FIRST ANNOUNCEMENT

ICTR-PHE 2016

INTERNATIONAL CONFERENCE ON TRANSLATIONAL RESEARCH IN RADIATION ONCOLOGY

PHYSICS FOR HEALTH IN EUROPE

Photo Geneva Tourism & Conventions

February 15 – 19, 2016
CICG, Geneva, Switzerland

IMPORTANT DATES

Abstract submission and early Registration deadline: Oct 31, 2015

Late registration deadline: Jan 18, 2016

http://cern.ch/ictr-phe16

info-ictr-phe-2016@cern.ch

ICTR-PHE 2016 Conference

Novel synergies among medicine, biology and physics

Dear Colleague,

On behalf of the Organizing Committee, it is our privilege to invite you to attend ICTR-PHE 2016 (International Conference on Translational Research in Radio-Oncology and Physics for Health), which will take place in Geneva on February 15 – 19, 2016.

ICTR-PHE 2014 brought up an overwhelming number of proposals in both the diagnostic and therapeutic fields. They ranged from new detectors and next-generation imaging techniques, to accelerator-based facilities for making new isotopes such as radiotracers and drugs. For instance, presentations covered various activities related to the technologies developed at CERN, including the design of specialized accelerators for cancer therapy, the adaptation of the Low Energy Ion Ring (LEIR) to serve as a biomedical facility, radio-isotope production using ISOLDE, medical imaging and applications to improve dosimetry for patients and, finally, large scale computing applications. In biology, it was shown that a better understanding of biomolecular pathways and interactions between tumors and their micro-environment was key to success in team efforts to increase malignant cell killing. Another example of inter-disciplinary scientific program was brought in the framework of the EORTC Symposium: the Synergy of Targeted Agents and Radiotherapy (STAR), was shown to be a unique quality controlled platform for integrated development of anticancer agents with radiotherapy, through a network of radiotherapy centers in Europe.

ICTR-PHE 2016 will be a unique opportunity to gather all scientific communities involved in research programs articulated around the optimization of cancer treatment. Radiochemists, nuclear-medicine physicians, biologists, software developers, accelerator experts, oncologists, and detector and medical radio-physicists will indeed be asked to “think outside the box” and make innovative proposals to boost further the comprehensive approach of cancer management. The red threads of ICTR-PHE 2016 will range from the production of more effective isotopes for clinical use to personalized medicine in imagery, drug selection and treatment planning; from drug-radiation interactions to immunotherapies; and from advances in detection techniques to hadrontherapy. The importance of recent discoveries from researches fostered in the field of molecular radiobiology will also be emphasized in interactive sessions on cancer stem cells, regulation of tumor response to anticancer therapies, normal tissue protection, and viral interactions with cancer development and treatment outcome.

ICTR-PHE 2016 will undoubtedly contribute to strengthen the global platform that the previous conferences have successfully set up and on which chemists, physicists, radiobiologists, and physicians are developing a win-win collaboration at the international level.

The Organizing Committee of ICTR-PHE 2016 is looking forward to welcoming you to Geneva so mark February 15 – 19, 2016 in your agenda now!

CONFERENCE CHAIRS

Jacques Bernier & Manjit Dosanjh

ICTR-PHE 2016 Scientific committee

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SESSIONS

BIOLOGY

M. Durante	Darmstadt
K. Prise	Belfast
P. Lambin	Maastricht
B. Wouters	Toronto

NUCLEAR MEDICINE

U. Köster	Grenoble
O. Ratib	Geneva
T. Beyer	Vienna
J-F. Chatal	Nantes

NEW TECHNOLOGIES

W. Enghardt	Dresden
A. Lomax	Villigen
R. Jeraj	Wisconsin
R. Mohan	Houston

PRE-CLINICAL & CLINICAL STRATEGIES

M. Baumann	Dresden
K. Haustermans	Leuven
Z. Fuks	New York
M. Verheij	Amsterdam

DETECTORS & IMAGING

D. Dauvergne	Lyon
A. Del Guerra	Pisa
K. Parodi	Munich
P. Lecoq	CERN

RADIOTHERAPY

S.M. Bentzen	Madison
J. Bourhis	Lausanne
D.R. Olsen	Oslo
D. Brizel	Durham

EXECUTIVE COMMITTEE

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CONFERENCE ARRANGEMENTS AND ORGANISATION

VENUE AND ACCOMMODATION

All sessions will be held at the Centre International de Conférences de Genève - International Conference Centre of Geneva (CICG), conveniently located near the International Airport and major highways, the railway station, Lake Geneva and the historic old town. A vast choice of hotels offers the delegates first-rate hospitality just a stone's throw from the conference centre.

Information on how to book your accommodation will be available on the conference website.

REGISTRATION Registration will open on May 15, 2015. Information will be available on the website http://cern.ch/ictr-phe16

LANGUAGE The language of the Conference will be English. No simultaneous translation is foreseen.

CONFERENCE ABSTRACTS The Conference abstracts will be published as a supplement to Radiotherapy and Oncology (Green Journal).

ACCREDITATION, TRAVEL GRANTS A list of accreditations including (European Accreditation Council for Continuing Medical Education (EACCME) and American Medical Association (AMA)) will be regularly updated on the Conference website.

REGISTRATION FEE

Early registration deadline: October 31, 2015	**Swiss Francs**	**350**
Late registration deadline: January 18, 2016	**Swiss Francs**	**600**
On site registration	**Swiss Francs**	**1000**
Students	**Swiss Francs**	**200**

Students will be asked to provide a proof of their status at the time of registration
The registration fee covers access to the Conference, a copy of the final programme and abstract book, coffee breaks and lunches during the Conference. Fees transferred later than January 18, 2016 may not be credited to the Conference account in time. Therefore, it is mandatory to provide the registration desk personnel with a copy of the transfer order as proof of payment.

Registration fees (less a CHF 80.00 administrative charge) will be refunded only if notification of cancellation reaches the Conference Secretariat before January 18, 2016. No refunds will be issued after this date and no-shows are not eligible for a refund. All refunds will be made within 3-4 weeks after the Conference. If you register but cannot attend the Conference, you may elect to pass on your registration to another person within your Organization.

PROJECTION FACILITATION Powerpoint and PDF files will be used.

POSTERS Posters will be on display throughout the Conference.

TECHNICAL EXHIBITION An exhibition will take place in the Conference Center Main Hall, close to the lecture and poster presentation halls.

SPONSORING If you are interested in sponsoring, please contact us for more details.

CONTACT E-mail address: info-ictr-phe-2016@cern.ch

SCIENTIFIC PROGRAMME
IN THE ARENA

GENERAL RESEARCH AREAS

Functional Imaging
Developmental Radiation Physics
Molecular Pathology and Oncology
Structural Biology
Human Cancer Genetics
Pre-Clinical Data
Big Data in healthcare
Experimental Therapeutics
Early clinical testing
Radiobiology in therapy and space science
Radioisotopes in diagnostics and therapy
Prospects in medical imaging
Novel technologies in radiation therapy

SPECIFIC TOPICS

(NON EXHAUSTIVE LIST)

Molecular imaging
Positron emission tomography
New markers in CT/PET
Targeted imaging including hypoxia markers
Brachytherapy
Radio-surgery
Navigation systems
Single-Cell Microbeams
Microbeam probes of cellular radiation response
Magnetic field research
Intensity modulated radiation therapy (IMRT)
Tomotherapy
Particle radiotherapy, hadrontherapy
Image-guided radiotherapy, tissue motion
Sparing normal tissues and critical organs
Novel approaches in Quality Assurance
Telematics
Biologic and physical optimization in treatment planning
Bio-mathematical approaches for experimental data
Novel approaches in fractionation alteration
Gene expression profiling
Predictive assays
Cell cycle and response to treatment
Mechanisms of radiation induced cell death
How to develop a successful cancer drug (chemo-radiation approaches)?
Pitfalls in developing cancer treatment agents
Applications of proteomics and genomics in drug discovery
Mechanistic combinations
Practical issues in tissue research
Tumor vaccines
AKT/PTEN/Survival pathways
New targeting strategies: basic mechanisms and clinical outcome
Drug radioresistance
Molecular targeting
Receptors

Structure-activity relationships
Tumor hypoxia
Hypoxic cytotoxins
Micro-environmental determinants of response to radiation
Tumor vasculature
Vascular disrupting agents
Tumor endothelial cell interactions
Angiogenesis and metastasis inhibitors
Radiation effects on angiogenesis
Apoptosis pathway targeting agents
Proteasome inhibitors
Stress pathway inhibitors
Chromatin modifying agents
Cellular therapies and cytokines
Monoclonal antibodies and target toxins/nuclides
Radiosensitizers: in vitro and in vivo models
Radioprotectors
Genetic control of cancer cell and normal tissue Radiosensitivity
Intra- and inter-cellular signaling cascades induced by radiation
Signal transduction modulators
Cyclins and CDKs
Telomerase-targeting agents
Gene therapy and antisense approaches
Optimising targets for angiogeneic inhibition
Stroma as a target
DNA, protein, and membrane chemistry
DNA damage recognition
DNA repair in tumor and normal tissues
DNA adducts
Normal tissue radiobiology
Antimetabolites
Bioreductive agents
Topoisomerase I / II inhibitors
Tubulin-interacting agents
DNA-interactive agents
Prodrugs

Drug delivery
Drug resistance and modifiers
Radiation interactive agents
Immunotherapy and ionizing radiation
Hormonal agents
Tumor tissue banks
Track structure applications
Oxidative stress
Bystander effects and radiotherapy
Microdosimetry
Genomic instability
Tumor susceptibility genes
Radiation carcinogenesis
Epigenetics
Genomics
Proteomics
Histones and response to radiation
Ubiquitin system in cancer therapy
Novel organisms for studying radiation response
Stem cells (tumor response and normal tissue damage)
Hyperthermia
Photodynamic Therapy
Radiobiology
Radiation oncology
Particle therapy
Radiation therapy
Treatment plans in radiotherapy
Radioisotopes
Nuclear medicine
Medical imaging
Challenges for simultaneous PET-MRI
Time of Flight PET
Treatment of moving targets
Scanned ion beam therapy
Linac
Cyclotron
Technology in emerging markets
Comprehensive engineering inradiotherapy
Clinical trials