St. Jude Children's Research Hospital

PBII
Pediatric Biomedical Imaging Initiative

Pediatric Interventional Radiology & Oncology Course

Oncology Review for Pediatric IRs

Memphis, Tennessee
November 3-4, 2024

Better Imaging. Better Outcomes.

St. Jude Children's Research Hospital

PBII

Pediatric Biomedical Imaging Initiative

About this Initiative

The Pediatric Biomedical Imaging Initiative (PBII) is an effort of the Department of Radiology 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 events focusing on either pediatric neuro-oncologic imaging, pediatric oncologic body imaging, or pediatric image guided intervention as a rotating basis. 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 Radiology 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.

PBII Sponsors

Asim K. Bag, MBBS, MD, EDiNR
Associate Member, St. Jude Faculty
Director, Neuroimaging Section
Director, Pediatric Oncologic Imaging Education
Co-chair, Pediatric Biomedical Imaging Initiative

Noah D. Sabin, MD, JD
Associate Member, St. Jude Faculty
Co-chair, Pediatric Biomedical Imaging Initiative

To sign up for the Department of Radiology/PBII mailing list, please visit: www.StJude.org/pbii

Continuing Medical Education Information

Educational Objectives

After attending this educational conference, you should be able to:

- Explain cancer epidemiology, cause and various treatment approaches.
- Discuss oncology clinical trial design and endpoints (in particular, tumor metrics classification systems)
- Identify common pediatric tumors as well as successes and issues in current treatment approaches.
- Describe current pediatric interventional oncology techniques approaches and status of literature.

Please note that session objectives will be presented during the conference as appropriate.

Accreditation Statement

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

Credit Designation

St. Jude Children's Research Hospital designates this live activity for a maximum of **13** *AMA PRA Category 1 Credits™*. Physicians should only claim the credit commensurate with the extent of their participation in the activity.

Evaluation and Claiming Certificates

To claim *AMA PRA Category 1Credit™* or attendance credit for this activity, you must attend the sessions and complete the evaluation by following the instructions below:

- Go to cme.stjude.org
- Sign in using the email address you used when registering for this conference and your password
- Click the MyCME button on the top right of your screen and choose Evaluations and Certificates
- Click "Complete Evaluation" by *Pediatric Interventional Radiology & Oncology Course: Oncology Review for Pediatric IRs* to complete the evaluation for this activity
- You will then be returned to the Evaluations and Certificates screen to print, download, or email your certificate

If you have questions about claiming your CME or attendance certificate, please contact us at cme@stjude.org. The evaluation will be open until **February 3, 2025**; you will not be able to claim credit after the evaluation is closed.

Disclosure of Financial Relationships

All individuals in a position to control the content of this CME activity (such as faculty, presenters, and planners) were asked to complete a statement regarding all financial relationships between themselves and any ineligible company (defined by the ACCME as any entity whose primary business is producing, marketing, selling, re-selling, or distributing healthcare products used by or on patients).

All relevant financial relationships are disclosed below and have been mitigated. No other speakers, planners, or other individuals with control over content have disclosed relevant financial relationships with ineligible companies.

Disclosures of Financial Relationships

Name	Company	Relationship
Asim K. Bag, MBBS, MD, EDiNR	• 2024 Radiological Society of North America	• Grant or research support
Adam Durbin, MD, PhD	• Foghorn Therapeutics • Syros Pharmaceuticals	• Stocks or stock options, excluding diversified mutual funds • Stocks or stock options, excluding diversified mutual funds
Lucas Elijovich, MD	• Balt USA • Codman Neuro • Corindus • Covidien • Johnson & Johnson • Medtronic • MicroPort Neuro Tech Co, Ltd. • Microvention Cerenovus • MIVI Neuroscience, Inc. • Penumbra • Scientia Vascular • Siemens Imari Medical, Inc. • Stryker Neurovascular • Viz.ai, Inc.	• Consultant fee
Afshin Gangi, MD, PhD	• Boston Scientific Siemens • Apriomed	• Consultant fee and grant or research support • Royalties or patent beneficiary
Daniel Morgenstern, MD	• Y-mAbs Therapeutics • Regenero • Clarity Pharmaceuticals	• Consulting fee • Consulting fee • Membership on advisory committees or review panels, board membership, etc.
Michael Neel, MD	• United Orthopedics	• Consulting fee
Albert Pappo, MD	• Eisai • Lily • Merck • Memorial Sloan Kettering • Pfizer • UpToDate	• Membership on advisory committees or review panels, board membership, etc. • Editor
Julie Park, MD	• Umoja • UpToDate	• Royalties or patent beneficiary • Membership on advisory committees or review panels, board membership, etc.
Andrew Smith, MD, PhD	• AI Metrics • Body Check • Radiostics	• Ownership • Consulting fee
Stephen B. Solomon, MD	• Aperture Medical • GE Healthcare • Johnson & Johnson • Magnisity • Merck • Paige AI • Tete	• Consulting fee
	• GE Healthcare	• Ownership
	• Aperture Medical • Delcath • Johnson & Johnson	• Grant or research support
Alexander Towbin, MD	• Applied Radiology • Elsevier	• Consulting fee • Royalties or patent beneficiary

Meeting Agenda

Sunday, November 3, 2024
Location: Marlo Thomas Center Lecture Hall

	PRESENTATION TITLE	SPEAKER or LOCATION
7:00 am – 8:00 am	**Registration & Breakfast**	Marlo Thomas Center Lobby Board Room
8:00 am – 8:15 am	PBII Pediatric Interventional Radiology & Oncology Course Welcome and Introduction	Asim K. Bag, MBBS, MD, EDiNR Michael Temple, MD, FRCPC
8:15 am – 9:05 am	*St. Jude: Past, Present, and Future*	Terrence Geiger, MD, PhD
9:05 am – 9:20 am	A Success Story: Retinoblastoma	Todd Abruzzo, MD, FAHA, FACR, FSNIS
	BASIS OF CANCER	
9:20 am – 9:40 am	*Biological Basis of Pediatric Cancer*	Adam Durbin, MD
9:40 am – 10:00 am	*The Genetic Basis of Pediatric Care*	Selene Koo, MD
10:00 am – 10:20 am	*Basis of Cancer: Predisposition*	Arti Pandey, PhD, CGC
10:20 am – 10:35 am	**Break**	
	CANCER TREATMENTS	
10:35 am – 11:00 am	*Systemic Therapies*	Elizabeth Fox, MD, MS
11:00 am – 11:25 am	*Cellular Therapies*	Christopher DeRenzo, MD, MBA
11:25 am – 11:45 am	*Integration of Noninvasive and Minimally Invasive Ablative Therapies in Multimodality Pediatric Oncology Care*	John Lucas, MD
11:45 am – 12:05 pm	*Emerging Guidelines and Challenges for Pediatric Solid Tumor Biopsy*	Andrew Murphy, MD
12:05 am – 12:25 pm	Panel Discussion (Q&A)	
12:25 am – 1:25 pm	**Lunch**	MTC: Board Room
	PEDIATRIC CANCERS	
1:25 pm – 1:40 pm	*Successes and Challenges in Treating Pediatric Lymphomas*	Matthew Ehrhardt, MD
1:40 pm – 2:00 pm	*Pediatric Liver Tumors: An Avenue Ripe for Collaboration*	Allison O'Neill, MD
2:00 pm – 2:20 pm	*Advances in Neuroblastoma Therapy*	Sara Federico, MD
2:20 pm – 2:40 pm	*Wilms Tumor*	Daniel Green, MD
2:40 pm – 2:55 pm	**Break**	
2:55 pm – 3:15 pm	*The Vital Role of IR in Pediatric Orthopedic Oncology*	Michael Neel, MD
3:15 pm – 3:35 pm	*Solid Tumor - Sarcoma*	Jessica Gartrell, MD
3:35 pm – 3:55 pm	*Pediatric CNS Tumors*	Emily Hanzlik, MD
3:55 pm – 4:15 pm	*Palliative Care Challenges and Opportunities with Interventional Radiology*	Deena Levine, MD, FAAP, FAAHPM
4:15 pm – 4:30 pm	Panel Discussion (Q&A)	
4:30 pm – 6:00 pm	**Evening Reception**	Marlo Thomas Center Atrium

Meeting Agenda

Monday, November 4, 2024
Location: Marlo Thomas Center Lecture Hall

	PRESENTATION TITLE	SPEAKER or LOCATION
8:00 am – 9:00 am	**Registration & Breakfast**	Marlo Thomas Center Lobby & Board Room
9:00 am – 9:15 am	Welcome & Housekeeping	Michael Temple, MD, FRCPC
	CLINICAL TRIALS	
9:15 am – 9:40 am	*Basics/Oncology Endpoints*	Brenda Weigel, MD, MSc
9:40 am – 10:00 am	*Collaborative Groups*	Julie Park, MD
10:00 am – 10:20 am	*NCI Funded Trials: US and others*	Meaghan Granger, MD
10:20 am – 10:40 am	*NCI Funded Trials: International, Canada*	Daniel Morgenstern, MB, BChir, PhD
10:40 am – 10:55 am	**Break**	
	IMAGING	
10:55 am – 11:15 am	*Imaging in Clinical Trials*	Alexander Towbin, MD
11:15 am – 11:35 am	*Imaging in Clinical Trials: Tumor Metrics*	Andrew Smith, MD, PhD
11:35 am – 11:55 am	Panel Discussion (Q&A)	
11:55 am – 12:55 pm	**Lunch**	MTC Board Room
	TECHNIQUES	
12:55 pm – 1:15 pm	*Biopsy in Cancer Patients*	Michael Acord, MD
1:15 pm – 1:30 pm	*Thermal Ablation for Pediatric Solid Tumors*	Anne Gill, MD
1:30 pm – 1:45 pm	*Ablation: US: Hyperthermia, Histotripsy, FUS*	Karun Sharma, MD, PhD, FSIR
1:45 pm – 2:00 pm	*Ablation: IRE/ Electrochemotherapy*	Christopher Sinsabaugh, MD
2:00 pm – 2:20 pm	*Vascular Interventional Oncology*	Allison Aguado, MD
2:20 pm – 2:35 pm	*CNS Interventions*	Lucas Elijovich, MD, FAHA
2:35 pm – 2:50 pm	*Image Guided Interventional Oncologic Pain Management in Pediatric Patients*	Hasmukh Prajapati, MD, FSIR, FCIRSC
2:50 pm – 3:05 pm	**Break**	
	KEYNOTE PRESENTATION: Status of Adult Interventional Oncology	
3:05 pm – 3:30 pm	*Interventional Oncology: Multimodal and Multidisciplinary*	Afshin Gangi, MD, PhD
3:30 pm – 3:55 pm	*History of Interventional Oncology:* *How We Got Here and Where Are We Going?*	Stephen Solomon, MD
3:55 pm – 4:15 pm	*Current Status of Pediatric IO*	Michael Temple, MD, FRCPC
4:15 pm – 5:15 pm	**Planning the Future**: Open Discussion	Moderators

Presenters

Todd A. Abruzzo MD, FAHA, FACR, FSNIS
NeuroInterventional Radiologist
Phoenix Children's Hospital

Dr. Abruzzo is a radiologist who serves as the head of pediatric neuroendovascular therapy at Phoenix Children's Hospital. He is highly knowledgeable in the areas of stroke and vascular malformations and pioneered new techniques in the neurointerventional treatment of retinoblastoma. Dr. Abruzzo focuses on the diagnostic evaluation and interventional treatment of infants and children with vascular malformations, neurovascular injuries, aneurysms, ocular tumors, vascular tumors, stroke and a wide range of cerebrovascular disorders. Additional areas of special expertise include vein of Galen malformations, dural sinus malformations, arteriovenous malformations, arteriovenous fistulae and spinal vascular disorders. He was appointed to the National Institute of Neurological Disorders and Stroke (NINDS) Acute Stroke Trials Advisory Panel.
Dr. Abruzzo is board certified in radiology and has subspecialty certifications in neuroendovascular surgery from the Society of Neurological Surgeons Committee on Advanced Subspecialty Training.

Michael Acord, MD
Interventional Radiologist
Children's Hospital of Philadelphia
University of Pennsylvania

Dr. Acord is an attending interventional radiologist at the Children's Hospital of Philadelphia and an Assistant Professor of clinical radiology at the University of Pennsylvania School of Medicine. He completed advanced fellowship training in pediatric diagnostic and pediatric interventional radiology. His interventional oncology interests include building on minimally invasive IR therapies used for adult cancer patients and making them available for pediatric patients.
Dr. Acord's recent research involves percutaneous soft tissue biopsies for oncologic diagnoses in children that have historically been diagnosed surgically. He hopes his work can serve as a model for integrating evidence based interventional oncology research into COG protocols and establishes a foundation for multidisciplinary collaboration within the fields of diagnostic radiology, IR and medical oncology. He is an active member of SIR, SPR, and SPIR and serves on multiple societal IR sub-committees.

Allison Aguado, MD
Interventional Radiologist
St. Jude Children's Research Hospital

Dr. Allison Aguado is an Interventional Radiologist in the Department of Radiology at St. Jude. She earned her medical degree from Northwestern University and completed a residency in Diagnostic Radiology at St. Barnabas Medical Center in Livingston, New Jersey. Dr. Aguado then completed three subspecialty fellowships, two at the Children's Hospital of Philadelphia—one in diagnostic pediatric radiology and another in pediatric interventional radiology. She also completed a fellowship in adult interventional radiology at Memorial Sloan Kettering Cancer Center.
This unique combination of training provides her with the expertise to offer minimally invasive, image-guided treatments to children with cancer. Her research focuses on evaluating the safety and effectiveness of interventional radiology therapies for pediatric oncology patients. Examples include targeted delivery of particles, drugs, and radioisotopes directly into tumors by placing a catheter into the blood vessels that supply them, and the use of specialized needles to destroy tumors through heating or cooling.

Presenters

Asim K. Bag, MBBS, MD, EDiNR
Pediatric Neuroradiologist
St. Jude Children's Research Hospital

Dr. Bag is the Director of Neuroradiology in the Department of Radiology at St. Jude with dual board certifications in radiology and nuclear medicine. With a strong educational foundation from Medical College Calcutta and multiple fellowships from the University of Alabama at Birmingham, Dr. Bag has specialized in neuroradiology and molecular imaging.
At St. Jude, Dr. Bag is holding prestigious roles, including co-chairing the Pediatric Biomedical Imaging Initiative (PBII) and leading the Pediatric Oncologic Imaging Education. His research focuses on multi-modality imaging of pediatric brain tumors, including therapy related complications such as cerebellar mutism syndrome, the nexus of neuroinflammation and sleep disturbances, employing advanced MRI and PET techniques to unravel the brain's complexities.

Christopher DeRenzo, MD, MBA
Pediatric Hematologist Oncologist
St. Jude Children's Research Hospital

Dr. DeRenzo leads the study of CAR T-cell therapy in the treatment of solid tumors at St. Jude. He is an Assistant Faculty member and earned his MD from Rutgers Robert Wood Johnson Medical School and his MBA from Rutgers Business School. The translational and reverse-translational approach of his laboratory is one that fosters a spirit of collaboration and dedication to the advancement of treatments for children with solid tumors.

Adam D. Durbin, MD
Pediatric Oncologist
St. Jude Children's Research Hospital

Dr. Durbin received his training at York University and the University of Toronto, earning a BSc in Biology, PhD in Medical Biophysics, and MD. In 2020, he joined the Division of Molecular Oncology at St. Jude as an Assistant Member and Attending Oncologist in the Solid Tumor Division. His independent laboratory investigates the systems biology of pediatric solid tumors with the aim of identifying novel therapeutic strategies for these challenging tumors, which typically exhibit low mutational burden. The goal is to find new ways to target high-risk pediatric cancers while improving efficacy and reducing the toxicity of conventional therapies.

Presenters

Matthew J. Ehrhardt, MD
Pediatric Hematologist Oncologist
St. Jude Children's Research Hospital

Dr. Matthew Ehrhardt is an Associate Member in the Division of Cancer Survivorship at St. Jude Children's Research Hospital. He received his medical degree from the University of Illinois College of Medicine at Peoria and completed training in pediatrics, internal medicine, and pediatric hematology/oncology at the Medical College of Wisconsin. He completed an additional year of training in childhood cancer survivorship at St. Jude, following which he joined the faculty and specializes in the care of children newly diagnosed with Hodgkin and non-Hodgkin lymphoma and long-term childhood cancer survivors.
Dr. Ehrhardt's clinical research is focused on the long-term effects of childhood cancer therapy, in particular cardiac conditions, as well as surveillance guideline development, dissemination, and utilization. He is a Co-Chair of the Children's Oncology Group (COG) Group Long-Term Follow-Up Guidelines for Survivors of Childhood, Adolescent, and Young Adult Cancers member of the American Society of Clinical Oncology Survivorship (ASCO) Guideline Advisory Group, the American College of Radiology (ACR) Appropriateness Criteria Committee, and multiple COG and International Guideline Harmonization Group (IGHG) guideline panels and initiatives. He is actively seeking mechanisms in which to improve both guideline recommendations and effectiveness of delivery to cancer survivors.

Lucas Elijovich, MD, FAHA
Interventional Neuroradiologist
Semmes Murphey Clinic

Dr. Lucas Elijovich received his undergraduate degree in Biology from Tufts University in Massachusetts and his medical degree from the University of Texas in Galveston. He then completed his Neurology residency at New York University, where he served as Chief Resident.
In order to pursue advanced interests in cerebrovascular disease, neurocritical care, and interventional neuroradiology, Dr. Elijovich went on to complete fellowship training in stroke and neurocritical care at the University of California San Francisco from 2006-2008. He then returned to New York from 2008-2010 to train with Dr. Alejandro Berenstein, one of the pioneers of interventional neuroradiology.
Dr. Elijovich joined Semmes-Murphey Clinic in 2010 and is a Professor in the Departments of Neurology and Neurosurgery at the University of Tennessee Health Sciences Center.
He also serves as the Director of Neurocritical and Neurointerventional Surgery for LeBonheur Children's Hospital Neurosciences Institute, and as the Co-Director of the LeBonheur Vascular Anomalies Center.

Sara M. Federico, MD
Pediatric Hematologist Oncologist
St. Jude Children's Research Hospital

Dr. Federico is a pediatric oncologist who received her bachelor's degree from Stanford University and MD from Virginia Commonwealth University School of Medicine. She completed a pediatric internship and residency at Lucille Packard Children's Hospital at Stanford, followed by a pediatric hematology-oncology fellowship at St. Jude Children's Research Hospital.
Dr. Federico is the Director of the Division of Solid Tumor in the Department of Oncology. She uses clinical investigation and translational research to develop new treatment strategies for children with high-risk neuroblastoma and other solid tumors.

Presenters

Elizabeth Fox, MD, MS
Pediatric Hematologist Oncologist
St. Jude Children's Research Hospital

Dr. Fox serves as Senior Vice President of Clinical Trials Research and the Associate Director for Clinical Research, Comprehensive Cancer Center at St. Jude. Dr. Fox earned her medical degree at the Pennsylvania State University College of Medicine. She completed her internship and residency at the University of Rochester Golisano Children's Hospital and fellowship training at the Pediatric Oncology Branch of the Intramural Program of the National Cancer Institute. She also holds a master's degree in clinical research from Duke University College of Medicine, with an emphasis on statistics, research, and database management. She received a bachelor's degree in medical lab science from Northeastern University, Boston.
Dr. Fox is an expert in the integration of clinical and preclinical pharmacology in clinical trial design for childhood cancers. As an expert on rare tumors, including liver and neuroendocrine tumors, she has a keen understanding of the critical role of targeted therapies for improving outcomes and decreasing late effects in childhood cancer.

Afshin Gangi, MD, PhD
Professor, Interventional Radiologist
University of Strasbourg Medical School

Dr. Gangi completed his primary and secondary education at Lycée Razi in Tehran, graduating in 1980. He pursued medical studies at the University of Reims in France and began his internship in Strasbourg in 1987, where he developed a strong interest in interventional radiology. After his internship, he spent a year working with Professor R.F. Dondelinger in Luxembourg, specializing in interventional radiology. Dr. Gangi returned to Strasbourg in 1991, focusing on neuroradiology and interventional radiology, performing his first vertebroplasty in 1989 and advancing image-guided procedures in interventional oncology.
In 1995, he earned his doctorate in physics (laser thermics) from the University of Strasbourg. He became a lecturer in 1995 and Associate Professor of Radiology in 2000. Dr. Gangi has been a Visiting Professor at King's College London since 2014, focusing on interventional oncology and HIFU research. He holds multiple patents, authored over 300 refereed papers, contributed to 40+ book chapters, and presented at 500+ national and international conferences. Currently, he heads the Radiology and Nuclear Medicine Department at the University Hospitals of Strasbourg, with a special interest in interventional oncology. Dr. Gangi is a former president of the European Society of Cardiovascular and Interventional Radiology (CIRSE).

Jessica Gartrell, MD
Pediatric Hematologist Oncologist
St. Jude Children's Research Hospital

Dr. Gartrell is an assistant faculty member at St. Jude. During her first year as a Pediatric Hematology/Oncology fellow, she developed a strong passion for improving the outcomes of patients with high-risk sarcoma. This drive led her to join the laboratory of Anang Shelat, PhD, where she completed a project focused on EWSR1-translocated sarcomas and PARP inhibitor sensitivity, with particular attention to SLFN11 as a biomarker of sensitivity to DNA-damaging agents. Dr. Gartrell then pursued a Solid Tumor fellowship under the mentorship of Alberto Pappo, MD, where she expanded her clinical expertise in solid tumors and gained mentorship in clinical trial design.
Dr. Gartrell's research interests are centered on developing early-phase clinical trials aimed at identifying therapeutic biomarkers and novel combination therapies for high-risk solid tumors. She has collaborated with pre-clinical and clinician scientists to develop a phase I/II study combining immunotherapy with anti-angiogenic therapy to target the immunosuppressive microenvironment of high-risk sarcomas and liver tumors.

Presenters

Terrence L. Geiger, MD, PhD
SVP and Deputy Director,
Academic and Biomedical Operations
St. Jude Children's Research Hospital

Dr. Geiger is the Senior Vice President and Deputy Director for Academic and Biomedical Operations and Interim Chair of the Department of Immunology at St. Jude. Dr. Geiger joined St. Jude in 1999 and holds the St. Jude Endowed Chair in Pediatrics. He oversees academic and biomedical functions within the institution, including academic and faculty affairs, biomedical manufacturing, and several core institutional resources, fostering the integration and efficient operation of diverse institutional structures. His research program focuses on understanding immune regulation in the context of immunologic diseases and cancer immunotherapy. He earned an MD and PhD from Yale University, where he also completed post-doctoral clinical and scientific training.

Anne E. Gill, MD
Interventional Radiologist
Emory University School of Medicine
Children's Healthcare of Atlanta

Dr. Gill is a board-certified radiologist and associate professor at the Emory University School of Medicine within the Department of Radiology and Imaging Sciences. She has also earned her certificate of added qualification in the subspecialty of interventional radiology from the American Board of Radiology. Dr. Gill is the Associate Director of Pediatric Interventional Radiology, and specializes treatments in vascular malformations, pediatric hepatobiliary interventions, venous thromboembolic disease, and thermal ablations of both soft tissue and osseous tumors. She serves as Medical Director of Vascular Access at Children's Healthcare of Atlanta (CHOA). She enjoys mentoring medical students interested in IR and developing the pediatric interventional radiology fellowship program at CHOA. She is actively involved as a Vice Chair of the COG Radiology committee and is active in the liver tumor committee section of COG. Dr. Gill is a reviewer for the Pediatric Radiology Journal, JVIR and CVIR. She has authored more than 45 peer-reviewed publications and given over 60 national and international invited presentations about various aspects of pediatric interventional radiology.

Meaghan Granger, MD
Pediatric Hematologist Oncologist
St. Jude Children's Research Hospital

Dr. Granger is the Director of Oncology Clinical Medicine at St. Jude. She completed her training at the University of Arkansas for Medical Sciences College of Medicine and the University of Texas Health Systems. Her specialties include Pediatric Hematology-Oncology, Pediatrics, Oncology.

Presenters

Daniel Green, MD
Pediatric Oncologist
St. Jude Children's Research Hospital

Dr. Green is a Member in the Division of Cancer Survivorship, Department of Oncology where he spends 60% of his time providing clinical services for patients in the After Completion of Therapy Clinic. He has a secondary appointment in the Department of Epidemiology and Cancer Control. Prior to coming to St. Jude in January 2008, Dr. Green was a member of the Department of Pediatrics at Roswell Park Cancer Institute, Buffalo, New York and Professor of Pediatrics, School of Medicine and Biomedical Sciences, University at Buffalo, State University of New York, Buffalo, New York. Dr. Green was the Chair of the National Wilms Tumor Study Group from 1990 – 2000 when it was merged with the three other pediatric cooperative groups to form the Children's Oncology Group.

Emily Hanzlik, MD
Neuro-Oncologist
St. Jude Children's Research Hospital

Dr. Hanzlik is a dual certified pediatric neuro-oncologist and neurologist in the Pediatric Medicine department at St. Jude. She completed her pediatric neurology residency at Vanderbilt University followed by a pediatric neuro-oncology fellowship at Duke University. She is involved in improving outcomes of pediatric brain tumors, continued research in neurologic complications and long-term outcomes of pediatric oncology survivors, and ongoing medical education efforts in neuro-oncology.

Selene Koo, MD
Pediatric Pathologist
St. Jude Children's Research Hospital

Dr. Koo is an Assistant Member in the Department of Pathology at St. Jude. She joined the Medical Scientist Training Program (MSTP) at the University of Chicago, completing a PhD in Biochemistry and Molecular Biology in 2009 and MD in 2011. She completed residency training in Anatomic and Clinical Pathology at the University of Chicago and ACGME-accredited fellowships in Molecular Genetic Pathology (University of Chicago) and Pediatric Pathology (Boston Children's Hospital). Prior to joining St. Jude, she was staff pathologist and autopsy pathology director at Nationwide Children's Hospital and assistant professor at The Ohio State University from 2017 to 2021. At St. Jude, her clinical work spans both the solid tumor pathology and molecular pathology services. Her primary research focus lies in the accurate and appropriate diagnosis of pediatric solid tumors, leveraging both histologic and molecular techniques. Beyond the institution, she holds leadership roles in the Society for Pediatric Pathology; serves on the editorial board of *Pediatric and Developmental Pathology*, the premier journal in the field of pediatric pathology; and has co-authored over 40 manuscripts and book chapters.

Presenters

Deena Levine, MD, FAAP, FAAHPM
Pediatric Oncologist
St. Jude Children's Research Hospital

Dr. Levine is the Medical Director of the Quality-of-Life service, and recently assumed the role of Division Director. She is a pediatric oncologist and palliative care physician dedicated to improving the quality of care for children with cancer through clinical medicine and research. Her primary work focuses on enhancing the early integration of palliative care with oncology care, aiming to improve the quality of care throughout the course of therapy. Her extensive training includes a 6-year BA/MD program with Lehigh University and Drexel University College of Medicine, a pediatric residency at UMDNJ-NJMS, a Pediatric Hematology/Oncology fellowship at Johns Hopkins/NIH, a Bioethics fellowship at the NIH, and a Hospice and Palliative Medicine Fellowship at UTHSC. Her clinical and research training has enabled her to achieve triple board certification in pediatrics, hematology/oncology, and hospice and palliative medicine, establishing herself as a physician scientist, pediatric palliative oncologist, and ethicist.

John T. Lucas Jr., MD
Pediatric Radiation Oncologist
St. Jude Children's Research Hospital

Dr. Lucas' work at St. Jude focuses on optimizing radiotherapy, both as a standalone treatment and in combination with other modalities, to personalize care, prevent complications, and improve disease control. His interests span developing innovative technologies and deepening the understanding of disease biology, all with the goal of enhancing care for children with cancer.
This multifactorial approach includes clinical trials leading to dose de-escalation for high-risk neuroblastoma and evaluating proton therapy's impact on childhood cancer survivors. Through the St. Jude Global Division, Dr. Lucas consults on global tumor boards and serves as a mentor to pediatric radiation oncologists worldwide.

Daniel Alexander Morgenstern, MB BChir, PhD
Pediatric Oncologist
The Hospital for Sick Children

Dr. Morgenstern received his medical and PhD degrees from the University of Cambridge in the UK, followed by pediatric training in London. As an academic clinical lecturer at UCL Institute of Child Health, he focused on cancer immunology research. He completed a fellowship in drug development at the Royal Marsden Hospital, Sutton, before joining SickKids in 2012 as the first Sears Foundation/Garron Cancer Centre Fellow in Neuroblastoma.
After serving as a pediatric oncology consultant at Great Ormond Street Hospital, he returned to SickKids in 2016 as a Staff Oncologist and Director of the New Agent and Innovative Therapies (NAIT) program. His current work focuses on neuroblastoma treatment and advancing early-phase clinical trials for novel therapies targeting difficult-to-treat childhood cancers. His research interests include immunotherapy for high-risk neuroblastoma, immune checkpoint inhibitors in pediatric cancers, and precision medicine for pediatric solid tumors.

Presenters

Andrew J. Murphy, MD
Pediatric Surgeon
St. Jude Children's Research Hospital

Dr. Murphy is an academic pediatric surgeon and Associate Member in the Department of Surgery at St. Jude Children's Research Hospital. He is the Division Chief of Pediatric General Surgery, Department of Surgery and is the Associate-Vice-Chair for Biology on the Surgery Discipline Committee for the Children's Oncology Group. He is also an Affiliate Assistant Professor of Surgery at the University of Tennessee Health Science Center in Memphis.
Dr. Murphy specializes in pediatric renal tumors, pediatric liver tumors, and neuroblastoma. His clinical and basic/translational research interest is in the surgical treatment and biology of pediatric solid tumors. He is the primary investigator of a basic/translational research laboratory that studies pediatric renal tumors.

Michael D. Neel, MD
Orthopedic Surgeon
OrthoSouth

Dr. Neel has been practicing for more than 24 years – treating adults and children with bone and soft tissue tumors as well as adults with hip and knee arthritis. He currently serves as Chief for the Orthopaedic Division at St. Jude.
Dr. Neel lectures to national and international audiences on the management of skeletally immature patients with bone cancer, the use of oncologic prosthesis in adults with massive bone loss and the management of osteonecrosis.
Dr. Neel spends his free time with his wife, Liz, of 30 years and 2 children, Elisabeth Ann, who is in the adult program at Madonna Learning Center and Robert, who is a PGY3 at Campbell Clinic. He also enjoys playing golf and following Alabama football. Dr. Neel volunteers at Church Health and currently serves as president of the Board of Directors of the Madonna Learning Center, a faith-based school for children and adults with special needs.

Allison O'Neill, MD
Pediatric Oncology Physician-Scientist
Dana-Farber Cancer Institute

Dr. O'Neill is a pediatric oncology physician-scientist with an interest in translational research and a growing expertise in the care of pediatric solid tumor patients. She has followed a unique path, focused initially on the use of imaging to enhance diagnostics and therapeutics in pediatric solid tumor patients, now with an increasing interest in the Ewing sarcoma cell surfaceome and immune environment. Her prior work generating a targeted imaging probe to more sensitively and specifically diagnose Ewing sarcoma micro-metastases inspired a growing interest in targeted immunotherapeutics. Dr. O'Neill's subsequent training in cancer immunology, including but not limited to antibody humanization, characterization, and engineering, has generated the skills necessary to pursue novel immunotherapeutics for pediatric patients. She leads the Dana-Farber/Boston Children's Pediatric Liver Tumor Center, working closely with surgeons, interventional radiologists, and preclinical researchers to bring innovative care to patients with all types of primary liver tumors. She also serves as Chair of the Children's Oncology Group Liver Tumor Committee and works closely with international colleagues affiliated with the Paediatric Hepatic International Tumor Trial (PHITT) and SIOP Liver Tumor Working Group.

Presenters

Arti S. Pandey, PhD, CGC
Genetic Counselor
St. Jude Children's Research Hospital

Dr. Pandey is a licensed Genetic Counselor in the Division of Cancer Predisposition in the Oncology Department at St. Jude since June 2022. In addition to her clinical work, she is actively involved in research with a focus on genetic anticipation in Lynch syndrome, the uncertainties in genetic testing and role of germline genetic testing in the process of hematopoietic stem cell transplant in children. At St. Jude, Arti is also expanding her expertise in clinical data analytics and database management. She earned her Master's in Genetic Counseling from Northwestern University in 2022 and holds a PhD in Biochemistry from Montana State University which she obtained in 2007. She previously served as a Professor in Kathmandu Medical College and Teaching Hospital in Nepal, where she taught biochemistry to medical, dental and nursing students for 17 years.

Julie Park, MD
Pediatric Hematologist Oncologist
St. Jude Children's Research Hospital

Dr. Park is a pediatric hematologist-oncologist who is interested in developing and advancing new approaches to childhood cancer therapy. She received her MD from the University of Vermont and completed residency training in pediatrics at the University of Washington. Dr. Park then completed a fellowship in pediatric hematology/oncology at the University of Washington and Fred Hutchinson Cancer Research Center.
She has been funded as a Fellow for the Leukemia Society of America at Fred Hutchinson Cancer Research Center, and an investigator on NCI and NIH grants. As a Member of the St. Jude Faculty and Chair of the Oncology Department, Dr. Park is interested in discovering the molecular and immunologic vulnerabilities of solid tumor malignancies, such as neuroblastoma, and using this information to inform clinical trials centered on novel therapies for children with relapsed or refractory high-risk tumors.

Hasmukh J. Prajapati, MD, FSIR, FCIRSC
Interventional Radiologist
Texas Children's Hospital

Dr. Prajapati is a Clinical Associate Professor of Radiology at Baylor College of Medicine, specializing in Pediatric Interventional Radiology and Interventional Oncology, with training from Emory University Hospital (2013). He is a board-certified Radiologist with a Certificate of Additional Qualification (CAQ) in Pediatric Radiology. His previous positions include serving as Director of Interventional Radiology Services at SPMCIR in St. Petersburg, Florida, as Assistant and Associate Professor at UTHSC, and Pediatric Interventional Radiologist at St. Jude and LeBonheur Children's Hospital.
A recipient of the 2021 SPIR Pioneers Award for work on the scientific paper "Safety and Efficacy of the Cryoablation of Pulmonary and Pleural Metastases in Pediatric Patients", Dr. Prajapati has authored over 100 peer-reviewed publications and is a sought-after presenter. His clinical and research expertise includes pediatric cancer, lymphatic, MSK, and liver transplant interventions.

Presenters

Karun V. Sharma, MD, PhD, FSIR
Interventional Radiologist
Co-Director FUS Center of Excellence
Children's National Hospital

Dr. Sharma is an Interventional Radiologist at Children's National and George Washington University Hospitals and Professor of Radiology and Pediatrics at the George Washington University School of Medicine and Health Sciences. His clinical practice and translational research focus on improving tumor ablation and local drug delivery for pediatric oncology patients.
He leads the Image-Guided Non-Invasive Therapeutic Energy (IGNITE) program, a collaboration of the Sheikh Zayed Institute and the departments of Radiology, Oncology, Surgery, and Anesthesiology. The IGNITE program aims to improve the quality of life and outcomes for pediatric patients through the development and clinical translation of minimally and noninvasive surgery and combination therapy approaches, with the goal of making pediatric surgery more precise, less invasive and pain-free.

Christopher A. Sinsabaugh, MD
Vascular Interventional Radiologist
Indiana University Health
Indiana University School of Medicine

Dr. Sinsabaugh is a vascular interventional and abdominal radiologist at Indiana University Health. He was born in South Bend, IN grew up in Cleveland, OH and returned home to Indiana in the 90s. After serving the United States Marine Corps from 2002-2006, he graduated with a degree in Clinical Laboratory Sciences from IUPUI before attending IU School of Medicine. He completed his residency and fellowship training at IU School of Medicine and now works primarily in pediatric interventional radiology as well as contributing to the adult VIR and abdominal imaging sections. He is currently an Assistant Professor of Clinical Radiology & Imaging Sciences at the IU School of Medicine. His interests include irreversible electroporation ablation(IRE), fusion navigation systems, treatment of congenital and acquired vascular malformations, and treatment of tumors (benign and malignant).

Andrew Smith, MD, PhD
Oncologic Radiologist
St. Jude Children's Research Hospital

Dr. Smith is a nationally recognized academic Radiologist and Oncologic Imager at St. Jude where he is a faculty member and Chair of the Department of Radiology. Dr. Smith's clinical areas of expertise are in abdominal and oncologic imaging, and he is a leader in innovation and artificial intelligence (AI) in imaging and medicine.
Before joining St. Jude, Dr. Smith served as Professor, Vice Chair of Innovation, Co-Director of AI, and Chief of CT in Radiology at the University of Alabama, Birmingham. He was also the Director of Clinical AI for the Heersink Institute for Biomedical Innovation, and the Director of the Human Imaging Core Lab. Dr. Smith is a Fellow of the Society of Advanced Body Imaging and the Society of Abdominal Radiology, where he co-chairs the Emerging Technology Commission on AI. He is an inventor on thirty patents, and he has led FDA 510(k) clearance on multiple imaging technologies.
Dr. Smith believes in the responsible use of artificial intelligence (AI) in radiology, imaging research and pediatric medicine. Clinical applications of AI in Radiology encompass image acquisition and reconstruction, tumor response evaluation, cancer detection, opportunistic screening, body composition analysis, and the integration of large language models in radiology reporting.

Presenters

Stephen B. Solomon, MD
Interventional Radiologist
Memorial Sloan Kettering
Cancer Center

Dr. Solomon is the Chief of the Interventional Radiology Service in the Department of Radiology and Director of Memorial Sloan Kettering's Center for Image-Guided Interventions (CIGI). He received his medical degree from Yale University School of Medicine.
Dr. Solomon is a pioneer in developing new techniques for the minimally invasive image guided therapy of solid tumors. He is a clinical leader in interventional oncology and has performed ground-breaking work developing new techniques that improve image guided therapies. He has over 100 peer-reviewed publications. This includes development of robotic and other navigational systems for performing needle placement, clinical development of thermal ablation techniques that allow therapy for previously untreatable patients, and creating new imaging techniques that allow immediate assessment of treatment success.

Michael Temple, MD, FRCPC
Interventional Radiologist
St. Jude Children's Research Hospital

Dr. Temple is the newly appointed Chief of Clinical Radiology, Department of Radiology at St. Jude Children's Research Hospital where he also serves as the Division Head of Interventional Radiology. He completed fellowships in Diagnostic and Interventional Pediatric Radiology at the Hospital for Sick Children in Toronto, Canada. He currently serves on the Board of Directors of the Society for Pediatric Interventional Radiology and the Pediatric Clinical Subspecialty Committee of the Society of Interventional Radiology. Dr. Temple's research interests include ablation technologies with a focus on therapeutic ultrasound. He is currently leading efforts to create the International Pediatric Interventional Radiology Research Collaborative with an international group of 28 physicians and researchers.

Presenters

Alexander J. Towbin, MD
Pediatric Radiologist
Cincinnati Children's Hospital
Medical Center

Dr. Towbin is the Neil D. Johnson Chair of Radiology Informatics, and Associate Chief of Radiology, Clinical Operations and Radiology Informatics at Cincinnati Children's Hospital Medical Center. He is a recognized leader in pediatric abdominal imaging, pediatric oncologic imaging, imaging informatics, and quality improvement. Dr. Towbin is a frequent speaker at national and international conferences on topics including pediatric liver tumors, pediatric cancer imaging, the use of MRI-based contrast agents, customer service, social media in medicine, enterprise imaging, structured reporting, and workflow efficiency.
In addition to his roles at Cincinnati Children's, Dr. Towbin leads multiple national and international initiatives. As a leader in pediatric oncologic imaging, he is a fellow of the International Cancer Imaging Society, the incoming Chair of the Diagnostic Imaging Committee of the Children's Oncology Group, the Chair of the Pediatric LI-RADS Committee working to standardize reporting of pediatric liver tumors, a member of the National Cancer Institute Clinical Imaging Steering Committee and is the radiology primary investigator of the current international pediatric liver tumor research trial. As a leading advocate for children, Dr. Towbin serves on the Steering Committee of Image Gently and is a Co-Chair of its current education-based campaign.

Brenda Weigel, MD, MSc
Pediatric Hematologist Oncologist
University of Minnesota
Medical School

Dr. Weigel is currently the Director of the Division of Pediatric Hematology/Oncology. She is a professor cross-appointed at the University of Minnesota's Cancer Center and the Department of Pediatrics, and the recipient of the Lehman/Children's Cancer Research Fund Endowed Chair in Pediatric Cancer. She is also the Co-Director of the Sarcoma Program for the Masonic Cancer Center, and an Associate Director of the Cancer Experimental Therapeutics Initiative for the Masonic Cancer Center.
Dr. Weigel received her medical degree from MacMaster University in Hamilton, Ontario, and did her residency in Pediatrics at the University of Western Ontario. She came to the University of Minnesota in 1996 to do a Fellowship in Pediatric Hematology/Oncology and Bone Marrow Transplant. During her four-year fellowship, Dr. Weigel worked in the lab of Dr. Bruce Blazar and developed a murine model of rhabdomyosarcoma.

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