



2026 JOINT AAPM | COMP MEETING

JULY 19–22 | VANCOUVER, BC

Scheduled event times listed in Pacific Daylight Time. All rooms listed are in the Vancouver Convention Centre.

Sunday, July 19th

Session: Diagnostic and Interventional Radiology Physics Scientific Session: Artificial Intelligence for Disease Characterization and Longitudinal Assessment in Medical Imaging

SU-840-212-1 - An Opportunistic Screening Framework for Coronary Artery Calcium Assessment on Radiotherapy Datasets

- **Chase Ruff, MS, Nicholas R. Summerfield, MS, Blessing Akinro, Anudeep Kumar, MS, Alex Singleton Kuo, Prashant Nagpal, MD, Ming Dong, PhD, Dr. Timothy P. Szczykutowicz, PhD and Carri K. Glide-Hurst, PhD**
- 8:40 AM - 8:50 AM | Room 212

Session: Learning from Experience: Real-World Lessons from Physics Plan Review, Invited Program
Learning from Experience: Real-World Lessons from Physics Plan Review

- **Moderators: Sua Yoo, PhD, Dustin J. Jacqmin, PhD and Minsun Kim, PhD**
- 2:25 PM - 3:15 PM | Room 118

Session: Learning from Experience: Real-World Lessons from Physics Plan Review, Invited Program
SU-225-118-2 - Improving planning workflows with physics plan review: lessons from incident learning

- **Gemma A. Davies, PhD**
- 2:41 PM - 2:51 PM | Room 118

AAPM Residency Fair, Part 1

- 1:30 PM - 3:00 PM
- Exhibit Hall
- The Residency Fair aims to provide prospective residents and trainees an opportunity to learn more about individual residency programs and meet representatives from the participating institutions.



Session: Therapy Physics Scientific Session: Biological Modeling

SU-400-118-1 - Changing the Rhythm: How the Hearts Trial Is Redefining Cardiac Safety In Cancer Treatment

- **Carri K. Glide-Hurst, PhD, Nicholas R. Summerfield, MS, Chase Ruff, MS, Yuhao Yan, MS, Prashant Nagpal, MD, Ming Dong, PhD, Grace C Blitzer, MD, Claire Baniel, MD, Newton Hurst, MD, PhD, Michael F. Bassetti, MD, Andrew J. Shepard, PhD, Jennie SM Crosby, PhD, BS, Oliver Wieben, PhD, Tarun Naren7, Thomas M Grist, MD, Jiwei Zhao, PhD and Andrew M Baschnagel, MD**
- 4:00 PM - 4:10 PM | Room 118

Session: Session in Memory of Robert J. Schulz: Bragging Rights and Bragg Peaks: Who Really Wins the Proton vs Photon Debate?

SU-510-BRA-3 - Protons-Technical Aspects

- **Carri K. Glide-Hurst, PhD**
- 5:24 PM - 5:31 PM | Ballroom A

Session: Poster Discussions

- 3:15 PM - 4:00 PM
- Exhibit Hall | Poster Lounge
- *Please see page 3-4 for details**



AAPM Residency Fair, Part 2

- 3:30 PM - 5:00 PM
- Exhibit Hall
- The Residency Fair aims to provide prospective residents and trainees an opportunity to learn more about individual residency programs and meet representatives from the participating institutions.



Monday, July 20th

AAPM Vendor Showcase: Taking Treatment to New Heights: Reaching Upright Proton Therapy for the Clinic

- **Carri K. Glide-Hurst, PhD, Leo Cancer Care, RaySearch Laboratories**
- 9:45 AM - 10:15 AM | Innovation Room

Session: Joint ESTRO-AAPM Session on Clinical Trial Design for Medical Physicists: Moving from QA into Oncologic Outcomes and Biomarker Applications
MO-115-109-1 - Beyond QA: Translating Physics Innovations from Technical Studies to Patient Centered Clinical Trials

- **Carri K. Glide-Hurst, PhD**
- 1:15 PM - 1:30 PM | Room 109

Session: Therapy Physics Scientific Session: ART: Modeling and Prediction

MO-400-BRA-3 - Bridging Cone-Beam CT to Stopping Power Ratio Maps: A Brownian Bridge Approach to Support Robust Adaptive Proton Therapy

- **Yuhao Yan, MS, Qisheng He, PhD, Minglei Kang, PhD, Behzad Hejrati, MS, Ming Dong, PhD and Carri K. Glide-Hurst, PhD**
- 4:20 PM - 4:30 PM | Ballroom A

Monday, July 20th (continued)

Session: Therapy Physics Scientific Session: Particle Therapy Program: Proffered Program

MO-510-118-2 - Deep Inverse Optimization with Supervised Lookahead Learning for Real-Time Proton Treatment Plan Optimization

- Zhizhen Wei, **Chingyun Cheng, PhD, Ben Durkee, MD, PhD, Zachary Morris, MD, PhD, Shouyi Wei, Charles B. Simone II, MD, Haibo Lin, PhD, Yang Lei, PhD and Minglei Kang, PhD**
- 5:10 PM - 5:20 PM | Room 118

Session: Therapy Physics SNAP Oral: ART

MO-510-220-6 - Digital Twin-Enabled Virtual Imaging Framework for Scalable Development of Upright Radiotherapy

- **Nicholas R. Summerfield, MS, William Paul Segars, PhD, Lavsén Dahal, Ehsan Abadi, PhD, Yuhao Yan, MS, Alex Singleton Kuo, Mark Pankuch, PhD and Carri K. Glide-Hurst, PhD**
- 5:45 PM - 5:52 PM | Room 220

AAPM 2026 Awards Ceremony and Reception

- 6:30 PM - 9:00 PM | Bruce Thomadsen, PhD, William D. Coolidge Gold Medal, presented by Bhudatt Paliwal, PhD



Tuesday, July 21st

Session: Therapy Physics Scientific Session: Brachytherapy

TU-1030-118-2 - BEST IN PHYSICS (THERAPY): Tumor Dose Heterogeneity Informed Biological Optimization of Combination Lu-177 PSMA Radiopharmaceutical Therapy and Ir-192 High Dose Rate Prostate Brachytherapy

- **Joseph B. Schulz, Ohyun Kwon, MS, Campbell Haasch, Abby E. Besemer, PhD, John M. Floberg, MD, PhD, Michael J. Lawless, PhD, Jordan M. Slagowski, PhD and Bryan Bednarz, PhD**
- 10:40 AM - 10:50 AM | Room 118

Session: Therapy Physics Scientific Session: Brachytherapy

TU-10340-118- - Robust Simultaneous Optimization of Catheter Positions and Dwell Times for High Dose Rate Prostate Brachytherapy

- **Joseph B. Schulz, Bryan Bednarz, PhD, John M. Floberg, MD, PhD and Jordan M. Slagowski, PhD**
- 11:00 AM - 11:10 AM | Room 118

Session: Blue Ribbon Posters

TU-310-BRP-41 - BLUE RIBBON POSTER THERAPY: Linear Energy Transfer Distributions In Dose-Optimized Pencil Beam Scanning Proton Therapy Delivered Using a Dynamic Collimation System

- **Albert Du, MS, Nhan Vu, MS, Ryan T. Flynn, PhD, Patrick M Hill, PhD, Daniel E. Hyer, PhD, Kevin J. Erhart and Blake R. Smith, PhD, MS**
- 3:10 PM - 4:00 PM | Exhibit Hall | Poster Lounge

Session: Radiopharmaceuticals Scientific Session: Alpha-Emitters and Dosimetric Infrastructure for RPT

TU-1030-205-1 - BEST IN PHYSICS

(RADIOPHARMACEUTICALS): Design and Fabrication of a Novel Pelvic-Vertebral 3D-Printed Anthropomorphic Phantom for Radiopharmaceutical Therapy Dosimetry

- **Nicole Alma Strecker, Joseph B. Schulz, Carolyn Eckrich, MS, Abby E. Besemer, PhD, Michael J. Lawless, PhD, Tyler J. Bradshaw, PhD and Bryan Bednarz, PhD**
- 4:00 PM - 4:10 PM | Room 205

Session: Therapy Physics Scientific Session: Modern Tools for a Safe Clinic

TU-400-118-1 - BEST IN PHYSICS (THERAPY): Large Language Model (LLM) Based Linac Downtime Analysis

- **Yeochean Youn, Joseph B. Schulz, Ethan D. Stolen, Karl J. Farrey, MS, Emil Muresan, Siyong Kim, PhD and James J. Sohn, PhD**
- 4:00 PM - 4:10 PM | Room 118

Wednesday, July 22nd

Session: Radiopharmaceuticals SNAP Oral: Dosimetric Validation, Preclinical Models and Treatment Planning for RPT

WE-730-220-1 - Development of a Dosimetric Validation Framework for Clinical Radiopharmaceutical Therapy Treatment Planning Systems

- **Jainam Hiteshkumar Valand, Elissa Khoudary, MS, Lyna Dinh, Carolyn Eckrich, MS, Michael J. Lawless, PhD and Abby E. Besemer, PhD**
- 7:30 AM - 7:37 AM | Room 220

Session: Therapy Physics SNAP Oral: Motion Management

WE-1120-220-6 - Gastrointestinal Motility-Induced Interplay In Abdominal Proton Therapy: Patient-Specific Delivery Replay In Pancreas and Liver

- **Jing Wang, PhD, Xingyi Zhao, Elissa Khoudary, MS, Balaji Selvaraj, Yuli Wang, Jiahua Zhang, PhD, Kaida Yang, PhD, Charles B. Simone II, MD, Haibo Lin, PhD, Karyn A. Goodman, MD, MS, Tian Liu, PhD, Xun Jia, PhD, Shouyi Wei, Minglei Kang, PhD and Yang Lei, PhD**
- 11:55 AM - 12:02 PM | Room 220



Poster Discussions

Sunday, July 19th

3:15 PM – 4:00 PM

Exhibit Hall | Poster Lounge

SU-315-GPD-D-87 - Automated Tools for MR Imaging QA

• *Bhudatt Paliwal, PhD, Aviral Bal, Lokesh Kodali, Dinesh K. Tewatia, PhD and Idarto Tanumihardjo*

SU-315-GPD-D-174 - Multiscale Evaluation of Tumor Hypoxia In Orthotopic and Heterotopic Head and Neck Cancer PDX Models

• *Liliana Berube, MS, Sai Inesh Nallamothu, Hannah Sondreal, BSc, David Murphy, PhD, Kwangok P Nickel, PhD, Mark Pagel, PhD and Randall J Kimple, MD, PhD, MBA*

SU-315-GPD-R-44 - Sensitivity of Dosimetry Calculations to Tumor Segmentation Methods on SPECT/CT Images for Patients Undergoing 177 Lu-PSMA-617 Radiopharmaceutical Therapy (RPT)

• *Lyna Dinh, Jainam Hiteshkumar Valand, Carolyn Eckrich, MS, Bryan Bednarz, PhD, Tyler J Bradshaw, PhD, Ryan Hutten, MD, Scott B Perlman, MD, MS, John M. Floberg, MD, PhD, Abby E. Besemer, PhD and Michael J. Lawless, PhD*

SU-315-GPD-T-55 - Intra-Field Interruption In Pencil Beam Scanning Proton Flash Radiotherapy: Dosimetric Impact and Clinical Solutions

• *Hang Qil, Ajay Zheng, Francis Yu, Anna Zhai, MS, Yang Lei, PhD, Minglei Kang, PhD, Tian Liu, PhD, Wolfgang A. Tomé, PhD, Xiaoxuan Xu, Richard Bakst, MD, Nancy Y Lee, MD, Chanda Guha, MD, PhD, Kristin Hsieh, MD, Irini Yacoub, MD, Arpit M. Chhabra, MD, J Isabelle Choi, MD, Charles B. Simone II, MD, Haibo Lin, PhD and Shouyi Wei*

SU-315-GPD-T-68 - Comprehensive Multi-Platform Characterization of an Advanced Linac-Based Cone-Beam CT Imaging System

• *Jennie SM Crosby, PhD, BS, Ian Morton, Gemma A. Davies, PhD and Carri K. Glide-Hurst, PhD*

SU-315-GPD-T-92 - Full Abdominal Motion Interplay In Pencil Beam Scanning Proton Therapy: Integrating Respiratory and Gastrointestinal Dynamics

• *Jing Wang, PhD, Xingyi Zhao, Elissa Khoudary, MS, Balaji Selvaraj, Yuli Wang, Jiahan Zhang, PhD, Kaida Yang, PhD, Charles B. Simone II, MD, Haibo Lin, PhD, Karyn A Goodman, MD, MS, Tian Liu, PhD, Xun Jia, PhD, Shouyi Wei, Minglei Kang, PhD and Yang Lei, PhD*

SU-315-GPD-T-99 - Charge Accumulation In Liquid Water Under Electron Flash Irradiation

• *Miguel Angel Flores Mancera, MS, Jeffrey L Radtke, MS and Wesley S. Culberson, PhD*

SU-315-GPD-T-218 - GRID-Lattice: A Compact and Robust Proton Lattice Strategy Using a GRID Entrance Beam Pattern

• *Shouyi Wei, PhD, Balaji Selvaraj, Hang Qi, Lee Xu, MS, Dr. Chengzhu Zhang, PhD, Francis Yu, Yang Lei, PhD, Minglei Kang, PhD, Xiaodong Wu, PhD, Nancy Y Lee, MD, Chanda Guha, MD, PhD, Richard Bakst, MD, Kristin Hsieh, MD, Irini Yacoub, MD, J Isabelle Choi, MD, Charles B. Simone II, MD and Haibo Lin, PhD*

SU-315-GPD-T-223 - Evaluation of Single- Versus Multi-Point Barometer Calibration for Reference Dosimetry

• *Jainam Hiteshkumar Valand, Gemma A. Davies, PhD, Rajat J. Kudchadker, PhD and Jordan M. Slagowski, PhD*

SU-315-GPD-T-238 - Building Resilience and Modernizing Radiation Therapy In Ukraine through Comprehensive Education and International Collaboration

• *Ruslan Zelinskyi, MSc, Yuliia Lozko, MD, Zoia Shepil, MD, Serhii Brovchuk, PhD, Natalka Suchowerska, PhD, Viktor M. Iakovenko, PhD, Zachary Morris, MD, PhD, Alexandra Diaz, MD, Mitchell Kamrava, Anna Riby, Anastasia Flanigan, Kateryna Pavelko, Maria Winemar, Anna-Pia Margareta Ternstrom, Philippe Fortier, Aldijana Osmanagic, Emily Kruse, MPH, Benjamin Li, MD, MBA and Nataliya Kovalchuk, PhD*

SU-315-GPD-T-277 - Design and Construction of a Novel Hemi-Body Tset Fixture Design

• *Kyle E. Schaefer and Abby E. Besemer, PhD*

SU-315-GPD-T-280 - Automatic Selection of Isocenter(s) and Minimization of Normal Tissue Dose for Multi-Target Oligometastatic Extracranial SABR

• *Laura Bennett, PhD, MS, Gemma A. Davies, PhD, R. Adam B. Bayliss, PhD, Michael F. Bassetti, MD, Carri K. Glide-Hurst, PhD and Jordan M. Slagowski, PhD*

SU-315-GPD-T-445 - Dosimetric Feasibility of Flash-Compatible Single-Energy Bragg Peak (SEBP) Proton Therapy for Hypofractionated Pancreatic Cancer

• *Jocelyn Miyo Jackson, PhD, Nicholas Lynch, PhD, Zhizhen Wei, Shouyi Wei, Chingyun Cheng, PhD, Zachary Morris, MD, PhD, Ben Durkee, MD, PhD, Haibo Lin, PhD, Carri K. Glide-Hurst, PhD, Charles B. Simone II, MD and Minglei Kang, PhD*

Poster Discussions (continued)

Sunday, July 19th

3:15 PM – 4:00 PM

Exhibit Hall | Poster Lounge

SU-315-GPD-T-469 - Validation of MR-CT Deformable Registration Accuracy and MRI Fat-Fraction Quantification Using a Novel 3D-Printed Anthropomorphic Phantom

• Carolyn Eckrich, MS, Nicole Alma Strecker, Joseph B. Schulz, Jessica R. Miller, PhD, Bryan Bednarz, PhD and Michael J. Lawless, PhD

SU-315-GPD-T-593 - A Retrospective Sensitivity Analysis of Dynamic Collimation System to Realistic Delivery and Mechanical Uncertainties

• Nhan Vu, MS, Albert Du, MS, Blake R. Smith, PhD, MS, Kaustubh A. Patwardhan, Alonso N. Gutierrez, PhD, Eduardo Pons, Ryan T. Flynn, PhD, Wesley S. Culbertson, PhD, Patrick M Hill, PhD and Daniel E. Hyer, PhD

SU-315-GPD-T-673 - Autosegmentation Via nnU-Net on Post-Brachytherapy-Catheter CT for Prostate HDR Brachytherapy

• Eric M. Wallat, PhD, MS, Joseph B. Schulz, John M. Floberg, MD, PhD, Greg Cooley, MD, Bryan Bednarz, PhD and Jordan M. Slagowski, PhD

SU-315-GPD-T-708 - Evaluation of the Sun Nuclear Sunsilicon Diode for Small-Field Dosimetry In 1.5 T and 0.35 T MR-Linacs

• Caiden Kohl Atienza, Andrew J. Shepard, PhD, Carri K. Glide-Hurst, PhD, Jennie SM Crosby, PhD, BS, Daniel E. Hyer, PhD and Wesley S. Culbertson, PhD

SU-315-GPD-T-1080 - A Medical Physics-Driven Clinical Trial of Temporally Modulated Pulsed Radiotherapy (NRG-CC017)

• Christian Velten, PhD, R. Adam B. Bayliss, PhD, Michael G. Snyder, Jiayi Huang, MD and Wolfgang A. Tomé, PhD

SU-930-GPD-E-11 - Piloting a Structured Observership to Prepare Medical Physics Graduate Students for Clinical Practice

• Autumn E. Walter-Denzin, PhD, Alison C. Arnold, MS, Abby E. Besemer, PhD, Lindsay Zammit and Carri K. Glide-Hurst, PhD

Poster Viewing

Sunday, July 19th | 7:00 AM – 6:00 PM

*Viewable online only through the meeting app and website

PO-DPV-T-344 - A Comprehensive Comparative Study of Proton Flash Techniques for Conformal Pencil Beam Scanning Radiotherapy: Pristine Bragg Peak Vs. Spread-out Bragg Peak

• Elissa Khoudary, MS, Nicholas Lynch, PhD, Zhizhen Wei, Xingyi Zhao, MS, Chingyun Cheng, PhD, Ben Durkee, MD, PhD, Shannon E. O'Reilly, PhD, Carri K. Glide-Hurst, PhD and MingLei Kang

PO-DPV-E-7 - Aligning Outreach Curriculum with Learner Demand: Survey-Informed Design of Medical Physics Workshops for Students In Africa

• Kaelyn Becker, PhD, Shannon E. O'Reilly, PhD, Kelly Kisling, PhD, MS, and Christopher F. Njeh, PhD