

PIC Newsletter Winter 2023



President's message

I would like to express my gratitude to all members who support the Pediatric Imaging Council. Your passion, expertise, and dedication have been instrumental in driving the progress of pediatric imaging. I encourage everyone to join us at the upcoming mid-winter meeting in 2024. This promises to be an engaging and informative event, featuring a range of interesting presentations and discussions. It is an excellent opportunity to network, gain new insights, and stay updated with the latest developments in our field.

I am also delighted to share that the Pediatric Imaging Council will support the continuation of the mentorship program, will continue the project of updating and revising our existing guidelines for pediatric nuclear medicine, and will continue the project of the case competition. With advancements in technology and evolving best practices, it is imperative to regularly review and update these guidelines to ensure the highest standards of care for our young patients and to share interesting/educational cases. We invite all members to actively participate and share their expertise."

Regards,

Reza vali R.V.

Reza vali, MD, MSc.

President, Pediatric Imaging Council

<u> 2024 SNMMI Mid-Winter Meeting</u>

Februrary 1-3, 2023 | Orlando, Florida



Please Join Us for Our Session

Friday, February 2, 1:15-3:15 PM ET

Tips and Challenges for Developing a Successful Pediatric Therapy Program

Sponsored by the SNMMI Pediatric Imaging Council (PIC)/Therapy COE

Organizer(s): Lisa J. States, MD

Moderator(s): Lisa J. States MD and Reza Vali MD

Session Description

The course will feature the unique applications of radiopharmaceutical therapy for pediatric patients. Children are not little adults. Indications for treatment, procedures and protocols and interpretation of studies will be discussed. The challenges encountered when treating a child will be discussed and tips for addressing these issues will be provided.

Session Objectives

1. Know the indications for radiopharmaceutical therapy in children

- 2. Understand the issues encountered when treating children with radiotherapy
- 3. Learn how to communicate these challenges with children and families

Presentations

- I-131 MIBG therapy for Neuroblastoma: A clinician's perspective Meaghan Granger, MD
 St. Jude Children's Research Hospital
- Radiopharmaceutical Therapy in Children: Nuts and Bolts Kevin W Edwards BSRT (N) (R) CNMT PET Children's Hospital of Philadelphia
- I-131 MIBG therapy for Neuroblastoma Susan E. Sharp, MD Cincinnati Children's Hospital
- RAI Therapy for Children with Graves' Disease Hedieh Khalatbari, MD, MBA
 St. Jude Children's Research Hospital
- RAI Therapy for Children with Thyroid Cancer Marguerite T. Parisi, MD, MS Ed Seattle Children's Hospital

Please Join Us for our Session

Saturday, February 3, 10:30 AM - 12:30 PM ET

Pediatric Imaging-Tips for Optimization and Diagnosis

Sponsored by the SNMMI Pediatric Imaging Council (PIC)

Organizer(s): Lisa J. States MD

Moderator(s): Reza Vali MD

Session Description

This session is designed to give an overview of the current practices used for the evaluation of children with cancer. The lectures will provide protocols for diagnostic tests utilized in pediatric cancer staging and treatment. There will be a focus on the patterns of uptake in children, interpretation of images, and key findings required for staging and reporting. New and emerging technologies will also be highlighted. The intended audience is physicians, technologists, and physicists of all levels. This course will serve to unify the practice of pediatric nuclear medicine. After attending this course, practitioners will have a better understanding of the importance of imaging in the treatment of pediatric cancer, resulting in improved delivery of care and improved outcomes.

Session Objectives

- 1. Understand techniques used to improve imaging of children and provide optimal imaging results
- 2. Identify the patterns of physiologic uptake of radiotracers in pediatric patients
- 3. Recognize key findings required for accurate staging and reporting

Presentations

 PET Imaging in the Pediatric Cancer Patient- from Normal to Abnormal Hollie A. Lai, MD
 Children's Hospital of Orange County, Orange, CA

- PET Imaging of Neuroblastoma with 18F-MFBG
 Bart de Keizer, MD
 University Medical Center Utrecht, The Netherlands
- Imaging Neuroblastoma: Diagnosis and Staging Susan E. Sharp, MD
 Cincinnati Children's Hospital, Cincinnati, OH
- Thyroid cases
 Marguerite T. Parisi, MD, MS Ed
 Seattle Children's Hospital, Seattle, WA

SNMMI PIC Imaging Case Competition



The SNMMI Pediatric Imaging Council will be hosting its 3rd annual Imaging Case Competition at this year's SNMMI Annual Meeting, which takes place June 8-11, 2024, in Toronto, Canada. The top 5 cases will be showcased at the annual meeting! The top 3 cases will be eligible for a cash prize each, and an opportunity to be published in the *Clinical Nuclear Medicine* journal!

Full details will be posted on the PIC website and will be distributed to the PIC membership through a flyer.

Congratulations to the top 5 winning cases of 2023!!

- Rasmussen's Encephalitis (Top Case)
 Valentina Ferrer Valencia, MD, Research Fellow, Department of Radiology, Boston Children's Hospital
- Metachronous Multifocal Giant Cell tumor
 Nadeen Abu Ata, M.D, Radiology Faculty, Cincinnati Children's Hospital Medical Center, Cincinnati, Ohio
- Langerhans cell histiocytosis
 Hwan Lee, MD, Radiology Resident, Children's Hospital of Philadelphia & Hospital of the University of Pennsylvania
- High risk Ganglioneuroblastoma, ^{64/67}Cu-SARTATE Theranostic Treatment
 Neeta Pandit-Taskar, MD, Radiology Faculty, Memorial Sloan Kettering Cancer Center,
 New York, NY
- Hepatic Gastrinoma, Zollinger-Ellison syndrome
 Dr. Piyush Aggarwal, MD, Nuclear Medicine Resident, Postgraduate Institute of Medical Education and Research, Chandigarh, India

PIC Mentoring Program

Mentorship is a key component of professional development in our field. The PIC has initiated a mentoring program for its members to provide career guidance, increase networking and collaboration and promote leadership development.

There are currently four (4) mentoring groups containing a mix of early-, mid- and late-career physicians, scientists and technologists. If you are interested in joining as a mentor, mentee, or both, please contact Dr. Lisa States (STATES@chop.edu), or Dr. Reza Vali (reza.vali@sickkids.ca). SNMMI members from outside the PIC are also welcome to join PIC mentorship program.

PIC involvement in guidelines and practice parameters

The PIC has proposed the creation of comprehensive new guidelines for Gastric Emptying Scintigraphy in pediatric patients to help standardize this very commonly performed procedure in pediatric nuclear medicine. This would be a joint guideline between EANM and SNMMI. The PIC will also be involved in renewing the existing guidelines on Radionuclide Cystography.

If you would like to participate in on any of these guidelines, please contact Dr. Reza Vali (reza.vali@sickkids.ca) or Dr. Hollie A. Lai (hlai@choc.org)

Member in Spotlight



"Thank you to the PIC and all my friends and mentors who have pushed me forward and upward. Thanks for teaching me patience and offering me empathy when I needed it!"

Victor J. Seghers, MD, PhD is the Chief of Radiology at Texas Children's-The Woodlands and Texas Children's-West Campus, two free-standing children's hospitals in the greater Houston region. He also serves as Division Chief for Community Radiology at Texas Children's and is a Professor of Radiology and Pediatrics at Baylor College of Medicine. He served as the Division Chief of Nuclear Medicine at Texas Children's from 2010-15.

He graduated from Texas A&M University with degrees in Chemistry and History and joined the Baylor College of Medicine MD/PhD program in Houston, TX in 1993. Genomic cloning and gene sequencing was coming into its own, and his laboratory had just cloned the gene for the Sulfonylurea Receptor, a protein important in K-ATP channels which helped regulate insulin release in pancreatic β -cells. His job was to create a "knock-out" mouse that lacked the sulfonylurea receptor and mimic a human disease of neonatal hyperinsulinism. He was successful at creating the knock-out mouse but when all the mice had normal blood glucose levels and were quite happy despite Vic's frequent poking and prodding, quickly realized that mice have superior and more redundant mechanisms to control their glucose levels than humans. This was the first of many times he appreciated how life and mother nature do not always share their mysteries and when they do, they may not be what you expect at all. Vic thanks the thousands of his murine progeny for convincing his dissertation committee to still allow him to graduate with his PhD in 2000.

Vic completed an Internship at the University of Pennsylvania from 2001-02 where he met his wife (Deborah) through online dating. After internship he went to University of California-San Diego for Radiology Residency (2002-06) and Pediatric Radiology Fellowship at Boston Children's Hospital (2006-07) where he was fortunate to study under Drs. Ted Treves and Fred Grant. Soon after Vic joined Texas Children's in 2007, the institution began reorganizing its physician faculty and desired to bring the local private practice pediatric radiology and nuclear medicine groups under their umbrella. It was during this time that Vic was offered the opportunity to work in pediatric nuclear medicine and agreed to lead the Division. The next few years were a whirlwind of helping design and operationalize a new nuclear medicine department, bring in new faculty, and purchase new equipment including PET/MR, which was the first in a free-standing pediatric hospital at that time (2010). He became more involved with SNMMI during this time and credits those leadership and mentorship opportunities with helping him navigate complex clinical, academic, and political challenges. Drs. Meg Parisi, Helen Nadel, and Fred Grant spent a lot of time handholding him during those years. Dr. Barry Shulkin would tell him he had no experience and had no idea how to help him, and then proceed to give him the exact answer for what to do. Vic survived and thrived and realized that he enjoyed administration and project building, which led to a phase of leadership training through courses offered at RSNA, books discussed at SNMMI and SPR meetings, and seeking out and benefiting from many, many mentors.

It was through the SNMMI-Pediatric Imaging Council (PIC) that Vic met many of the terrific luminaries in pediatric nuclear medicine and developed close friendships who have greatly influenced his academic career. The PIC offered the first opportunity to get involved and eventually lead a committee/council outside of his home institution and learn more about how medical societies work. He currently serves as Chair of the SNMMI Committee of Councils and Centers and Chair of the SNMMI Governance Re-organization Committee, a taskforce charged by the SNMMI Board of Directors to help streamline committees and councils to ensure we are best positioned to address current and future needs of our SNMMI members, priorities, and patients.

PIC Board of Directors

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