



Winter School

Dosimetry-Guided Treatment Planning for Radionuclide Therapy

January 20-22, 2021

HS Maurice E. Müller, Inselspital, Bern, Switzerland

SGNM/SSRMP: 17 credit points, BAG: 24 educational hours
 DGMP: 22 credit points (21 no. N7, 1 no. 14)

Registration:

The registration fee is 150 CHF.
 Please send your name, affiliation and address to dosimetrywinterschool2020@gmail.com
 We will send you the confirmation and invoice.

Website: <http://www.nukmed.insel.ch/de/veranstaltungen/>

Program

January 20, 2021:

08:00-09:00 Registration
 09:00-09:30 Opening Ceremony
 Moderator: **Prof. Axel Rominger**
Prof. Francesco Giammarile

International Atomic Energy Agency

Prof. Mark Konijnenberg

EANM Dosimetry Committee

Prof. John Prior

Swiss Nuclear Medicine Society

Prof. Michael Fix

Swiss Society of Radiobiology and Medical physics

PD Dr. Sebastien Baechler

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. M. Bardiès

15:10-15:30 Pharma industry perspective

Dr. Germo Gericke

15:30-16:00 Coffee Break

Session 3: Practical Session

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

January 21, 2021:

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. Manuel Bardiès

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. Carlo Chiesa

January 22, 2020:

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 Glattig

10:30-11:00 Coffee Break

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

Prof. Gerhard Glattig

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

Prof. Kuangyu Shi

14:45-15:30 Pre-clinical dosimetry

Dr. Francesco Cicone

15:30-16:15 Novel Isotopes for Theranostics

PD. Dr. Cristina Mueller

Endorsement or Accreditation:

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)

German Society of Nuclear Medicine (DGN)

World Association of Radiopharmaceutical and Molecular Therapy (WARMTH)

German Society of Medical Physics (DGMP)

European Radiation Dosimetry Group e.V.

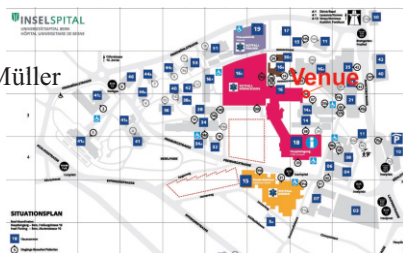


Mission & Scope:

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.

Location:

Auditorium Maurice E. Müller
Inselspital, Entrance 34
Operationstrakt Floor F
Freiburgstrasse 16,
3010 Bern, Switzerland



Speakers:



Prof. Ernesto Amato
University of Messina, Italy



PD Dr. Sebastien Baechler
Swiss Federal Office of Public Health, Switzerland



Prof. Manuel Bardiès
Institut du Cancer de Montpellier, France



Dr. Francesco Cicone
Magna Graecia University of Catanzaro, Italy



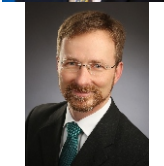
Prof. Michael Fix
University of Bern, Switzerland



Dr. Germo Gericke
Advanced Accelerator Applications, Novartis



Prof. Francesco Giammarile
International Atomic Energy Agency



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



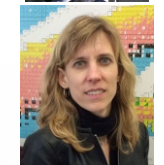
Prof. Mark Konijnenberg
Erasmus Medical Center, The Netherlands



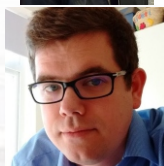
Prof. Michael Lassmann
Dept. Nuclear Medicine, University of Würzburg, Germany



Dr. Carlo Chiesa
Nuclear Medicine Division, Foundation IRCCS Istituto Nazionale Tumori, Milan, Italy



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
Dept. Nuclear Medicine, Lausanne University Hospitals CHUV, Switzerland



Dr. Elisa Richetta
Azienda Ospedaliera Ordine Mauriziano di Torino, Italy



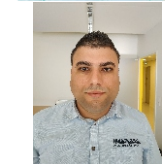
Prof. Axel Rominger
Dept. Nuclear Medicine, Inselspital, University of Bern, Switzerland



Prof. Niklaus Schaefer
Dept. Nuclear Medicine, Lausanne University Hospitals CHUV, Switzerland



Dr. Johannes Tran-Gia
Dept. Nuclear Medicine, University of Würzburg, Germany



Mr Alex Vergara
CRCT, UMR 1037, Inserm, Université Toulouse III Paul Sabatier, Toulouse, France

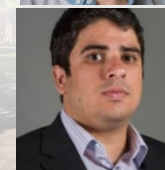
Organizers:



Prof. Kuangyu Shi
Dept. Nuclear Medicine, Inselspital, University of Bern, Switzerland



Dr. Silvano Gnesin
Institute of Radiation Physics, Lausanne University Hospital, University of Lausanne, Switzerland



Dr. Thiago VM Lima
Department of Radiology and Nuclear Medicine, Luzerner Kantonsspital, Switzerland