

SCIENTIFIC PROGRAMME

SATURDAY 27 APRIL 2019

	TEACHING LECTURE	TEACHING LECTURE	AUDITORIUM	TEACHING LECTURE	TEACHING LECTURE	TEACHING LECTURE	TEACHING LECTURE	TEACHING LECTURE		
08:00 - 08:40	Artificial Intelligence applications in radiation oncology	Model organisms in radiation biology	State of the art in definitive treatment of locally advanced NSCLC	New ILROG radiotherapy guidelines for haematological malignancies	The role of postoperative radiotherapy in endometrial cancer: what have we learned of the PORTEC trials?	Gating and breath-hold techniques in radiation therapy	Technology for precision small animal radiotherapy research: Optimal use and challenges	Ensuring quality in an image guidance era		
08:45 - 10:00	SYMPOSIUM Artificial intelligence in radiation oncology Clinical applications of AI for radiation oncology - Acceptance, commissioning, introduction, regulatory aspects and QA of AI - AI in radiation oncology research - Impact of AI and automation on practice	SYMPOSIUM Mouse models: Animal models the next step for radiotherapy Linking radiation-induced DNA damage to systemic effects: what can we learn from preclinical models of normal tissue complications - New developments in small animal image guided radiotherapy: Bladder cancer - RBE of protons: what can we learn from preclinical models? - Dynamics Changes in Immune Cells During Glioblastoma Response to Treatment: Macrophages at Play	SYMPOSIUM Optimal management of patients with unresectable stage 3 NSCLC Standard of care in 2019 - Areas of controversy and ongoing research - Active management of patient's comorbidities (including respiratory and cardiac comorbidities) - Role of patient reported outcome in patients follow-up	SYMPOSIUM Combined modality treatment vs chemotherapy alone in lymphoma patients? Hodgkin lymphoma - Aggressive Lymphoma (DLBCL)	SYMPOSIUM Image guided adaptive brachytherapy (IGABT) for primary vaginal cancer in Europe and North America Evidence for image guided adaptive brachytherapy in primary vaginal cancer - GYN GEC-ESTRO Recommendations for IGABT target delineation in primary vaginal cancer - Brachytherapy for primary vaginal cancer – North American experiences - Dose planning for primary vaginal cancer – a multicentre comparison - Discussion	JOINT SYMPOSIUM ESTRO-AAPM QA of adaptive radiotherapy - QA of contour segmentation - QA of deformable image registration - QA of complete treatment fraction on MRI linac: clinical experience - How to QA on the line	SYMPOSIUM Beyond Physical dose Mathematical Modelling of radiation response: an overview. - Developing metrology support for biologically relevant dosimetry - Understanding biological response - Implementation of nanodosimetric and radiobiological models in treatment planning response modelling	SYMPOSIUM Quality in an IGRT Education and Training - Continuous Quality Improvement Strategies to Support Volumetric IGRT - Audits in IGRT - Development of standardised image guidance registration documents and workflows - Exploiting IGRT to calculate delivered dose for normal tissue sparing	POSTER VIEWING 1	
10:00 - 10:30	COFFEE BREAK									
10:30 - 11:45	SYMPOSIUM Challenging dose painting: Are we really painting what we aim to or the better outcome is only linked to higher dose spots within the CTV? What is left from dose painting when adding all uncertainties - What are the limitations on dose escalation to sub-volumes in head and neck cancer: experience from dose painting -	PROFFERED PAPERS	PROFFERED PAPERS	PROFFERED PAPERS	PROFFERED PAPERS	PROFFERED PAPERS	PROFFERED PAPERS	PROFFERED PAPERS	PROFFERED PAPERS	POSTER VIEWING 2

	Clinical evidence for improved local control through prescription of heterogenous dose adapted to treatment response during radiotherapy: experience from cervix cancer with image guided brachytherapy									
12:00 - 12:30	EMMANUEL VAN DER SCHUEREN AWARD LECTURE									
12:30 - 13:00	IRIDIUM AWARD LECTURE									
13:00 - 14:30	LUNCH AND INDUSTRY SYMPOSIA									
	SYMPOSIUM	SYMPOSIUM	JOINT SYMPOSIUM	JOINT SYMPOSIUM	SYMPOSIUM	SYMPOSIUM	JOINT SYMPOSIUM	SYMPOSIUM	POSTER VIEWING 3	MULTIDISCIPLINARY TUMOUR BOARD
14:30 - 15:45	MR-guided radiation therapy: hybrid machines and treatment adaptation Magnetic resonance based small animal radiotherapy in neuro-oncology - On-line MRI-guidance for dose accumulation and plan adaptation - First clinical experience and future directions of MR-guided radiation therapy	How to exploit Immunogenic cell death Mechanism in Radiotherapy Immunologic and non-immunologic cell death Immunologic and non-immunologic cell death - Immunogenic cell death by systemic therapy - Mechanisms of radiotherapy induced inflammatory signaling - Neoantigens in cancers	Oligo-metastatic prostate cancer – shedding light in a quickly emerging field What are realistic clinical goals in radical radiotherapy for oligometastatic prostate cancer - What is the optimal staging for oligometastatic prostate cancer? - What is the optimal target volume concept in radiotherapy for oligometastatic pelvic lymph nodes after radical prostatectomy? - What is the optimal sequencing of local and systemic treatment in oligometastatic prostate cancer?	New developments in gynaecological cancers Integration of molecular prognostic factors in the management of endometrial cancer. - Improving outcomes in high-risk locally advanced cervical cancer: extended field radiotherapy, adjuvant chemotherapy or immunotherapy? - Chemo-radiation in Vulvar Cancer: recent developments in (neo) adjuvant and primary therapy	Real time navigation technologies in brachytherapy Surgical navigation: real-time image fusion and identification of anatomical landmarks - Steering of needles and applicators - 3D printed applicators for steering of needles	Automatic / Knowledge based treatment planning:open issues How can we get the best out of knowledge-based planning? - Does automation jeopardise personalised treatment? Are we going back to prêt-à-porter instead of bespoke fashion? - The potential of automated treatment planning in clinical trials - Using automated planning for “bias-free” plan comparison	ESTRO-EFOMP Multi-disciplinary working in Radiotherapy - Working for radiotherapy applications: The perspective of a nuclear medicine physicist in the era of integrated Hybrid Imaging Systems - Working in radiotherapy from the perspective of an MRI physicist - Working with radiotherapy from the perspective of US physicist - Working with radiotherapy from the perspective of data/ computer scientist	Younger people and late effects Risks among children undergoing radiation therapy - Status on younger people and RT. What do we know until now and what will the future bring? - Preparation and treatments without anaesthesia		Soft tissue sarcomas
15:45 - 16:15	COFFEE BREAK									
	JOINT SYMPOSIUM	PROFFERED PAPERS	PROFFERED PAPERS	PROFFERED PAPERS	PROFFERED PAPERS	PROFFERED PAPERS	PROFFERED PAPERS	PROFFERED PAPERS	POSTER VIEWING 4	
16:15 - 17:30	ESTRO-CARO Functional imaging in RT: from biology to guidance									
17:35 - 18:35	HONORARY MEMBERS AWARD LECTURES									
18:40 - 19:40	POSTER AWARDS CEREMONY									

CLINICAL SESSION

INTERDISCIPLINARY SESSION

PHYSICS SESSION

RTT SESSION

RADIOBIOLOGY SESSION

BRACHYTHERAPY SESSION

YOUNG SCIENTISTS' SESSIONS

12:00 - 12:30	PRESIDENTIAL SYMPOSIUM										
12:30 - 13:00	C. REGAUD AWARD LECTURE										
13:00 - 14:30	LUNCH AND INDUSTRY SYMPOSIA								13:00 - 14:15 YOUNG LUNCH SYMPOSIUM	POSTER VIEWING 7	MULTIDISCIPLINARY TUMOUR BOARD
									How to prevent burnout? Perspectives on burnout in the medical professions - Coping strategies in daily practice - Science slam: 1) Report back from ESTRO mobility grants: biology 2) Report back from ESTRO mobility grants: physics 3) Report back from ESTRO mobility grants: RTT		
14:30 - 15:45	SYMPOSIUM	SYMPOSIUM	SYMPOSIUM	DEBATE	DEBATE	SYMPOSIUM	SYMPOSIUM	SYMPOSIUM	SYMPOSIUM	POSTER VIEWING 7	MULTIDISCIPLINARY TUMOUR BOARD
	Inflammatory environmental factors and radiation response The microbiome & cancer - The microbiome & cancer therapies - Immune effects of the microbiome on cancer treatment - The microbiome and treatment side-effects	Reducing the normal tissue effects of RT Stem cell replacement to overcome radiotherapy induced xerostomia - Sparing of stem cells using protons - Mechanisms of radiotherapy-induced neurocognitive decline - Neurocognition and brain irradiation	Radiotherapy in the era of the Sliver Tsunami: demographic characteristics of cancer patients Cancer epidemiology in Europe with focus on indications for RT - Radiobiology: Does normal tissue in the elderly have different sensitivity and tolerance/ are tumours in elderly of different biology and shall they be treated differently - Influence of age and comorbidity on outcome and compliance to RT - From geriatric assessment in radiation oncology to interventions: experience from the PIVOG trial	This house believes that margin reduction is the key to improved outcome	Which is the best brachytherapy technique to deliver partial breast irradiation? Pitfalls, results and current recommendations Postoperative multicatheter brachytherapy - Intraoperative multicatheter brachytherapy - Single catheter balloon brachytherapy (Mammosite, Contura) - Single catheter brachytherapy (SAVI, ClearPath) - Panel discussion	Big data – big problems? The need and potential for use of big data for research and development of radiotherapy - Challenges of collection, sharing and analysis of data at scale - Practicalities and issues of setting up the infrastructure to collect big data in a hospital environment	From grid therapy to microbeam radiotherapy Introduction to microbeam radiotherapy and how it differs from grid therapy - Spatial fractionation of the dose: from photons to charged particles - Dosimetry measurement in microbeam therapy - Compact microbeam sources and microbeam treatment planning	Focus on the lung Image-guided adaptive radiotherapy in the treatment of lung cancer patients - Automatic selection of lung cancer patients for adaptive radiotherapy using cone-beam CT imaging - Image-guided radiotherapy and motion management in lung cancer	Stronger together - news and projects in the young national societies Perspective of an established young society: the Spanish Young Society - An emerging young society: Young Romanian Radiotherapists and Oncologists Group (YRROG) - Creating a new young radiation oncology society - the case of Poland - Working together across borders: YROG - Panel discussion	POSTER VIEWING 7	PROSTATE CANCER
15:45 - 16:15	COFFEE BREAK								15:45 – 17:00		
16:15 - 17:30	JOINT SYMPOSIUM	PROFFERED PAPERS	PROFFERED PAPERS	PROFFERED PAPERS	PROFFERED PAPERS	PROFFERED PAPERS	PROFFERED PAPERS	PROFFERED PAPERS	PROFFERED PAPERS	POSTER VIEWING 8	PROFFERED PAPERS
	ESTRO-ASTRO TBC									Quiz and Young networking cocktail	
17:40 - 18:00	J. OVERGAARD LEGACY AWARD LECTURE										
18:00 - 18:20	HONORARY PHYSICIST AWARD LECTURE										

MONDAY 29 APRIL 2019

	TEACHING LECTURE	TEACHING LECTURE	TEACHING LECTURE	TEACHING LECTURE	TEACHING LECTURE	TEACHING LECTURE	TEACHING LECTURE	TEACHING LECTURE		
08:00 – 08:40	Extreme hypofractionation in the treatment of localised prostate cancer	Radio-immunotherapy: challenges and opportunities	Tumour metabolism and radiation response	Radiomic machine-learning to predict radiotherapy outcome	Importance of volumetric staging and biological dose inhomogeneity in IMRT	In-vivo dosimetry: possibilities and pitfalls	The vital role of physicists in clinical trials: from design to data analysis	New developments in the treatment of brain metastases: better prognostic tools, improved outcomes		
08:45 – 10:00	Radiotherapy in bladder cancer: Standard of care and future perspectives Do we have the evidence for radiation therapy as standard of care in bladder cancer? - Brachytherapy in bladder cancer. Undoubted importance of close collaboration - Stepwise Development of personalised radiation therapy for bladder cancer - Radiosensitisation strategies for the treatment of bladder cancer	ESTRO-EACR Radio-immunotherapy: from concept to clinical practice	Tumour Metabolism and Radiotherapy Vitamin C to improve the therapeutic ratio - Tumour metabolic gender differences driving treatment response - Hypoxia-induced Replication Stress - Sensitising hypoxic tumour cells	ESTRO-ESR Current status and future challenges in MR-integrated radiotherapy	Improved outcome by smarter use of radiotherapy Towards less radiotherapy in breast cancer treatment - Image-guided elective neck irradiation in head and neck cancer - Dose reducing strategies in soft tissue sarcoma	Quantitative Imaging for Radiation Oncology Quantitative dynamic contrast enhanced MRI: The QIBA guidelines - Quality assurance for quantitative MRI in a multicenter trial - Quality assurance and validation for quantitative PET in multicenter trials	Advanced methods to account for proton range uncertainties in treatment planning Probabilistic treatment planning - Multi-energy CT for improved SPR determination: proposed methods and their experimental validation - The potential of treatment planning and pre-treatment imaging with proton CT and proton radiography to reduce range uncertainties in proton therapy - Accounting for organ motion in proton therapy at the planning stage	Care, communication and new technology in brain radiotherapy Communication care and side effect - brain radiotherapy - What's the role of the RTT? - Treating multiple metastases – reducing normal brain tissue - Linac isocentric accuracy and its influence on treatment margins	POSTER VIEWING 9	
10:00 – 10:30	COFFEE BREAK									
10:30 – 11:45	ESTRO-IAEA The role of hypofractionation in current radiotherapy and its impact in planning radiotherapy services	DEBATE Which is the best technique for the delivery of APBI? This house believes that the EBRT is the best technique - This house believes that the multicatheter brachytherapy is the best technique - For which patient which technique is the best from the point of view of the physicist? - Radiobiology aspects and limitations	PROFFERED PAPERS	PROFFERED PAPERS	PROFFERED PAPERS	PROFFERED PAPERS	PROFFERED PAPERS	PROFFERED PAPERS	PROFFERED PAPERS	POSTER VIEWING 10
12:00 – 12:30	K. BREUR AWARD LECTURE									
12:30 – 12:40	ACADEMIC AWARD LECTURE: JACK FOWLER UNIVERSITY OF WISCONSIN AWARD									
12:40 – 13:00	COMPANY AWARD LECTURES									

13:00 – 14:30 LUNCH AND INDUSTRY SYMPOSIA										
	SYMPOSIUM	SYMPOSIUM	SYMPOSIUM	SYMPOSIUM	JOINT SYMPOSIUM	SYMPOSIUM	PROFFERED PAPERS	SYMPOSIUM	POSTER VIEWING 11	MULTIDISCIPLINARY TUMOUR BOARD
14:30 – 15:45	<p>Adaptive radiotherapy: reactive or proactive?</p> <p>Clinical perspective and evidence on radiotherapy adaptation, has it improved outcome?</p> <p>Physics perspective on radiotherapy adaptation including role of predictive modelling in radiotherapy adaptation</p> <p>Role of the RTT in the clinical implementation of adaptive radiotherapy</p> <p>Adaptive and real-time approaches in brachytherapy</p>	<p>Predictive models of toxicity and big data, big open issues</p> <p>How to organize your department to have a structured way of collecting toxicity data</p> <p>Dreams and reality of toxicity data-sharing/ farming: quality vs. quantity?</p> <p>Exploiting large data base to build robust predictive models: validation issues</p> <p>Radiogenomics: big data to understand genetic risk factors of toxicity</p>	<p>Biological Imaging for Radiotherapy</p> <p>Imaging of tumour infiltrating lymphocytes with [18F]FB-IL2 PET</p> <p>Imaging DNA damage response</p> <p>MRI-CEST Imaging of tumor acidosis</p> <p>Tracing hypoxia in tumours</p>	<p>New developments for breast cancer irradiation</p> <p>Neoadjuvant radiotherapy in breast cancer</p> <p>Response to preoperative therapy - prediction, assessment and indications for adjuvant radiotherapy</p> <p>Nodal irradiation with or instead axillary lymph node dissection</p> <p>Radiotherapy after breast reconstruction</p>	ESTRO-EORTC	<p>Debate: In 10 years physicists will need different training to include more ...</p> <p>Imaging</p> <p>Predictive models and big data</p> <p>Deep learning, automation and computing</p> <p>Management and leadership</p> <p>Basic physics skills</p>		<p>Education and Advance Practice</p> <p>Education programme - Defining advanced practice specifically in radiotherapy</p> <p>Education and advance practice - defining level EQF 7 and 8 competencies</p> <p>Incorporation of radiation therapist to radiation oncologist team</p>		Bladder cancer
15:45 – 16:15 COFFEE BREAK										
	DEBATE	SYMPOSIUM	PROFFERED PAPERS	PROFFERED PAPERS	PROFFERED PAPERS	PROFFERED PAPERS	PROFFERED PAPERS	PROFFERED PAPERS	POSTER VIEWING 12	
16:15 – 17:30	<p>Can early-regression-guided adaptive RT (eRG-ART) improve the pathological response in neo-adjuvant treatments?</p>	<p>Recent insights into adverse cardiac effects from multimodal radiation therapy</p> <p>Multivariable prediction models for adverse cardiac effects to target optimal cardiac radiation dose distributions in breast cancer patients</p> <p>Practical aspects of estimating and measuring of CIED dose in radiotherapy procedures</p> <p>From the biological basis of cardiac toxicity induced by radiation therapy to the new application of SBRT in the cardiovascular field</p> <p>Managing cardiotoxicity in primary care services</p>								
17:40 – 17:50	D. HOLLYWOOD AWARD LECTURE									
17:50 – 18:30	HIGHLIGHTS OF PROFFERED PAPERS									
18:40 – 19:40	GENERAL ASSEMBLY									
22:00	SOCIAL EVENING									

CLINICAL SESSION

INTERDISCIPLINARY SESSION

PHYSICS SESSION

RTT SESSION

RADIOBIOLOGY SESSION

BRACHYTHERAPY SESSION

YOUNG SCIENTISTS' SESSIONS

TUESDAY 30 APRIL 2018

08:30 – 09:10	TEACHING LECTURE The DNA damage response to radiotherapy: mechanisms and therapeutic opportunities	TEACHING LECTURE Are adolescents and young adults (AYA) a specific patients' population?	TEACHING LECTURE Hypofractionation: can the DNA damage response deliver a biological rationale?	TEACHING LECTURE Recent insights into radiotherapy tolerance from the REQUITE Consortium	TEACHING LECTURE Integration of PET imaging in radiation treatment planning	TEACHING LECTURE Implementation and practice of SRS and SBRT: Consensus guidelines and protocols	TEACHING LECTURE How to select patients for radiotherapy with protons instead of photons	TEACHING LECTURE MR-guided radiotherapy in the pelvic region		
09:15 – 10:30	SYMPOSIUM Radiotherapy biomarkers: a confluence of imaging, genetics and pathology Advances in imaging to predict and monitor radiation response - New approaches to radiotherapy biomarkers, the data has gotten big - Translation of biomarker signatures in daily clinical use?	SYMPOSIUM Palliation in RT - How much is enough? Criteria for choosing dose and irradiation technique in severe conditions for palliation treatment - Uncertainties in single fraction treatment - Communication with a palliative patient - What's the role of the RTT? - Healthy tissue response to a single fraction treatment	SYMPOSIUM Mechanisms of radiation resistance in Glioma The role of DNA replication stress in glioma stem cell radiation resistance - Tumour cell connections causing radiation treatment - Chemoresistance related RNAs in glioblastoma - Irradiation and targeted inhibition of the PI3K/AKT and MAPK pathways in glioma	DEBATE This house believes that there is still a role for radiotherapy in pancreatic cancer	SYMPOSIUM New developments in head and neck cancer treatment p16+ oropharyngeal cancer: new disease, new staging – what about treatment? - Predictive models in treatment of head and neck cancer - Immunotherapy in head and neck cancer – when and for whom, biomarkers of response	SYMPOSIUM New detector developments Update on compact graphite calorimeter for absolute dosimetry measurements - Update on commercial scintillators - Multichannel film dosimetry - Developments in time-resolved detectors	PROFFERED PAPERS	SYMPOSIUM Focus on the pelvic region Status on adaptive strategies in the pelvic region – how far are we? Bladder filling - does it matter? - MR-based treatment planning for prostate cancer		
10:30 – 11:00	COFFEE BREAK									
11:00-12:15	JOINT SYMPOSIUM ESTRO-RANZCR Radiotherapeutical management of oligometastatic disease	SYMPOSIUM Plan of the day - present status and future aims Online adaptive planning in pancreatic cancer - Future developments in adaptive strategies - Clinical results of PotD strategies - MRI online ART: opportunities and pitfalls	DEBATE This house believes that immunotherapy is really changing radiation oncology	DEBATE This house believes that patients with squamous cell cancer of the esophagus no longer need surgery	SYMPOSIUM Controversies in the management of brain metastases Whole brain irradiation with hippocampal avoidance - Radiosurgery alone in multiple brain metastases - Systemic treatment as alternative or addition to radiotherapy - Integration of surgery and radiosurgery	SYMPOSIUM Improving delineation in RT: not only for the doctor Using novel CT imaging for delineation improvements (Dual Energy CT, iterative reconstructions, metal artifact reduction etc). - Development of MR techniques focused on improved delineation - How to handle clinical inter-observer variation in contouring assessment - The future of margins in the era of new (multi-modality) imaging technology	SYMPOSIUM A new era for radiotherapy (anthropomorphic) phantoms Personalised phantoms through 3D printing - Phantoms in motion - MR linacs and QA phantoms - Phantoms in particle therapy to verify Monte Carlo dose calculation - Discussion	DEBATE Workload/clinic logistics, and not technical uncertainties, are the main barrier to widespread implementation of adaptive radiotherapy practice		
12:20 – 13:20						12:20 – 13:20 closing debate				
						Closing remarks				