# Radiation Break-through: from DNA damage responses to precision cancer therapy Programme

Oxford, UK

12 - 14 March 2018



# Scientific Programme

# Monday 12th March 2018

11:30 REGISTRATION

Wolfson College foyer

tea/coffee will be available in the Haldane Room

12:00 LIGHT LUNCH

Haldane Room

13:30 CONFERENCE WELCOME

Leonard Wolfson Auditorium

**Scientific Programme Committee** 

13:35 SESSION 1 - DDR & DNA REPAIR

Session Chair: Jos Jonkers

13:35 OPENING LECTURE

Steve Jackson

University of Cambridge, UK

"Cellular responses to DNA damage: mechanistic insights and therapeutic applications"

14:20 Alessandro A. Sartori

University of Zurich, Switzerland

"Exploiting cell-penetrating peptide inhibitors of homologous recombination as research tools and as novel cancer therapeutics"

14:50 Sylvie Noordermeer

Leiden University Medical Centre, Netherlands

Proffered Paper 1: "Identification of the Shieldin complex as a novel effector of 53BP1-dependent DNA repair"

15:05 Karlene Cimprich

Stanford University School of Medicine, USA

"ATR couples DNA replication and mitosis through an S/G2 phosphorylation switch and transcription program"

15:35 COFFEE BREAK

Hall

16:05 Anton Gartner

University of Dundee, UK

Proffered Paper 2: "Massive C. elegans whole-genome sequencing for profiling mutational signatures associated with IR, carcinogens and DNA repair deficiency"

16:20 Madalena Tarsounas

CRUK/MRC Oxford Institute for Radiation Oncology, UK

"A pharmacological screen identifies drugs that selectively target BRCA1/2-deficiency and counteract drug resistance"

#### 16:50 Christian Reinhardt

University Hospital Cologne, Germany

"Targeting defects in the DNA damage response to treat tumors driven by non-druggable oncogenes"

#### 17:20 Nina Gustafsson

Karolinska Institute, Sweden

Proffered Paper 3: "Protecting the genome through metabolic enzymes"

#### 17:35 EXHIBITOR INTRODUCTIONS

A fun session to introduce the companies who are exhibiting at the conference

# 17:45 WELCOME BUFFET AND DRINKS

Haldane Room & Hall

Opening of the trade exhibition

#### 18:45 POSTER DEFENCE SESSION 1

The Haldane Room & Hall until 20:45

# Tuesday 13th March 2018

# 00:00 SESSION 3 - BIOMARKERS & TISSUE RESPONSES TO RADIATION (2)

Session Chair: Martin Pruschy

#### 00:00 Catharine West

University of Manchester, UK

"Radiobiology Biomarkers for Precision Radiotherapy"

## 08:30 POSTER VIEWING

Haldane Room & Hall

Tea/coffee will be available

#### 09:00 SESSION 2 - BIOMARKERS & TISSUE RESPONSES TO RADIATION (1)

Session Chair: Karlene Cimprich

#### 09:00 **Jos Jonkers**

Netherlands Cancer Institute (NKI), Netherlands

"Identification of cancer drivers and mechanisms of therapy resistance in mouse models of BRCA-deficient breast cancer"

#### 09:30 Claus Sørensen

BRIC, Denmark

"Cancer cell evasion of growth limits imposed by genotoxic stress"

## 10:00 Flavie Coquel

Institut de Génétique Humaine, France

Proffered Paper 4: "SAMHD1 acts at stalled replication forks to prevent ssDNA-mediated induction of type I interferons"

## 10:15 Ludwig Dubois

Maastricht University, Netherlands

"Radiotherapy and immunotherapy: partners in crime"

#### 10:45 COFFEE BREAK

Hall

#### 11:15 **Jason Parsons**

University of Liverpool, UK

Proffered Paper 5: "Complex DNA damage induced by high-LET protons triggers a specific cellular DNA damage response"

#### 11:30 Verena Jendrossek

University of Duisburg-Essen, Germany

"Radiation-induced normal tissue toxicity: new insight from damage signaling and tissue-specific immune defense strategies"

#### 12:00 SEATED LUNCH

Haldane Room & Buttery

#### 14:00 Anderson Ryan

University of Oxford, UK

"The impact of DNA damage response (DDR) modulators on normal tissues following thoracic irradiation in preclinical models"

# 14:30 **Domenico Maiorano**

Institute of Human Genetics, France

Proffered Paper 6: "Targeting the RAD18 ubiquitin ligase enhances sensitivity to therapy by inhibiting cancer stem cells proliferation"

#### 14:45 Andrew Tutt

The Institute of Cancer Research (ICR), UK

"Understanding genomic instability and targeting defective DNA damage responses in breast cancer"

#### 15:15 MEET THE EXPERTS SESSION

with Madalena Tarsounas, Verena Jendrossek and Karlene Cimprich

## 16:00 POSTER DEFENCE SESSION 2

Haldane Room & Hall

until 18:00

# 19:00 CONFERENCE DINNER

Cherwell Boathouse

Pre-booked optional extra

# Wednesday 14th March 2018

#### 08:30 POSTER VIEWING

Haldane Room & Hall

Tea/coffee will be available

# 09:00 SESSION 4 - TRANSLATIONAL

Session Chair: Madalena Tarsounas

# 09:00 Timothy Humphrey

CRUK/MRC Oxford Institute for Radiation Oncology, UK

"Targeting histone H3K36me3-deficient cancers"

# 09:30 Frank Pajonk

UCLA, USA

"Cancer Therapies and Cancer Cell Plasticity"

### 10:00 Olivier De Wever

Ghent University, Belgium

Proffered Paper 7: "Radiotherapy-activated cancer-associated fibroblasts

promote tumor progression through paracrine IGF-1R activation"

# 10:15 COFFEE BREAK

Hall

#### 11:00 Brita Singers Sorensen

Aarhus University, Denmark

"Implementation and Validation of a 15-Gene Hypoxia Classifier in Head and Neck Cancer"

# 11:30 Martin Pruschy

University Hospital Zürich, Switzerland

"Targeting the secretome as part of combined treatment modalities with radiotherapy"

# 12:00 CLOSING LECTURE

#### **Amato Giaccia**

Stanford University School of Medicine, USA

"Protecting normal tissue from DNA damage to enhance the efficacy of radiotherapy"

# 12:45 CLOSING SUMMARY

Poster Prizes and Meeting Bursaries will be presented by Verena Jendrossek

#### 13:00 LUNCH & DEPART

Haldane Room