

Activity report of the 62nd PTCOG Conference, June 10th – 15th in Singapore

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I had the privilege of attending the 62nd Annual PTCOG Conference in Singapore, held alongside the 4th annual PTCOG-AO meeting from June 10th to 15th, 2024. The event brought together over 1250 participants from 42 countries. Here, I would like to briefly report on my impressions as an attendee of this international conference.

The conference began with two days of educational sessions, followed by three days of multi-session scientific reports. The educational program provided a blend of theoretical knowledge and practical insights into proton and ion therapy, catering to both professionals and newcomers through combined and parallel sessions in physics, clinical practice, and radiotherapy technology. Topics included the fundamentals of radiation biology, treatment concepts of specific tumours in adults and children, and re-irradiation techniques. The scientific sessions covered a range of pertinent topics in physics, clinics, and biology, such as LET optimization, the combination of particle therapy with immunotherapy, and advances in particle therapy imaging. In the so-called “Keynote Sessions”, thought leaders and key figures in the field of proton and ion therapy provided perspectives on the current state and future directions of particle therapy in cancer treatment. Additionally, some radiotherapy companies hosted dedicated sessions presenting their latest advancements, technologies, and innovations in cancer treatment with particle therapy.

As a medical physicist working in the clinical quality assurance team and a research associate involved in translational particle therapy research at the WPE, in collaboration with biologists, physicians, and chemists, I found the conference enriching. I expanded my knowledge in all areas of proton and ion therapy and gained valuable suggestions.

Presenting my doctoral research was a major highlight for me. I had the opportunity to deliver an oral presentation titled " RISK MODELING OF IMAGING CHANGES AFTER PROTON BEAM THERAPY FOR CHILDHOOD BRAIN TUMORS" dealing with the outcome analysis of normal tissue complications after radiation therapy for pediatric patients. Understanding the specific risk factors for normal tissue complications after radiation therapy is crucial in clinical research and will continue to grow in importance in the coming years. It was a profound experience to present my work to a broad international audience of scientists and professionals, enabling the exchange of ideas and experiences with experts and research working groups.

The conference concluded with a visit to the newly established Goh Cheng Liang Proton Therapy Centre (GCLPTC) at NCCS, which started operations in June 2023.