINE: AI-Enhanced Lumbar Spine MRI Interpretation & Reporting
Diagnostic Utility of 68-Gallium-DOTATATE PET in the Diagnosis and Management of Somatostatin Receptor-Positive CNS Tumors
High-Resolution Whole-Brain ASL Perfusion Using Cartesian FSE and Compressed Sensing
Machine Learning Predicts Acuity of Compression Fracture on CT
Prediction of Chronological Age from Intracranial Time-of-Flight Magnetic Resonance Angiography Images by Deep Convolutional Neural Network
SpineCloud: Image Analytics for Predictive Modeling of Spine Surgery Outcomes
Temporal Hypometabolism in Athletes with Head Trauma: A Pilot FDG-PET/MRI Study
Using Deep Learning to Predict Age from CT Brains

Diagnostic Imaging of Brain Tumors for Characterization and Differentiation Room 309

- “T2 FLAIR Mismatch” Sign and Radiomics in Lower-Grade Gliomas
- Amide Proton Transfer-Weighted (APTw) Imaging Improves the Pre-Surgical Radiological Accuracy for Final Diagnosis in Brain Tumors
- Apparent Diffusion Coefficient Improves the Prediction of Low-Grade Glioma Subtype, IDH-Mutant with No 1p19q Codeletion: Added Value to the T2/FLAIR Mismatch Sign
- Correlation of rCBV with Established and Novel Genomic Markers in Gliomas
- Detection of Brain Metastases: Comparison of DANTE-Prepared 3D T1-Weighted TSE and 3D MP-RAGE Sequences
- Development and Evaluation of a Matlab-Based Toolbox for Calculation of the Percentage of Signal Recovery (PSR) from Dynamic Susceptibility Contrast MR Perfusion Sequences (DSC-MR) for Classification of High-Grade Intra-Axial Brain Lesions
- False-Positive Measurement on 2-Hydroxyglutarate Magnetic Resonance Spectroscopy in Isocitrate Dehydrogenase Wild-Type Glioblastoma: A Multifactorial Analysis
- Influence of First-Pass Leakage Correction on Cerebral Blood Flow in Glioma Grading Using T1-Perfusion MRI

AI/Advanced Imaging in Preoperative Planning and Beyond Room 210

- Age-Related Microstructural Alterations in the Corpus Callosum Measured by High-Gradient Diffusion MRI
- Bayesian Networks to Aid Spine MRI Interpretation
- Cross-Institutional Generalizability of a Deep Learning Model for Automated Stenosis Grading of Lumbar Spine MRI
- Data Set Assembly

Temporal Hypometabolism in Athletes with Head Trauma: A Pilot FDG-PET/MRI Study
Using Deep Learning to Predict Age from CT Brains
Vascular Malformations
Room 311
A Frequent Yet Unreported Dural Venous Sinus Draining into the Transverse Sinus
An Update on Screening for Intracranial Aneurysms in Patients with Thoracic Aortic Aneurysms
Arterial Spin-Labeling Versus Digital Subtraction Angiography in Differentiating Developmental and Transitional Venous Anomalies in Symptomatic Patients
Carotid-Cavernous Fistula: Normal and Pathologic Appearance of the Cavernous Sinus on Computed Tomography Angiography
Connecting the Metameres: Facial Venous Malformations and Intracranial Developmental Venous Anomalies
Cost-Effectiveness of CT Angiography in Management of Tiny UIAs
Ganglionic Eminence Abnormalities in Fetal Hydrocephalus
MR Characteristics of Unruptured Intracranial AVMs Associated with Seizure as Initial Clinical Presentation
Quantification of Hemodynamics of Cerebral Arteriovenous Malformations after Stereotactic Radiosurgery Using 4D Flow MRI
Risk of Radiation-Induced Cancer from CT Angiography Use in Imaging Surveillance for Unruptured Cerebral Aneurysms
Seeing an Opening: Features of Vertebral Artery Fenestration
Utility of Routine Brain MRI Sequences in Differentiating Transverse Dural Sinus Hypoplasia from Thrombosis on Non-Contrast MRV
Wall Shear Stress Patterns and Flow Morphology for Risk Stratification of Intracranial Aneurysms Assessed Using High-Resolution 4D Flow MRA

4:30 PM - 6:00 PM

AI/Advanced Imaging in the Spine and Brain
Room 210
A 3D-Printed Apparatus of the Ventricular and Cisternal System: Color Coded Using Light Sources
Brain Extraction Method for Multi-Institutional FLAIR MRI
Common Data Elements (CDE) Reporting Quality Assurance Initiative for MRI Pituitary Macroadenoma Prior to Implementing ASNR-ACR-RSNA Templates/Macros

Convergent Structural Alterations to White Matter and Neurite Density across Multiple Genetic Models of Schizophrenia and Autism Spectrum Disorder

Diffusion MRI Connectome Subnetworks in 16p11.2 Deletion Syndrome Reveal Differential Structural White-Matter Alterations

Functional MRI Study of Language Organization in Left-Handed and Right-Handed Trilingual Subjects

Higher Temporal Resolution Multiband fMRI Provides Improved Presurgical Language Maps

Identifying Language Laterality via Functional Connectomes

Increasing MRI Safety for Patients with Implanted Medical Devices: Comparisons of a 0.5T Head-Only MRI with 1.5T and 3T

Prolonged Microgravity Affects Human Brain Structure and Cognition

Unexpected Clinical Outcomes after Deep Brain Stimulation for Essential Tremor: When Established Targeting Methods Fail

Machine Learning, Automated Processing and Lesion Segmentation Brain Applications

Room 309

A Deep Learning Pipeline for Automated Brain Tumor Segmentation

A Quasi-Conformal Mapping-Based Data Augmentation Technique for Improving Deep Learning Techniques on Brain Tumor Segmentation

Amygdala Volume in Pulmonary Hypertension: A Pilot Study Comparing with Human Connectome Project Normative Population

Application of Machine Learning-Based Iterative Image Reconstruction Algorithms for MRI Scan Time Reduction in Brain and Spine

Automated Versus Manual Imaging Assessment of Early Ischemic Changes in Acute Stroke - Comparison of 2 Software Packages and Expert Consensus

Automated ASPECTS vs. Conventional ASPECTS in Acute Ischemic Stroke: A Comparative Analysis with CBV-ASPECTS

Comparative Study of Human Observations and Machine Learning in the Differentiation of Biopsy-Proven Pseudoprogression and True Progression in High-Grade Gliomas

Deep Learning for Ischemic Core Prediction with CT Perfusion

Detecting Brain Metastases on MRI Using a Combined Deep Learning and Support Vector Machine Approach

Fully Automated CT-Based Prediction of pc-ASPECTS in Patients with Basilar Artery Occlusion

Reliable Automated Segmentation of Meningiomas Using a Specially Adapted Deep Learning Model on Multiparametric MRI

Tumorous and Non-Tumorous Acute Intracerebral Hemorrhage in CT Brain Scans: Machine Learning-Based Prediction of Dignity Using Radiomic Image Feature

Stroke: Technical Outcomes

Room 310

Beyond the First Pass: Revascularization Remains Critical in Stroke Thrombectomy

Clinical Implementation of Fast Markerless Motion Correction in K-Space of Structural 3D MR-Images of the Brain

Effect of Endovascular Revascularization on Neutrophil-Lymphocyte ratio and Its Relationship to 90 Days Clinical Outcome

Histological Clot Composition is Associated with Pre-Interventional Clot Migration in Acute Stroke Patients

Impact of Vascular Anatomy on Clinical and Radiological Outcome of Endovascular Treatment of Acute Ischemic Stroke Patients

Intraprocedural Time Accounts for Majority of Door to Reperfusion Time During Endovascular Thrombectomy

Live Streaming Technology in the Angiography Suite: Description of a Setup to Remotely Supervise and Instruct Thrombectomy

Predictors of Hemorrhagic Transformation after Successful Endovascular Recanalization of Acute Ischemic Stroke

Relationship Between Device Type and Duration of Endovascular Thrombectomy is Influenced by Physician Device Preferences
Supervision and Training of Thrombectomy by Remote Real Time Streaming Support: A Randomized Comparison Using Simulated Interventions

Neuroimaging in Brain Tumor Prognostication
Room 311
2-Hydroxyglutarate/Lactate Ratio as a Biomarker Using 2-Hydroxyglutarate MR Spectroscopy: Improved Prediction of IDH Mutation Status in Glioma with Necrosis
Using Brain Tumor MRI Structured Reporting to Quantify the Impact of Brain Tumor Board
A Prospective Trial of Texture Analyses of Contrast-Enhanced T1-Weighted MRI and Dynamic Contrast-Enhanced MRI Perfusion to Predict Survival in Patients with Suspected Pseudoprogression
A UK Survey of Neuro-Oncology Imaging Practices in the Management of Glioblastoma
Lower-Grade Diffuse Gliomas: Diagnostic and Prognostic Value of 500 Gene Panel Assay and Associated Imaging Phenotypes
MRI-Derived Radiomics Features Predict STAT3 Expression in GBM and Indicates Survival
Perfusion Permeability Mismatch: A New Prognostic Factor for Glioblastoma, but Not Useful in Lymphoma
Texture Analysis to Predict Survival in Patients with Glioblastomas Receiving Immunotherapy
The Hemodynamic Evaluation of Arterial Spin-Labeling and Dynamic Susceptibility Contrast Perfusion-Weighted Imaging in Patients with Malignant Brain Tumors
Tumor Genetics and Ventricular Contact as Predictors of Progression and Survival in WHO Grade II and III Gliomas
Tumor Histogram Analysis with Co-Registered Diffusing-Weighted and T1
Post-Contrast MRI in Primary Central Nervous System Lymphoma Predicts Tumor Biomarkers and Outcome
Volumetric Analysis of Post-Operative Residual MR Enhancement in Glioblastoma as a Predictor of Time to Death and Time to Recurrence

TUESDAY, MAY 21, 2019

11:00 AM - 12:00 PM

Cerebral Perfusion to Spine Diffusion
Room 210
Award Presentation: It Is SAIF! Pilot Study of Stent-Screw-Assisted Internal Fixation (SAIF) Technique for Treatment of Osteo, Interventional
ASL Perfusion Abnormalities on Acute MR Imaging Following Focal-Onset Pediatric Seizures
Can SWI Determine Brain Oxygen Saturation in Neonates with Congenital Heart Disease?
Deep Medullary Venous Thrombosis in Neonates Correlates Highly with Development of Shunt-Dependent Hydrocephalus
Imaging Cerebral Focal Increase of Deoxygenation in Pediatric Patients with Migraine with Aura
MR Vessel Wall Imaging in Pediatric Arterial Stroke Due to Focal Cerebral Arteriopathy
Spinal Cord Lesions in Mitochondrial Disorders

Adding Value with Advanced Imaging
Room 310
Added Value of Diffusion-Weighted Imaging in Magnetic Resonance Imaging of the Lumbar Spine
Can T2 SPACE Differentiate Active Lesions of Multiple Sclerosis in the Spinal Cord from Chronic Lesions?
Shoulder Artifact Reduction on Cervical Spine CT: Is There a Role for DECT?
Spinal Cord Perfusion MR Imaging Implicates Ischemia and Hypoxia in Cervical Spondylotic Myelopathy
Spinal Metastases from Neuroendocrine Neoplasm: Imaging Detection and Characterization with Simultaneously Acquired Ga-68 DOTATATE PET-MR
T1-Weighted Dynamic Contrast-Enhanced MR Perfusion Imaging Correlates with Histopathology Findings: A Noninvasive Approach to Assess Malignancy in Spine
**Glymphatic Imaging and MRI Contrast**

**Room 311**

Brain Core Temperature of Patients before and after Orthotopic Liver Transplantation Assessed by DWI-Thermometry

Characterization of Perivascular Spaces in Healthy Subjects

Dose-Finding Study of Gadopiclenol, a New Macrocyclic Gadolinium-Based Contrast Agent, in MRI of the Central Nervous System

Glymphatic Pathway of Gadolinium-Based Contrast Agents through the Brain: Overlooked and Misinterpreted

Methemoglobinemia Mimics Contrast Enhancement on T1-Weighted Sequences and Represents a Potential Alternative to Gadolinium

Multishell, Multidirection Diffusion Imaging as a Biomarker of Parenchymal Glymphatic Flow.

Perivascular Spaces - a Marker of Atrophy? An Exploratory Study in Patients with Frontotemporal Lobe Dementia

The Anterior Chamber of the Eye: An Overlooked Entry of the Natural Excretion Pathway of Gadolinium-Based Contrast Agents?

**Quick Brain MRI for Evaluation of First-Time Afebrile Seizures in Children**


**Screen Time Is Linked to Decreased Cortical Surface Area and Lower Cognitive Performance in Early Adolescence**

**Snoring Is Linked to Decreased Cortical Surface Area and Lower Cognitive Performance in Early Adolescence**

**Subfields in Children with Non-Lesional Focal Epilepsy**

**Synthetic-MRI Detects Delayed Myelination in Preterm-Neonates**

**Adult Brain Potpourri 2**

**Room 309**

Scholar Award in Neuroradiology Research: Carotid Intima-Media Thickness Progression and Subclinical Brain Ischemia, Brain Aging, and the Incidence of Dementia: Framingham Study

An Atypical Case of Fulminant Hemorrhagic Neuromyelitis Optica

An Unusual Presentation of Posterior Reversible Encephalopathy Syndrome

Combination Immune Checkpoint Inhibitor-Induced Hypophysitis: A Case Report and Review of the Clinical and Imaging Findings

DECT Comparison with MR SWI Following Acute Stroke Management

Do NOT Make A MoVemeNT on MVNT: Multinodular and Vacuolating Neuronal Tumor

Hashimoto Encephalopathy

Influenza B Virus Encephalitis with Associated Reversible Restricted Diffusion in the Splenium of the Corpus Callosum “Boomerang Sign”

Lymphohistiocytosis: A Case Report

PET and Diffusion-Weighted MRI Features in Creutzfeldt-Jakob Disease

Recurrent Encephalitis due to anti-NMDA Receptor Antibody Encephalitis in a Patient with HIV CSF Escape

Rheumatoid Meningitis with Communicating Hydrocephalus

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

**Breaking the Mold in Pediatric Neuroimaging**

**Room 210**

Development of an Express MRI Protocol for Pediatric Brain Imaging

Effects of Pharmacological Sedation on Resting-State Functional Connectivity in Pediatric Epilepsy

Fast Imaging Protocol: Can It Be Used to Evaluate the Pediatric Brain?

Improved Pediatric MRI with Motion-Robust Acquisition and Reconstruction Strategies

Modified Fast Trauma Brain MRI as a Follow-Up Imaging Modality in Pediatric Traumatic Brain Injury: Higher Percentage of Injury Detection without Radiation and Anesthesia

Pediatric Brain Ultrasonography with Shear Wave Elastography: Parenchymal Disease Detection and Evaluation of Progression

**DECT Comparison with MR SWI Following Acute Stroke Management**

**Do NOT Make A MoVemeNT on MVNT: Multinodular and Vacuolating Neuronal Tumor**
Aneurysms Interventional
Room 310
A Case of Early Rupture Following Flow-Diversion with Quantification of Hemodynamics and Aneurysmal Wall Stress Using Additive Manufacturing and Particle Tracking Velocimetry
Early Versus Late Establishment of Full Dual Antiplatelet Therapy after Emergency Carotid Artery Stenting in Tandem Occlusions
First National Outcome Study of the Pipeline Embolization Device with Shield Technology
Flow-Diversion Treatment of Anterior Communicating Artery-Region Aneurysms
High-Frequency Optical Coherence Tomography for Interventional Neuroradiology
In-Stent Stenosis in Patients with Stent-Assisted Coiling: Incidence, Clinical Significance and Long-Term Follow-Up
Magnetic Resonance Imaging Follow-Up of Posterior Inferior Cerebellar Artery Aneurysms Treated with Flow Diversion
Pipeline Endovascular Device versus Stent-Assisted Coiling in Small Unruptured Aneurysms: A Cost-Effectiveness Analysis
Readmission after Elective Treatment of Unruptured Cerebral Aneurysm: A Nationwide Readmission Database Analysis
The Safety and Efficacy of Ticagrelor or Prasugrel in Intracranial Flow-Diverting Stents – a Systematic Review and Meta-Analysis.
Woven Endobridge (WEB) Device as a Re-Treatment Strategy after Unsuccessful Trial of Surgical Clipping: Feasibility, Safety, and Efficacy
2018 ENRS Award Winner: Radiogenomic Analysis of Blood-Brain Barrier Disruption in Aneurysmal Subarachnoid Hemorrhage Utilizing CT Perfusion Imaging and Micro RNA Profiling

MTV for In Vivo Susceptibility and Myelin-Sensitive Imaging
Accurate Noninvasive Eye Vitreous Temperature Measurement and Mapping Using Diffusion-Based Thermometry MRI
Comparison of Fat-Saturated Coronary Turbo-Spin-Echo with Short-Tau Inversion-Recovery Sequences in the Diagnostc Work-Up of Optic Nerve Neuritis
Correlation between Dual-Energy CT Iodine Quantification and Perfusion CT in Patients with Head and Neck Squamous Cell Carcinoma
Detection of Bone Marrow Edema in the Head and Neck with DECT - Ready to Use?
Generation of Panoramic Dental Images from Non-Dental CT Scans for Improved Visualization of Dental Pathology
The Combination of Metal Artifact Reduction Algorithms and Virtual Monoenergetic Images from Spectral Detector CT Can Reduce Even Strongest Artifacts from Large Oral Implants
The Incremental Value of MRI 3D STIR SPACE-Enhanced Sequence for the Diagnosis of Mild Postganglionic Brachial Plexus Damage
Virtual Noncontrast Reconstructions Derived from DECT Cannot Replace True Native Scans in Head and Neck Imaging
PET Taupathology: Novel Direction of PET/MRI Imaging
Shock Thyroid in a Patient with Hypovolemic Shock Complex

2:55 PM - 4:25 PM

Adult Brain and Head and Neck Mixed Session
Room 210
A Rare Case of Central Posterior Reversible Encephalopathy Syndrome
CT Angiography (CTA) for Evaluation of Acute Stroke in Elderly (Patients >80 Years)
Hearing Aid Use Preserves Left Superior Temporal Gyrus Volume
Intracranial Subarachnoid Fat Arising from an Occult Pelvic Fracture

Let’s Talk Techniques in H&N
Room 311
SENRS Award Abstract: Orphan Lesions of the Head and Neck: Uncommon Non-Thyroid Masses
Accelerated Simultaneous Acquisition of QSM and
Mass Casualty and Human Trafficking: Raising Radiologists’ Concerns for Heatstroke
Optimizing CT Angiography of the Neck: Does the Side of Injection Influence Vascular Opacification?
Risk of Thyroid Cancer in Lung Cancer Risk Patients According to the Presence of Incidental Thyroid Nodules Detected on Screening Low Dose Chest CT: A Retrospective Study
Unique Imaging Manifestations of Ventriculoperitoneal Shunt Malfunction

Radiomics and Extra-axial Lesions

Room 309

Comparison of MRI and Histology Radiomics in Glioblastoma
Comparison of MRI Radiomics and Histological Features in Glioblastoma
Comparison of Signal Changes in Cochlea on Fluid-Attenuated Inversion Recovery (FLAIR) and 3D Constructive Interference in Steady State (CISS) Imaging in Patients with Cerebellopontine Angle (CPA) Masses with Internal Acoustic Canal (IAC) Component
DTI Assessment of Optic Pathway Function in Patients with Anterior Visual Pathway Compression
Endovascular Treatment of Acute Large Vessel Occlusion Stroke in Infective Endocarditis: Radiological and Pathological Correlation
Gallium-68-DOTATATE PET-MRI in Recurrent Meningioma: Correlation with DCE Perfusion Parameters
Incidence of Microhemorrhage in Cystic Vestibular Schwannomas in the Cerebellopontine Angle
Predicting Intraoperative Blood Loss in Meningioma: Application of DSC MR Imaging
Profiling of Glioblastoma During Chemoradiation Therapy: A Pilot Study
Radiomic Analysis Differentiates Between Uveal and Cutaneous Melanoma Brain Metastases
Radiomic Features and Multilayer Perceptron Network Classifier: A Robust MRI Classification Strategy for Distinguishing Glioblastoma from Primary Central Nervous System Lymphoma
Utility of Microhemorrhage as a Diagnostic Tool in Distinguishing Vestibular Schwannomas from Other Cerebellopontine Angle (CPA) Tumors

Innovative Imaging of Anatomy and Pathology

Room 310

Anatomy of the Great Posterior Radiculomedullary Artery
Are Anatomic Measurements an Effective Predictor of Cough-Associated Headache in Chiari I Malformation (CMI)?
Conventional MRI Findings in 92 Consecutive Cases of Symptomatic Low-Flow Spinal Arteriovenous Fistulas
Differentiation Between Tuberculosis and Pyogenic Spondylodiscitis: The Role of the Ventral Meningovertebral Ligament in Patients with Anterior Epidural Abscess
Frequency and the Distribution of Moderate to Severe Disc Disease (MSDD) Detected on MRI in Athletes Participating in the 2016 Summer Olympic Games in Rio de Janeiro, Brazil
Renal Excretion of Contrast on CT Myelogram: A Specific Marker of Cerebrospinal Fluid Leak?
Safety and Efficacy of Embolization of Low-Flow Spinal Arteriovenous Fistula with Intradural Venous Drainage Using NBCA: Technical Outcome in 21 Consecutive Cases
Spinal Cord Herniation: A Lack of Syringomyelia to Assist in Differentiation from Arachnoid Webs and Cysts
Tectorial Membrane Injury in the Acute Trauma Setting: Examining Disparities Between the Adult and Pediatric Populations
The Relationship between Magnetic Resonance Imaging Features of Discitis/Osteomyelitis and the Diagnostic Yield and the Result of Biopsy
The Effect of Pre-Procedure Spinal Magnetic Resonance Angiography on Digital Subtraction Angiography Fluoroscopy Times in Patients with Suspected Spinal Dural Arteriovenous Fistulas

Keys to Understanding the Developing CNS

Room 311

Diffusion Tensor Imaging Indices of the Pediatric Spinal Cord in Myelomeningocele Repair Patients Compared with Normal
Dural Venous Sinuses and Subarachnoid Spaces in Fetuses with MMC Correlate with Sac Morphology
Impact of Craniocervical Junction and Cervical Spine Anatomy on Syringohydromyelia in Pediatric Patients with Chiari 1 Malformation

Increased Notching of the Corpus Callosum in Fetal Alcohol Spectrum Disorder: A Callosal Misunderstanding?

Nodular Heterotopia: Prevalence and Significance in Typically Developing Adolescents

Postnatal Intracranial Findings Following Fetal Repair of Spinal Dysraphisms: A Retrospective Review

Postnatal Spine Findings Following Fetal Repair of Spinal Dysraphism: A Retrospective Review

Structural and Functional Alterations in Language-Related Brain Regions for Children with Non-Syndrome Cleft of Lip with or without Palate (NSCL/P)

Structural Imaging Phenotype of XYY Chromosomal Aneuploidy

The Role of Fetal MRI for Evaluating Brain Pathology in Fetuses with Abnormal Chromosomal Microarray Analysis

4:30 PM - 6:00 PM

Advanced Neuroimaging of Neurodegenerative Diseases and Aging

Room 309

Clinical Benefit of Nigrosome 1 Detection at 3T MRI for Diagnosis of Neurodegenerative Parkinsonism

Comparative Study of Susceptibility Map Weighted Image (SMWI) with Susceptibility Weighted Image (SWI) in the Substantia Nigra to Diagnose of Idiopathic Parkinson Disease

Correlation of Motor Outcome in Early Wallerian Degeneration Using Synthetic MRI in Patients with Recent Stroke

Discrimination Of Intra-thalamic Nuclei Using Magnetic Susceptibility Mapping At 3T MRI

Effects of Alcohol and Acetate on Brain Perfusion: A Pilot Study

Fully-Automatic Quantitative Susceptibility Mapping of the Precentral Gyrus in Motor Neuron Disease

Improved Targeting of the Globus Pallidus Interna Using Quantitative Susceptibility Mapping Prior to MR-Guided Focused Ultrasound Ablation in Parkinson’s Disease

Neuropsychological and Functional Neuroimaging Changes Following Bariatric Surgery

Symmetric Hypoperfusion of Parieto-Occipital Lobes as It Relates to Aging

Symmetric Parieto-Occipital Hypoperfusion on Arterial Spin Labeled MRI is Associated with Major Depressive Disorder and Parkinson’s Disease

Tractographically-Defined Targets for Tremor Reduction in Parkinson’s Disease Patients Treated with Focused Ultrasound

Validation of Ultrafast Wave-CAIPI Magnetization Prepared Rapid Gradient-Echo (MPRAGE) for Quantitative Evaluation of Brain Tissue Volume in the Workup of Suspected Neurodegenerative Disease

Spine Interventional

Room 310

A Comprehensive Clinical Care Pathway for the Appropriate Management of Vertebral Fragility Fractures

Combined Percutaneous Radiofrequency Ablation and Vertebroplasty (CRAV) for Vertebral Tumors: a Prospective Single Center Study with Longitudinal MRI Follow-Up

Comparison of Powered Drill & Manual Bone Biopsy Systems: Does the Diagnostic Yield Justify the Cost?

Correlation Between Findings of Facet Arthropathy or Synovitis on MRI and Pain Score Response from Therapeutic Lumbar Facet Joint Injections

Early Experience of High Volume Blood Patch in the Management of Refractory Intracranial Hypotension

Examination of Life-Time Risk of Cancer by Organ, Age and Sex in CT-Guided Interventional Nusinersen Administrations for Young Patients with Spinal Muscular Atrophy


Transforaminal Lumbar Puncture for Injection of Spinraza is Adult & Pediatric Patients with Spinal Muscular Atrophy

Metastatic Spinal Tumors Management: Combined OsteoCool RF Ablation and Vertebral Augmentation Treatment

The ‘Stent-Screw Assisted Internal Fixation’ (SAIF) Technique to Reconstruct the Vertebral Body in Severe Osteoporotic Spinal Fractures with Middle Column Involvement
Waiting Is the Hardest Part: Patience Could Reduce Disc Biopsies for Discitis-Osteomyelitis
“Disc Surround Sign”: A Static CT Myelogram and MRI Finding for Rapid CSF Leak Localization

Pediatric Gray and White Matter Matters
Room 311
Age, But Not Repeated Exposure to Gadoterate Meglumine, Is Associated with T1- and T2-Weighted Signal Intensity Changes in the Deep Brain Nuclei of Pediatric Patients
Biomechanical Accelerations Associated with Concussion and the Development of Microhemorrhages in High School Football
Clinical Utility of Diffusion Weighted Imaging of the Brain on Fetal MRI in Monochorionic Twin Gestation
Diffusion Weighted MR Imaging in a Prospective Cohort of Children with Cerebral Malaria Offers Insights into Pathophysiology and Prognosis
Early Brain Findings in Cerebral Adrenoleukodystrophy: Are We Missing Subtle Disease?
Effect of Early MRI in the Management of Pediatric Traumatic Head Injury
Iron Deposition in Deep Gray Matter Nucleus on Pediatric Patients with MCT8 Transporter Deficiency Can MRI Identify Disrupted Neuronal Processes?
Microstructural Changes in Multipotent Neural Stem Cell Niche Associated with Subconcussive Impacts in High School Football
MRI Findings in a Pediatric Population with Neurologic Disease and Enterovirus A71 Infection
Neuroimaging and Natural History of FIRES in a Pediatric Population
White Matter Tract Development in Autistic Toddlers by Diffusion Tensor Imaging and Correlation with Ongoing Therapies

WEDNESDAY MAY 22, 2019
11:00 AM - 12:00 PM

Pediatrics Potpourri Topics
Room 210
ASL Perfusion of Pediatric Hemangiomas
CNS Involvement of Hemophagocytic Lymphohistiocytosis in a Pediatric Patient
DTI of Spinal Cord Lesions of Varying Severity Based on MRI in the Entire Pediatric Spinal Cord
Reaching the Limit: Specific Absorption Rate (SAR) MRI Threshold in Pediatric Spine Imaging

Imaging of Neurodegenerative Diseases and Aging
Room 310
Wilson Award Presentation: The Effect of Voxel Position and Tissue Composition on the Level of Brain Metabolites in PET-Guided MR Spectroscopy in Alzheimer’s Disease
Imaging Findings Associated with Gamma Knife Thalamotomy for Essential Tremor
Intra-Individual Correlations Between Quantitative THK5351 Positron Emission Tomography Measurement and MRI-Derived Cortical Volume Across the Alzheimer’s Disease Spectrum
Recognition of Underlying Neurodegeneration on Emergency Head CT Scans
Regionally Specific Variation in Brain Structure in Behavioral Variant Frontotemporal Dementia Compared to Alzheimer’s Dementia
Role of Multiparametric Imaging in Unravelling Pathogenic Pathways in Hepatic Encephalopathy
Signature of Preclinical Alzheimer’s Disease in a Longitudinal Cohort
The Role of Volumetric Analysis in the Pre-Operative Assessment of Parkinson’s Disease Patients Undergoing Deep Brain Stimulation

Adult Brain - Stroke
Room 311
A Retrospective Investigation of the Relationship Between Cerebral Microbleeds and White Matter Hyperintensities in Patients with Systemic Lupus
Erythematous: Cerebral Microbleeds as an Imaging Biomarker of Vasculitis
CT Perfusion Collateral Index for Prediction of Recanalization in Patients with Acute Ischemic Stroke
Influence of Spatial Resolution on Error of Stroke Infarct Core Volume Measurement in DWI-MRI
Sensitivity and Inter-Rater Reliability of Stroke Protocol CT in the Early Detection of Stroke Mimics
Time to Imaging Does Not Affect Intracranial Collateral Circulation Score in Acute Large Vessel Embolic Stroke
Stroke-like Migraine Attacks after Radiation Therapy (SMART) Syndrome: A Unique Post-Treatment Complication or Manifestation of Status Epilepticus?
The Effects of Peripheral Vascular Disease on Acute Ischemic Stroke

1:00 PM - 2:30 PM

Spine Excerpta
Room 210
A Novel Imaging Entity: Intraspinal Stem Cell Injection Induced Glioneuronal Lesion of the Cauda Equina
A Rare Case of Hirayama Disease
A Rare Case of Primary Intramedullary Spinal Cord Lymphoma
Anterior Spinal Artery Aneurysm Presenting with Spinal Subarachnoid Hemorrhage in a Case of Polyarteritis Nodosa
Diffuse Midline Glioma of the Spinal Cord: A Rare Entity
Enterovirus Associated Acute Flaccid Myelitis
Ependymoma of the Filum Terminale Presenting with Diffuse Superficial Siderosis
Exceedingly Rare Intradural Extramedullary Primary Ewing’s Sarcoma in an Elderly Patient
Extruded Calcified Disc: An Unusual Presentation of Spinal Calcium Pyrophosphate Deposition Disease (CPPD)
H3 K27M Mutated Diffuse Midline Glioma of the Spinal Cord: Difficulties In Distinction From Other Causes of Longitudinally Extensive Transverse Myelitis
Hypervascular Tumour as a Differential Diagnosis for Spinal Vascular Malformation

Longitudinally Extensive Transverse Myelitis As Initial presentation of Sjogren’s Syndrome
Pilocytic Astrocytoma with Gangliocytic Differentiation of Spinal Cord
Pregnancy-Related Osteoporosis: Assessment by MRI
Progressive Myelopathy Referable to Massive Ossification of the Posterior Longitudinal Ligament in a Patient with X-Linked Hypophosphatemic Rickets
Skeletal Sarcoidosis
Spinal Cord Watershed Infarction: Novel Findings on Magnetic Resonance Imaging
Syndrome of Segmental Arterial Mediolyis after Gemcitabine and Cisplatin Chemotherapy with Omental Infarction and Ruptured Spinal Aneurysm
White Cord Syndrome: A Rare and Devastating Condition

Trauma Neuroimaging
Room 309
Coupling: A Unifying Theory for Post-Concussion Syndrome Treatment and Functional Neuroimaging
Volumetric MR Imaging as a Biomarker for Cognitive Decline in Mild Traumatic Brain Injury
Distinct Features of Traumatic vs Radiation Induced Microhemorrhage on Ultra-High Resolution Susceptibility Weighted Imaging
Early Dramatic Improvement on the National Institutes of Health Stroke Scale Predicts Favorable Outcome 90 Days after Thrombectomy in the DEFUSE 3 Study
Functional Connectivity Alterations in Subacute Post-Concussive Visual Motion Sensitivity Using a Novel Task-Based Functional MRI Vestibular Paradigm
Maximum Ambiguity distance for Phase Imaging (MAGPI) in Detection of Traumatic Cerebral Microbleeds: An Improvement Over Current Imaging Practice
Monitoring Small Subdural Parafalcine and Paratentorium Hemorrhages. Is it Beneficial?
PH-Weighted Molecular MRI in Acute Traumatic Brain Injury Using Amine Proton Chemical Exchange Saturation Transfer Echoplanar Imaging (CEST EPI)
Quantitative Assessment of Myelin Content in Mild Traumatic Brain Injury Patients with Post-Concussion Syndrome: Assessment with a Multidynamic Multiecho Sequence
Resting-State fMRI Brain Connectivity Alterations in Subacute Post-Concussive Visual Motion Sensitivity
Subcallosal Hemorrhage as a Sign of Diffuse Axonal Injury in Patients with Traumatic Head Injury
Subdural Effusion/Hygroma (SDEH) as the Patho-Anatomic Basis for Traumatic Meningeal Enhancement (TME)
Thrombectomy for Acute Ischemic Stroke in Nonagenarians Compared to Octogenarians
Variations in Blunt Trauma of the Head, Spine and Facial Injury Patterns in Elderly Patients

Head and Neck Potpourri Topics
Room 310
A Rare Case of Metastatic Glomangiocpericytoma
Looking for Brain Tissue in all of the Wrong Places: A Rare Case of Middle Ear Neuroglial Heterotopia
Lupus-Associated Vasculitis Mimicking an Invasive Sinonasal and Orbital Infection
Regressed Pneumatization: Fatty Osseous Replacement of Previously Aerated Air Cells Mimicking Arrested Pneumatization
Silicone Lymphadenopathy in Papillary Thyroid Carcinoma: Potential Mimickers of Metastatic Lymphadenopathy
Uncommon Site for an Uncommon Disease of the Temporal Bone: Chondroblastoma of the Jugular Foramen
Acquired Silent Sinus Syndrome of the Sphenoid Sinus
An Unusual Presentation of Orbital Inflammation
Clival Lesion: Not Always Chordoma or Chondrosarcoma
CT-Guided Stellate Ganglion Blockade as Last Resort Treatment for Refractory Ventricular Tachycardia
Diagnostic Dilemma and Pathologic Confirmation: Pediatric Cerebellopontine Angle Mass Versus Encephalocoele
Fibromatosis Colli as a Uncommon Cervical Dystonia Mimic in Young Adults: MR, Ultrasound, Clinical and Radio-Pathological Correlation
Giant Dental Calculus presenting as a Calcified Mandibular Mass on CT
Hybrid Imaging in Dementia: Semi-Quantitative PET/MRI Approach

Intracranial Rosai-Dorfman Disease: A Diagnostic Dilemma
Isolated Ocolomotor Neuropathy: A Case Report
Isolated Unilateral Small Trigeminal Nerve and Meckel’s Cave in a Patient with Trigeminal Neuralgia
Lift Your Head out of the Fog: It’s Anti-MOG!

Tackling Tumors of the Pediatric CNS Room 311
Characterizing the Growth of Subependymal Nodules and Subependymal Giant Cell Tumors in Tuberous Sclerosis Complex
DTI and Volumetric Analyses of Pediatric Patients Post Proton Radiotherapy
Frequency of Optic Nerve Involvement in Pediatric Intracranial Germ Cell Tumors
Imaging of Spinal Drop Metastasis in Pediatric Central Nervous System Tumors: Comparison of Balanced Fast Field Echo Sequence with T1-Weighted Contrast Enhanced Sequence and Correlation with Cerebrospinal Fluid Cytology
Leukoencephalopathy, Quantitative MR Imaging and Neurocognitive Performance in Adult Survivors of Childhood Hodgkin Lymphoma
Longitudinal Evaluation of Abnormal Cortical and Subcortical Cerebral Morphology in Neurofibromatosis Type 1
MR Imaging Correlates for Molecular and Mutational Analyses in Children with Diffuse Intrinsic Pontine Glioma
MRI Features of ‘Supratentorial PNET’ in the Light of Molecular Diagnoses and the New WHO Classification: A Report From the Children’s Oncology Group Randomized ACNS0332 Trial
Pediatric Intracranial Tumor Grading: Multiparametric Comparison Including ADC, IVIM, APT, ASL, and Stretched Exponential DWI with Histogram Analysis
Post-RT Changes in ADC Histogram Metrics May Help Identify Pseudoprogression in Newly Diagnosed DIPG: A Report from the Pediatric Brain Tumor Consortium
Response of Pediatric Brainstem Tumors to Proton Radiotherapy
Use of Advanced Diffusion and Perfusion MR Metrics to Predict Survival in Newly Diagnosed DIPG: A Report from the Pediatric Brain Tumor Consortium
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2:55 PM - 4:25 PM

**Stroke**

**Room 210**

A Novel Rabbit Thromboembolic Occlusion Model
Calibrating to Hit a Moving Target: The Need for Evaluating and Modifying CT Perfusion Parameters for Acute Ischemic Stroke Following Initial Implementation
Comparative-Effectiveness of Endovascular Thrombectomy in Elderly Stroke Patients
Defining Ischemic Core in Acute Ischemic Stroke: A Multiparametric Bayesian-Based Model
Different Pathophysiology Underlies Different Cerebellar Intracerebral Hemorrhage Locations
Early Experiences with Mobile Stroke CT Angiography
Early Lesion Water Uptake Predicts Clinical Outcome in Ischemic Stroke Patients after Successful Recanalization: An Observational Study
Impact of Admission Blood Glucose Levels on Early Brain Edema and Clinical Outcome in Patients with Ischemic Anterior Circulation Stroke
Measuring Degree of Conjugate Gaze Deviation May Help Distinguish Acute PICA Occlusion as Potential Mimicker from Anterior Large Vessel Occlusion on Computed Tomography
Posterior Frontal Lobe Involvement is a Highly Specific Imaging Marker for Prediction of Large Final Infarct Despite Successful Intra-Arterial Thrombectomy in Patients with Large Vessel Occlusion
The Intrinsic Iodine Content of the Thyroid is Correlated to the HU Value of the Thyroid on True Non-Contrast Scans
Thrombus Permeability and Histopathology: Is a Clot’s Perviousness on CT Imaging Correlated with Its Histologic Composition?
Where Did the Time Go? Packaging, Transfer and Imaging Time Course of Patients Who Undergo Neuro-endovascular Intervention for Acute Stroke

**Compressed Sensing to Improve Performance of Time-of-Flight MR Angiography**

**Enhanced Perivascular Space Contrast Using T1-T2 Fusion and Adaptive Spatial Filtering**

**Extreme Prominence of Deep Medullary Vein Score Correlates with Absent Cerebral Blood Flow on Nuclear Medicine Exams in Suspected Brain Death**

**Is Advanced Imaging Warranted or Excessive in the Evaluation of Spontaneous Intracerebral Hemorrhage?**

**Optimizing CT Angiography of the Neck: Does the Side of Injection Influence Vascular Opacification?**

**Pointwise Encoding Time Reduction with Radial Acquisition (PETRA) in the Follow-Up after Stent-Assisted Coil Embolization for Anterior Circulation Aneurysms**

**Vessel Wall MRI Contrast Enhancement in Cerebral Amyloid Angiopathy and Association with Stroke**

**Imaging Biomarkers of Intracranial Arterial Disease: Comparing 7 tesla MRI with CT**

**Brain Tumors: Post-treatment Imaging**

**Room 310**

Assessing Glioblastoma Therapy Mediated Inflammatory Pseudoprogression with Delayed Ferumoxytol Iron Oxide Enhanced Magnetic Resonance Imaging in a Pre-Clinical Rat Model
Assessing the Utility of Advanced DWI-MRI Parameters Using Multi-B Values Acquisition and a Histogram Approach for Assessment of Early Therapeutic Response in Glioblastoma
Effect of Immune Checkpoint Inhibitors on MR Perfusion in Recurrent Glioblastoma
Enhancement Characteristics of the Brain Tumor Resection Cavity on 3T-MRI: Optimizing the Imaging Window
Multiparametric MRI for Prediction of Treatment Response in Patients with Recurrent Glioblastoma Treated With Programmed Death (PD)-1 Immunotherapy
Mutation Status of IDH and TP53 and Correction of rCBV Derived from MR Perfusion Weighted Imaging in Early Diagnosis of Tumor Progression in Patients with High Grade Gliomas after Chemoradiation Treatment

**Neurovascular Imaging Adult Brain**

**Room 309**

Carotid Artery Tortuosity is Associated with Connective Tissue Diseases
Predictive Value of Magnetic Resonance Spectroscopic Imaging During Anti-angiogenic Treatment in Recurrent Glioblastoma

Radiotherapy Treatment May Affect Quantitative MRI Assessment of Brain Tumour Treatment Response

RSI-Derived Neurite Density Can Differentiate True Progression from Immunotherapy-Related Pseudoprogression

Treatment-Related Lesions in Glioblastoma Patients Treated with Heat Shock Protein Vaccine and Chemoradiation

Tumor Recurrence versus Radiation Necrosis in Patients with Treated GBM: A Prospective Study Using DCE Perfusion MR

Usefulness of MR Spectroscopy in addition to Perfusion MRI in Differentiating Tumor Progression from Treatment Related Changes in High Grade Gliomas

The Fast and the Curious: Pediatric CNS Diseases

Room 311

An Extremely Rare Case of Longitudinal Extensive Transverse Myelitis (LETM) in Children: Acute Spinal Cord Infarction Secondary to Varicella Zoster Virus (VZV)

Case of Beta-Propeller Protein-Associated Neurodegeneration in an Adolescent Patient

Diffuse Leptomeningeal Glioneural Tumor (DLGNT) Presenting in a Two-Year-Old Female with Persistent Vomiting: A Case Presentation with Discussion of Imaging, Clinical, and Pathological Features

Extradural Epidermoid with an Intradiploic Component

Fibrous Dysplasia of the Skull Base with Sarcomatous Degeneration

Hemispheric Origin of Pediatric High-Grade H3-K27M-Mutant Glioma

Imaging Findings in Hemophagocytic Lymphohistiocytosis

Infected Posterior Fossa Dermoid Cyst: A Challenging Clinical and Radiologic Diagnosis

Infiltrating Glioma, H3F3A G34R-Mutant, with Rapidly Progressive Bone Metastases

Intracranial Hypertension Leading to Trigeminal Nerve Herniation into a Petrous Apex Meningoencephalocele

Intraparenchymal Schwannoma Presenting in a 16-Year-Old Male with Seizures: A Case Report with Discussion of Imaging Features, Clinical Considerations and Proposed Theories of Histogenesis

MRI and Clinical Findings In Children with Acute Flaccid Myelitis from 2018 Illinois Outbreak

Radiologic Variability of Menkes Disease in Infancy

Serial Vessel Wall MR Imaging of Tuberculosis Cerebral Vasculitis

Spontaneous Resolution of Headaches, Syringomyelia and Improvement of Chiari I Malformation in a Trumpet Player

The Germ You Will Find If It’s in Mind! Rare Case of a Medullary Germinoma

The Neuroimaging Findings of Monocarboxylate Transporter 1 Deficiency: A Case Report

4:30 PM - 6:00 PM

New MR Imaging Techniques

Room 210

3D Fast Low Angle Shot (FLASH) Imaging for Detection of Intracranial Enhancing Lesions: Comparison with MPRA

A Diffusion Tractography-based Atlas of Human Thalamic Ventral Intermediate Nucleus for Neurosurgical Guidance

Application of Compressed Sensing Technique to Quantitative Susceptibility Mapping

Association Between Tumor Acidity and Hypervascularity Within Human Gliomas Using pH-Weighted Amine Chemical Exchange Saturation Transfer Echoplanar Imaging (CEST-EPI) and Dynamic Susceptibility Contrast (DSC) Perfusion MRI at 3T

Comparison of Highly Accelerated Wave-CAIPI Susceptibility-Weighted Imaging (SWI) and Standard T2*-Weighted 2D Gradient-Echo (GRE) Imaging for Routine Clinical Brain MRI

Comparison of Highly Accelerated Wave-CAIPI Susceptibility-Weighted Imaging (Wave-SWI) with Conventional 3D SWI for Routine Clinical Brain Imaging

Delineation of Thalamic Substructures Based on Ultra-High b-Value DWI-Measurement with Reasonable Acquisition Time
Diagnostic Performance of a Multi-Contrast EPI Sequence Compared to Routine MRI Sequences in the Emergency Department: Initial Results
Imaging Biomarkers of Intracranial Arterial Disease: Comparing 7 Tesla MRI with CT
In-Vivo Diffusion Imaging of Hippocampal Network with 600 Micrometer Isotropic Resolution at 7T
Markerless Prospective Motion Correction Improves Diagnostic Image Quality of T2 and FLAIR
Myeloarchitectonic Mapping of Cortical Gray Matter with 3D Inhomogeneous Magnetization Transfer (IHMT)
Reproducibility of Amide Proton Transfer-weighted Signal in Brain According to Clinical Conditions and Anatomical Location: A Prospective Evaluation

MRI of Neurovascular Diseases
Room 310
Spot Sign in Secondary Intraventricular Hemorrhage (IVH) Predicts Early Neurological Decline
Identification of Patients Within Thrombolysis Time Window: Direct Comparison of DWI-FLAIR Mismatch and CT based Lesion Water Uptake Quantification in Acute Stroke Patients Receiving Both Imaging Modalities
Reperfusion in Non-Recanalizing Stroke Patients as a Sign of Collateral Involvement Using DSC-MRI: A Substudy of the Observational 1000Plus Study
Longitudinal Analysis of Quantitative Brain MRI in Astronauts Following Microgravity Exposure
Pre- and Post-Flight Size Comparison of the Major Dural Venous Sinuses in Astronauts
Prediction of Upper Extremity Motor Recovery after Stroke Using Diffusional Kurtosis Imaging
Spectrum of Perfusion and Diffusion Changes in the Setting of Hypoxic Ischemic Brain Injury: A Translational Pilot Study Using Swine Models
Stroke of Undertermined Source and Carotid Intraplaque Hemorrhage on MRI: A Systemic Review and Meta-Analysis
Stroke Stratification of Carotid Plaque by MRI Diffusion Weighted Imaging
The Association of Brush Sign and Poor Collaterals on Baseline MRI Predicts Fast Infarct Growth
Vessel Wall MRI Contrast Enhancement in Cerebral Amyloid Angiopathy and Association with Stroke

Epilepsy and Neuropsychiatric
Room 311
Assessment of Explicitly Stated Interval Change on Non-Contrast Head CT Radiology Reports
Default Mode Network Functional Connectivity Post Stroke and Association with Depression
Diffusion Kurtosis Imaging of Temporal Lobe Epilepsy Patients with Bilateral Temporal Encephalocele and Unilateral Seizure Focus Reveals Microstructural Pathology
Global and Local Efficiency of Brain Networks in Treated HIV Infection
Initial Experience with PET-MR for the Evaluation of Temporal Lobe Epilepsy
Noninvasive Neuromodulation in rat models of Pain and Depression
Temporal Encephaloceles in Patients with Refractory Epilepsy: Underdiagnosed But Uncommon

THURSDAY MAY 23, 2019
9:30 AM - 10:30 AM

Health Policy Analytics
Room 304/306
Changing Characteristics of Inpatient Hospital Stays and Associated Neuroimaging in Brain Cancer Patients
Clinical Impact of Emergent Total Spine MRI Scans Performed at a Major Academic Medical Center
Disproportionate National Contributions to Subspecialties of Neuroradiology
Standardization of Imaging Strategies in Acute Stroke Care: A Cost-Effectiveness Approach

Vascular Malformations and Embolization
Room 210
Ear Arteriovenous Malformation Management
Ethanol and Coil Embolization of Complex Dural AVF
Evaluation of Hemorrhagic Risk in Quantitative Digital Subtraction Angiography
Management of Tongue Venous & Lymphatic Malformations
Mandibular AVM Diagnosis and Curative Treatment
Recurrence of Brain Arteriovenous Malformations Following Complete Angiographic Obliteration: A Large Single Center Experience
Transarterial Hemispheric Embolization For Intractable Seizures In Neonates With Hemimegalencephaly

Head and Neck Potpourri Topics 2
Room 309
A Rare Case of Metastatic Glomangiopericytoma
Looking for Brain Tissue in All the Wrong Places: A Rare Case of Middle Ear Neuroglial Heterotopia
Lupus-Associated Vasculitis Mimicking an Invasive Sinonasal and Orbital Infection
Regressed Pneumatization: Fatty Osseous Replacement of Previously Aerated Air Cells Mimicking Arrested Pneumatization
Silicone Lymphadenopathy in Papillary Thyroid Carcinoma: Potential Mimickers of Metastatic Lymphadenopathy
Risk Stratification for Oropharyngeal Carcinoma Using Texture Analysis: A Step Beyond HPV Status
T1-Hyperintense Cysts are a Specific Feature of Pituitary Null Cell Adenomas

Adult Brain Excerpta 2
Room 310
Nonlesional Hypertrophic Olivary Degeneration
Organized Hematoma after Radiosurgery of Intracranial Arteriovenous Malformation
Progression of Diffuse Intracranial Dolichoectasia with Cerebral Infarcts and Ruptured Dissecting Aneurysm
Rupture of Right Vertebral Artery Aneurysm Incited by Neurocysticercosis: A Rare Entity Review
Spectral CT Findings in Central Artery Occlusion

Temporal Bone Hour
Room 311
Expected Evolution of Inner-Ear MR Findings after Vestibular Schwannoma Resection: Comparison of Translabyrinthine, Retro-Sigmoid, and Middle-Cranial Fossa Approaches

Inner and External Ear Malformations as Assessed on Fetal Ultrasound and MRI
Inner-Ear Fluid Compartment Accumulation of Gadolinium after Intrathecal Gadolinium Injection for the Work-Up of Suspected CSF Hypotension/ Hypovolemia Syndrome
Jugular Foramen Tumors: The Role of Imaging from the Surgeon’s Perspective
Novel MRI Characterization of Auditory Pathways for Preoperative Assessment in Cochlear Implant Patients
Prevalence of Internal Auditory Canal Diverticulum in Subjects without and with Otosclerosis and its Association with Intracanalicular Collected Ossicle Mass
Reversed Fast Imaging with Steady-State Precession Diffusion-Weighted Imaging for the Detection of Middle Ear Cholesteatoma
The Prognostic Significance of Bony Cochlear Nerve Canal Width in Sudden Sensorineural Hearing Loss

10:45 AM – 12:15 PM

Data Crunching, Pretty (and Pretty Useful) Pics in H&N
Room 309
ACR TI-RADS Reduces Biopsy Recommendations for Thyroid Nodules while Increasing the True Positive Rate
CT Features of Head and Neck Amyloidosis: Correlation with Clinicopathological Characteristics
Diffusion-Weighted Imaging for the Evaluation of Post-Treatment Squamous Cell Carcinoma in the Neck: Image Optimization and a New Quantitative Assessment Metric
Risk Stratification for Oropharyngeal Carcinoma Using Texture Analysis: A Step Beyond HPV Status
Fly-through Virtual Reality-Assisted Training Module of the Pterygopalatine Fossa
Imaging Surveillance of Head and Neck Cancer using NI-RADS: 36% of recurrences were clinically NED and Detected by Imaging Alone
Measurement of the Transverse Diameter of the Meckel’s Cave, a Very Specific Finding for Diagnosis of the Idiopathic Intracranial Hypertension/ Pseudotumor Cerebri
Patient-Specific Bench-Top Models of Venous Pulsatile Tinnitus

Positive Predictive Value of NI-RADS Categories 3 and 4 Post-treatment FDG PET/CT in Head and Neck Squamous Cell Carcinoma

**Adult Brain Excerpta 3**

**Room 310**

A Case of Pial Arteriovenous Malformation (AVM) with Jugular Vein Aplasia and Stenosis: Is Pial AVM an Acquired Venous Outflow Restriction Disease?

A High-Resolution Vessel Wall MRI-Histopathology Study of Cerebral Amyloid Angiopathy

Cerebral Microbleeds and Superficial Siderosis: Iron Deposition in the Brain Leading to Neurodegeneration?

Cervical Artery Dissection: Demythifying the Need of Axial T1 Fat Saturation Images

Dural Venous Sinus Cephalocele in the Setting of Intracranial Hypertension

Giant De Novo Cavernoma and Associated Developmental Venous Anomaly

Identification of a Ruptured Basilar Artery Sidewall Perforator Aneurysm by Vessel Wall MR Imaging

Imaging Features of Non-Ketotic Hyperglycemic Hemichorea

Imaging Illustration of a Rare Case of Trigeminal Artery Variant Resulting in Trigeminal Neuralgia

Improved Visualization of Cerebral Blood Flow in Mice and Neonates Using Angular Coherence-Based Doppler Ultrasound

Intracranial Involvement in a Giant Cell Arteritis: The Role of Imaging in Reaching the Underlying Diagnosis

Multiparametric MRI Assessment of Response to Convection Enhanced Intratumoral Delivery of MDNA55, an Interleukin-4 Receptor Targeted Immunotherapy for Recurrent Glioblastoma

Neuroimaging of Leukostasis, a Rare Complication of Leukemia

Nonketotic Hyperglycemia: Brain MRI Findings and Serial Follow-Up
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