

Joint ICTP-IAEA Advanced School on Quality Assurance and Dosimetry in Mammography | (smr 3248)

Monday, 22 October 2018

08:00 - 17:00 Day 1

08:30 **Free Time for those visiting the Finance Office** 1h0'

A shuttle bus will run from the Adriatico Guesthouse to the Finance Office for one hour. 8:30-9:30. All participants must first register upon arrival at the Guesthouse Reception Desk.

09:30 **Course Presentation and Pre-course test** 1h0'

10:30 **Coffee Break** 30'

11:00 **Clinical aspects of breast imaging** 45'

Speaker: Anita Spezzacatene

11:45 **Basic principles of mammography** 45'

Speaker: Ioannis Sechopoulos (Radboud University Medical Center, Nijmegen, The Netherlands)

12:30 **Lunch Break** 1h0'

13:30 **Introduction to Quality** 45'

Speaker: Harry Delis (IAEA)

14:15 **Role of the medical physicist in the quality process** 45'

Speaker: Hilde Bosmans (Katholieke Universiteit Leuven, Belgium)

15:00 **Coffee Break** 30'

15:30 **Role of the radiographer in the quality process** 45'

Speaker: Marina De Stefano (Udine Hospital)

16:15 **Mammography image receptors and effects on image quality** 45'

Speaker: Hilde Bosmans

Tuesday, 23 October 2018

09:00 - 17:00 Day 2

09:00 **Components of a QA programme for mammography** 45'

Speaker: Hilde Bosmans

09:45 **Daily QC in mammography (including film processing, darkroom and monitors QC)** 45'

Speaker: Paola Bregant (Trieste Hospital)

10:30 **Coffee Break** 30'

11:00 **Image Quality Evaluation Metrics and phantoms** 45'

Speaker: Paola Bregant (Trieste Hospital)

11:45 **Dosimetry in mammography** 45'

Speaker: Ioannis Sechopoulos

12:30 **Lunch Break** 1h0'

13:30 **Hospital Practical** 3h30'

Wednesday, 24 October 2018

09:00 - 17:00 Day 3

09:00 **Digital mammography: Post-processing and deep learning** 45'

Speaker: Ioannis Sechopoulos

09:45 **Contrast detail analysis** 45'

Speaker: Hilde Bosmans

10:30 **Coffee Break** 30'

11:00 **Breast tomosynthesis: Physics** 45'

Speaker: Ioannis Sechopoulos

11:45 **Breast tomosynthesis: Quality Assurance** 45'

Speaker: Hilde Bosmans

12:30 **Lunch Break** 1h0'

13:30 **Computer Exercises: (I) Evaluation of Image Quality; (II) Evaluation of Patient Dose** 3h30'

Speaker: Experts and Local staff

Thursday, 25 October 2018

09:00 - 17:00 Day 4

- 09:00 **Digital mammography: PACS and DICOM** 45'
Speaker: Annalisa Trianni (Udine Hospital)
- 09:45 **Phase contrast mammography** 45'
Speaker: Renata Longo (University of Trieste)
- 10:30 **Coffee Break** 30'
- 11:00 **Breast CT** 45'
Speaker: Ioannis Sechopoulos
- 11:45 **Synchrotron radiation in medical imaging** 45'
Speaker: Renata Longo (University of Trieste)
- 12:30 **Lunch Break** 1h0'
- 13:30 **Practical session: Phase Imaging. Visit to Elettra Synchrotron Facility** 3h30'
Speaker: Experts and Local staff

Friday, 26 October 2018

09:00 - 17:00 Day 5

- 09:00 **Controversies and benefits of screening** 45'
Speaker: Ioannis Sechopoulos
- 09:45 **Managing Quality for a national breast screening programme** 45'
Speaker: Hilde Bosmans
- 10:30 **Coffee Break** 30'
- 11:00 **Remote and automated tools for QC** 30'
Speaker: Harry Delis (IAEA)
- 11:30 **Discussion - Q&A** 1h0'
Speaker: All Participants
- 12:30 **Lunch Break** 1h0'
- 13:30 **Discussion - Q&A** 45'
Speaker: All Participants
- 14:15 **Course evaluation - Post course test** 45'
Speaker: IAEA Staff
- 15:00 **Meeting closure - Certificates** 45'
Speaker: All Participants