Scientific Program

Advancing Particle Therapy

Innovative Research. Global Collaboration.

The PTCOG 63 Scientific Program, taking place from June 4-6, will showcase the latest research, clinical advancements, and technological innovations in particle therapy. With leading experts from around the world, this program offers a comprehensive platform for multidisciplinary collaborations and real-world clinical applications.

View Program at a Glance

Latest Updates

Over 100 Scientific Presentations covering clinical applications, physics, radiobiology, and emerging technologies

Global Knowledge

40+ Countries Represented with speakers from top research institutions and cancer centers

Comprehensive Insights

Parallel Tracks in clinical practice, treatment planning, imaging, and biological research

Focused Science

Dedicated Subcommittee Sessions focusing on emerging fields such as FLASH, BNCT, and adaptive therapy

Key Session Highlights

- **Keynote Lecture: Accelerator-Based BNCT – Global & Latin American Impact – Andres J. Kreiner (Argentina)**
- **PTCOG-ASTRO Joint Plenary: New Data & Indications in Particle Therapy** – Featuring global leaders in CNS, breast, lung, and GI cancers
- **Re-Irradiation in Particle Therapy** – Best practices and case studies on treating **recurrent cancers**
- **Pediatric Proton Therapy** – Advances in **dose reduction, toxicity management, and long-term outcomes**
- **Emerging Use of Carbon Ion Therapy** – Clinical outcomes and future potential
- **Machine Learning & AI in Treatment Planning** – Cutting-edge research on **automated beam angle selection and adaptive planning**
- **Proton Arc Therapy & Dynamic Delivery Systems** – Enhancing efficiency and precision in **motion-adaptive treatments**
- **Microdosimetry & Quality Assurance** – Novel approaches in **LET-based dosimetry and Monte Carlo simulations**
- **FLASH Radiotherapy & Spatially Fractionated Therapy** – Examining the **radiobiological effects and potential clinical applications**
- **Tumor-Immune Crosstalk & Proton Therapy** – The role of

charged particles in enhancing immunotherapy efficacy

- **Boron Neutron Capture Therapy (BNCT)** – Latest breakthroughs in **BNCT applications for glioblastoma, head & neck cancers, and lung metastases**
- **Proton Therapy in Latin America** – Challenges and opportunities for **expanding access in the region**
- **Physics of Ocular Proton Therapy – Precision-based solutions for treating ocular tumors**
- **Particle Therapy for Gynecological Malignancies** – Exploring the potential of **proton and carbon ion therapy in gynecologic cancers**
- **Industry Symposia & Exhibition** – Explore **the latest innovations from leading companies in particle therapy**
- **PTCOG 63 Networking Event** – Connect with experts, researchers, and peers in a **relaxed social setting**
- **Early Career Researcher Sessions** – Engage with **mentorship programs and career development discussions**

Secure Your Spot Today

Stay at the forefront of particle therapy research and clinical applications.

Register Today