

Thursday 22nd February 2018
IACR Scientific Sessions

09.00 - 09.15: **Welcome Address: Prof Amanda McCann (IACR President)**

PLENARY SESSION 1: REPORTS FROM CLINICAL TRIALS IN LOW SURVIVAL CANCERS

09.15-09.45 ***PRECISION ONCOLOGY FOR PANCREATICOBILIARY CANCERS – SUCCESSES, CHALLENGES AND FUTURE DIRECTIONS***
Professor Maeve Lowery, Professor of Translational Cancer Medicine, Trinity College Dublin

09.45-10.15 ***CLINICAL CHALLENGE IN IMPROVING TREATMENT RESPONSE RATES FOR OESOPHAGEAL CANCER PATIENTS: IMPORTANCE OF TRANSLATIONAL RESEARCH***
Professor Jacintha O’Sullivan, Trinity Translational Medicine Institute (TTMI), St. James’s Hospital, Dublin

10.15-10.45 ***Dr Frances Shepherd, UHN, Toronto, Canada***

10.30-10.45 **GOLD SPONSOR PRESENTATION**
Nanostring Technologies Europe Ltd

10.45-11.15 **TEA/COFFEE/POSTERS & MEET THE SPONSORS**

PLENARY SESSION 2: NANOMEDICINE IN CANCER TREATMENT

11.15-11.45 ***SMART AND THERANOSTICS NANOMATERIALS FOR STIMULI-RESPONSIVE THERAPIES AGAINST CANCER***
Prof. Valentina Cauda, Department of Applied Science and Technology (DISAT), Politecnico di Torino, Italy

11.45-12.15 ***POLYMERIC MICELLES AND NANOGELS FOR MULTI-DRUG DELIVERY IN OVARIAN CANCER THERAPY***
Dr Hyunah Cho, Assistant Professor, School of Pharmacy and Health Sciences, Fairleigh Dickinson University, New Jersey, USA

12.15-12.45 ***CONTROLLING THE RELEASE OF CHEMOTHERAPEUTICS WITH NANOPARTICLE-HYDROGEL COMPOSITES***
Professor Eduardo Ruiz-Hernandez, School of Pharmacy, Trinity College Dublin

12.45-13.00 **GOLD SPONSOR PRESENTATION**
AECA Biosciences, Inc

13.00-14.15 **LUNCH**

Distributed by:

Lab Unlimited
CARL STUART GROUP

Tallaght Business Park
Whitestown, Dublin 24,
Ireland
D24 RFK3

Tel: (01) 4523432
Fax: (01) 4523967
E-mail: info@labunlimited.com
Web: www.labunlimited.com

Quatro House, Frimley Road,
Camberley,
United Kingdom
GU16 7ER

Tel: 08452 30 40 30
Fax: 08452 30 50 30
E-mail: info@labunlimited.co.uk
Web: www.labunlimited.co.uk

- 14.15-15.08 **ORAL POSTER PRESENTATIONS (Prof. John Fitzpatrick Medal)
(Chaired by Dr Antoinette Perry and Dr Patrick Kiely)**
(8 x 6 minute presentations, selected from Abstract Submissions)
- 14.15-14.26 **PROTEIN AND CHEMOTHERAPY PROFILING OF EXTRACELLULAR VESICLES
HARVESTED FROM THERAPEUTIC INDUCED SENESCENCE TRIPLE NEGATIVE BREAST
CANCER CELLS.**
Emma L Kavanagh¹, S Lindsay¹, M Halasz^{2,3}, LC Gubbins¹, K Weiner-Gorzel¹, MHZ
Guang¹, A McGoldrick¹, E Collins¹, M Henry⁴, A Blanco-Fernandez¹, P O'Gorman⁵,
P Fitzpatrick⁶, MJ Higgins⁷, P Dowling⁸, A McCann^{1,3}
¹UCD Conway Institute of Biomolecular and Biomedical Research, University College
Dublin (UCD), Dublin, ²Systems Biology Ireland (SBI), University College Dublin (UCD),
Dublin, ³UCD School of Medicine, College of Health and Agricultural Science,
University College Dublin (UCD), Dublin, ⁴National Institute for Cellular
Biotechnology, Dublin City University, Dublin, ⁵Haematology Department, Mater
Misericordiae University Hospital, Dublin, ⁶UCD School of Public Health, University
College Dublin (UCD), Dublin, ⁷Oncology Department, Mater Misericordiae
University Hospital, Dublin, ⁸Biology Department, National University of Ireland
Maynooth, Kildare, Ireland
- 14.26-14.32 **3D TISSUE-ENGINEERED CELL MODEL OF NEUROBLASTOMA FOR EVALUATING
CYTOTOXIC AND MIRNA-TARGETED THERAPEUTICS**
Olga Piskareva^{1,2}, C Curtin^{3,4}, J Nolan^{1,2}, R Conlon¹, C Gallagher¹, L Deneweth¹, BL
Cavanagh⁵, H Harvey¹, S Miller-Delaney¹, I Bray¹, FJ O'Brien^{3,4}, RL Stallings^{1,2}
¹Molecular & Cellular Therapeutics, College of Surgeons in Ireland, Dublin
²National Children's Research Centre, Our Lady's Children's Hospital, Dublin
³Tissue Engineering Research Group, College of Surgeons in Ireland, Dublin
⁴Advanced Materials and Bioengineering Research Centre, RCSI & TCD, Dublin
⁵Cellular and Molecular Imaging Core, College of Surgeons in Ireland, Dublin
- 14.32-14.38 **RNA SEQUENCING IDENTIFIES BRD3 AS A NOVEL THERAPEUTIC TARGET IN
INVASIVE LOBULAR CARCINOMA BREAST CANCER**
Kathryn Haley, L Walsh^{1,8}, F Tarrant², B Moran², S Das¹, D Vareslija³, C Dowling⁸, P
Schouten⁴, SF Chin⁵, R Bernards⁶, C Caldas⁷, L Young³, WM Gallagher², T Ní
Chonghaile^{*8}, DP O'Connor^{*1}
¹Molecular and Cellular Therapeutics, Royal College of Surgeons in Ireland, Dublin
²School of Biomolecular and Biomedical Science, University College Dublin, Dublin
³Surgery, Royal College of Surgeons in Ireland, Dublin
⁴Division of Molecular Pathology, The Netherlands Cancer Institute, Amsterdam
⁵Cancer Research UK Cambridge Institute, University of Cambridge, Cambridge
⁶Cancer Genomics Netherlands, The Netherlands Cancer Institute, Amsterdam
⁷Oncology, University of Cambridge, Cambridge
⁸Physiology and Medical Physics, Royal College of Surgeons in Ireland, Dublin
- 14.38-14.44 **NEW ROLE OF MYCN IN THE MITOCHONDRIA: ANTI-CANCER EFFECTS OF
DIPHENYLENEIODONIUM CHLORIDE (DPI) IN MYCN-AMPLIFIED NEUROBLASTOMA**
Simone Marcone¹, K Iljin², E Dempsey³, D Fey¹, DJ Duffy¹, F Westermann⁴, W Kolch¹,
M Halasz¹
¹Systems Biology Ireland, University College Dublin, Dublin
²VT Technical Research Centre of Finland, Oulu, Finland
³School of Biology and Environmental Science, University College Dublin, Dublin
⁴DKFZ German Cancer Research Centre, Heidelberg, Germany

- 14.44-14.50 **TIME FOR A NEW TAXOL? PROMISING ANTI-CANCEROUS PROPERTIES OF A NOVEL NATURAL COMPOUND CRASSIN IN TRIPLE-NEGATIVE BREAST CANCER CELLS**
Cathy E Richards¹, SH Vellanki¹, YE Smith¹, AM Hopkins^{1,2}
¹Department of Surgery, Royal College of Surgeons in Ireland, Dublin
²Royal College of Surgeons in Ireland, RCSI Smurfit Building, Beaumont Hospital, Dublin 9
- 14.50-14.56 **THE UNIDIRECTIONAL HYPOXIA-ACTIVATED PRODRUG OCT1002 INHIBITS GROWTH AND VASCULAR DEVELOPMENT IN CASTRATE-RESISTANT PROSTATE TUMOURS**
H Nesbitt¹, J Worthington², RJ Errington^{3,4}, LH Patterson⁵, PJ SMith⁵, SR McKeown^{1,5}, DJ McKenna¹
¹Biomedical Sciences Research Institute, University of Ulster, Coleraine, ²Axis Bioservices Ltd, Coleraine, ³School of Medicine, Cardiff University, Cardiff
⁴BioStatus Ltd, Shepshed, Leicestershire, ⁵OncoTherics Ltd, Shepshed, Leicestershire
- 14.56-15.02 **A COMPENDIUM OF CO-REGULATED PROTEIN COMPLEXES IN BREAST CANCER REVEALS COLLATERAL LOSS EVENTS**
Colm J Ryan^{1,2}, S Kennedy¹, I Bajrami³, D Matallanas¹, CJ Lord³
¹Systems Biology Ireland, University College Dublin, Dublin
²School of Computer Science, University College Dublin, Dublin
³The Breast Cancer Now Toby Robins Breast Cancer Research Centre, Institute of Cancer Research, London
- 15.02-15.08 **USING IN VITRO MODELS TO IDENTIFY NEWLY SYNTHESISED PROTEINS INVOLVED IN THE PROGRESSION OF TRIPLE NEGATIVE BREAST CANCER.**
Amira F Mahdi¹, B Malacrida¹, K McGourty², AJ Lowery³, PA Kiely¹
¹Graduate Entry Medical School and Health Research Institute, University of Limerick, Limerick, ²Department of Chemical Sciences, Bernal Institute, University of Limerick, Limerick, ³Lambe Institute for Translational Research , NUI Galway , Galway
- 15.15- 15.45 **TEA/COFFEE/POSTERS & MEET THE SPONSORS**
- 15.45-16.45 **IRISH CANCER SOCIETY SCHOLAR AND FELLOW PRESENTATIONS**
(The highest scoring abstracts from 2 x ICS funded PhD students and 2 x ICS funded Postdocs will be selected for presentation)
- 15.45-16.00 **SELECTIVE HDAC6 KINASE INHIBITION WITH ACY-1215 PROMOTED RESISTANCE TO PACLITAXEL IN EPITHELIAL OVARIAN CANCER**
K Weiner-Gorzel¹, T Byrne², A McGoldrick¹, C Beggan³, N Faheem¹, P Cunnea⁴, E Dempsey⁵, S O'Toole⁶, J O'Leary⁶, E Kay³, T Robson⁷, A McCann¹, **Fiona Furlong**²
¹UCD School of Medicine and Medical Science (SMMS), University College Dublin
²School of Pharmacy, Queens University Belfast, Belfast
³Department of Pathology, Royal College of Surgeons, Dublin
⁴Department of Cancer and Surgery, Imperial College London, London
⁵UCD School of Biomolecular and Biomedical Science (SBBS), University College Dublin, ⁶Departments of Histopathology, Obstetrics and Gynaecology, Trinity College Dublin, ⁷Molecular and Cellular Therapeutics, Royal College of Surgeons, Dublin

- 16.00-16.15 **BRINGING APOPTO-CELL, A PROGNOSTIC MARKER OF APOPTOSIS SIGNALLING, CLOSER TO CLINICAL INTEGRATION**
(Post-doc)
Manuela Salvucci¹, A Rahman², A Resler¹, G Mallya Udipi², DA McNamara³, EW Kay^{1,4}, P Laurent-Puig⁵, DB Longley⁶, M Lawler⁶, R Wilson⁶, M Salto-Tellez⁶, S Van Schaeuybroeck⁶, M Rafferty², W Gallagher², M Rehm^{1,7}, JHM Prehn¹
¹Centre for Systems Medicine, Department of Physiology & Medical Physics, Royal College of Surgeons in Ireland, Dublin, ²OncoMark Ltd, Dublin, ³Department of Surgery, Beaumont Hospital, Dublin, ⁴Department of Pathology, Beaumont Hospital, Dublin, ⁵Personalized Medicine, Pharmacogenomics, Therapeutic Optimization, Université Paris Descartes, Paris, France
⁶Centre for Cancer Research and Cell Biology, Queen's University Belfast, Belfast, ⁷Institute of Cell Biology and Immunology, University of Stuttgart, Stuttgart, Germany
- 16.15-16.30 **TEMPORAL ANALYSIS IDENTIFIES NEUTROPHIL-LYMPHOCYTE RATIO VELOCITY PRE-RADIOTHERAPY as a potential prognostic indicator in localized prostate cancer**
(PhD)
Sophia R Halliday¹, C,A Lyons¹, S Jain¹, J,M O'Sullivan¹, D Mitchel², L McCrink³, R,D Kennedy^{1,4}, J,K Blayney¹
¹Centre for Cancer Research and Cell Biology, Queen's University Belfast, Belfast
²Oncology, Belfast Health & Social Care Trust, Belfast, ³Centre for Statistical Science & Operational Research, Queen's University Belfast, Belfast, ⁴Almac Diagnostics, Almac, Belfast
- 16.30-16.45 **PROTEOSTATIC STRESS REVERTS THE LEUKAEMIA-SUPPORTING BONE MARROW MICROENVIRONMENT TO A LEUKAEMIA-REJECTING MICROENVIRONMENT**
(PhD)
SPS Dhami¹, M Reidy¹, M O'Dwyer^{1,2}, E Szegezdi¹
¹Apoptosis Research Centre, National University of Ireland, Galway
²Department of Haematology, University Hospital Galway, Galway
- 17.00-17.30 **Dr Robert O'Connor (The Irish Cancer Society)**
- 17.30-18.30 **IRISH CANCER SOCIETY LECTURE**
MOLECULAR AND FUNCTIONAL DIVERSITY OF EXOSOMES AND OTHER EXTRACELLULAR VESICLES IN TUMOR-IMMUNE SYSTEM CROSS-TALK
Professor Clotilde Théry, The Institut Curie, France
- 18.45–21.30 **FORMAL POSTER SESSION**
- 18.45 -20.30 Buffet Dinner and Wine Reception
- 19.30–20.30 TRADE EXHIBITION/ /Presentation of odd Poster Numbers
- 20.30-21.30 TRADE EXHIBITION/ **Coffee and Dessert**/Presentation of even Poster Numbers

Friday 23rd February 2018
IACR Scientific Sessions

- 09.15 -10.15: **PROFFERED PAPER SESSION (selected from Abstract Submissions)**
6 x 15 minute presentations (12 mins + 3 mins Q&A)
- 09.15-09.30 **INSULIN-LIKE GROWTH FACTOR-1 SIGNALLING PROMOTES MITOCHONDRIAL PROTECTION IN CANCER CELLS**
Sarah Riis¹, A Lyons¹, M Coleman¹, C Favre¹, CH O'Flanagan², AV Zhdanov³, DB Papkovsky³, SD Hursting², R O'Connor¹
¹School of Biochemistry and Cell Biology, University College Cork, ²Division of Nutritional Biochemistry, Lineberger Comprehensive Cancer Center, University of North Carolina, Chapel Hill, ³Biophysics and Bioanalysis Laboratory, University College Cork, Cork
- 09.30-09.45 **JUNCTIONAL ADHESION MOLECULE-A (JAM-A) AS A NOVEL FUTURE DRUG TARGET IN DUCTAL CARCINOMA IN SITU (DCIS)**
Yvonne E Smith¹, K Brennan¹, L Hudson¹, AO Leech¹, SH Vellanki¹, AM Hopkins¹
¹Department of Surgery, Royal College of Surgeons in Ireland, Beaumont Hospital, Beaumont, Dublin 9
- 09.45-10.00 **THE NOVEL DETECTION OF THE EGFR-T790M MUTATION IN EXHALED BREATH CONDENSATE**
Robert J Smyth¹, S Toomey¹, A Sartori², E Hanrahan³, S Cuffe⁴, O Breathnach⁵, R Morgan⁶, BT Hennessy¹
¹Medical Oncology, RCSI, Dublin, ² Agena Bioscience, Hamburg, ³Medical Oncology, St Vincent's University Hospital, Dublin, ⁴Medical Oncology, St James's Hospital, Dublin, ⁵Medical Oncology, Beaumont Hospital, Dublin, ⁶Respiratory Medicine, Beaumont Hospital, Dublin
- 10.00-10.15 **p53 ACTIVATION INDUCES A TARGETABLE DEPENDENCE ON FLIP_L**
A McIntyre¹, A Lees¹, F Falcone¹, C Holohan¹, T Sessler¹, G Gregg¹, G Quinn¹, J Crawford¹, N Crawford¹, J Fox¹, J Majkut¹, C Higgins¹, L Egan², A Ryan², D McArt¹, PD Dunne¹, M Lawler¹, PG Johnston¹, DB Longley¹, **Simon S McDade**¹
¹CCRCB, Queen's University, Belfast, ², NUIG, Galway
- 10.15-10.30 **THE TWO SIDES OF METFORMIN – A SUPPRESSOR OF TUMOUR CELL PROLIFERATION AND CANCER IMMUNOSURVEILLANCE**
Lydia Dyck¹, X Michelet^{2,3}, A Douglas¹, RM Loftus¹, H Prendeville¹, KHG Mills¹, L Lynch^{1,2,3}
¹School of Biochemistry and Immunology, Trinity College Dublin, Dublin
², Brigham and Women's Hospital, Boston
³, Harvard Medical School, Boston
- 10.30-10.45 **MODULATION OF DRUG RESISTANCE IN HIGH-RISK NEUROBLASTOMA THROUGH EXOSOMAL MiRNA.**
John Christopher Nolan^{1,2}, R Conlon¹, T Frawley¹, RL Stallings^{1,2}, O Piskareva^{1,2}
¹Cancer Genetics Group, RCSI, Dublin
²National Children's Research Centre, OLCHC, Dublin
- 10.45-11.00 **TEA/COFFEE/POSTERS/MEET THE SPONSORS**

PLENARY SESSION 3: CELLULAR STRESS AND CANCER

- 11.00-11.30 **TARGETING THE IRE1 SIGNALLING AXIS IN BREAST CANCER**
Dr Susan Logue, Apoptosis Research Centre, NUI, Galway
- 11.30-12.00 **COMPLEXITY OF IRE1 SIGNALING IN TUMOR DEVELOPMENT AND THERAPEUTIC OPPORTUNITIES**
Dr Eric Chevet, INSERM U1242, "Oncogenesis, Stress, Signaling", Université de Rennes, Rennes, France. Centre de Lutte Contre le Cancer Eugène Marquis, Rennes, France
- 12.00-12.30 **DIRECTING CANCER THERAPY WITH MITOCHONDRIAL BH3 PROFILING**
Professor Tony Letai, Harvard Medical School, USA
- 12.30-12.50 **IACR AGM – All Welcome**
- 12.30-13.45 **LUNCH**

PLENARY SESSION 4: EMERGING TECHNIQUES IN BIOMARKER DISCOVERY, DRUG DEVELOPMENT AND PATIENT STRATIFICATION

- 13.45-14.15 **THE POWER OF 1: WHAT CAN WE LEARN FROM MOLECULAR CASE STUDIES?**
Dr Darran O'Connor, Clinical Pharmacology, RCSI, Dublin
- 14.15-14.45 **PRECISION ONCOLOGY APPROACHES IN BREAST CANCER – CLINICAL EXPERIENCE AND ANIMAL MODELS**
Professor Paraic Kenny, Kabara Cancer Research Institute, Wisconsin, USA
- 14.45-15.15 **PROGNOSTIC AND PREDICTIVE RADIOMICS AND PATHOMICS: IMPLICATIONS FOR PRECISION MEDICINE**
Dr Anant Madabhushi, Case Western Reserve University, Ohio, USA
- 15.15-15.30 **GOLD SPONSOR PRESENTATION**
"How to manufacture your own T-cell immunotherapies"
Lee Markwick Ph. D., Miltenyi Biotec Ltd
- 15.30-15.45 **TEA/COFFEE/POSTERS/MEET THE SPONSORS**
- 15.45-16.45 **EACR Young Scientist Awards**
(2 x 25 mins + 5 mins Q&A)
- 15.45-16.15 **MUTANT P53 AS A THERAPEUTIC TARGET FOR THE TREATMENT OF TRIPLE-NEGATIVE BREAST CANCER: PRECLINICAL INVESTIGATION WITH THE ANTI-P53 DRUG, PK11007**
Naoise C Synnott¹, MR Bauer², SF Madden³, A Murray¹, R Klinger⁴, D O'Connor⁵, WM Gallagher⁴, J Crown⁶, AR Fersht², MJ Duffy^{1,7}
¹School of Medicine, University College Dublin, Dublin
²Laboratory of Molecular Biology, Medical Research Council, Cambridge
³Population Health Sciences, Royal College of Surgeons Ireland, Dublin
⁴UCD School of Biomolecular and Biomedical Science, University College Dublin, Dublin, ⁵Department of Molecular & Cellular Therapeutics, Royal College of Surgeons Ireland, Dublin, ⁶Department of Medical Oncology, St Vincent's University Hospital, Dublin, ⁷Clinical Research Centre, St Vincent's University Hospital, Dublin

- 16.15-16.45 **XRCC6BP1: A KEY DNA REPAIR GENE IN CISPLATIN RESISTANT NON-SMALL CELL LUNG CANCER?**
Martin P Barr¹, S Singh¹, R Farrell¹, E Foley¹, Y He¹, L Brady², V Young³, R Ryan³, S Nicholson², N Leonard², S Cuffe^{1,4}, S Finn^{1,2}
¹Thoracic Oncology Research Group, St James's Hospital & Trinity College Dublin, Dublin 8
²Histopathology Department, St James's Hospital & Trinity College Dublin, Dublin 8
³Cardiothoracic Surgery, St James's Hospital, Dublin 8
⁴Medical Oncology Department, St James's Hospital, Dublin 8
- 17.00-18.00: **SPECIAL IACR CANCER RESEARCHER MEDAL PRESENTATION**
Chair: Professor Amanda McCann
2018 - Remembering Professor Patrick G Johnston
- 18.00 **CLOSE OF MEETING**
- 19.00 **GALA DINNER and Awards Presentations**
Venue: Crowne Plaza Hotel

Distributed by:

Lab Unlimited
CARL STUART GROUP

Tallaght Business Park
Whitestown, Dublin 24,
Ireland
D24 RFK3

Tel: (01) 4523432
Fax: (01) 4523967
E-mail: info@labunlimited.com
Web: www.labunlimited.com

Quatro House, Frimley Road,
Camberley,
United Kingdom
GU16 7ER

Tel: 08452 30 40 30
Fax: 08452 30 50 30
E-mail: info@labunlimited.co.uk
Web: www.labunlimited.co.uk