



## Annual Scientific Meeting Friday 10<sup>th</sup> of March 2023

**Durkan Lecture Theatre, Trinity Centre for Health Sciences, Dublin D08 W9RT**

14:00 Welcome Address from the Chair, Dr. Laure Marignol

### **Session 1 Proffered abstracts**

14:10 **Jie Feng**, Queen's University Belfast "Autophagy and PERK/eIF2 $\alpha$  Signaling Protects Against Atovaquone-Induced Radiosensitisation".

14:20 **Simone Marcone**, Trinity College Dublin. "Gold nanoparticles coupled to a novel radiosensitizer (Pyrazinib) increased radiation sensitivity and antiangiogenic activity by rewiring mitochondrial metabolism in oesophageal adenocarcinoma.

14:30 **Christina Cahill**, Trinity College Dublin "Investigating the role of miRNA-34a in the resistance of oesophageal adenocarcinoma to therapy".

14:40 **Francisco Gerra Liberal**, Queen's University Belfast. "Mapping the RBE/LET relationship as function of cellular DSB repair capabilities".

14:50 **Lydia Gardner**, Queen's University Belfast. "Quantifying the impact of single strand break repair pathway disruption on radiation response".

15:00 **Shannon Thompson**, Queen's University Belfast. "DNA damage models of different complexity levels do not predict fundamental differences in double strand break damage.

### **15:10 Short break**

15:20 **Dinesh Medipally, Technological University Dublin** "Chemical imaging with vibrational spectroscopy: a novel window into biochemistry and pathology in radio-biology".

15:30 **Michelle Leech, Trinity College Dublin** "Impact of image pre-processing on reproducibility of radiomics features in magnetic resonance imaging for prostate cancer. "

15:40 **Maitiú Ó Murchú, Trinity College Dublin** "Development of an Oxygen-Carrying Perfluorocarbon Nanoemulsion to Boost Oxygen Diffusion and Improve Response to Radiotherapy in Oesophageal Adenocarcinoma."

15:50 **John O'Connor, Queen's University Belfast** "In vitro trained genomics signatures of radiosensitivity perform poorly on held out data and in clinical cohorts".

16:00 **Rayhanul Islam, Queen's University Belfast**. "Sensitising prostate tumour models to radiation using novel RALA/AuNPs nanocomplexes"

16:10 **Angus Collison, South East Technological University** "Natural radioactivity in Irish farmed oysters (*Crassostrea gigas*)".

16:20 **Aoife Kinahan, EPA** "Improvements in the estimation of Ingested DOSE from Natural Radioactivity in the Irish diet".

16:30-16:45 Short Break

### **Session 2 Current Challenges and Opportunities for Irish Radiation Research.**

16:45- Clinical applications Mr Gavin Lawler, IRROG

17:10 Environmental / Public Health considerations (TBC)



17:30 General discussion on Society's activities and future direction. Recruitment of new committee members.

**18:00- Meeting closing and Networking drinks reception.**

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