

PROGRAM - AT-A-GLANCE

|                                                                                        | PROFESSIONAL                                                                                                                                                                              | DIAGNOSTIC AND INTERVENTIONAL RADIOLOGY PHYSICS                                                                |                                                                                                       | RADIOPHARMACEUTICALS                                                                          | THERAPY PHYSICS                                                                                          |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
|                                                                                        | ROOM 202                                                                                                                                                                                  | ROOM 211                                                                                                       | ROOM 212                                                                                              | ROOM 205                                                                                      | ROOM 109                                                                                                 |
| 7:30 AM – 8:30 AM                                                                      | Rethinking Evidence: Working Towards Equitable Practice of Medical Physics through Understanding Limitations of Past Research I                                                           | Optimizing Energy Use in CT and MRI: From Definitions and Measurement to Operational and Protocol Efficiency I | New NCRP Recommendations for Patient Shielding in Medical Imaging I                                   | Lung Ventilation/ Perfusion (V/Q) I                                                           | Real-Time Motion Management in Today's Clinical Practice I                                               |
| 8:40 AM – 9:40 AM                                                                      | AAPM's Summer Undergraduate Research Fellowship Programs: A Ten-Year Update and Stories from Past Fellows I                                                                               | ACR Updates for Imaging Physicists I                                                                           | Artificial Intelligence for Disease Characterization and Longitudinal Assessment in Medical Imaging P | International Council Symposium: Building Global Medical Physics Capacity (Joint AAPM-IOMP) I | The Surface Revolution: Intelligent Imaging, Motion Correlation, and Augmented Reality in Radiotherapy I |
| EXHIBIT HALL OPENS   9:40 AM – 10:20 AM   COFFEE BREAK IN EXHIBIT HALL                 |                                                                                                                                                                                           |                                                                                                                |                                                                                                       |                                                                                               |                                                                                                          |
| 9:40 AM – 10:20 AM                                                                     | Education General Poster Discussion (Innovation in Medical Physics) [Presenting Authors Available]<br>Exhibit Hall Poster Lounge                                                          |                                                                                                                |                                                                                                       |                                                                                               |                                                                                                          |
| 10:30 AM – 12:00 PM                                                                    | Opening Keynote: Non-Linear Biological Responses to Low Dose Ionizing Radiation - From Deep Earth to Deep Space<br>Moderator: R. Miller   Speakers: R. Miller, D. Boreham   Ballroom BC I |                                                                                                                |                                                                                                       |                                                                                               |                                                                                                          |
| 12:00 PM–1:15 PM LUNCH BREAK IN EXHIBIT HALL   VISIT THE TECHNICAL EXHIBITS            |                                                                                                                                                                                           |                                                                                                                |                                                                                                       |                                                                                               |                                                                                                          |
| 1:15 PM – 2:15 PM                                                                      | Shaping the Future of Medical Physicist Education in Brachytherapy: From CAMPEP Standards to Emerging New ABS Consensus Guidelines I                                                      | Artificial Intelligence in Breast Imaging: Challenges and Opportunities I                                      | Science Council Session: <i>Innovations in Medical Physics</i> P                                      | Dosimetry in Radiopharmaceutical Therapy: Why it Matters I                                    | From Pixels to Patients: Practical Pipelines for Implementing AI in Radiation Oncology I                 |
| 2:25 PM – 3:15 PM                                                                      | I Screwed up! Admitting My Mistake and Learning from It I                                                                                                                                 | Read with An Expert: Pediatric Imaging I                                                                       |                                                                                                       | Dosimetry in Radiopharmaceutical Therapy: How to Do It I                                      | Frontiers of AI in Medical Imaging and Radiation Therapy I                                               |
| 3:15 PM – 4:00 PM                                                                      | WELCOME RECEPTION IN EXHIBIT HALL<br>General Poster Discussions All Programs [Presenting Authors Available]   Poster Lounge                                                               |                                                                                                                |                                                                                                       |                                                                                               |                                                                                                          |
| 3:30 PM – 5:00 PM                                                                      |                                                                                                                                                                                           |                                                                                                                |                                                                                                       |                                                                                               |                                                                                                          |
| 4:00 PM – 5:00 PM                                                                      | Enhancing Brachytherapy Safety: Learning from Past Errors I                                                                                                                               | Advances in Interventional and Fluoroscopic Imaging, Dose Monitoring, Simulation, and Quality P                | Embracing AI-Assisted Programming for Problem Solving and Development in Medical Imaging Physics I    | Education Session: Innovation in Medical Physics Education: Arthur Boyer Award P              | Acoustic Imaging in RT P                                                                                 |
| 5:10 PM – 6:00 PM                                                                      | History Symposium: History of Brachytherapy I                                                                                                                                             | Navigating the Shifting Landscape of Research Funding in the United States I                                   | Cardiac MRI: Fundamentals to Clinical Application I                                                   |                                                                                               | MRI in RT P                                                                                              |
| 7:00 PM - 10:00 PM   OPENING PARTY   WEST PACIFIC TERRACE, VANCOUVER CONVENTION CENTRE |                                                                                                                                                                                           |                                                                                                                |                                                                                                       |                                                                                               |                                                                                                          |

**P** PROFFERED SESSIONS  
**I** INVITED SESSIONS



SEE ONLINE PROGRAM  
FOR SPEAKER DETAILS

POSTER VIEWING  
*(Viewable online via the meeting app and website)*

SUNDAY | JULY 19

| THERAPY PHYSICS                                                                                                                                                                         |                                                                                                                                      | SNAP ORALS                                                               | EARLY CAREER-MENTOR                                                | PINS   VENDOR SHOWCASE                                                                                      |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|--------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| ROOM 118                                                                                                                                                                                | BALLROOM A                                                                                                                           | ROOM 220                                                                 | ROOM 301                                                           | INNOVATION ROOM                                                                                             |
| Session in Memory of Adel Mustafa: Dosimetry and Instrumentation<br><div>P</div>                                                                                                        | Accelerating Access, Managing Risk: Implementing Safe and Efficient Direct-to-Treatment Adaptive Workflows<br><div>I</div>           | Advanced Imaging In RT<br><div>P</div>                                   | New Attendee Orientation                                           |                                                                                                             |
| Outcome Models<br><div>P</div>                                                                                                                                                          | Proton Therapy for Reirradiation: Clinical and Technical Advances<br><div>I</div>                                                    | Professional SNAP Oral<br><div>P</div>                                   | Medical Physics—JACMP Joint Workshop for Journal Peer Review       |                                                                                                             |
| EXHIBIT HALL OPENS   9:40 AM – 10:20 AM   COFFEE BREAK IN EXHIBIT HALL                                                                                                                  |                                                                                                                                      |                                                                          |                                                                    |                                                                                                             |
| Education General Poster Discussion (Innovation in Medical Physics) [Presenting Authors Available]<br>Exhibit Hall Poster Lounge                                                        |                                                                                                                                      |                                                                          |                                                                    | 9:45 AM–10:15 AM<br>Vendor Showcase<br>GammaTile                                                            |
| Opening Keynote: Non-Linear Biological Responses to Low Dose Ionizing Radiation - From Deep Earth to Deep Space<br>Moderator: R. Miller   Speakers: R. Miller, D. Boreham   Ballroom BC |                                                                                                                                      |                                                                          |                                                                    | <div>I</div>                                                                                                |
| 12:00 PM–1:15 PM LUNCH BREAK IN EXHIBIT HALL   VISIT THE TECHNICAL EXHIBITS                                                                                                             |                                                                                                                                      |                                                                          |                                                                    | 12:15 PM–1:15 PM<br>Vendor Showcase<br>Sun Nuclear, a Mirion Company                                        |
| GRACE Grand Challenge Session: Advancing Total Body, Marrow, and Lymphoid Irradiation Treatment Planning<br><div>I</div>                                                                | Re-Irradiation: Current Status, Challenges and Opportunities<br><div>I</div>                                                         | Segmentation<br><div>P</div>                                             | 1:30 PM–3:00 PM<br>Residency Fair Part 1<br>Location: Exhibit Hall |                                                                                                             |
| Learning from Experience: Real-World Lessons from Physics Plan Review<br><div>I</div>                                                                                                   | Building an International Framework to Improve Reirradiation Care<br><div>I</div>                                                    | Breast Imaging<br><div>P</div>                                           |                                                                    | Partners in Solutions Imaging: Choosing the Right Spectrum: Vendor Insights for Spectral CT<br><div>I</div> |
| WELCOME RECEPTION IN EXHIBIT HALL<br>General Poster Discussions All Programs [Presenting Authors Available]   Poster Lounge                                                             |                                                                                                                                      |                                                                          |                                                                    |                                                                                                             |
|                                                                                                                                                                                         |                                                                                                                                      |                                                                          | Residency Fair Part 2<br>Location: Exhibit Hall                    |                                                                                                             |
| Biological Modeling<br><div>P</div>                                                                                                                                                     | Expanding Radiation Oncology into Benign Disease: Translating Evidence to Modern International Practice<br><div>I</div>              | Imaging Instrumentation and Quantitative Methods for RPT<br><div>P</div> | SPS Undergraduate Gathering                                        |                                                                                                             |
| QA Management in a Diverse Multicenter Institution<br><div>I</div>                                                                                                                      | Session in Memory of Robert J. Schulz: Bragging Rights and Bragg Peaks: Who Really Wins the Proton vs Photon Debate?<br><div>I</div> | CT/CBCT in RT<br><div>P</div>                                            |                                                                    |                                                                                                             |
| 7:00 PM - 10:00 PM   OPENING PARTY   WEST PACIFIC TERRACE, VANCOUVER CONVENTION CENTRE                                                                                                  |                                                                                                                                      |                                                                          |                                                                    |                                                                                                             |

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|---------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                 | ROOM 202                                                                                                                                               | ROOM 211                                                                                                                               | ROOM 212                                                                                                                              | ROOM 205                                                                                                        | ROOM 109                                                                                                                                                    |
| 7:30 AM – 8:30 AM                                                                                                               | Various Career Paths and Career Transitions for Graduates from Medical Physics<br><div>I</div>                                                         | IEC Standards and AdvaMed Efforts in Radiography and Fluoroscopy of Interest to Clinical Diagnostic Medical Physicists<br><div>I</div> | Early-Career Investigator Symposium: John R. Cameron & John R. Cunningham Early-Career Investigator Symposium (ECIS)<br><div>P</div>  | Glomerular Filtration Rate: Fundamentals and Clinical Implementation Using Radiopharmaceuticals<br><div>I</div> | Phase I Clinical Trials: Testing the Physics<br><div>I</div>                                                                                                |
| 8:40 AM – 9:40 AM                                                                                                               | Session in Memory of Peter J. Biggs: Reinventing Residencies: Innovative Approaches to Strengthen the Future Medical Physics Workforce<br><div>I</div> | Shielding Strategies for Atypical Diagnostic System Installations<br><div>I</div>                                                      |                                                                                                                                       | Basic Y-90 Image-Based Dosimetry Workshop: Past and Present<br><div>I</div>                                     | Combining External Beam Radiation Therapy (EBRT) with Radiopharmaceutical Therapy (RPT) in Prospective Clinical Trials<br><div>I</div>                      |
| 9:40 AM – 10:20 AM   COFFEE BREAK IN EXHIBIT HALL   VISIT <div>P</div> TECHNICAL EXHIBITS                                       |                                                                                                                                                        |                                                                                                                                        |                                                                                                                                       |                                                                                                                 |                                                                                                                                                             |
| 9:40 AM – 10:20 AM                                                                                                              | Best of Professional [Presenting Authors available]   Exhibit Hall Poster Lounge                                                                       |                                                                                                                                        |                                                                                                                                       |                                                                                                                 |                                                                                                                                                             |
| 10:30 AM – 12:00 PM                                                                                                             | President's Symposium: Mentorship Unlocked: A Masterclass<br>Moderator: R. Miller   Speakers: R. Miller, S. Gill   Ballroom BC<br><div>I</div>         |                                                                                                                                        |                                                                                                                                       |                                                                                                                 |                                                                                                                                                             |
| 12:00 PM–1:15 PM LUNCH ON YOUR OWN   VISIT THE TECHNICAL EXHIBITS                                                               |                                                                                                                                                        |                                                                                                                                        |                                                                                                                                       |                                                                                                                 |                                                                                                                                                             |
| 12:00 PM – 1:30 PM                                                                                                              |                                                                                                                                                        |                                                                                                                                        |                                                                                                                                       |                                                                                                                 |                                                                                                                                                             |
| 1:15 PM – 2:15 PM                                                                                                               | Adaptive Radiotherapy Readiness: A Peptalk on Training, Credentialing, and Confidence-Building<br><div>I</div>                                         | MRI Safety of Active Implanted Devices: Past, Present, Future<br><div>I</div>                                                          | Session in Memory of Tao Wu, PhD: Wide vs Narrow: The Decade Long Unsettled Debate on DBT Acquisition Angle<br><div>I</div>           | A Primer on Radiopharmaceutical Therapy Radiobiology<br><div>I</div>                                            | Joint ESTRO-AAPM Session on Clinical Trial Design for Medical Physicists: Moving from QA into Oncologic Outcomes and Biomarker Applications<br><div>I</div> |
| 2:25 PM – 3:15 PM                                                                                                               | Professional Council: The Evolving Role of Medical Physicists in a Modern World<br><div>I</div>                                                        | Photon Counting CT<br><div>P</div>                                                                                                     | The Medical Imaging and Data Resource Center (MDRC): Building Trustworthy AI through Curated, Harmonized Imaging Data<br><div>I</div> | Implementing ACR NM & PET QC Manuals<br><div>I</div>                                                            | Joint ASTRO-AAPM Session on Clinical Trials Changing Clinical Practice: Re-Irradiation and Oligometastatic Breast Cancer Therapy<br><div>I</div>            |
| 3:15 PM – 4:00PM   COFFEE BREAK IN EXHIBIT HALL   VISIT THE TECHNICAL EXHIBITS                                                  |                                                                                                                                                        |                                                                                                                                        |                                                                                                                                       |                                                                                                                 |                                                                                                                                                             |
| 3:15 PM – 4:00 PM                                                                                                               | BEST IN PHYSICS RECEPTION<br>Best in Physics [Presenting Authors available]   Exhibit Hall Poster Theater                                              |                                                                                                                                        |                                                                                                                                       |                                                                                                                 |                                                                                                                                                             |
| 4:00 PM – 5:00 PM                                                                                                               | Editorial Perspectives Bridging Radiation Oncology and Medical Physics Publishing<br><div>I</div>                                                      | Imaging Physics Task Group Reports (TG245, TG367) - DBT QC, DEXA QA<br><div>I</div>                                                    | Technology Developments to Overcome Global Disparities in Imaging and Treatment<br><div>I</div>                                       | Personalized Dosimetry in Clinical Trials for Beta-Emitting Radiopharmaceutical Dosimetry<br><div>I</div>       | Expanding the Role of Medical Physics: Building Robust System Architectures to Facilitate AI in Clinical Trials<br><div>I</div>                             |
| 5:10 PM – 6:00 PM                                                                                                               | Ampere (Access for Medical Physicists to Education and Research Excellence): Building Global Leaders in Medical Physics<br><div>I</div>                | Imaging Physics Task Group Reports (TG333, TG316) - MR-Guided Focused Ultrasound QC, Ultrasound display QC<br><div>I</div>             | Emerging Technologies in Cone Beam CT<br><div>I</div>                                                                                 | Targeted Radiation From Within: The Expanding Role of Radiopharmaceutical Therapy<br><div>I</div>               | Clinical Trials in Breast Cancer Screening: Clinical and Physics Perspectives<br><div>I</div>                                                               |
| 6:30 PM–9:00 PM   AWARDS CEREMONY & RECEPTION   CEREMONY: BALLROOM BC   RECEPTION: BALLROOM FOYER (VANCOUVER CONVENTION CENTRE) |                                                                                                                                                        |                                                                                                                                        |                                                                                                                                       |                                                                                                                 |                                                                                                                                                             |

MONDAY | JULY 20

| THERAPY PHYSICS                                                                                                                     |                                                                                                                                                                                    | SNAP ORALS                                                                                    | EARLY CAREER-MENTOR                                                                                    | PINS   VENDOR SHOWCASE                                                                                                                |
|-------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| ROOM 118                                                                                                                            | BALLROOM A                                                                                                                                                                         | ROOM 220                                                                                      | ROOM 301                                                                                               | INNOVATION ROOM                                                                                                                       |
| Detectors for Dosimetry Measurements in Ultra-High Dose Rate (UHDR) Beams Used for Flash Radiotherapy Applications<br>I             | Do We Still Need Patient-Specific Quality Assurance? Modern Approaches for Safe and Effective Delivery of Same-Day Stereotactic Radiosurgery and Online Adaptive Radiotherapy<br>I | MRI in RT<br>P                                                                                |                                                                                                        |                                                                                                                                       |
| Ultra-Fast Delivery and Imaging in Particle Therapy: Bridging Time, Dose Rate, and Biology<br>I                                     | Beyond CIEDs: Assessing Risk to Patients with Electronic Devices<br>I                                                                                                              | MRI - Joint Imaging and Therapy Applications<br>P                                             | AAPM Medical Physics Student Meeting: International Impact Through Collaboration in Global Health<br>I |                                                                                                                                       |
| 9:40 AM – 10:20 AM   COFFEE BREAK IN EXHIBIT HALL   VISIT THE TECHNICAL EXHIBITS                                                    |                                                                                                                                                                                    |                                                                                               |                                                                                                        |                                                                                                                                       |
| Best of Professional [Presenting Authors available]   Exhibit Hall Poster Lounge                                                    |                                                                                                                                                                                    |                                                                                               |                                                                                                        | 9:45 AM–10:15 AM<br>Vendor Showcase: Leo Cancer Care & Raysearch                                                                      |
| President's Symposium: Mentorship Unlocked: A Masterclass<br>Moderator: R. Miller   Speakers: R. Miller, S. Gill   Ballroom BC<br>I |                                                                                                                                                                                    |                                                                                               |                                                                                                        |                                                                                                                                       |
| 12:00 PM–1:15 PM LUNCH ON YOUR OWN   VISIT THE TECHNICAL EXHIBITS                                                                   |                                                                                                                                                                                    |                                                                                               |                                                                                                        | 12:15 PM–1:15 PM<br>Vendor Showcase: Elekta & Gray Oncology Solutions                                                                 |
|                                                                                                                                     |                                                                                                                                                                                    |                                                                                               | Student & Trainee Luncheon                                                                             |                                                                                                                                       |
| Ultra-High Dose Rate<br>P                                                                                                           | Biomarkers to Biologically-Guided Radiotherapy: Innovation & Clinical Translation of Quantitative MRI<br>I                                                                         | Advances in Radiographic and Fluoroscopic Physics From Dose Metrics to Clinical Practice<br>P | Student Guided Tours<br>Location: Room 111/112                                                         | 1:30 PM–2:00 PM<br>Vendor Showcase<br>GE Healthcare                                                                                   |
| Enhancing Everyday Clinical Practice<br>P                                                                                           | Adapting to More Than Shape: Leveraging the Full Potential of Adaptive Radiotherapy Technologies<br>I                                                                              | Computational and AI-driven Approaches for RPT Dosimetry and Imaging<br>P                     | Volunteering for the ABR: From Soup to Nuts<br>I                                                       | Partners in Solutions Therapy: Fast Track Treatment Planning: Dose Predictions and Automated Planning for Non-Adaptive Workflows<br>I |
| 3:15 PM – 4:00PM   COFFEE BREAK IN EXHIBIT HALL   VISIT THE TECHNICAL EXHIBITS                                                      |                                                                                                                                                                                    |                                                                                               |                                                                                                        |                                                                                                                                       |
| BEST IN PHYSICS RECEPTION<br>Best in Physics [Presenting Authors available]   Exhibit Hall Poster Theater                           |                                                                                                                                                                                    |                                                                                               |                                                                                                        |                                                                                                                                       |
| No, I Know the Real Mechanism of the Flash Effect - A Mini-Debate<br>I                                                              | ART: Modeling and Prediction<br>P                                                                                                                                                  | Proton Therapy<br>P                                                                           | Speed Mentoring<br>I                                                                                   |                                                                                                                                       |
| Particle Therapy<br>P                                                                                                               | Treatment Planning<br>P                                                                                                                                                            | ART<br>P                                                                                      |                                                                                                        |                                                                                                                                       |
| 6:30 PM–9:00 PM   AWARDS CEREMONY & RECEPTION   CEREMONY: BALLROOM BC   RECEPTION: BALLROOM FOYER (VANCOUVER CONVENTION CENTRE)     |                                                                                                                                                                                    |                                                                                               |                                                                                                        |                                                                                                                                       |

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|------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                  | ROOM 202                                                                                                                            | ROOM 211                                                                                                                                            | ROOM 212                                                                                                            | ROOM 205                                                                                                      | ROOM 109                                                                                                               |
| 7:30 AM – 8:30 AM                                                                                                                                                | Dependable and Trustworthy Artificial Intelligence in Clinical Practice - Does It Exist?<br><div>I</div>                            | Artificial Intelligence for Ultrasound: From Imaging to Biomarkers<br><div>I</div>                                                                  | Breast MRI: Technical Aspects and Cutting-Edge Techniques<br><div>I</div>                                           | Molecular Breast Imaging: Clinical Advances and Future Directions<br><div>I</div>                             | Imaging Across the SRS Workflow: From Planning Precision to Treatment Guidance and Response Assessment<br><div>I</div> |
| 8:40 AM – 9:40 AM                                                                                                                                                | Reirradiation and Medical Physicists - Professional, Legal, and Training Perspectives<br><div>I</div>                               | Carson-Zagzebski Ultrasound Distinguished Lectureship<br><div>I</div>                                                                               | Breast Cancer Risk Management – Past, Present, and Future<br><div>I</div>                                           | Ask the Experts: A Roundtable Session on Radiopharmaceutical Therapy<br><div>I</div>                          | PET in RT<br><div>P</div>                                                                                              |
| 9:40 AM – 10:20 AM   COFFEE BREAK IN EXHIBIT HALL   VISIT THE TECHNICAL EXHIBITS                                                                                 |                                                                                                                                     |                                                                                                                                                     |                                                                                                                     |                                                                                                               |                                                                                                                        |
| 9:40 AM – 10:20 AM                                                                                                                                               | Expanding Horizons Travel Grant Poster Presentations [Presenting Authors available]   Exhibit Hall Poster Lounge                    |                                                                                                                                                     |                                                                                                                     |                                                                                                               |                                                                                                                        |
| 10:30 AM – 11:30 AM                                                                                                                                              | Education Council: Establishing the Next Generation of Medical Physicists<br><div>I</div>                                           | Machine Learning for Image Formation, Reconstruction, and Quantitative Analysis in Medical Imaging<br><div>P</div>                                  | Breast Biopsies: Radiologist Insights and ACR Update<br><div>I</div>                                                | New Advances in Y90 Radioembolization<br><div>I</div>                                                         | Photon-Counting CT in Radiotherapy: From Physics to Advanced Photon and Proton Treatments<br><div>I</div>              |
| 11:30 AM– 1:00 PM LUNCH BREAK IN EXHIBIT HALL   VISIT THE TECHNICAL EXHIBITS                                                                                     |                                                                                                                                     |                                                                                                                                                     |                                                                                                                     |                                                                                                               |                                                                                                                        |
| 1:00 PM – 2:00 PM                                                                                                                                                | Burnout, Boundaries, and Balance - How to Set Boundaries and Lead a Balanced Life While Achieving Your Career Goals<br><div>I</div> | From Structure to Function Emerging Methods for Quantitative and Functional CT<br><div>P</div>                                                      | Emerging Frontiers in MRI Ultra-High Field Imaging, Quantitative Biomarkers, and Energy Efficiency<br><div>P</div>  | The Anne and Donald Herbert Distinguished Lectureship in Modern Statistical Modeling<br><div>I</div>          | Emerging CBCT Techniques and Applications in Radiotherapy<br><div>I</div>                                              |
| 1:00 PM–2:00 PM   GUIDED TOUR THERAPY: BEAM COMMISSIONING REDEFINED: PRECISION MEETS EFFICIENCY   ROOM 111/112<br><div>I</div>                                   |                                                                                                                                     |                                                                                                                                                     |                                                                                                                     |                                                                                                               |                                                                                                                        |
| 2:10 PM – 3:10 PM                                                                                                                                                | The Road Less Chosen – Alternate Pathways to Certification for Internationally Trained Medical Physicists<br><div>I</div>           | Patient-Specific Dose Optimization and Image Quality Assessment in CT From Phantoms to Clinical Practice<br><div>P</div>                            | Advances in Quantitative and Multiparametric MRI for Tissue Characterization and Disease Assessment<br><div>P</div> | Simulation Tools for Multiscale Modeling for Radiopharmaceutical Applications<br><div>I</div>                 | Advanced CT/CBCT Imaging<br><div>P</div>                                                                               |
| 2:10 PM–3:10 PM   GUIDED TOUR IMAGING: RADIATION SAFETY ESSENTIALS AND OCCUPATIONAL DOSE MONITORING IN RADIOLOGY AND THERANOSTICS   ROOM 111/112<br><div>I</div> |                                                                                                                                     |                                                                                                                                                     |                                                                                                                     |                                                                                                               |                                                                                                                        |
| 3:10 PM– 4:00 PM   COFFEE BREAK IN EXHIBIT HALL   VISIT THE TECHNICAL EXHIBITS                                                                                   |                                                                                                                                     |                                                                                                                                                     |                                                                                                                     |                                                                                                               |                                                                                                                        |
| 3:10 PM – 4:00 PM                                                                                                                                                | Blue Ribbon Posters [Presenting Authors available]   Exhibit Hall Poster Lounge                                                     |                                                                                                                                                     |                                                                                                                     |                                                                                                               |                                                                                                                        |
| EXHIBIT HALL CLOSES AT 5:00 PM   POSTERS TO BE REMOVED 4:30 PM – 5:00 PM                                                                                         |                                                                                                                                     |                                                                                                                                                     |                                                                                                                     |                                                                                                               |                                                                                                                        |
| 4:00 PM – 5:00 PM                                                                                                                                                | Teamwork By Design: Scheduling Tools for Physicists<br><div>I</div>                                                                 | Photon-Counting-Detector CT in Practice: Clinical Benefits, Quality Assurance, Imaging Protocols, Workflow, and System Optimization<br><div>I</div> | Clinical Impact of Artificial Intelligence on the MRI Physicist's Domain<br><div>I</div>                            | Radiopharmaceuticals Scientific Session: Alpha-Emitters and Dosimetric Infrastructure for RPT<br><div>P</div> | Foundation Models in Radiation Oncology: Applications, Challenges, and Path to Trustworthy AI<br><div>I</div>          |
| 5:10 PM – 6:00 PM                                                                                                                                                | From Idea to Impact: Translating Innovation into Clinical Reality in Radiation Oncology<br><div>I</div>                             | Optimizing Technique Selection for Radiography Examinations<br><div>I</div>                                                                         | MRI Protocols: Basics, Optimization, and Management<br><div>I</div>                                                 | Debate: Multi-Time-Point vs Single-Time-Point Dosimetry<br><div>I</div>                                       | Making AI Work: Real-World Implementation Strategies from Clinical Experience<br><div>I</div>                          |

TUESDAY | JULY 21

| THERAPY PHYSICS                                                                                                                                                         |                                                                                            | SNAP ORALS                                         | EARLY CAREER-MENTOR                                                                         | PINS   VENDOR SHOWCASE                                            |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|----------------------------------------------------|---------------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| ROOM 118                                                                                                                                                                | BALLROOM A                                                                                 | ROOM 220                                           | ROOM 301                                                                                    | INNOVATION ROOM                                                   |
| Session in Memory of Marilyn Stovall: Evolution of Dose Evaluations for Brachytherapy: From Adoption of Model-Based Dose Calculations to Impact on Patient Treatments I | AI in Radiation Oncology and Beyond P                                                      | Microscope Dosimetry and AI for RPT Optimization P |                                                                                             |                                                                   |
| Building and Revitalizing Brachytherapy Programs: Strategies for Success I                                                                                              | Outcome Models: How Far Have We Come and What More Do We Need to Test in Clinical Trials I | CT P                                               | Resident & Prospective Applicant Connect                                                    |                                                                   |
| 9:40 AM – 10:20 AM   COFFEE BREAK IN EXHIBIT HALL   VISIT THE TECHNICAL EXHIBITS                                                                                        |                                                                                            |                                                    |                                                                                             |                                                                   |
| Expanding Horizons Travel Grant Poster Presentations [Presenting Authors available]   Exhibit Hall Poster Lounge                                                        |                                                                                            |                                                    |                                                                                             | 9:45 AM–10:15 AM Vendor Showcase Elekta & Gray Oncology Solutions |
| Brachytherapy P                                                                                                                                                         | Medical Physics Summit Frontiers BEAM Talks: Expanding into Uncharted Territories I        | Clinical Innovations P                             | Getting Involved with AAPM/COMP                                                             |                                                                   |
| 11:30 AM – 1:00 PM LUNCH BREAK IN EXHIBIT HALL   VISIT THE TECHNICAL EXHIBITS                                                                                           |                                                                                            |                                                    |                                                                                             |                                                                   |
| Practice Patterns in Proton Therapy Treatment Planning – A Look at Challenging and Emerging Approaches I                                                                | Foundation Model P                                                                         | Ultra-High Dose Rate P                             | CV Workshop                                                                                 | 1:00 PM–1:30 PM Vendor Showcase DosiSoft                          |
| 1:00 PM – 2:00 PM   GUIDED TOUR THERAPY: BEAM COMMISSIONING REDEFINED: PRECISION MEETS EFFICIENCY   ROOM 111/112 I                                                      |                                                                                            |                                                    |                                                                                             |                                                                   |
| Joint PTCOG-AAPM Future of Proton Systems I                                                                                                                             | ART: Planning and Workflow P                                                               | AI-Driven Treatment Planning P                     | Empowering Medicine Through Physics: Insights from the 2026 Summit I                        |                                                                   |
| 2:10 PM – 3:10 PM   GUIDED TOUR IMAGING: RADIATION SAFETY ESSENTIALS AND OCCUPATIONAL DOSE MONITORING IN RADIOLOGY AND THERANOSTICS   ROOM 111/112 I                    |                                                                                            |                                                    |                                                                                             |                                                                   |
| 3:10 PM – 4:00 PM   COFFEE BREAK IN EXHIBIT HALL   VISIT THE TECHNICAL EXHIBITS                                                                                         |                                                                                            |                                                    |                                                                                             |                                                                   |
| Blue Ribbon Posters [Presenting Authors available]   Exhibit Hall Poster Lounge                                                                                         |                                                                                            |                                                    |                                                                                             |                                                                   |
| EXHIBIT HALL CLOSES AT 5:00 PM   POSTERS TO BE REMOVED 4:30 PM – 5:00 PM                                                                                                |                                                                                            |                                                    |                                                                                             |                                                                   |
| Modern Tools for a Safe Clinic P                                                                                                                                        | MedPhys SLAM                                                                               | AI and Data Science in Imaging Physics P           |                                                                                             |                                                                   |
| Safety on the Line Debate: No Custom Software for Clinical Care Vs Custom Software Is Essential to Innovate I                                                           |                                                                                            | Emerging Imaging Technologies P                    | New Professional Symposium: Mentoring Up, Down, and Across: Building a Mentorship Mindset I |                                                                   |

PROGRAM - AT - A - GLANCE

|                                                  | PROFESSIONAL                                                                                                                                                                               | DIAGNOSTIC AND INTERVENTIONAL RADIOLOGY PHYSICS                                                                                                   |                                                                                                                                                 | RADIOPHARMACEUTICALS                                                                                                                                | THERAPY PHYSICS                                                                     |
|--------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                                                  | ROOM 202                                                                                                                                                                                   | ROOM 211                                                                                                                                          | ROOM 212                                                                                                                                        | ROOM 205                                                                                                                                            | ROOM 109                                                                            |
| 7:30 AM – 8:30 AM                                | From Vision to Value: Project Development, Proformas, KPIs, and Data-Driven Leadership in Radiation Oncology<br><div>I</div>                                                               | AI in Pediatric Diagnostic Imaging: Transforming Safety, Quality, and Clinical Practice<br><div>I</div>                                           | Contrast with a Conscience: Integrating Technological Innovation and Environmental Responsibility in CT Contrast Administration<br><div>I</div> | Computational Methods in Theranostics and Nuclear Oncology: From Image Voxels to Personalized Radiopharmaceutical Therapies (SNMMI)<br><div>I</div> | Treatment Planning<br><div>P</div>                                                  |
| 8:30 AM – 9:00 AM   COFFEE BREAK   LEVEL 3 FOYER |                                                                                                                                                                                            |                                                                                                                                                   |                                                                                                                                                 |                                                                                                                                                     |                                                                                     |
| 9:00 AM – 10:00 AM                               | Closing Keynote: New Frontiers in PET: From Technological Innovation to Transformative Applications<br>Moderator: R. Miller   Speakers: R. Miller, S. Cherry   Ballroom BC<br><div>I</div> |                                                                                                                                                   |                                                                                                                                                 |                                                                                                                                                     |                                                                                     |
| 10:10 AM – 11:10 AM                              | Professional Proffered Session<br><div>P</div>                                                                                                                                             | Evaluating “Typical”: Materials and Methods Associated with Typical Exposure Rate and Low-Contrast Performance Annual Evaluations<br><div>I</div> | Emerging Multimodal Imaging Technologies for Disease Characterization and Therapy Monitoring<br><div>P</div>                                    | Clinical Trials with Alpha Emitters: Promises and Challenges<br><div>I</div>                                                                        | Reducing Animal Use through Rigorous Preclinical Research Practices<br><div>I</div> |
| 11:20 AM – 12:20 PM                              | Radiation Risk Communication: Empowering Trust, Understanding, and Action<br><div>I</div>                                                                                                  | Physics of Quantitative Techniques in CT, MRI, and Ultrasound<br><div>I</div>                                                                     | "JACMP Debates in Medical Physics: Challenging Perspectives to Advance the Field"<br><div>I</div>                                               | PET Quantification, Neurodegenerative Disease Imaging and Therapy Response Assessment<br><div>P</div>                                               | Image Guidance in Upright Radiotherapy<br><div>I</div>                              |
| 12:20 PM – 1:20 PM   LUNCH ON YOUR OWN           |                                                                                                                                                                                            |                                                                                                                                                   |                                                                                                                                                 |                                                                                                                                                     |                                                                                     |
| 1:30 PM – 2:30 PM                                | Strategies to Incorporate Soft Skills Training into Medical Physics Residency Curriculum<br><div>I</div>                                                                                   | Translating Phantoms and Phantom-Derived Measurements from Bench to Bedside<br><div>I</div>                                                       | Breast Imaging<br><div>P</div>                                                                                                                  | Emerging SPECT Technologies<br><div>I</div>                                                                                                         | Segmentation<br><div>P</div>                                                        |
| 2:40 PM – 3:40 PM                                | Physics Meets Finance: A Formula for Your Future<br><div>I</div>                                                                                                                           | Joint Therapy-Imaging Digital Twins in Medicine: Transforming Modeling, Personalization, and Prediction<br><div>I</div>                           | Best Practices on Using RDIM Data for CT Quality Improvement<br><div>I</div>                                                                    | PET Agents Beyond Oncology<br><div>I</div>                                                                                                          | Treatment Response<br><div>P</div>                                                  |

WEDNESDAY | JULY 22

| THERAPY PHYSICS                                                                                                                                                                            |                                                                                                           | SNAP ORALS                                                                               | EARLY CAREER-MENTOR                                                                |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| ROOM 118                                                                                                                                                                                   | BALLROOM A                                                                                                | ROOM 220                                                                                 | ROOM 301                                                                           |
| Therapy Physics Committee Newly Published Task Group and Scientific Reports<br><div>I</div>                                                                                                | Harnessing and Safeguarding Automation in Clinical Practice: The Medical Physicist's Role<br><div>I</div> | Dosimetric Validation, Preclinical Models and Treatment Planning for RPT<br><div>P</div> |                                                                                    |
| 8:30 AM – 9:00 AM   COFFEE BREAK   LEVEL 3 FOYER                                                                                                                                           |                                                                                                           |                                                                                          |                                                                                    |
| Closing Keynote: New Frontiers in PET: From Technological Innovation to Transformative Applications<br>Moderator: R. Miller   Speakers: R. Miller, S. Cherry   Ballroom BC<br><div>I</div> |                                                                                                           |                                                                                          |                                                                                    |
| Therapy Physics Committee Task Group Reports Writing and Reviewing in the New Era: How Did We Get Here and Where We Need to Go<br><div>I</div>                                             | Motion Management<br><div>P</div>                                                                         | Dosimetry and Measurement<br><div>P</div>                                                | How Ready Are You? A Real-Time AI Readiness Session for Physicists<br><div>I</div> |
| SBRT/SRS<br><div>P</div>                                                                                                                                                                   | Improving Patient Safety in Radiation Therapy Using Prospective Hazard Analysis<br><div>I</div>           | Motion Management<br><div>P</div>                                                        |                                                                                    |
| 12:20 PM – 1:20 PM   LUNCH ON YOUR OWN                                                                                                                                                     |                                                                                                           |                                                                                          |                                                                                    |
| Spatially Fractionated Radiation Therapy (SFRT) and Emerging Techniques<br><div>I</div>                                                                                                    | Modeling and Measurement<br><div>P</div>                                                                  | Brachytherapy<br><div>P</div>                                                            |                                                                                    |
| Next-Generation Radiation Therapy: Exploring FLASH-RT, SFRT, and ART Innovations<br><div>I</div>                                                                                           | Battle of the Titans TG-51 vs. TRS-398: A Global Dosimetry Debate<br><div>I</div>                         | Treatment Planning<br><div>P</div>                                                       |                                                                                    |