

Winter School

Dosimetry-Guided Treatment Planning for Radionuclide Therapy

March 04-06, 2020
Bern, Switzerland

SGNM/SSRMP: 17 credit points, BAG: 24 educational hours

Mission & Scope:

This winterschool targets medical physicists, physicians, technologists and researchers involved and interested in the workflow of clinical dosimetry in support to precision radionuclide therapy. The aim of this winter school is to present bases of quantitative imaging and dosimetry methodologies to support patient-based treatment planning and verification in clinic. The school also aims to promote a common/shared knowledge and cooperation of different partners involved. Research and commercial solutions to assist quantitative imaging and dosimetry workflows will be also presented and discussed.

Program

March 04, 2020 (Inselspital Lecture Hall of Dermatology):

08:00-09:00 Registration
09:00-09:30 Opening Ceremony
Moderator: **Prof. Axel Rominger**
Prof. Mark Konijnenberg

EANM Dosimetry Committee

Prof. John Prior

Swiss Nuclear Medicine Society

Prof. Michael Fix

Swiss Society of Radiobiology and Medical physics

Dr. Thomas Flury

Federal Office of Public Health (BAG)

Session 1: Imaging and Quantification

09:30-10:30 Quantitative imaging to assist personalized dosimetry

Prof. Mark Konijnenberg

10:30-11:00 Coffee Break

11:00-11:45 Calibration of imaging and non-imaging devices

Dr. Johannes Tran-Gia

11:45-12:30 Quantitative accuracy in activity and dose determination (MRT-projects)

Dr. Johannes Tran-Gia

12:30-14:00 Lunch Break

Session 2: Simplistic approach vs individualized approach

14:00-14:35 Physician's point of view

Prof. A. Rominger, Prof. N. Schaefer

14:35-15:10 Physicist's point of view

Prof. M. Konijnenberg, Prof. M. Lassmann, Prof. G. Flux

15:10-15:30 Pharma industry perspective

Dr. Germa Gericke

15:30-16:00 Coffee Break

Session 3: Practical Session

16:00-17:00 Vendor procedures for quantitative calibration of Imaging devices

March 05, 2020 (Aula 018 of University of Bern):

Session 4: Dose Calculation

08:30-09:15 Methodologies for Dose Calculation (From bases to Monte-Carlo)

Prof. Ernesto Amato

09:15-10:00 Future of dose calculation methodologies

Prof. Glenn Flux

10:00-10:30 Coffee Break

Session 5: Clinical Application and Results

10:30-11:10 Predictive dose planning and post-treatment verification in I-131 DTC and Y-90-Radioembolisation

Dr. Elisa Richetta

11:10-11:50 Lu-177-somatostatin analogues and PSMA

Prof. Axel Rominger

11:50-12:30 Bone metastasis

Dr. Iain Murray

12:30-14:00 Lunch Break

Session 6: Dose Calculation

14:00-14:40 OPENDOSE Collaboration

Mr. Alex Vergara

14:40-15:30 Industry presentations: Commercial solutions for personalized dosimetry

15:30-16:00 Coffee Break

Session 7: Round Table

16:00-17:00 The need of, and practical implementation of clinical dosimetry. Including presentation/discussion of the experience of the Italian societies AIMN/AIFM

Dr. Marco Maccauro

March 06, 2020 (Aula 018 of University of Bern):

Session 8: Biokinetics

09:00-09:45 Set-up of Multicenter trials Involving Dosimetry

Prof. Michael Lassmann

09:45-10:30 From Time-Activity Data to Pharmacokinetic Modelling

Prof. Gerhard Glatting

10:30-11:00 Coffee Break

11:00-11:45 Treatment Planning with PBPK/PD Models

Prof. Gerhard Glatting

11:45- 12:30 Biodosimetry and its Application to NM

Prof. Michael Lassmann

12:30-14:00 Lunch Break

Session 9: Research topics in MRT Dosimetry

14:00-14:45 How AI can support personalized dosimetry

PD Dr. Kuangyu Shi

14:45-15:30 Pre-clinical dosimetry

Dr. Francesco Ciccone

15:30-16:15 Novel Isotopes for Theranostics

PD. Dr. Cristina Mueller

Registration:

The registration fee is 250 CHF.

Please send your name, affiliation and address to dosimetrywinterschool2020@gmail.com

We will send you the confirmation and invoice.

Endorsement or Accreditation:

Dosimetry Committee of European Association of Nuclear Medicine (EANM)

European Federation of Organisations For Medical Physics (EFOMP)

Federal Office of Public Health of Switzerland (BAG)

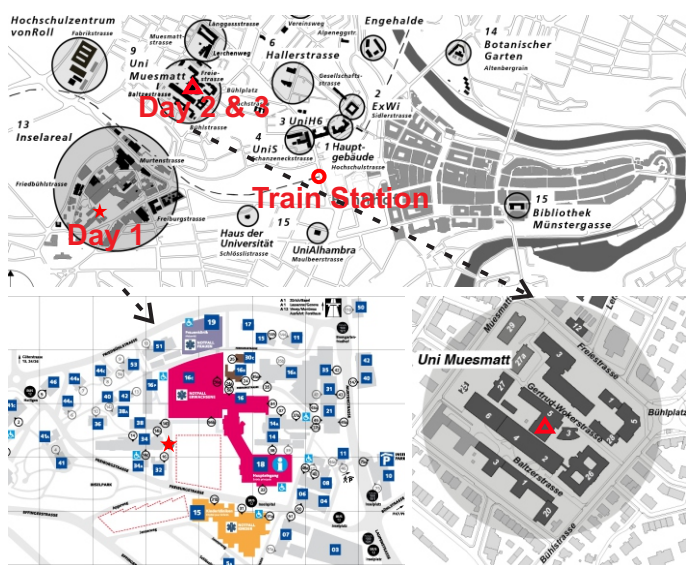
Swiss Nuclear Medicine Society (SGNM)

Swiss Society of Radiobiology and Medical Physics (SSRMP)

Italian Association of Medical Physics (AIFM)

Association Suisse des Techniciens en Radiologie Medicale (ASTRM)

Conference Venues:



Inselspital
Lecture Hall of Dermatology
Freiburgstrasse 34
3010 Bern

University of Bern
Aula 18
Gertrud-Woker-Strasse 5
3012 Bern

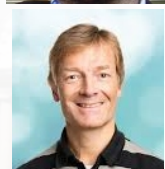
Speakers:



Prof. Ernesto Amato
University of Messina, Italy



Dr. Francesco Cicone
Magna Graecia University of
Catanzaro, Italy



Prof. Michael Fix
University of Bern, Switzerland



Dr. Thomas Flury
Swiss Federal Office of Public
Health, Switzerland



Prof. Glenn Flux
Royal Marsden Hospital and
Institute of Cancer Research, UK



Dr. Germo Gericke
Advanced Accelerator Applications,
Novartis



Prof. Gerhard Glatting
Dept. Nuclear Medicine, Ulm
University, Germany



Prof. Mark Konijnenberg
Erasmus Medical Center, The
Netherlands



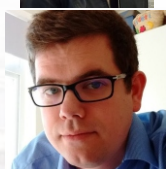
Prof. Michael Lassmann
Dept. Nuclear Medicine, University
of Würzburg, Germany



Dr. Marco Maccauro
Fondazione IRCCS "Istituto
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PD. Dr. Cristina Mueller
Center for Radiopharmaceutical
Sciences ETH-PSI-USZ, Paul
Scherrer Institute, Villigen-PSI, CH



Dr. Iain Murray
Royal Marsden Hospital and
Institute of Cancer Research, UK



Prof. John Prior
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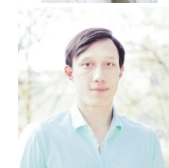
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Organizers:



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