St. Jude Children's Research Hospital

PBII
Pediatric Biomedical Imaging Initiative

Pediatric Oncologic Imaging Course

November 5 & 6, 2023

St. Jude Children's Research Hospital is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

Better Imaging. Better Outcomes.

St. Jude Children's Research Hospital

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About this Initiative:

The Pediatric Biomedical Imaging Initiative (PBII) is an effort of the Department of Diagnostic Imaging at St. Jude Children's Research Hospital to provide cutting-edge care to pediatric patients with catastrophic diseases by disseminating current and anticipated knowledge, expertise, and tools. Currently, the Zoltán Patay Scientific Symposium, the Education Courses, and on-site Training Opportunities are the three pillars of the PBII.

The Zoltán Patay Scientific Symposium is a one-day event during which PBII provides a forum for world experts to present on a singular timely and relevant topic. This event is meant for both clinicians and scientists engaged in the care and treatment of pediatric catastrophic diseases. The Education Courses are multiday event focusing on either pediatric neuro-oncologic imaging or pediatric oncologic body imaging in alternating years. These workshop-style courses are specifically designed for radiologists, both practicing and in training, and emphasize contemporary imaging of pediatric cancers.

PBII training opportunities with the St. Jude Department of Diagnostic Imaging include up to two months of an on-site clinical elective for any interested radiology resident or fellow currently enrolled in an Accreditation Council for Graduate Medical Education (ACGME)-accredited radiology training program.

Mission:

Our mission is to promote and facilitate the effective and impactful use of all modalities of state-of-the-art biomedical imaging to improve overall outcomes in malignancies and other catastrophic diseases in children, in alignment with the institutional mission "to advance cures and means of prevention for pediatric catastrophic diseases through research and treatment."

Vision:

To achieve our mission, we adopt and implement the latest concepts and technologies in biomedical imaging, facilitate their translation into patient care and create an interdisciplinary platform to exchange ideas, disseminate knowledge and share experience within and beyond the institution.

The PBII Pediatric Oncologic Imaging Course

This multiday program in the fall designed specifically for radiologists - both practicing and in training. The Education Course focuses either on pediatric oncologic neuro-imaging (includes all central nervous system (CNS) tumors) or pediatric oncologic body imaging (all non-CNS tumors), both of which are organized in alternating years. This one-of-a-kind course is designed to discuss the best practices in imaging pediatric cancers. In addition to in-depth discussion on the imaging characteristics of pediatric cancers by the national and internal imaging experts, the course also focuses on imaging techniques and standard-of-care response assessment systems. The CNS tumor response assessment lectures are typically given by the experts from the Response Assessment in Pediatric Neuro-oncology (RAPNO) group. Special syllabi are also included to discuss the latest version of the World Health Organization tumor classification systems. The course is delivered to a limited number of attendees to make sure that there are ample scopes of interactions with the faculty, both formal and informal. The course offers AMA category 1 CME credits.

Pediatric Oncologic Imaging Course Presentations

St. Jude Children's Research Hospital | PBII Pediatric Biomedical Imaging Initiative

Liver Tumors- Liver Imaging	
An Update on the COG Hepatoblastoma Radiomics Project	Gary R. Schooler, MD
Pediatric LI- Rads	Alexander J. Towbin, MD, FAAP, FACR
Rare Liver Tumors of Childhood: Embryonal Sarcoma, Hepatocellular Carcinoma, Other	Govind Chavhan, MBBS, MD, DNB, DABR
Contrast Enhanced Ultrasound of Liver Masses in Children	Judy H. Squires, MD, FSRU
Thyroid Cancer	
Ultrasound Features of Thyroid Nodules: Distinguishing Benign from Malignant	Adina L. Alazraki, MD, FAAP
Biopsy of Thyroid Nodules: When and How?	Adina L. Alazraki, MD, FAAP
Radioactive Iodine Therapy vs. Surgical Treatment of Thyroid Carcinoma	Hedieh Khalatbari, MD, MBA
Application of Molecular Imaging	
Anatomic vs. Functional /Metabolic Imaging: Which is Best for Which Tumors?	Stephan D. Voss, MD, PhD
MIBG/Dotatate/PET in Adrenal Tumors	Andrew T. Trout, MD
^{11}C Methionine PET Imaging in Pediatric Oncology	Barry L. Shulkin, MD, MBA
The Crossroads Between Imaging and Intervention	
Interventional Therapeutics in Pediatric Oncology	Michael Temple, MD, FRCPC
3D Visualization for Virtual Surgical Planning	Zachary R. Abramson, MD, DMD
The Value of 3D Imaging: A Surgeon's Perspective	Andrew M. Davidoff, MD
Global Outreach	
Keynote Address: A Report from the Lancet Oncology Commission on Medical Imaging and Nuclear Medicine	Pek-Lan Khong, MBBS, MD, FRCR
Global Pediatric Cancer Care	Sheena Mukkada, MD, MPH
Safer Ukraine	Marta A. Salek, MD, MPH
Cancer Predisposition Syndromes	
Cancer Predisposition Syndromes: What the Radiologist needs to know from the Geneticist and vice versa, what the Geneticist needs to know from the Radiologist	Kim E. Nichols, MD
Screening, When and How: The Major Syndromes, Which Tumors are Associated, Screening Modalities, Ultrasound, Whole Body MR, X-Ray	Stephan D. Voss, MD, PhD
NF1: What the Clinician Wants the Radiologist to Know	Melissa Perrino, MD
Adrenal Tumors	
Staging and Image Defined Risk Factors	Susan E. Sharp, MD
The International Neuroblastoma Response Criteria	Andrew T. Trout, MD
Advances in Neuroblastoma Therapy	Sara Federico, MD
Non-Neuroblastoma Adrenal Tumors in Children	Devendra Sawant, MBBS, MPH, PhD
Complications and Long-Term Effects	
Acute Cardiac Complications of Therapy	Jason Johnson, MD, MHS
Assessing Liver Toxicity in Pediatric Oncology	Cara E. Morin, MD, PhD
Toxicities of Immuno-Therapy	Ann D. Schechter, MD
Introduction to Survivorship Research: Partnering with Our Patients and Their Families	Matthew J. Ehrhardt, MD, MS
Survivors Panel	Matthew J. Ehrhardt, MD, MS

Pediatric Oncologic Imaging Course
Speakers Information

St. Jude Children's Research Hospital | PBII Pediatric Biomedical Imaging Initiative

Zachary R. Abramson, MD, DMD
Assistant Member, St. Jude Faculty
Department of Diagnostic Imaging
St. Jude Children's Research Hospital

Adina L. Alazraki, MD
Medical Director of Radiology at Egleston
Medical Director of System MRI
Director of Nuclear Medicine
Children's Healthcare of Atlanta

Govind Chavhan, MBBS, MD, DNB, DABR
Pediatric Radiologist
Body MRI Co-Section Head
Department of Medical Imaging
The Hospital For Sick Children
Professor, University of Toronto

Andrew M. Davidoff, MD
Member, St. Jude Faculty
Chair, Surgery Department
Director, Surgical Research
St. Jude Endowed Chair in Surgical Research
St. Jude Children's Research Hospital

Matthew J. Ehrhardt, MD, MS
Associate Member, St. Jude Faculty
Oncology Department
Epidemiology and Cancer Control Department
Cancer Survivorship Division
Leukemia/Lymphoma Division
St. Jude Children's Research Hospital

Sara Federico, MD
Member, St. Jude Faculty
Department of Oncology
Division of Solid Tumor
St. Jude Children's Research Hospital

Terrence L. Geiger, MD, PhD
Member, St. Jude Faculty
Senior Vice President and Deputy Director for Academic and Biomedical Operations
Interim Chair, Department of Immunology
St. Jude Endowed Chair in Pediatrics
Pathology Department, Immunology Department
St. Jude Children's Research Hospital

Jason Johnson, MD, MHS
Associate Chief of Cardiology
Director, Cardiac MRI
LeBonheur Children's Hospital
Director, Cardiac MRI
St. Jude Children's Research Hospital
Associate Professor of Pediatrics and Radiology
University of Tennessee Health Science Center

Hedieh Khalatbari, MD, MBA
Associate Member, St. Jude Faculty
Department of Diagnostic Imaging
St. Jude Children's Research Hospital

Pek-Lan Khong, MBBS, MD, FRCR
Head and Senior Consultant, Department of Diagnostic Imaging
National University Hospital
Professor and Head, Department of Diagnostic Radiology
Director, Clinical Imaging Research Center (CIRC)
Yong Loo Lin School of Medicine, National University of Singapore

Cara E. Morin, MD, PhD
Pediatric Radiologist
Division of Radiology and Medical Imaging
Assistant Professor, UC Department of Radiology
Cincinnati Children's Hospital Medical Center

Sheena Mukkada, MD, MPH
Assistant Member, St. Jude Faculty
Global Pediatric Medicine Department
Infectious Diseases Department
St. Jude Children's Research Hospital

Kim E. Nichols, MD
Member, St. Jude Faculty
Director, Cancer Predisposition Division
Oncology Department
St. Jude Children's Research Hospital

Melissa Perrino, MD
Instructor, St. Jude Faculty
Oncology Department
St. Jude Children's Research Hospital

Pediatric Oncologic Imaging Course Speaker Information (con't)

St. Jude Children's Research Hospital | PBII Pediatric Biomedical Imaging Initiative

Marta A. Salek, MD, MPH
Instructor, St. Jude Faculty
Global Pediatric Medicine
St. Jude Children's Research Hospital

Judy H. Squires, MD, FSRU
Associate Professor of Radiology
Chief of Pediatric Ultrasound
Program Director of Diagnostic Radiology Residency
UPMC Children's Hospital of Pittsburg

Devendra Sawant, MBBS, MPH, PhD
Assistant Member, St. Jude Faculty
Department of Diagnostic Imaging
St. Jude Children's Research Hospital

Michael Temple, MD, FRCPC
Section Chief, Interventional Radiology
Member, St. Jude Faculty
Department of Diagnostic Imaging
St. Jude Children's Research Hospital

Ann D. Schechter, MD
Staff Physician-Pediatric Radiologist
Department of Diagnostic Imaging
St. Jude Children's Research Hospital

Alexander J. Towbin, MD, FAAP, FACR
Associate Chief Medical Information Officer (Imaging)
Associate Chief, Department of Radiology (Operations and Informatics)
Neil D. Johnson Chair of Radiology Informatics
Professor of Radiology
Cincinnati Children's Hospital Medical Center

Gary R. Schooler, MD
Associate Professor of Radiology
Associate Division Chief, Pediatric Radiology
University of Texas, Southwestern Medical Center

Andrew T. Trout, MD
Director, Clinical Research,
Director, Nuclear Medicine,
Lead, Body CT, Department of Radiology and Medical Imaging
Associate Professor
UC Department of Radiology, Department of Pediatrics
Cincinnati Children's Hospital Medical Center

Susan E. Sharp, MD
Pediatric Radiologist
Cincinnati Children's Hospital Medical Center
Associate Professor
University of Cincinnati College of Medicine

Stephan D. Voss, MD, PhD
Director of Nuclear Medicine
Boston Children's Hospital
Associate Professor of Radiology
Harvard Medical School

Barry L. Shulkin, MD, MBA
Section Chief, Division of Nuclear Medicine
Department of Diagnostic Imaging
St. Jude Children's Research Hospital
Adjunct Professor of Radiology UTHSC

PBII Pediatric Oncologic Imaging Course- Planning Committee

Zachary R. Abramson, MD, DMD
Assistant Member, St. Jude Faculty
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Mary E. (Beth) McCarville, MD
Member, St. Jude Faculty
Interim Chair, Department of Diagnostic Imaging
Chief, Clinical Radiation
Chief, Body Imaging Section
St. Jude Children's Research Hospital

Sue C. Kaste, DO
Emeritus, St. Jude Faculty (1991-2022)
Department of Diagnostic Imaging
Oncology Department
St. Jude Children's Research Hospital

Ann D. Schechter, MD
Staff Physician-Pediatric Radiologist
Department of Diagnostic Imaging
St. Jude Children's Research Hospital

Pediatric Oncologic Imaging Course

Sunday, November 5, 2023

St. Jude Children's Research Hospital | PBII Pediatric Biomedical Imaging Initiative

Location: Marlo Thomas Center Lecture Hall

Registration and Continental Breakfast: 7:00am-8:00am

SUNDAY	PRESENTATION TITLE	SPEAKER
8:00 am – 8:10 am	Welcome & Introduction	Beth McCarville, MD
8:10 am – 8:50 am	**Keynote**: St. Jude Mission – Past, Present Future	Terrence L. Geiger, MD, PhD
8:50 am – 9:10 am	An Update on the COG Hepatoblastoma Radiomics Project	Gary R. Schooler, MD
9:10 am – 9:30 am	**Pediatric LI- Rads**	Alexander J. Towbin, MD, FAAP, FACR
9:30 am – 9:50 am	Rare Liver Tumors of Childhood: Embryonal Sarcoma, Hepatocellular Carcinoma, Other	Govind Chavhan, MD, DABR
9:50 am – 10:10 am	**Contrast Enhanced Ultrasound of Liver Masses in Children**	Judy H. Squires, MD, FSRU
10:10 am – 10:30 am	Q & A Session	
10:30 am – 10:45 am	Break	
10:45 am – 11:05 am	Ultrasound Features of Thyroid Nodules: Distinguishing Benign from Malignant	Adina Alazraki, MD, FAAP
11:05 am – 11:20 am	Biopsy of Thyroid Nodules: When and How?	Adina Alazraki, MD, FAAP
11:20 am – 11:35 am	Radioactive Iodine Therapy vs. Surgical Treatment of Thyroid Carcinoma	Hedieh Khalatbari, MD, MBA
11:35 am – 11:55 am	Q & A Session	
11:55 am – 12:40 pm	Lunch	
12:40 pm – 1:25 pm	**Quiz Case Presentations: Sunday Topics**	
1:25 pm – 1:40 pm	Anatomic vs. Functional /Metabolic Imaging: Which is Best for Which Tumors?	Stephan D. Voss, MD, PhD
1:40 pm – 2:00 pm	MIBG/Dotatate/PET in Adrenal Tumors	Andrew T. Trout, MD
2:00 pm – 2:15 pm	^{11}C Methionine PET Imaging in Pediatric Oncology	Barry L. Shulkin, MD, MBA
2:15 pm – 2:35 pm	Q & A Session	
2:35 pm – 2:50 pm	Break	
2:50 pm – 3:05 pm	Interventional Therapeutics in Pediatric Oncology	Michael Temple, MD
3:05 pm – 3:20 pm	3D Visualization for Virtual Surgical Planning	Zachary Abramson, MD
3:20 pm – 3:35 pm	The Value of 3D Imaging: A Surgeon's Perspective	Andrew Davidoff, MD
3:35 pm – 3:55 pm	Q & A Session	
4:00 pm – 5:30 pm	Event Reception - Speaker Meet and Greet following adjournment of events	Marlo Thomas Atrium

Pediatric Oncologic Imaging Course

Monday, November 6, 2023

St. Jude Children's Research Hospital | PBII Pediatric Biomedical Imaging Initiative

Location: Marlo Thomas Center Lecture Hall

Registration and Continental Breakfast: 7:00am-8:00am

MONDAY	PRESENTATION TITLE	SPEAKER
8:00 am – 8:10 am	Welcome & Introduction	Beth McCarville, MD
8:10 am – 8:40 am	**Keynote**: A Report from the Lancet Oncology Commission on Medical Imaging and Nuclear Medicine	Pek-Lan Khong, MBBS,MD, FRCR
8:40 am – 9:00 am	Global Pediatric Cancer Care	Sheena Mukkada, MD, MPH
9:00 am – 9:20 am	Safer Ukraine	Marta A. Salek, MD, MPH
9:20 am – 9:40 am	Q & A Session	
9:40 am – 9:55 am	Break	
9:55 am – 10:15 am	Cancer Predisposition Syndromes: What the Radiologist needs to know from the Geneticist and vice versa, what the Geneticist needs to know from the Radiologist	Kim E. Nichols, MD
10:15 am – 10:35 am	Screening, When and How: The Major Syndromes, Which Tumors are Associated, Screening Modalities, Ultrasound, Whole Body MR, X-Ray	Stephan D. Voss, MD, PhD
10:35 am – 10:50 am	NF1: What the Clinician Wants the Radiologist to Know	Melissa Perrino, MD
10:50 am – 11:10 am	Q & A Session	
11:10 am – 11:55 am	**Quiz Case Presentations**: Monday Topics	
11:55 am – 12:40 pm	Lunch	
12:40 pm – 1:00 pm	Staging and Image Defined Risk Factors	Susan E. Sharp, MD
1:00 pm – 1:15 pm	The International Neuroblastoma Response Criteria	Andrew T. Trout, MD
1:15 pm – 1:30 pm	Advances in Neuroblastoma Therapy	Sara Federico, MD
1:30 pm – 1:45 pm	Non-Neuroblastoma Adrenal Tumors in Children	Devendra Sawant, MD, PhD
1:45 pm – 2:05 pm	Q & A Session	
2:05 pm – 2:20 pm	Break	
2:20 pm – 2:40 pm	Acute Cardiac Complications of Therapy	Jason Johnson, MD, MHS
2:40 pm – 3:00 pm	Assessing Liver Toxicity in Pediatric Oncology	Cara E. Morin, MD, PhD
3:00 pm – 3:20 pm	Toxicities of Immuno-Therapy	Ann Schechter, MD
3:20 pm – 3:45 pm	Introduction to Survivorship Research: Partnering with Our Patients and Their Families	Matthew J. Ehrhardt, MD, MS
3:45 pm – 4:30 pm	Survivors Panel	Matthew J. Ehrhardt, MD, MS
4:30 pm	Closing Remarks and Adjourn	Sue Kaste, MD