PROGRAM AT A GLANCE | SUNDAY, JULY 23

ROOM 362

Therapy SNAP Oral

ROOM 371

Moderators: E Sidky, I Barreto

omosynthesis and Dosimetry

Moderators: A Jones, D Carver

Moderators: W Erwin, S Einstein

Medical Physicists Succeeding

Clinical and Professional Practice

While Facing Challenges in

Imaging SNAP Oral

Imaging SNAP Oral

X-Ray Radiography,

Imaging SNAP Oral

Nuclear Medicine

Professional SNAP Oral

in a Changing World

Moderator: C Hampton

X-Ray CT

ROOM 372

Proton Flash Dosimetry and QA

Moderators: Z Xiao, P Bruza

Translational Electron Flash

Therapy Scientific Symposium

Radio-Chemistry and Biology

Moderators: J Andreozzi,

Therapy SNAP Oral

Therapy SNAP Oral

Nanoparticle in RT

Moderator: R Berbeco

Speakers: S Bennett,

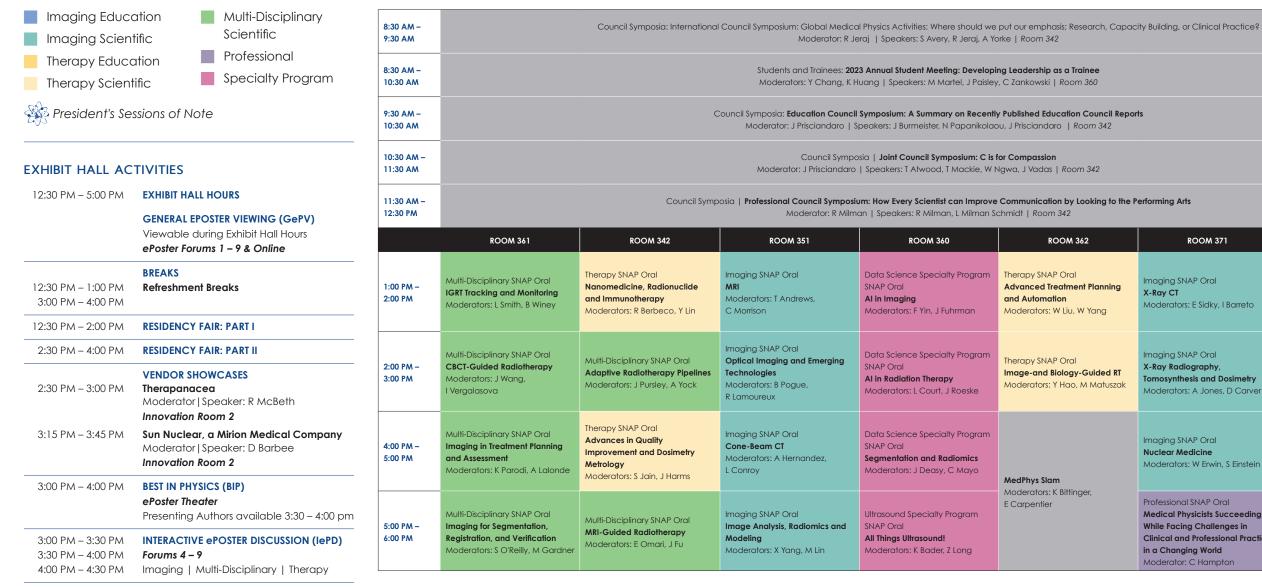
S Lacombe, J Welsh

Therapy SNAP Oral

Moderators: G Pratx.

R Hachadorian

E Schueler



4:00 PM - 5:00 PM **BLUE RIBBON ePOSTER (BReP)**

ePoster Theater

Imaging | Multi-Disciplinary | Therapy

PROGRAM AT A GLANCE | MONDAY, JULY 24

EXHIBIT HALL AC	TIVITIES		ROOM 361	ROOM 342	ROOM 351	ROOM 360	ROOM 362	ROOM 371	ROOM 372		
9:00 AM – 5:00 PM 9:30 AM – 10:15 AM 3:45 PM – 4:30 PM	EXHIBIT HALL HOURS GENERAL EPOSTER VIEWING (GePV) Viewable during Exhibit Hall Hours ePoster Forums 1 – 9 & Online BREAKS Refreshment Breaks	7:30 AM- 8:25 AM	Imaging Scientific Symposium Cone Beam CT: Interventional and Specially Applications Moderator: O Dillon Speakers: O Dillon, R Fahrig, G Gang, J Maier	Multi-Disciplinary Scientific Symposium Functional Lung Sparing Radiotherapy Clinical Trials: Outcomes and Future Concepts Moderators: H Byrne, E Vicente Speakers: H Byrne, B Tahir, E Vicente, T Yamamoto	apposium apposium apposium ctional Lung Sparing imaging Educational Course diotherapy Clinical Trials: imaging Educational Course iccomes and Future Concepts ACR Update derators: H Byrne, B Tahir, Moderator: D Gress scakers: H Byrne, S Tahir, Speakers: I Barreto, D Gress ti-Disciplinary Scientific for the science of the scie	Data Science Specialty Symposium The Anne and Donald Herbert Distinguished Lectureship in Modera Statistical Modeling Moderator: M Giger Speaker: K Myers	Therapy Educational Course Current Status and Future Directions in Photon and Proton Adaptive Therapy Moderators: M Lin, G Hugo Speakers: L Cervino, H Lin, D Parsons, T Zhao	Professional Symposium From Couch to Committee: Joining, Leading, and Thriving with Life-Work Balance Moderators: C Foote, C Stambaugh Speakers: A Cetnar, F Fahey, C Foote, S Simiele, C Stambaugh, P Taylor	Big Data Big Trouble Moderator: J Palta Speakers: C Chung, L Conroy,		
12:15 PM – 1:45 PM	Lunch Break + Visit the Technical Exhibits	8:35 AM - 9:30 AM	Imaging Scientific	Multi-Disciplinary Scientific		Data Grienes Grazielte		Speakers: C			
9:30 AM – 10:00AM	VENDOR SHOWCASES MIM Software, Inc. Moderator Speaker: K Kiffner Innovation Room 2		Symposium PET/MR - Research Opportunities and Clinical Potential Moderator: H Mao Speakers: L Hu, H Mao,	Symposium Control Image- Guided Interventions in Radiation Oncology Moderator: R Zhang Speakers: P Bruza, C Lin,		Data Science Specialty Symposium Breast Al Moderator: M Giger Speakers: H Chan, M Giger, R Nishikawa			R Kapoor, G Price, A Traverso		
12:15 PM – 1:15 PM	GE Healthcare		X Yang	T Pawlicki, B Pogue							
	Moderators: B Yanoff, N Buls, A Pourmorteza Speakers: B Yanoff, N Buls, A Pourmorteza Innovation Room 2	10:15 AM – 12:15 PM			President's S Moderator: E Samei Speakers: S G	ymposium: The Art of Science, the Sc i Garber, R Gunderman, E Martínez Cel	i ence of Care aya, K Myers, E Samei Assembly BC	: \$			
1:45 PM – 2:15 PM	IBA Moderator Speaker: K Sukumar Innovation Room 2		Education Session Arthur Boyer Award for Innovation in Medical Physics Education Moderator: V Montemayor	Early-Career Investigator Symposium J ohn R. Cameron Early-Career Investigator Symposium Moderators: E Ritenour, M Podgorsak	Imaging Educational Course Creating Vendor Relationships for Pediatric Fluoroscopy Guided Interventional (FGI) Applications Moderators: T Tran, S Brady Speakers: A Bessou, J Jans, A Kuhls-Gilcrist, M Lendl, K Strauss	Ultrasound Specialty Symposium Zagzebski-Carson Lectureship on Medical Ultrasound Moderators: Z Long, K Bader Speaker: J Wiskin	Therapy Educational Course A Clinical Perspective on the Evolution and Challenges of TBI Moderators: T Wu, P Rassiah-Szegedi Speakers: J Burmeister, X Gu, J Kunz	Professional Symposium How to Communicate Effectively with a Multidisciplinary Team Moderators: P Johnson, C Buckey Speakers: L Fong de los Santos, D Hyer, P Johnson, S Parkerr	Imaging Educational Course QC Performance Updates of ACF NM & PET QC Manuals: What, When, and How? Moderator: J Zhang Speakers: R Barbee, M Georgiou M Palmer, J Zhang		
2:30 PM – 2:40 PM	Ashland Moderator Speaker: R Aydin Innovation Room 2	1:45 PM – 2:40 PM									
2:50 PM - 3:00 PM	GammaTile Moderator Speaker: A Turner										
4:00 PM – 4:30 PM	Innovation Room 2 GE Healthcare Moderator Speaker: M Persson Innovation Room 2	2:50 PM – 3:45 PM				Ultrasound Specialty Symposium Al in Ultrasound Imaging Moderator: M Holland Speakers: B Byram, T Liu	Therapy Educational Course Keeping up with the Task Groups: TG-290 and TG-372 Moderator: M Matuszak				
9:30 AM - 10:00 AM	BEST OF PROFESSIONAL						Speakers: L Beaulieu, H Li				
1:15 PM – 1:45 PM	ePoster Theater – Forum 1 Presenting Authors available	3:45 PM -									
9:30 AM – 10:00 AM 1:15 PM – 1:45 PM		4:45 PM				Moderator: Ehsan Samei Room 340)				
3:45 PM – 4:15 PM	Forums 1 – 9							- Star	Therapy Scientific		
1:45 PM – 3:45 PM	PinS Artificial Intelligence-Based Automatic Segmentation: Current State-of-Affairs and Future Directions Moderator: C Cardenas Speakers: X Feng, M Gerace, F Mourtada, S Torres, S Wang	4:30 PM – 6:00 PM	Imaging Scientific Symposium Novel X-Ray Sources Moderator: R Fahrig Speakers: J Boone, R Fahrig, B Gonzales, H Hertz, P Schwoebel, E Silver	Therapy Scientific Session Electron Flash Therapy Moderators: R Zhang, A Cetnar	Imaging Educational Course The Emerging Role of Medical Physics in Surgery Moderators: J Siewerdsen, A Jones Speakers: J Bird, L Eberlin, T Mackie, J Siewerdsen	Ultrasound Specialty Symposium Focused Ultrasound With Microbubbles for Therapeutic Effects Moderator: K Hoyt Speakers: F Forsberg, S Sirsi, J Szabiowski	Therapy Educational Course Innovations in Adult and Pediatric Clinical Trials Moderators: K Smith, S Flampouri Speakers: C Grassberger, K Smith, L Tchelebi, Y Xiao	(21)	Symposium Session in Memory of Arthur Lucas, Sc.D.: Time Is of the Essence: Advances in Online Adaptive Radiation Therapy Moderators: W Liu, C Glide-Hurst Speakers: A Francesca, C Glide-Hurst, N Kovalchuk, W Liu		
4:30 PM – 5:30 PM	Innovation Room 1 BLUE RIBBON ePOSTER	6:30 PM - 9:00 PM	Awards a	nd Honors Ceremony: Houston Ballro	om 1-4; Followed by Wine & Cheese	Reception: Houston Ballroom 5-7 Ma	rriott Marquis Houston Hotel (Meeting	g Level 2) [Wear your badge for entry	/ scanning]		

ePoster Theater Imaging | Multi-Disciplinary | Therapy

PROGRAM AT A GLANCE | TUESDAY, JULY 25

XHIBIT HALL AC	TIVITIES		ROOM 361	ROOM 342	ROOM 351	ROOM 360	ROOM 362	ROOM 371	ROOM 372	
9:00 AM - 6:00 PM 9:30 AM - 10:15 AM 12:15 PM - 1:45 PM 3:45 PM - 6:00 PM	EXHIBIT HALL HOURS BREAKS Refreshment Break Lunch On Your Own + Visit the Technical Exhibits Meet the Vendors Reception NEW! Sponsored by Sun Nuclear, a Mirion Medical Company (Refreshment Break, ePosters and Technical Exhibits)	7:30 AM- 8:25 AM	Imaging Scientific Symposium Photon Counting Detection: Theory, Practical Considerations, and Applications Moderator: K Yang Speakers: C Dunning, X Hu, K Li, X Tang, K Yang	Multi-Disciplinary Scientific Symposium In Vivo Dosimetry and Image Guidance for FLASH Radiotherapy Moderator: L Xiang Speakers: K Parodi, B Pogue, L Xiang	Imaging Educational Course Read with Expert - ABD/GI Moderator Speaker: H Kang	Ultrasound Specialty Symposium Ultrasound QA/QC Workshop Moderator: Z Lu Speakers: Z Long, M Russ	Therapy Educational Course A New Paradigm of Surface- Guided Radiotherapy Moderators: D Gierga, G Li Speakers: E Covington, D Giantsoudi, G Li	Professional Symposium Engaging in Advocacy With Legislators and Regulators. Why Should Medical Physicists Care? Moderators: K Hintenlang, K Little Speakers: D Gilley, S Gros, M Reiter	Therapy Scientific Session Radiobiology Moderators: X Jia, Y Chen	
9:30 AM - 10:00 AM 10:00 AM - 10:30 AM 10:30 AM - 11:00 AM 1:15 PM - 1:45 PM 3:45 PM - 4:15 PM 9:30 AM - 10:30 AM	INTERACTIVE ePOSTER DISCUSSION Forums 1 – 9 EXPANDING HORIZONS	8:30 AM - 9:30 AM		Multi-Disciplinary Scientific Session Clear Vision: Image Guidance for Treatment Verification Moderators: T Zhu, Y Zlateva	Therapy Scientific Session Small Animal Study and Novel Systems Moderators: A Sawant, S Lacombe		8:35 AM - 9:30 AM Therapy Educational Course Clinical Translation of Radiomics: How Do We Get There? Moderator: H Whitney Speakers: I El Naga, H Whitney	8:35 AM – 9:30 AM Professional Symposium Patient Radiation Safety and the Law, Standards, and Ethics: An Overview of Perspectives From ICRP, WHO, IEC et al. Moderator: Y Liao	8:35 AM – 9:30 AM Therapy Scientific Symposium Target Tracking in Radiation Therapy Moderators: J. Roeske, M Axente Speakers: E Hewson, K Mittauer, L Wang	
10:15 AM – 12:15 PM	Forum 1 PinS QUANTITATIVE ULTRASOUND Moderator: I Rosado-Mendez Speakers: T. Erpelding, T. Lynch,	7:30 AM - 9:30 AM	Professional Symposium Are These Stories Real? – A Case Study Workshop for Leadership, Professionalism, and Ethics Education Moderators: C Stambaugh, J Steiner Speakers: M Hyun, M Popovic, D Wang Room 340							
10:15 AM – 12:15 PM	I. Rosado-Mendez, G. Torres, M. Wang Innovation Room 1 GUIDED TOURS The Evolution and Applications of Surface Guided Radiation Therapy Moderator: K Gifford Speaker: R Hachadorian Innovation Room 2	10:15 AM – 11:10 AM 11:15 AM – 12:15 PM	Imaging Scientific Symposium Advances in Imaging for Personalized Breast Cancer Treatment Moderators: J Mainprize, I Reiser Speakers: P Kinahan, W Yang	Multi-Disciplinary Scientific Symposium Interpretable Machine Intelligence in Multidimensional Omics Moderators: H Nasief, F Yin Speakers: H Li, H. Nasief, M Schabath, Y Xiao, F Yin	Imaging Educational Course The Physics, Physiology, Administration and Toxicity of Contrast Agents for Conspicuity Enhancement in CT: State-of-the- Art and Outlook Moderator: X Tang Speakers: D Cormode, J Hsu, C Moreno, X Tang, X Tang	Ultrasound Specialty Symposium Translational Opportunities for Photoacoustic and Ultrasound- Mediated Imaging Moderator: R Bouchard Speakers: R Bouchard, K Hoyt, L Li, G Lu	Therapy Educational Course Use of Artificial Intelligence in Brachytherapy Moderators: X Jia, A Damato Speakers: P Klages, M Roumeliotis, H Veeraraghavan, T Wang, W Yang	History Symposium The Historical Foundation of Physics Based Major Medical Procedures and the Contributions of the Innovators and Pioneers Moderator: G lbbott Speakers: G lbbott, L Rothenberg, R Wilson	10:15 AM – 11:15 AM Therapy Scientific Session MRI and Functional Guided Radiation Therapy Moderators: E Subashi, E Vicente	
1:45 PM – 1:55 PM	VENDOR SHOWCASE Ashland Moderator Speaker: R Aydin Innovation Room 2 PROFESSIONAL SYMPOSIA		Imaging Scientific Session Breast Imaging Moderators: I Reiser,					11:20 AM – 12:15 PM Professional Symposium Addressing Equity Issues Experienced by Female Medical Physics Moderator: M Wells	11:20 AM – 12:15 PM Therapy Scientific Session Dosimetry Modeling and Verification	
1:45 PM – 2:40 PM	Data Analysis and Artificial Intelligence (AI) in Relation to Medical Physics Profession: The IOMP's View Moderator: M Mahesh Speakers: E Bezak, J Damilakis, M Mahesh Innovation Room 1	10:15 AM – 12:15 PM	I Sechopoulos	Multi-Disciplinary Scientific Symposiur Global Collaborations for Medical Physics Inr Moderator: P Sandwall II Speakers: S Adeneye, S Chang, P Costa, A Ekpenyong,			Speakers: C Borras, E Draeger, E Hirata, M Wells			
2:50 PM – 3:45 PM	Joint AAPM-EFOMP Symposium: Multi- Professional Society Perspectives on Future of Medical Physics and Combined Efforts in Al Moderator: I Sechopoulos Speakers: M Avanzo, M Giger, C Mayo Innovation Room 1 2:45 PM –		Evaluation	Science Council Session: Innovations in Medical Physics Moderators: J Seuntjens, K Brock	Imaging Educational Course Breast Cancer Diagnosis from Screening Mammography to Final Pathology Moderator: W Geiser Speakers: W Geiser, S Krishnamurthy, T Moseley	1:45 PM – 2:40 PM Data Science Specialty Symposium Radiogenomics and Artificial Intelligence for Personalized Medicine: Perspectives from a Biologist, Physicist and Physician Moderators: J Niedzielski, L Wei Speakers: B Al-Lazikani, I ElNaqa, C Fuller	Therapy Educational Course Overcoming Challenges for Imaging and Treating Potentially Pregnant Patients Moderator: J. Pollard-Larkin Speakers: J Masten, P Nitsch, B Parker, J Sharpe Taylor	1:45 PM – 2:40 PM Professional Symposium Board Exams in an Evolving World: ABR Updates and Panel Discussion for ABR Initial Certification	1:45 PM – 2:40 PM Therapy Scientific Symposium Innovations in Brachytherapy Moderators: S Abbasinejad Enger, E Soisson	
4:00 PM – 5:00 PM 5:00 PM – 6:00 PM	PRESIDENT'S EVENTS Medical Physics Meets Visual Arts Moderator: E Samei Speaker: J Malone Innovation Room 1							Moderators: P Wall, K Bittinger Speakers: C Green, E Hilliard, G Ibbott, J Steiner	Speakers: S Abbasinejad Enger, C Deufel, R Flynn	
4:00 PM – 5:00 PM 5:00 PM – 6:00 PM 4:30 PM – 5:30 PM	"Rasa"" — An Immersive Artistic Resonance Experiential Workshop Moderator: E Samei Speaker: R Kapadia Innovation Room 2 BLUE RIBBON ePOSTER	2:45 PM – 3:45 PM	2:50 PM – 3:45 PM Imaging Scientific Session Nuclear Medicine Moderators: P Kinahan, A Tao					2:50 PM - 3:45 PM Professional Symposium New Member Symposium: I've Got a New Job, How Do I Ensure Success? Moderator: C Page-Robertson Speakers: J Chang, R Miller	Therapy Scientific Session Innovation in Imaging and Treatment Techniques Moderators: Lei Ren, Ying Xiao	
	ePoster Theater (Imaging, Multi-Disciplinary, Therapy)	6:00 PM - 9:00 PM	AAPM Night Out [Wear your badge for entry scanning]							

PROGRAM AT A GLANCE | WEDNESDAY, JULY 26

EXHIBIT HALL AC	ITVITIES		ROOM 361	ROOM 342	ROOM 351	ROOM 360	ROOM 362	ROOM 371	ROOM 372	
9:00 AM – 2:00 PM	EXHIBIT HALL HOURS GENERAL EPOSTER VIEWING (GePV) Viewable during Exhibit Hall Hours ePoster Forums 1 – 9 & Online	7:30 AM- 8:25 AM	7:30 AM – 8:30 AM Imaging Scientific Session Photon-Counting and Dual- Energy CT and CBCT Moderators: G Gang, K Li	Multi-Disciplinary Scientific Symposium Joint WMIS-AAPM Symposium:	Imaging Educational Course Read with Expert - Neuro Moderator Speaker: G Young	Data Science Specialty Symposium Data Science Boot Camp - MR Data Moderator: H Whitney Speakers: S Harmon, H Whitney	Therapy Educational Course MRI vs CBCT for ART: Case Demonstrations Moderator: J Pursley Speakers: C Fuller, Z Han, M Lin	Professional Symposium Systems Thinking for Patient Safety and Quality Improvement in Radiation Oncology Moderator: T Pawlicki Speakers: M Bakhtiari, L Wong	7:30 AM – 8:30 AM Therapy Scientific Session Novel Techniques for Treatment Planning Moderators: Q Wu, Y Zhang	
9:30 AM – 10:15 AM 12:15 PM – 1:45 PM 9:30 AM – 10:00 AM	BREAKS Refreshment Break Lunch Break + Visit the Technical Exhibits ePosters and Exhibits close at 2:00 PM INTERACTIVE ePOSTER DISCUSSION	8:35 AM - 9:30 AM	Therapy Scientific Symposium Advances in 3D Printing for Radiation Therapy Moderators: A Yu, J Zou Speakers: M Kamrava, L Skinner, B Teo, A Yu	Imaging for Immune Modulating, Cellular, and Gene Therapies Moderators: J Hazle, C Anderson Speakers: J Hazle, R Patel, P Pereira, H Rafei	Imaging Scientific Session Advances in Neuroimaging and Head and Neck Imaging Moderators: G Clarke, V Yu	Data Science Specialty Symposium Data Science Boot Camp - Therapy Data Approaches Moderator: G Valdes Speakers: H Lin, G Valdes	Therapy Educational Course Benefits and Barriers for Widespread Adoption of Adaptive RT Moderators: K Brock, M Kessler Speakers: T Craig, C Glide-Hurst, J Sonke, D Stanley, M Surucu	Professional Symposium Safety and Quality Improvements With Peer Review and Program Audits Moderator: O Blasi Speakers: S Han-Oh, K Lofton, Y Lyatskaya	Therapy Scientific Symposium Al for Clinical Decision Making Radiation Therapy Moderator: L Ren Speakers: I El Naqa, X Gu, L Ren	
10:00 AM - 10:30 AM 10:30 AM - 11:00 AM 10:15 AM - 12:15 PM Aut Und and Mod Spe G S Inno GUI A Tr and Mod	Forums 1 – 9 PinS Autosegmentation in Radiotherapy: Understanding Fundamentals, Benefits, andcRisk Moderator: T Netherton Speakers: K Otto, D Rhee,	10:15 AM – 11:10 AM	Imaging Scientific Symposium Quantum Computing in Medical Physics: Technology Basics and Opportunities for Clinical Impact Moderators: L Atonuk, J Siewerdsen Speakers: L Antonuk, A Sawant, A Sisniega, H Veeraraghavan	10:15 AM – 11:15 AM Multi-Disciplinary Scientific Session Respond and Model: Imaging for Treatment Assessment Moderators: L Xing, H Nasief	Imaging Educational Course Advanced MRI in Brain Tumors Moderator: L Qin	Data Science Specialty Symposium The Medical Imaging and Resource Center (MIDRC) – A Comprehensive Data Repository for COVID-19 Medical Images To Expedite Machine Intelligence Moderator: K Drukker Speakers: N Baughan, N Bevins, K Drukker, C Weijie	Therapy Educational Course JACMP Parallel Opposed Debate: AI, ART, and Patient Physics Interaction Moderator: J Burmeister	Professional Symposium RO-ILS and the WGPE: Mastering Both Hard and Soft Skills to promote Safety in the Clinic	Therapy Scientific Symposium Path to Independence: How To Secure Your First Grant as an Early-Stage Investigator?	
	G Schregardus-abma, K Tierney, Y Zhu Innovation Room 1 GUIDED TOURS A Trip down Quality Lane: MRI Phantoms and Quality Assurance Moderator: R Boggs	11:20 AM – 12:15 PM	Imaging Scientific Session Optical Imaging and Emerging Technologies Moderators: R Jeraj, H Byrne	Multi-Disciplinary Scientific Symposium Longitudinal Multimodality Imaging of Treatment Response: Data Dimensionality Challenges and Solutions Moderators: Y Gao, J Wang Speakers: S Bowen, R Li, H Nasief, J Wang		Data Science Specialty Symposium Al Automation in Segmentation Moderator: G Hugo Speakers: C Cardenas, G Hugo, H Veeraraghavan	Speakers: J Burmeister, B Cai, Q Chen, J Cunha, W Donahue, S Evans, D Hyer, M Hyun, Y Rong W Talcott	Moderator: C Buckey Speakers: C Buckey, E Covington, B Salter, M Washington	Moderators: G Pratx, L Ren Speakers: A Bertolet, S Decker, G Pratx, M Schmidt, L Xiang, F Y	
11:00 AM - 11:10AM	Speaker: B Villegas Innovation Room 2 VENDOR SHOWCASE Ashland Moderator Speaker: R Aydin Innovation Room 2	1:45 PM – 2:40 PM	Multi-Disciplinary Scientific Symposium Grant Funding Pathways for Clinical Medical Physicists Moderator: W Yang Speakers: R Howell, J Lamb, C Obcemea, W Yang	 1:45 PM – 2:45 PM Imaging Scientific Session Image Analysis, Quantitative Imaging, and Radiomics Moderators: E Abadi, M Jacobsen 	Imaging Educational Course	Data Science Specialty Symposium Ethics in Big Data and Artificial Intelligence Moderator: K Brock Speakers: R Gunderman, J Platt	Therapy Educational Course Patient Reported Outcomes and Quality of Life Data: What	Professional Symposium Know Your Rights Moderators: T Roth, A Perez-Andujar Speakers: B Blankenship, R Castillo, A Cetnar, K Osterman	Therapy Scientific Symposium FLASH Therapy Delivery, Motion Management and Dosimetry Moderators: A Sawant, R Zhang Speakers: J Buchsbaum, Y Poiri R Zhang, J Zou	
		2:50 PM – 3:45 PM	Imaging Scientific Symposium Teamwork Makes the Dream Work: Innovations in Diagnostic Medical Physics Through Academic Industrial Partnerships Moderators: J Hoye, E Angel Speakers: G El Fakhri, T Flohr, F Jansen, A Kuhls-Gilcrist, C McCollough, S Rudin	es the Dream Symposium Nutliscale Computational Oncology for Dynamic Biological Optimization of Treatments Moderator: K Sheng Is-Gilcrist, Speakers: A Hawkins-Daarud,	for Prostate Cancer Moderators: J Ma, T Andrews Speakers: A Chatterjee, D Hyer, H Kang, H Mok	Data Science Specialty Symposium Image Formation and Presentation GANs/Transformer Networks Moderator: L Hadjiiski Speakers: L Hadjiiski, J Kalpathy-Cramer, H Veeraraghavan	Medical Physicists Need To Know Moderator: Y Vinogradskiy Speakers: S Devpura, A Dueck, P Mavroidis, A Moreno, Y Vinogradskiy	Professional Symposium A Year In: Progress and Updates on the AAPM Affinity Groups Initiative Moderators: R Castillo, S Campelo Speakers: S Avery, P Galavis, L Jones, J Pollard-Larkin, T Roth	2:45 PM – 3:45 PM Therapy Scientific Session Treatment Optimization, Assessment, and Prediction Moderators: I El Naqa, M Huang	
		3:45 PM - 4:30 PM		Refreshment Break Level 3						
		4:30 PM - 6:00 PM	Imaging Scientific Symposium Quantitative Imaging Moderator: M Jacobsen Speakers: M Jacobsen, P Kinahan, B Taylor	 Multi-Disciplinary Scientific Symposium Frontiers in 4D-MRI and Diffusion MRI for Adaptive Radiotherapy Moderators: J Deng, M Fast Speakers: J. Cai, Y. Cao, E. Paulson, J. Xu 	Imaging Educational Course Remote Interpretation of Medical Images and Physics: Approaches, Challenges, and the Future Moderator: M Silosky Speakers: N Bevins, R Milman, M Silosky	Data Science Specialty Symposium Big Data Enabled AI Driven Health Care and Clinical Trials Moderators: C Mayo, Y Xiao Speakers: B AI-Lazikani, K Brock, J Buchsbaum, M Feng, C Mayo	Therapy Educational Course Streamlining Cervical Cancer Radiotherapy Treatment Planning for Low- and Middle-Income Countries Moderators: L Court, W Ngwa Speakers: M Huq, X Jia, T Netherton, C Nwachukwu	Professional Symposium The Medical Physics Journal: Manuscript Preparation, Submission, and Manuscript Review Moderator: J Boone Speakers: S Benedict, J Boone, E Thomas"	Multi-Disciplinary Scientific Symposium Presidential Forum: Medical Physics NOW Moderator: E Samei Speakers: E Angel, T Atwood, A Badano, L Dawson, M Giger, C Mayo, J Pollard-Larkin, J Pursley, A Rahmim	
		6:15 PM – 7:15 PM			Annual Business Meeting	rector Members Room 342				

PROGRAM AT A GLANCE | THURSDAY, JULY 27

- Imaging EducationImaging Scientific
- Therapy Education
- Therapy Scientific Specialty Program

Multi-Disciplinary Scientific

Professional

President's Sessions of Note

	ROOM 361	ROOM 342	ROOM 351	ROOM 360	ROOM 362	ROOM 371	ROOM 372				
7:30 AM- 8:30 AM	Imaging Scientific Session Image Quality and New Technologies in X-Ray CT Moderators: K Rajendran, T Reynolds	7:30 AM – 8:25 AM Multi-Disciplinary Scientific Symposium Grand Challenges Moderators: K Drukker, L Hadjiiski Speakers: D Hardiansyah, J O Doherty	Imaging Educational Course Updates to MRI Safety Guidance	Data Science Specialty Program Scientific Session Al Advanced Methods Moderator: M Giger	7:30 AM – 8:25 AM Therapy Educational Course Quality Assurance in Image- Guided Radiation Therapy Moderator: P Alaei Speakers: P Alaei, H Al-Hallaq, J Snyder	Professional Symposium Best Practice Guidelines for	Therapy Scientific Session Advances in Proton Therapy Moderators: S Mossahebi, J Daartz				
8:35 AM - 9:30 AM	Imaging Scientific Session X-Ray Radiography, Fluoroscopy, and Dosimetry Moderators: W Zbijewski, K Hulme	8:30 AM – 9:30 AM Multi-Disciplinary Scientific Session Resonate to Adapt: MRI-Guided Radiotherapy Moderators: Y Cao, S Tari	for Varied Environments and Devices Moderators: M Hoff, R Stafford Speakers: A Doemer, S Einstein, M Hoff, Y Shu, R Stafford	Data Science Specialty Symposium Early-Career Investigators Breaking New Ground in Data Science Moderator: E Covington Speakers: J Brosch-Lenz, M Howard, K Lafata, E Vasquez osorio	Therapy Educational Course Evaluating Proton Therapy Equipment Specifications Moderator: J Kruse Speakers: A Deisher, L Dong	International Collaboration Moderators: S Prajapati, B Hasson Speakers: I Das, J Raffi, J Van Dyk, S Wadi-Ramahi					
9:30 AM – 10:00 AM				Refreshment Break Level 3							
10:00 AM – 10:55 AM	Imaging Scientific Symposium Advances in MRI Imaging: MR	Multi-Disciplinary Scientific Symposium Session in Memory of Isaac Rosen, PhD: Advanced Imaging Modalities for Proton Therapy Planning and Verification Moderator: A Lalonde Speakers: C Collins Fekete, A Lalonde, K Parodi, E Sterpin	Imaging Educational Course Updates in Rad and Fluoro – TG	10:00 AM – 11:00 AM Data Science Specialty Program Scientific Session AI Applications Moderators: C Glide-Hurst, K Drukker	Therapy Educational Course What Will You Do When You Touch My Heart? Moderators: C Shi, M Chan Speakers: M Chan, N Knutson, C Shi, P Tsai, S Wadi-Ramahi	Professional Symposium Collaborating and Communicating with Facility Administrators: Lessons Learned Moderator: J Frimeth Speakers: J Frimeth, M Jafari, J Petronaci	10:00 AM – 11:00 AM Therapy Scientific Session Brachytherapy and Radiopharmaceuticals Moderators: Y Rong, J Xu				
11:05 AM – 12:00 PM	Relaxometry, Fat-Water Imaging Moderators: K Hwang, G Clarke Speakers: H Cheng, C Chung, G Clarke, D Hernando	11:00 AM – 12:00 PM Multi-Disciplinary Scientific Session Stay on Track: Image Guidance for Motion Management Moderators: J Balter, D Ferguson	Reports Moderator: K Wunderle Speakers: G Gang, K Little, D Mihailidis, I Reiser, B Schueler	Data Science Specialty Symposium Uncertainty Quantification and Error Propagation of Artificial Intelligence in Medical Physics Applications Moderators: J Wang, K Lafata Speakers: A Barragan Montero, H Ji, C Wang, J Wang		Professional Symposium Equipment Specification & Purchasing Considerations For Physicists Moderator: R Stafford Speakers: D Jordan, R Stafford, R Tarver	Therapy Scientific Symposium Novel Biologically Enhanced Proton Delivery Technologies (FLASH, Grid, and PBCT) Moderators: L Dong, J Schuemann Speakers: A Bertolet, N Cao, S Mossahebi				
12:00 PM – 12:50 PM	Boxed Lunch Level 3										
1:00 PM – 2:00 PM	Imaging Scientific Session MRI Acquisition and Reconstruction Moderators: D Hernando, H Cheng	Multi-Disciplinary Scientific Session Breaking News: Novel Devices, iechniques, and Applications Moderators: R Hill, Q Lyu Imaging Educational Course Not Just CT: The American		Data Science Specialty Program Scientific Session Explainable Al Moderator: C Cardenas	Therapy Educational Course	Professional Symposium Medical Physicist Job Status and	Therapy Scientific Session Patient Safety and Quality Improvement Moderators: D Pokhrel, L Cervino				
2:05 PM – 3:00 PM	2:00 PM – 3:00 PM Imaging Scientific Session Cone-Beam CT Moderators: A Sisniega, P Galavis	2:00 PM – 3:00 PM Multi-Disciplinary Scientific Session Plan Ahead: Imaging for Segmentation and Treatment Adaptation Moderators: X Nie, B Cai	· ·	Data Science Specialty Symposium Machine Learning Challenges from Benchtop to Clinical Implementation Moderators: R Ger, D Nguyen Speakers: C Cardenas, T Purdie, K Shoemaker	Advances in Intra-Operative Radiation Therapy Moderators: L Perles, S Howard Speakers: S Davis, D Goer, E Holliday, S Howard, A Jackson, B Libby, L Perles, H Zhang	Practice Changes in Radiation Therapy During and After COVID-19 Pandemic Moderators: X Liu, X Qi Speakers: D Branco, J Cui, S Goetsch, X Liu, J Pollard-Larkin, J Zhang	Therapy Scientific Session Dose Measurement and QA Moderators: S Dhanesar, S Chen				