

FIRST ANNOUNCEMENT

ICTR-PHE 2014

INTERNATIONAL CONFERENCE ON TRANSLATIONAL
RESEARCH IN RADIATION ONCOLOGY

PHYSICS FOR HEALTH IN EUROPE



February 10 - 14, 2014
CICG, Geneva, Switzerland

IMPORTANT DATES:

**ABSTRACT SUBMISSION AND EARLY
REGISTRATION DEADLINE: Sept 30, 2013**

**LATE REGISTRATION
DEADLINE: Jan 10, 2014**

UNITING PHYSICS, BIOLOGY AND MEDICINE FOR BETTER HEALTHCARE



ORGANISED IN COLLABORATION WITH

ESO | ESTRO | EORTC | ENLIGHT | ENVISION | ENTERVISION | ESRF | ILL | ULICE

Dear Colleague,

On behalf of the Organizing Committee, it is our privilege to invite you to attend ICTR-PHE 2014 (International Conference on Translational Research in Radio-Oncology and Physics for Health), which will take place in Geneva on February 10 – 14, 2014.

Following the success in 2012, this event will once again bring together the ICTR conference and the PHE workshop.

ICTR-PHE aims at developing new strategies to better diagnose and treat cancer, by uniting biology and physics with clinics. Optimizing biologically and physically the ways we attack cancer is the key issue in our search for better treatment precision and specificity: we need to foster the research of techniques that will significantly enhance the therapeutic ratio of our treatments, both by increasing the tumour cell killing and by augmenting normal tissue sparing. These novel research developments require a closer integration between the cutting-edge technologies we develop for detectors and therapeutic devices, and all the bio-molecular vectors that the post-genomic era is offering us.

These innovative synergies will be the “red thread” that ICTR-PHE 2014 will follow during the 5-day conference, by reviewing the most recent advances in translational research in physics, biology and clinical oncology. Through the various sessions and symposia, the scientific programme will offer the delegates the opportunity to discuss, in a friendly atmosphere, the latest progress in physics breakthroughs for health applications. As in the past years, ICTR-PHE 2014 will continue to pay a tribute to those institutions and individuals who significantly contribute to the development of translational research in oncology.

Last but not least, this conference will further expand our partnerships with industry, with concerted efforts in Research & Development, and will trigger institutional contacts favouring a more efficient collaboration between laboratories worldwide.

The Organizing Committee of ICTR-PHE 2014 is looking forward to welcoming you to Geneva so mark February 10 - 14, 2014 in your agenda now!

CONFERENCE CHAIRS

Jacques Bernier & Manjit Dosanjh



ICTR-PHE 2014 SCIENTIFIC COMMITTEE (AS OF FEBRUARY 2013)

ADVISORY BOARD

- Ugo Amaldi
- Kian K. Ang
- Michael Baumann
- Soeren M. Bentzen
- Jacques Bernier
- Jean Bourhis
- David Brizel
- Denis Dauvergne
- Alberto Del Guerra
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- Paul Lecoq
- Anthony Lomax
- Alejandro Mazal
- Steve Myers
- Dag Rune Olsen
- Jens Overgaard
- Kevin Prise
- Osman Ratib
- Sandro Rossi
- Vincenzo Valentini
- Marcel Verheij
- Brad Wouters

SESSIONS:

BIOLOGY

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

NUCLEAR MEDICINE

- **O. Ratib - Geneva**
- **U. Köster - Grenoble**
- TBC
- TBC

NEW TECHNOLOGIES

- **W. Enghardt - Dresden**
- **A. Lomax - Villigen (TBC)**
- A. Mazal - Curie Institute (TBC)
- S. Rossi - Pavia

PRE-CLINICAL & CLINICAL STRATEGIES

- **K.K. Ang - Houston**
- **M. Baumann - Dresden**
- Z. Fuks - New York
- M. Verheij - Amsterdam

DETECTORS & IMAGING

- **D. Dauvergne - Lyon**
- **A. Del Guerra - Pisa**
- T. Haberer - Heidelberg
- P. Lecoq - CERN

RADIOTHERAPY

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

ICTR-PHE 2014 EXECUTIVE COMMITTEE

- Ugo Amaldi, TERA
- Jacques Bernier, Genolier and Geneva
- Jean Bourhis, Lausanne
- Alberto Costa, Milano
- Manjit Dosanjh, CERN
- Raymond Miralbell, Geneva
- Steve Myers, CERN

SUPPORTING INSTITUTIONS



In collaboration with
The European School of Oncology



European Organization
for Nuclear Research



European Society for Therapeutic
Radiology and Oncology



Under the auspices of the European
Organisation for Research and Treatment
of Cancer



Fondazione FARO, Geneva



Fondazione TERA, Novara



University of Geneva,
and Geneva University Hospital



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.

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REGISTRATION

Registration will open on June 1st. Information will be available on the website <http://cern.ch/ICTR-PHE14>

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: September 30, 2013)	Swiss Francs	400
Late registration (deadline: January 10, 2014)	Swiss Francs	700
On site registration	Swiss Francs	1000
Students	Swiss Francs	250

Students will be asked to provide a proof of their status at the time of registration.

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-2014@cern.ch

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 10, 2014 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 10, 2014. 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.

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
- 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/nucleides
- 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 angiogenic 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 in radiotherapy

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