



*30<sup>th</sup> Annual Meeting of*

# The Eastern Neuroradiological Society

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**August 23 - 26, 2018**

Fairmont Southampton, Bermuda • Hamilton, Bermuda

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**SAM Credit Available**

*26.0 AMA PRA Category 1 Credit(s)<sup>TM</sup>*

**For more information, visit [www.enrs.org](http://www.enrs.org)**



## From The Program Chair

Mark your calendar now for the 30<sup>th</sup> Annual Meeting of the Eastern Neuroradiological Society (ENRS), August 23-26, 2018. This is a wonderful opportunity to bring family, join peers, learn and socialize at the luxurious Fairmont Southampton Bermuda Resort, the site of America's Cup in 2017, located on the stunning Bermuda south shore with miles of pink sand beaches and its exclusive beach club resort.

For history buffs, forty years ago, Bermuda was the site of the 15<sup>th</sup> Annual Meeting of the American Society of Neuroradiology, March 27-31, 1977, hosted by one of the ASNR founding members, Dr. Norman E. Leeds, an honored guest, presenting the award in his name, The *Norman E. Leeds* award for the best Scientific Presentation.

The 2018 program maximizes learning from phenomenal speakers in our society with focused 20-minute block lectures, 4 SAMS and updates from rising junior faculty and scientific paper sessions. Each day is focused on topics in Brain, Head and Neck, Pediatrics, Spine and Neurointerventional, with Lunch & Learn Sessions. Competitive juices will be stimulated, by the challenging and enjoyable "Stump the Stars" Jeopardy Game Show!

The collegial, charming and relaxed atmosphere of Bermuda is a perfect opportunity to enjoy brilliance, brains and beaches, sharing knowledge and reconnecting with old friends and family and making new friends. The timing in August allows an enjoyable break prior to the Labor Day holiday and start of the school year. Bermuda is less than a two-hour flight from most eastern cities, and about a 55-minute plane ride from New York City. The Fairmont Southampton, is a beach paradise on nearly 100 acres, with spacious guestrooms many with private balconies and spectacular water views. There are unparalleled amenities from the kid's camp, resort pools, oceanfront beach club dive center, tennis courts, 18-hole golf course, and activities including deep sea fishing.

The ENRS is a favorite meeting of many, myself included, where all can learn, share knowledge and ideas in a friendly wonderful environment. I would like to take this opportunity to thank the many outstanding members of our Executive Committee who gave me invaluable advice and help, the many fabulous speakers and moderators who agreed to participate, our generous sponsors, Ken Cammarata from the ASNR, and Bethany Satter from ESI for their tireless efforts and priceless assistance.

All of us look forward to welcoming everyone to Bermuda for the ENRS 30<sup>th</sup> Annual Meeting. As Mark Twain once said, "You can go to heaven if you want. I'd rather stay in Bermuda."

Best Regards,

**Claudia F.E. Kirsch, MD**

Vice President / President Elect and Program Chair

## Target Audience

The ENRS 30<sup>th</sup> Annual Meeting is targeted to both academic and private practice neuroradiologists, including trainees in the Northeast United States and Canada. Those with an interest in imaging and neurointervention in diseases of the brain, spinal cord, skull base and head and neck in both pediatric and adult patients. The meeting is equally targeted to physicians in training including both residents and fellows pursuing careers in radiology.

## Accreditation

**Physicians:** This activity has been planned and implemented in accordance with the Essential Areas and policies of the Accreditation Council for Continuing Medical Education through the joint providership of Educational Symposia and the Eastern Neuroradiological Society. Educational Symposia is accredited by the ACCME to provide continuing medical education for physicians.

Educational Symposia designates this live activity for a maximum of 26.0 *AMA PRA Category 1 Credit(s)*<sup>TM</sup>. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

**Self-Assessment Modules (SAMs):** Educational Symposia has been granted Deemed Status by the American Board of Radiology (ABR). This allows Educational Symposia to develop and implement SAMs that satisfy ABR Part II MOC requirements.

## Educational Objectives

At the conclusion of the meeting, the participant should be able to:

- Explain stroke imaging etiologies including hemorrhagic, embolic and vessel dissections, or stroke predictors from subarachnoid hemorrhage, and how MRI, perfusion imaging and arterial spin labeling are utilized in stroke assessment.
- Demonstrate improved knowledge regarding brain neoplasms and how perfusion, functional imaging and radiogenomics are utilized in pre-operative assessment of brain tumors.
- Differentiate and explain demyelination and radiographic mimics, CNS infections, and inflammatory neurologic conditions including IgG4, and the use of biomarkers in degenerative brain disease, and the utilization of conventional imaging techniques and newer imaging techniques.
- Demonstrate greater awareness of pathology and imaging strategies for assessment of the anterior, middle and posterior skull base including the sella turcica and pituitary and cranial nerves.
- Discuss the important radiographic techniques and findings for disease of the orbit, temporal bone, sinonasal cavities, oral cavity and oropharynx, larynx, thoracic inlet, and salivary tissues, and important findings that need to be carefully assessed for such as perineural tumoral spread, lymphadenopathy, post-surgical flaps, and key findings that may be overlooked and missed.
- Explain current and advanced imaging protocols for neonates and children of pathology associated with congenital abnormalities, phakomatosis, tumor, infection and trauma that may affect the orbit and temporal bone, CSF flow, including trauma and emerging techniques in imaging for traumatic brain injury.
- Explain the importance of gray matter versus white matter pathology in the spinal cord, and imaging of spinal neoplasms, trauma and post-operative critical radiographic findings, with note made to utilization of the proper nomenclature for disc disease.
- Describe the work-up and imaging findings for vertebroplasty, and optimizing vascular imaging of the spine and for vascular imaging in the treatment of aneurysm and new developments in intra-arterial chemotherapy.

*No special educational preparation is required for this CME activity.*

**SPECIAL NOTE FOR THE DISABLED:** Educational Symposia (ESI) and the Eastern Neuroradiological Society (ENRS) wish to ensure that no individual with a disability is excluded, denied services, segregated or otherwise treated differently from other individuals because of the absence of auxiliary aids and services. If you need any auxiliary aids or services identified in the Americans with Disabilities Act, please contact ESI at (813) 806-1000.





## 2017-2018 ENRS Executive Committee

### PRESIDENT & CHAIR

**Eugene Yu, M.D. FRCPC**

*Associate Professor of Medical Imaging and  
Otolaryngology Head and Neck Surgery  
Princess Margaret Cancer Centre University of Toronto  
Toronto, Ontario, Canada*

### VICE-PRESIDENT/PRESIDENT-ELECT

**Claudia F.E. Kirsch M.D.**

*Professor of Neuroradiology and Otolaryngology  
Division Chief Neuroradiology  
Northwell Health  
Zucker Hofstra School of Medicine  
Manhasset, NY*

### SECRETARY

**Reza Forghani, M.D., Ph.D.**

*Associate Chief, Department of Radiology  
Clinical Investigator, Segal Cancer Centre and Lady Davis  
Institute for Medical Research  
Jewish General Hospital  
Assistant Professor of Radiology, McGill University  
Montreal, Quebec, Canada*

### TREASURER

**Thierry A.G.M. Huisman, M.D., EQNR, FICIS**

*Professor of Radiology, Pediatrics and Neurology  
Director Pediatric Radiology and Pediatric Neuroradiology  
Johns Hopkins Hospital  
Baltimore, MD*

### 1<sup>ST</sup> PAST PRESIDENT

**Christopher G. Filippi M.D.**

*Vice-Chair Biomedical Imaging and Translational Science  
Professor of Radiology, Zucker Hofstra School of Medicine  
Manhasset, NY*

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**Lawrence N. Tanenbaum, M.D.**

*Vice-President and Medical Director East Region  
Director of CT, MR and Advanced Imaging  
Radnet, Inc.  
New York, NY*

## 2017-2018 ENRS Program Committee

### VICE-PRESIDENT/PRESIDENT-ELECT/ PROGRAM CHAIR

**Claudia F.E. Kirsch M.D.**

*Professor of Neuroradiology and Otolaryngology  
Division Chief Neuroradiology  
Northwell Health  
Zucker Hofstra School of Medicine  
Manhasset, NY*

### BRAIN / STROKE:

**Marlise P. dos Santos, M.D., MSc, FRCPC**

*Associate Professor of Radiology  
University of Ottawa  
Scientist, Ottawa, Brain and Mind Research  
Institute and Ottawa  
Hospital Research Institute Neuro-Interventionalist  
and Diagnostic  
The Ottawa Hospital  
Ottawa, On, CANADA*

### NEUROINTERVENTIONAL:

**Donatella Tampieri, M.D., FRCPC**

*Professor of Radiology, Neurology and  
Neurosurgery McGill  
University Montreal  
Montreal, Quebec  
CANADA*

**Carlos H. Torres, M.D.**

*Assistant Professor of Radiology  
Program Director – Neuroradiology  
University of Ottawa  
The Ottawa Hospital Civic Campus  
Ottawa, Ontario, Canada*

### BRAIN - TUMOR & DEMYELINATION:

**Girish M. Fatterpekar, MBBS, DNB, M.D.**

*Associate Professor Radiology  
Associate Section Chief Neuroradiology  
NYU Langone Medical Center  
New York, NY*

**Reza Forghani, M.D., Ph.D.**

*Associate Chief, Department of Radiology  
Clinical Investigator, Segal Cancer Centre and Lady Davis  
Institute for Medical Research  
Jewish General Hospital  
Assistant Professor of Radiology, McGill University  
Montreal, Quebec, Canada*

### HEAD & NECK:

**Eugene Yu, M.D. FRCPC**

*Associate Professor of Medical Imaging and  
Otolaryngology Head and Neck Surgery  
Princess Margaret Cancer Centre University of Toronto  
Toronto, Ontario, Canada*

**Tanya Rath, M.D.**

*Associate Professor of Radiology and Otolaryngology  
University of Pittsburgh School of Medicine  
Pittsburgh, PA*

### PEDIATRIC:

**Thierry A.G.M. Huisman, M.D., EQNR, FICIS**

*Professor of Radiology, Pediatrics and Neurology  
Director Pediatric Radiology and Pediatric Neuroradiology  
Johns Hopkins Hospital  
Baltimore, MD*

**Karuna V. Shekdar, M.D.**

*Assistant Professor of Clinical Radiology  
Raymond and Ruth Perelman School of Medicine,  
University of Pennsylvania  
The Children's Hospital of Philadelphia  
Philadelphia, PA*

### SPINE:

**Amish H. Doshi, M.D.**

*Associate Professor at Mount Sinai School of Medicine  
New York, NY*

### SCIENTIFIC PRESENTATIONS:

**Doris D.M. Lin, M.D., Ph.D.**

*Associate Professor of Radiology and Radiological Science  
Johns Hopkins University School of Medicine  
The Johns Hopkins Hospital  
Baltimore, MD*

**Chinthaka (Chris) Heyn BSc, Ph.D., M.D., FRCPC**

*Assistant Professor  
Department of Medical Imaging  
University of Toronto*

### PRESENTATION - AWARDS COMMITTEE:

**Eric Grief, M.D.**

*Department Radiology - Northwell Health*

**Chinthaka (Chris) Heyn BSc, Ph.D., M.D., FRCPC**

*Assistant Professor Department of Medical Imaging,  
University of Toronto*

**Alan A. Johnson, M.D.**

*Assistant Professor, LIJ / Northwell Health  
Zucker Hofstra School of Medicine at Northwell*

**Amy W. Lin, M.D.**

*Lecturer of Medical Imaging, University of Toronto*

**Doris D.M. Lin, M.D., Ph.D.**

*Associate Professor of Radiology and Radiological Science  
Johns Hopkins University School of Medicine  
The Johns Hopkins Hospital*

**Ali Noor, M.D.**

*Assistant Professor Radiology, Northwell Health  
Zucker Hofstra School of Medicine at Northwell*

## ENRS Abstract Submission: Deadline for abstract submissions June 4, 2018

Abstracts will be accepted for oral presentation in 2 categories: (1) Scientific Oral Presentation or (2) Excerpta Extraordinaire (brief presentation of interesting, educational case reports). Submissions are welcome in all major categories in neuroradiology. Authors will be notified by mid-June. Authors of accepted abstracts will be required to register for the meeting and pay the meeting registration fee.

Interested candidates should submit abstract(s) accompanied by a completed abstract submission form electronically to:

Doris D. M. Lin, M.D., Ph.D. at [ddmlin@jhni.edu](mailto:ddmlin@jhni.edu) and to Chinthaka (Chris) Heyn, M.D., Ph.D., FRCPC at [chris.heyne@utoronto.ca](mailto:chris.heyne@utoronto.ca).

Visit <http://www.edusymp.com/esi/2018/ENRS18/CallforAbstracts2018.pdf> to access the submission form.

**DISCLAIMER:** Educational Symposia (ESI) and the Eastern Neuroradiological Society (ENRS) as planners and presenters of this meeting, and Professional Travel as the official travel agency for this meeting, claim no liability for the acts of any suppliers or the safety of any attendees while in transit to, from, or during, this event or any optional activities. The total amount of liability, if any, for the meeting organizers is limited to a refund of the registration fee, and Professional Travel's responsibility is limited to that of an agent.

# Program Schedule

**Thursday, August 23, 2018**

**8:00 AM Meeting Registration**

9:20 – 9:30 Introduction and Welcome  
*Claudia F.E. Kirsch, MD*

## BRAIN STROKE - VESSELS

*Moderators: Oluwatoyin R. Idowu, MD and Rona F. Woldenberg, MD*

9:30 – 9:50 Stroke Imaging and Recommendation  
*Pina C. Sanelli, MD, MPH, FACR*

9:50 – 10:10 Assessment of Hemorrhagic Stroke Is No Joke  
*Clifford J. Eskey, MD, PhD*

10:10 – 10:30 The Many Reasons Why There Are Cerebral Emboli  
*Carlos H. Torres, MD, FRCPC*

10:30 – 10:50 Perfusion/Arterial Spin Labelling MRI in Stroke  
*Pamela W. Schaefer, MD*

## SAM SESSION

10:50 – 11:20 Name That Tract - Understanding Tractography  
*Steven G. Imbesi, MD*

11:20 – 11:50 Stroke Assessment- The Role of MRI  
*Kambiz Nael, MD*

11:50 – 12:00 PM Brief Update - Stroke Predictors in SAH  
*Jana Ivanidze, MD*

**12:15 – 1:15 Lunch & Learn Session or Lunch on Your Own**

## BRAIN TUMORS

*Moderators: Marinos Kontzialis, MD, and David M. Yousem, MD, MBA*

1:30 – 1:50 Neoplasm or Not  
*Jacqueline A. Bello, MD, FACR*

1:50 – 2:10 The Importance of Using, DSC Perfusion or How DSC Users Distinguish Brain Tumor  
*Girish M. Fatterpekar, MBBS, DNB, MD*

2:10 – 2:30 Pre-operative Brain Tumor fMRI – The How and Why  
*Andrei I. Holodny, MD*

2:30 – 2:40 Mapping Brain Circuits and Brain Response on Patients with DBS  
*Walter Kucharczyk, MD, FRCPC*

2:40 – 3:00 Radiogenomic Mapping of Brain Tumors  
*Rivka R. Colen, MD*

3:00 – 3:20 Update on Task Free fMRI – Why It's Time to Try!  
*Behroze Adi Vachha, MD, PhD*

3:20 – 3:30 DIPG – Pontine Gliomas – Brief Imaging Update  
*Sofia S. Haque, MD*

**3:30 – 3:45 Refreshment Break and Visit Technical Exhibits**

## DEMYELINATION/DEGENERATION/NOVEL IMAGING TECHNOLOGIES

*Moderators: Jacqueline A. Bello, MD, FACR and Marlise dos Santos, MD, MSc, FRCPC*

3:45 – 4:05 Imaging Patterns of Multiple Sclerosis and its Mimics  
*Reza Forghani, MD, PhD*

4:05 – 4:25 Let's Get Functional - Use of fMRI as Biomarkers in Disease Such as Alzheimer's  
*Jeffrey R. Petrella, MD*

4:25 – 4:45 MR Neurography Some Lessons Learned  
*Ronald L. Wolf, MD, PhD*

4:45 – 5:05 Radiology 4.0 in Neuroimaging - Artificial Intelligence and the Rise of the Machines  
*Christopher G. Filippi, MD*

5:05 – 5:15 Radiographic Detection of CNS Infection  
*Doris D.M. Lin, MD, PhD*

5:15 – 5:25 I Want to Know More About IgG4  
*Marie-Constance Lacasse, MD*

**5:25 End of Session**

5:25 – 5:55 **Scientific Paper Session #1 ♦**

*Moderators & Evaluators: Eric Grief, MD, Chinthaka (Chris) Heyn, MD, Alan A. Johnson, MD, Amy W. Lin, MD, Doris D.M. Lin, MD, PhD, and Ali Noor, MD*

**6:30 – 8:00 Welcome Reception**

**Friday, August 24, 2018**

**7:00 – 7:45 AM Continental Breakfast for Registrants and Visit Technical Exhibits**

## SKULL BASE AND CRANIAL NERVES

*Moderators: Peter Assad, MD, MPH, MB and Luciano Prevedello, MD, MPH*

7:45 – 8:05 Imaging of Skull Base Cranial Nerves IX-XII  
*Nafi Aygun, MD*

8:05 – 8:25 Anterior Skull Base - The CSF Leak, Where to Look and Seek  
*C. Douglas Phillips, MD, FACR*

8:25 – 8:45 Imaging Pearls and Pitfalls of the Central Skull Base and CVJ  
*Keivan Shifteh, MD*

8:45 – 9:05 Pediatric Skull Base & Craniocervical Junction Pathology  
*Karen K. Moeller, MD*

9:05 – 9:25 Posterior Skull Base Anatomy and Pathology  
*Daniel J. Boulter, MD*

**9:25 – 9:40 Refreshment Break and Visit Technical Exhibits**

## EYES, EARS AND GLANDS

*Moderators: Daniel J. Boulter, MD and Rebecca S. Cornelius, MD, FACR*

## SAM SESSION

9:40 – 10:05 Orbital Imaging  
*Amy Fan-Yee Julianano, MD*

10:05 – 10:30 Temporal Bone Anatomy  
*Hillary R. Kelly, MD*

10:30 – 10:55 Temporal Bone Imaging - Looking Through The Third Window  
*Ashok Srinivasan, MD*

10:55 – 11:15 Temporal Bone Imaging – Non-infectious Pathology  
*Hugh D. Curtin, MD, FACR*

11:15 – 11:35 Stand By Your Gland – Radiographic Assessment of Salivary Anatomy and Pathology  
*Kristine M. Mosier, DMD, PhD*

11:35 – 11:55 Laryngeal Cancer - Imaging Pearls and Pitfalls  
*Hilda E. Stambuk, MD*

**12:10 – 1:10 PM Lunch & Learn Session or Lunch on Your Own**

## HEAD AND NECK - ORAL CAVITY, NOSE & THROAT

*Moderators: Tanya J. Rath, MD and Barry A. Shpizner, MD*

1:25 – 1:45 Sink Your Teeth Into This - A Review of Dental and Jaw Pathology  
*James J. Abrahams, MD*

1:45 – 2:05 Oral Cavity and Oropharyngeal Cancer  
*Eugene Yu, MD, FRCPC*

2:05 – 2:25 Imaging Nerves with MRI Neurography  
*Xuan V. Nguyen, MD, PhD*

2:25 – 2:45 You've Got a Lot of Nerve! Correlation of Histopathology With Radiology in Oral Cancers  
*Ashleigh Briody, DDS, MS*

2:45 – 3:05 Radiographic Detection of Sinonasal Inflammation and Infection  
*Mari Hagiwara, MD*

3:05 – 3:25 Update on Malignant Sinonasal Tumors: New Diagnoses and Imaging Techniques  
*Deborah R. Shatzkes, MD*

**3:25 – 3:40 Refreshment Break and Visit Technical Exhibits**

## HEAD AND NECK - TUMORS, NODES, GLANDS AND ROADS TO IMPROVEMENT

*Moderators: Kristen Lloyd Baugnon, MD and Xuan V. Nguyen, MD, PhD*

3:40 – 4:00 The Truth Be Told – What Does it Mean When Tumor is Beyond the Node - Lymphadenopathy and Extracapsular Spread Update!  
*Peter M. Som, MD, FACR, FRSM*

4:00 – 4:20 When Do I Get- the Follow Up PET? PET-CT Utilization in Head and Neck Cancer  
*Tanya J. Rath, MD*

4:20 – 4:40 Head and Neck Reconstruction Flaps – The Flap on Flaps!  
*Amanda S. Corey, MD, FACR*

4:40 – 5:00 What'd I Miss! Missed Findings in Head and Neck Imaging!  
*Philip R. Chapman, MD*

5:00 – 5:20 What'd I Miss - Missfindings in PET CT Imaging!  
*Elcin Zan, MD*

5:20 – 5:40 Steps in Climbing the Academic Ladder to Success  
*Christopher J. Palestro, M.D., FSNMMI*

**5:40 End of Session**

**5:40 – 6:00 ENRS Annual Business Meeting (ENRS Members Only) ♦**

**Saturday, August 25, 2018**

**7:00 – 7:35 AM Continental Breakfast for Registrants and Visit Technical Exhibits**

7:05 – 7:35 **Scientific Paper Session #2 ♦**  
*Moderators & Evaluators: Eric Grief, MD, Chinthaka (Chris) Heyn, MD, Alan A. Johnson, MD, Amy W. Lin, MD, Doris D.M. Lin, MD, PhD, and Ali Noor, MD*

**PEDIATRIC HEAD AND NECK**

*Moderators: Maria J. Borja Angulo, MD and Korgun Koral, MD*

7:35 – 7:55 What Can We See – in Pediatric Orbital Pathology  
*Gul Moonis, MBBS*

7:55 – 8:15 Congenital Pediatric Hearing Loss  
*Caroline D. Robson, MB, ChB*

8:15 – 8:35 Fetal MRI – Learning The Neuroimaging Basics  
*Beth Kline-Fath, MD, FAIUM*

**SAM SESSION**

8:35 – 9:05 You Must Know This – About Pediatric CNS Phakomatosis  
*Mai-Lan Ho, MD*

9:05 – 9:35 Non-accidental Injury and The Pediatric CNS  
*Bruno P. Soares, MD*

9:35 – 9:55 Emerging Tools for Traumatic Brain Injury Research  
*Jill V. Hunter, MD*

**9:55 – 10:10 Refreshment Break and Visit Technical Exhibits**

**PEDIATRIC HEAD AND NECK - EMBRYOLOGIC CONGENITAL ABNORMALITIES**

*Moderators: Maria J. Borja Angulo, MD and Korgun Koral, MD*

10:10 – 10:30 MACRA- What It Means for Neuroradiologists  
*Joshua A. Hirsch, MD, FACR, FSIR*

10:30 – 10:50 When Things Are Not Fine - In the Congenital Spine - Congenital Spinal Anomalies  
*Puneet S. Pawha, MD*

10:50 – 11:10 Pediatric Cystic Neck Masses  
*Karuna V. Shekdar, MD*

11:10 – 11:30 Pituitary Gland Embryology and Related Lesions  
*Mauricio Castillo, MD, FACR*

**PEDIATRIC IMAGING II**

*Moderators: Jane Ari Lee, MD and Yvonne W. Lui, MD*

**SAM SESSION - PEDIATRIC BRAIN**

11:30 – 12:00 PM Evaluating Epilepsy - Imaging of Pediatric and Adult Epilepsy  
*Erin Simon Schwartz, MD, FACR*

12:00 – 12:30 Following Pediatric Brain Tumors – False Positive vs. Recurrence  
*Korgun Koral, MD*

**12:45 – 1:45 Lunch & Learn Session or Lunch on Your Own**

**SPINE SESSION I**

*Moderators: Amna A. Ajam, MD and Amish H. Doshi, MD*

2:00 – 2:20 Pediatric Spine Tumors  
*Aylin Tekes, MD*

2:20 – 2:40 “Oh, the Places You Flow” Normal and Pathologic CSF Flow and Development  
*Alireza Radmanesh, MD*

2:40 – 3:00 Imaging in Pediatric Demyelination  
*Manohar Shroff, MD, FRCPC*

3:00 – 3:05 A Brief Update - The Extended Spine Sign! A Marker for Pleural Effusion  
*Anna Derman, MD*

**3:05 – 3:20 Refreshment Break and Visit Technical Exhibits**

**Saturday, August 25, 2018 (continued)**

**SPINE SESSION II**

*Moderators: Bidyut K. Pramanik, MD and Elcin Zan, MD*

3:20 – 3:40 Why Spinal Cord Gray and White Matter Matter! A Review of Non-neoplastic Spinal Cord Pathologies  
*Carlos H. Torres, MD, FRCPC*

3:40 – 4:00 Make the Case! Unknown Interactive Spine & Skull Base  
*Laurie A. Loevner, MD*

4:00 – 4:20 Cervical Spine Trauma: A Classification Update  
*Harprit S. Bedi, MD*

4:20 – 4:40 How Do I Describe This Disk – Current Updates on Lumbar Disc Nomenclature  
*Gordon K. Sze, MD, FACR*

4:40 – 5:00 Spine Infection Detection – The Role of The Radiologist  
*Amish H. Doshi, MD*

5:00 – 6:00 Stump The Stars – Jeopardy Game Show  
*Justin Brucker, MD & Laurent Letourneau-Guillon, MD*

**6:00**

**End of Session**

**6:30 – 9:00**

**Closing Reception and Dinner**

*Presentation of the Norman E. Leeds, Steven A. Kieffer and Robert D. Zimmerman Awards - Norman E. Leeds, MD*

**Sunday, August 26, 2018**

**7:00 – 8:00 AM Continental Breakfast for Registrants and Visit Technical Exhibits**

7:30 – 8:00 **Scientific Paper Session #3 ♦**  
*Moderators & Evaluators: Eric Grief, MD, Chinthaka (Chris) Heyn, MD, PhD, FRCPC, Alan A. Johnson, MD, Amy W. Lin, MD, Doris D.M. Lin, MD, PhD, and Ali Noor, MD*

**SPINE - NEUROINTERVENTIONAL/ EMERGENCY**

*Moderators: Allan L. Brook, MD, FSIR and Gregg H. Zoarski, MD*

8:00 – 8:20 What Do I Need to Find in the Post-Operative Spine  
*A. Orlando Ortiz, MD, MBA, FACR*

8:20 – 8:40 Post-op Spine Imaging With a Focus on Complications  
*William A. Mehan, Jr., MD, MBA*

8:40 – 9:00 MRI Spinal Perfusion in Spinal Metastasis  
*Sasan Karimi, MD*

9:00 – 9:20 When It's Fine to Put Stuff in the Spine - New Evidence for Vertebroplasty  
*Eric C. Bourekas, MD, MBA, FACR*

9:20 – 9:40 How Do I Find The Vascular Lesion in The Spine Optimizing Spinal Vascular Imaging  
*Michele H. Johnson, MD, FACR, FASER*

**9:40 – 9:55**

**Refreshment Break and Visit Technical Exhibits**

9:55 – 10:15 Coil, Stent or Diversion of Flow- How Do I Know?  
*Donatella Tampieri, MD, FRCPC*

10:15 – 10:35 Do We Know When it is Going to Blow? - Growth and Rupture Risk of Small Intracranial Aneurysms  
*Ajay Malhotra, MBBS, MD*

10:35 – 10:55 Sussing Out Subarachnoid Hemorrhage- An Update on SAH  
*Sapna Rawal, MD, FRCPC*

10:55 – 11:15 What Test is Best for the Treated Aneurysm?  
*Marlise dos Santos, MD, MSc, FRCPC*

11:15 – 11:35 Brain Malformations Road to Discovery  
*Thierry A.G.M. Huisman, MD, EQNR, FICIS*

**11:35 – 11:45**

**Closing Comments**

*Claudia F.E. Kirsch, MD*

**11:45**

**End of Meeting**

# Invited Faculty

**James J. Abrahams, M.D.**  
*Yale University School of Medicine*

**Amna A. Ajam, M.D.**  
*The Ohio State University Medical Center*

**Jane Ari Lee, M.D.**  
*Lenox Hill Hospital Northwell Health*

**Peter Assaad, M.D., MPH, MB**  
*Donald and Barbara Zucker School of Medicine at Hofstra/Northwell*

**Nafi Aygun, M.D.**  
*Johns Hopkins University*

**Kristen Lloyd Baugnon, M.D.**  
*Emory University School of Medicine*

**Harprit S. Bedi, M.D.**  
*Tufts University School of Medicine*

**Jacqueline A. Bello, M.D., FACR**  
*Montefiore Medical Center*

**Maria J. Borja Angulo, M.D.**  
*NYU School of Medicine*

**Daniel J. Boulter, M.D.**  
*The Ohio State University Wexner Medical Center*

**Eric C. Bourekas, M.D., MBA, FACR**  
*The Ohio State University Wexner Medical Center*

**Ashleigh Briody, DDS, MS**  
*Central Ohio Skin & Cancer, Inc*

**Allan L. Brook, M.D., FSIR**  
*Montefiore Medical Center*

**Justin Brucker, M.D.**  
*University of Wisconsin*

**Mauricio Castillo, M.D., FACR**  
*University of North Carolina Hospital*

**Philip R. Chapman, M.D.**  
*University of Alabama Birmingham*

**Rivka R. Colen, M.D.**  
*MD Anderson Cancer Center*

**Amanda S. Corey, M.D., FACR**  
*Emory University*

**Rebecca S. Cornelius, M.D., FACR**  
*University of Cincinnati College of Medicine*

**Hugh D. Curtin, M.D., FACR**  
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# Registration Information

30<sup>th</sup> Annual Meeting of

## The Eastern Neuroradiological Society

ENRS18

A late fee of \$75 will be added to any registration postmarked after **July 23, 2018**.

ENRS Member ..... ☐ \$425.00

Non-Member ..... ☐ \$750.00

Members-in-Training ..... ☐ \$250.00

☐ Resident ☐ Fellow ☐ Medical Student

☐ Yes, I plan to attend the  
Welcome Reception ..... \$15.00  
**Thursday August 23, 2018**

☐ Yes, I plan to attend the  
Annual Gala Dinner..... \$25.00  
**Saturday, August 25, 2018**

☐ Yes, I plan to have a guest attend  
☐ Guest / Spouse Reception /  
Dinner Fee ..... \$175.00  
☐ Children under 12 years of age ..... \$75.00

**TOTAL ENCLOSED: \$** \_\_\_\_\_

### 4 Easy Ways To Register

We Accept



**INTERNET**  
ENRS.Edu symp.com

#### MAIL

Check payable to:  
ENRS

c/o Educational Symposia  
5620 West Sligh Avenue  
Tampa, Florida USA  
33634-4490

#### FAX

(813) 806-1001

#### PHONE

(813) 806-1000

Name \_\_\_\_\_ Degree ☐ M.D. ☐ D.O. ☐ Ph.D. ☐ Other

Company / Institution \_\_\_\_\_ Specialty: ☐ Staff Neuroradiologist ☐ Staff Head & Neck ☐ Private Practice Neuroradiologist ☐ Private Practice Head & Neck ☐ Other

Address \_\_\_\_\_ City / State / Zip Code / Country

Phone \_\_\_\_\_ Email (**Required for Electronic Syllabus**)

Card Number / Card Type: ☐ Master Card ☐ Visa ☐ American Express ☐ Discover \_\_\_\_\_ Expiration Date \_\_\_\_\_ Security Code \_\_\_\_\_

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Cardholder Signature

**Cancellations:** Requests for refund of registration fees, less a \$75.00 administrative fee, will be made to those providing written notification of cancellation by July 23, 2018. After that date, there will be no refunds given for cancellations. Please email notice of cancellation to: [lsessa@edusymp.com](mailto:lsessa@edusymp.com) or fax to 813-806-1001.



## Fairmont Southampton, Bermuda

### About The Hotel

Perched on Bermuda's stunning south shore with miles of pink sand beaches, the luxurious Fairmont Southampton, Bermuda beach resort sits on nearly 100 acres, dotted with lush bougainvillea and towering coconut palms.

Fairmont Southampton Bermuda hotel's spacious guestrooms—many with sweeping water views—are richly appointed with private balconies, walk-in closets and marble bathrooms.

Relax at the resort pool, or pull up a chaise lounge at the sprawling oceanfront beach club with Dive Centre, tennis courts, jet ski rentals, & more. Unwind in the Willow Stream Spa with indoor pool & fitness facility, or tee off at the 18-hole par-3 championship Turtle Hill Golf Club.

Fairmont Southampton has dining covered for even the most discerning palates with an impressive range of 10 restaurant options located in our Bermuda resort.

### How To Get There

The closest airport to Fairmont Southampton is L.F. Wade International Airport (BDA) formerly named Bermuda International Airport, located in St. George's, approximately 35 minutes from the Fairmont Southampton, Bermuda.

Taxis are available at the airport, hotel, city of Hamilton, and are available by calling the Bermuda Taxi Association at 441-296-2121. Taxi fare from the airport is approximately \$60 USD, plus tip (1-4 persons) and is a 30 minute drive each way.

Direct shuttle service to and from the airport can be pre-arranged by calling 441-234-4366 in advance of your arrival. Shared shuttle is \$15 per person. Private transfers & island tours are also available. Rates subject to change without notice.

### SPACE IS LIMITED - RESERVE TODAY:

Visit [ENRS.edusymp.com](http://ENRS.edusymp.com) to visit the accommodations page for additional hotel information and reservation link.

Call Fairmont Southampton, Bermuda at: 441-238-8000 or Global Reservations Centre at: 800-441-1414 and identify that you are with the Eastern Neuroradiological Society Conference to receive the group discount.

Call Professional Travel at 800-237-7230 for further assistance.

**Group Room Rates Start At.....\$209.00 nt.** (Single/Double Occupancy) and available 3 days prior/post meeting based on availability. Extra person sharing a room will be charged an additional \$30 per day. Children 18 years and under sharing their parents accommodation are complimentary, however they are subject to daily gratuities and daily resort fee.

### ROOM PREFERENCE:

1 King/ 2 Queen beds (upon availability)

**Hotel Tax:** 7.25% • **Tourism Guest Fee:** 4.5%

**Resort Levy:** \$15.00 per person per day plus tax for all guests over the age of 12 years old.

**Gratuities Fee:** \$12.00 per person per day

**Hotel Cut-off Date: July 21, 2018**

**DEPOSIT POLICY:** Reservations must be guaranteed with a major credit card.

**CANCELLATION POLICY:** Cancellation of reservations made up to 72 hours prior to arrival will be accepted, and the deposit refunded for those rooms for the full night's stay. Check in is 4:00 p.m.; Check out is 11:00 a.m.

**HOTEL:** 101 South Shore Road  
Southampton, Bermuda SN02

**PHONE:** 441-238-8000

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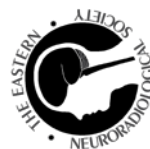
*30<sup>th</sup> Annual Meeting of*  
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**August 23 - 26, 2018**

Fairmont Southampton, Bermuda  
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For more information, visit [www.enrs.org](http://www.enrs.org)



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