****

|  |
| --- |
| **Joint ICTP-IAEA Workshop on Quality Assurance and Dosimetry in Brachytherapy**21. – 25. November 2022Trieste, Italy**Course Directors:**Daniel Berger, IAEA, Austria.**Local Organiser**Luciano Bertocchi , ICTP, Italy. **Venue:** ICTPGiambiagi Lecture Hall (AGH)Adriatico Guest House Riva Massimiliano e Carlotta, Grignano I - 34151 Trieste (Italy)**Lecturers** Ewelina Gruszczyńska, Mari Skodowskiej Curie Institut, Wasaw Plolan Lalida Tuntipumiamorn, Siriraj Hospital Mahidol University, Bangkok, ThailandSamantha Simiele, AAPM faculty member, MD Anderson, Houston, Texas, USA Taran Paulsen Hellebust, University Hospital Oslo, Norway **Practical Session Organiser** Robert Hudej, Institute of Oncology Ljubljana, Slovenia |
| **Monday, 21 Nov 2022** |
| **Time** | **Topic** | **Speaker** |
| **8:30-9:00** | **Registration**  | **All**  |
| 9.00-9.30 | Welcome and Introduction | L. Bertocchi / D. Berger |
| 9.30-10.30 | Individual Participant Presentation  | Participant 1-5 |
| 10.30-11.00 | Coffee |  |
| 11.00-12:00 | Individual Participant Presentation | Participant 6-10 |
| 12.00-1.00 | Lunch |  |
| 1.00-2.00 | Individual Participant Presentation | Participant 11-15 |
| 2.00-3.00 | Introduction to the physics of brachytherapy | L. Tuntipumiamorn |
| 3.00-3.30 | coffee |  |
| 3.30-5.00 | Description of existing brachytherapy sources | T. Paulsen Hellebust |
| **Tuesday, 22 Nov 2022** |
| 9.30-10.30 | Source strength determination  | S. Simiele |
| 10.30-11.00 | Coffee break |  |
| 11.00-12.00 | Dose calculation formalisms and uncertainties | S. Simiele |
| 12.00-1.00 | Lunch |  |
| 1.00-2.00 | Imaging in brachytherapy (X-ray, C-arm, CT, MRI, US) | T. Paulsen Hellebust |
| 2.00-3.00 | Medical physics aspects of quality management, quality assurance and auditing methodologies in the clinic  | L. Tuntipumiamorn |
| 3.00-3.30 | Coffee break |  |
| 3.30-5.00 | Applicator selection, reconstruction, commissioning in various imaging modalities. | T. Paulsen Hellebust |
| **Wednesday, 23 Nov 2022** |
| 8.00-9.30 | Bus to Institute of Oncology Ljubljana | All |
| 9.30-12.00 | Practical Hands-On (breaks on demand) | R. Hudej |
| 12.00-1.30 | Lunch |  |
| 1.30-3.30 | Practical Hands-On (breaks on demand) | R. Hudej |
| 3.30-5.00 | Bus back to ICTP | All |
| **Thursday, 24 Nov 2022** |
| 9.30-10.30 | The brachytherapy processes for Level-2 (‘2D’) and Level-3 (‘3D’)  | D. Berger |
| 10.30-11.00 | Coffee |  |
| 11.00.12.00 | Brachytherapy dose prescription, optimization, and reporting | T. Paulsen Hellebust |
| 12.00-1.30 | Lunch |  |
| 1.30-3.00 | Ask the experts - Question and Answer session – | All Faculty |
| 3.00-3.30 | Coffee |  |
| 3.30-5.00 | Challenges in Brachytherapy | Participants in groups (3-5) |
| **Friday, 25 Nov 2022.** |
| 9.00-10.30 | Brachy Quiz (Exam). | Participants |
| 10.30-11.00 | Coffee |  |
| 11.00-11.30 | Results of the Quiz | All Faculty |
| 11.30-12.00 | Course evaluation and Feedback. | L. Bertocchi / D. Berger |
| 12:00-12:30 | Closure of the workshop / course. | All |
| **12.30** | **Lunch and Goodbye** |  |