#### Lightning talk abstracts

#### Precision and mechanistic oncology

### Exploration of predictive biomarkers for BCL3 inhibitor treatment response in advanced prostate cancer

<u>Marcos Quintela-Vazquez<sup>1</sup></u>, Tabitha Cunliffe<sup>1</sup>, Daniel J Turnham<sup>1,2</sup>, Anna E Richards<sup>1</sup>, Wytske van Weerden<sup>3</sup>, Robert Jones<sup>4</sup>, Andrew D Westwell<sup>5</sup>, Richard Clarkson<sup>1</sup>, Helen B Pearson<sup>1</sup>

- 1. European Cancer Stem Cell Research Institute, School of Biosciences, Cardiff University
- 2. School of Applied Sciences, University of the West England (UWE) Bristol
- 3. Experimental Oncology, Erasmus University Rotterdam
- 4. School of Medicine, Cardiff University. 5. School of Pharmacy, Cardiff University

#### Immuno-oncology

### An adenovirus-based 5T4-expressing cancer vaccine induces inflationary CD8+ T cell responses that afford protection from colorectal cancer

Dr Marta Williams<sup>1</sup>, Dr Sandra Dimonte<sup>1</sup>, Morgan Marsden<sup>1</sup>, Lucy Chapman<sup>1</sup>, Dr Evelina Statkute<sup>2</sup>, Prof Andrew Godkin<sup>1</sup>, Prof Richard J Stanton<sup>1</sup>, Prof Awen Gallimore<sup>1</sup>, Prof Ian R Humphreys<sup>1</sup>

1. Cardiff University

2. Oxford Biomedica

#### **Radiotherapy**

### Development of a Normal Tissue Complication Probability Model for Dysphagia in PATHOS trial patients

Emma Higgins<sup>1</sup>, Richard Webster<sup>1</sup>, Nachi Palaniappan<sup>1</sup>, Chris Hurt<sup>2</sup>, Zohal Nabi<sup>3</sup>, Kostas Rizos<sup>3</sup>, Riki Lad<sup>3</sup>, Kate Elliott<sup>3</sup>, Elizabeth Miles<sup>3</sup>, Joanne Patterson<sup>4</sup>, Kate Hutcheson<sup>5</sup>, Joanne Canham<sup>2</sup>, Lizette Nixon<sup>2</sup>, Christie Heiberg<sup>2</sup>, Matt Beasley<sup>6</sup>, Jones T<sup>7</sup>, Evans M<sup>1,8</sup>

- 1. Velindre Cancer Centre, Directorate of Medicine, Cardiff, United Kingdom
- 2. Centre for Trials Research, Cardiff University, Cardiff, UK
- 3. National Radiotherapy Trials Quality Assurance Group, Mount Vernon Cancer Centre, UK
- 4. School of Health Sciences, University of Liverpool, Liverpool, United Kingdom
- 5. Division of Radiation Oncology, University of Texas MD Anderson Cancer Center, Houston, USA
- 6. University Hospitals Bristol NHS Foundation Trust, Bristol Haematology and Oncology Centre, Bristol, UK
- 7. Department of Molecular and Clinical Cancer Medicine, University of Liverpool, Liverpool, United Kingdom
- 8. Division of Cancer and Genetics, School of Medicine, Cardiff University, Cardiff, United Kingdom

#### **Cancer clinical trials**

#### Dendrimer-Nanoparticle (DEP) Delivery of Cabazitaxel (DEP-Cabazitaxel): a first-in-human Phase 1/2 Trial in Patients With Advanced Solid Tumors

Karam Aboud, MBChB<sup>1</sup>, David J. Pinato, MD, PhD<sup>2,3</sup>, Martin D. Forster, MBBS, PhD<sup>4</sup>, Anthony M. Joshua, MBBS, PhD<sup>5</sup>, James Korolewicz, MBBS<sup>2,6</sup>, Cienne Morton, MBBS<sup>8</sup>, Jia Liu, MD PhD<sup>5</sup>, Rasha Cosman, MBBS<sup>5</sup>, Nicola J. Main, BPharm<sup>7</sup>, Julia Le Meur, MSc<sup>7</sup>, Jeremy R.A. Paull, PhD<sup>7</sup>, Stephanie R. Edmondson, PhD<sup>7</sup>, James Spicer, FRCP, PhD<sup>8</sup>, Robert H. Jones, MBBS, PhD<sup>1</sup>

- 1. Velindre Cancer Centre and Cardiff University, Cardiff, UK
- 2. Department of Surgery & Cancer, Imperial College London, London, UK
- 3. Department of Translational Medicine, Division of Oncology, University of Piemonte, Novara, Italy
- 4. University College London (UCL) Cancer Institute, UCL Hospital NHS Trust, London, UK
- 5. The Kinghorn Cancer Centre, St Vincent's Hospital, Sydney, NSW, Australia
- 6. University Hospitals Bristol and Weston NHS Foundation Trust, Bristol, UK
- 7. Starpharma Pty Ltd, Abbotsford, VIC, Australia
- 8. King's College London, Guy's Hospital, London, UK

#### Palliative and supportive oncology

Fracture Related Hospital Admissions in Patients with Metastatic Castrate Resistant Prostate Cancer (mCRPC) Treated with Radium - 223 Dichloride

Ope Gbadegesin<sup>1</sup>, Jake Tanguay<sup>2</sup>

- 1. FY2 Doctor, Cardiff and Vale University Health Board
- 2. Consultant Clinical Oncologist, Velindre Cancer Centre

#### Population health-based cancer prevention and early diagnosis

### Changes in the urinary proteome could differentiate between prostate cancer and benign prostatic hyperplasia

<u>Tracy C. Knight<sup>1</sup></u>, Nur Aimi Aliah Zainurin<sup>1</sup>, Russell Morphew<sup>1</sup>, Edward Hughes<sup>1</sup>, David Rooke<sup>2</sup>, Stephen F. Hughes<sup>3</sup>, Iqbal Shergill<sup>4</sup>, NS Luis A. J. Mur<sup>1</sup>

- 1. Department of Life Sciences, Aberystwyth University
- 2. ProTEM Services Ltd
- 3. Maelor Academic Unit of Medical and Surgical Sciences, Gwenfro Buildings, Wrexham
- 4. The Alan de Bolla Wrexham Urology Unit at Wrexham Maelor Hospital, Wrexham

#### **Poster abstracts**

#### Precision and mechanistic oncology

### Unveiling the heterogeneity of pancreatic cancer initiation: a novel perspective on normal-mutant cell-cell Interactions

Ella Reed<sup>1</sup>, Catherine Hogan<sup>1</sup>, Beatriz Salvador-Barbero<sup>1</sup>

1. ECSCRI, School of Biosciences, Cardiff University, Cardiff, UK

#### Understanding the functional importance of the Wnt receptor FZD7 in prostate tumourigenesis

Jessica Hembrough<sup>1</sup>, Kieran Hodson<sup>1</sup>, Toby Phesse<sup>1</sup>, Helen Pearson<sup>1</sup>

1. European Cancer Stem Cell Research Institute, Cardiff University

### Developing Small Molecule Inhibitors of GATA2: a novel approach to target leukaemia blasts and stem cells in therapy-resistant acute myeloid leukaemia

Rebekah Clarke<sup>1,3</sup>, Neil Rodrigues<sup>2</sup>, Gui Feng<sup>2</sup>, Marcella Bassetto<sup>3</sup>, Salvatore Ferla<sup>1</sup>

- 1. Medical School, Pharmacy, Grove Building, Swansea University, SA2 8PP
- 2. European Cancer Stem Cell Research Institute, Cardiff University, School of Biosciences, Maindy Rd, Hadyn Ellis Building, Cardiff CF24 4HQ
- 3. School of Pharmacy and Pharmaceutical Sciences, Cardiff University, Redwood Building, King Edward VII Avenue, Cardiff, CF10 3NB

#### Targeting The WNT Ligand Receptor Complex in Cholangiocarcinoma and Prostate Cancer: Therapeutic Potential of FZD7-ADC and WNT974 in Metastatic Disease

Kieran Hodson<sup>1</sup>, Hector Arredondo<sup>2</sup>, Valerie Meniel<sup>1</sup>, Aled Clayton<sup>3</sup>, Toby J Phesse<sup>1</sup>

- 1. Cardiff University School of Bioscience, European Cancer Stem Cell Research Institute
- 2. The University Of Sheffield, The Mellanby Centre for Musculoskeletal
- 3. Cardiff University, School of Medicine

#### **OmicsChart: Multi-Omics Cancer Biomarker Discovery for Translational Researchers**

Asta Vasalauskaite<sup>1</sup>, Tatsiana Aneichyk<sup>1</sup>

1. OmicsChart Tech Ltd

#### Developing and evaluating a virtual laboratory to support medical student oncology education

<u>Karen R Reed<sup>1</sup></u>, Owen J Crawford<sup>2</sup>, Hannah D West<sup>1</sup>, Joseph Lewis<sup>3</sup>, Michael Hackman<sup>2</sup>, Andreia de Almeida<sup>1</sup>, Andrew Hilbourne<sup>2</sup>, Emma Short<sup>4</sup>, Sarju Patel<sup>1</sup>, Keith Hart<sup>1</sup>, Athanasios Hassoulas<sup>1</sup>

- 1. Centre for Medical Education, School of Medicine, Cardiff University, Cardiff, CF14 4YU, UK
- 2. Cardiff Learning & Teaching Academy, Cardiff University, Cardiff CF10 3AT, UK
- 3. Department of Cellular Pathology, University Hospital of Wales, Cardiff, CF14 4WX, UK
- 4. Swansea Bay University Health Board, Morriston Hospital, Swansea, SA6 6NL

#### **Cancer Chemotherapy Curability is Determined by On Going Developmental Epigenetic Processes** Philip Savage<sup>1</sup>

I. Dept of Medical Onc<u>ology, Cardiff University</u>

### Discovery of first-in-class BCI3-p50 protein-protein interaction inhibitor for the treatment of advanced-stage breast cancer

Dusan Ruzic<sup>1</sup>, Carwyn Hughes<sup>2</sup>, Arwyn Jones<sup>1</sup>, Richard Clarkson<sup>2</sup>, Andrea Brancale<sup>3</sup>, Andrew Westwell<sup>1</sup>

- 1. Cardiff University, School of Pharmacy and Pharmaceutical Sciences, Cardiff, Wales, U.K.
- 2. Cardiff University, European Cancer Stem Cell Research Institute, Cardiff, Wales, U.K.
- 3. University of Chemistry and Technology, Prague, Czech Republic

### Heparin-derived nanocarriers as a precision medicine drug for therapeutic reprogramming of glioblastoma phenotypic states

<u>Vadim Le Joncour<sup>1</sup></u>, Austin D. Evans<sup>2</sup>, Oommen P. Oommen<sup>3</sup>

- Translational Cancer Medicine Research Program, Faculty of Medicine, University of Helsinki, Helsinki, Finland.
- 2. Bioengineering and Nanomedicine Lab, Faculty of Medicine and Health Technology, Tampere University, Korkeakoulunkatu 3, 33720 Tampere, Finland.
- 3. School of Pharmacy and Pharmaceutical Sciences, Cardiff University, King Edward VII Avenue, Cardiff CF10 3NB, United Kingdom.

### New Wine in Old Bottles - The Therapeutic Promise of the PARP Inhibitor Rucaparib as an N-WASP Inhibitor for Breast Cancer Metastasis

Rhiannon Yanan Yu<sup>1</sup>, Q Ping Dou<sup>2</sup>, Elyas Khan<sup>2</sup>, Wen G. Jiang<sup>1</sup>, Tracey A. Martin<sup>1</sup>

- 1. Cardiff University School of Medicine, Cardiff, UK
- 2. Karmanos Cancer Institute, Wayne State University, Detroit, USA

### Utilizing biological experimental data and molecular dynamics for the classification of mutational hotspots through machine learning

James G. Davies<sup>1</sup>, Georgina E. Menzies<sup>1</sup>

1. School of Biosciences, Cardiff University

#### Glioblastoma-astrocyte interactions drive tumour progression

<u>Ayesha Begum<sup>1</sup></u>, Suresh Kaushik<sup>1</sup>, Mathew Clement<sup>2</sup>, Florian A Siebzehnrubl<sup>1</sup>

- 1. European Cancer Stem Cell Research Institute, Cardiff University School of Biosciences
- 2. Division of Infection and Immunity, Cardiff University School of Medicine

#### Pharmacological Inhibition of cFLIP Targets Breast Cancer Stem Cells

- Rhiannon French<sup>1</sup>, Olivia Hayward<sup>2</sup>, Andreia Ribeiro da Silva<sup>2</sup>, Timothy Robinson<sup>3</sup>, Richard Clarkson<sup>2</sup>
- 1. University of Oxford, Sir William Dunn School of Pathology
- 2. European Cancer Stem Cell Research Institute, Cardiff University School of Biosciences
- 3. Bristol Medical School (PHS), University of Bristol

#### Investigating BCL3 as a therapeutic target to treat prostate cancer

Tabitha Cunliffe<sup>1</sup>, Marcos Quintela-Vazquez<sup>1</sup>, Daniel J. Turnham<sup>1</sup>, Boris Shorning<sup>1</sup>, Luke Piggott<sup>2</sup>, Robert Jones<sup>3</sup>, Andrea Brancale<sup>4</sup>, Andrew Westwell<sup>5</sup>, Richard W.E. Clarkson<sup>1</sup>, Helen B. Pearson<sup>1</sup>

- 1. ECSCRI, School of Biosciences, Cardiff University.
- 2. TNA Therapeutics, USA.
- 3. ECMC Cardiff, University Hospital Wales, Cardiff University.
- 4. University of Chemistry and Technology, Prague.
- 5. School of Pharmacy, Cardiff University.

#### Pharmacological targeting of Bcl3 improves outcomes in models of colorectal cancer

Hannah Smith<sup>1</sup>, Huw Morgan<sup>1</sup>, Adam Higgins<sup>1</sup>, Cleo Bonnet<sup>1</sup>, Katie Stott<sup>1</sup>, Gillian Seaton<sup>1</sup>, Richard Clarkson<sup>1</sup>

1. European Cancer Stem Cell Research Institute Cardiff University School of Biosciences Maindy Road Cardiff

#### From healthy pancreas to tumours: identifying the cancer initiating cells

<u>Beatriz Salvador<sup>1</sup></u>, Daniel Ruiz-Palacios<sup>2</sup>, Justo P Castano<sup>2</sup>, Jen Morton<sup>3</sup>, Owen Sansom<sup>3</sup>, Catherine Hogan<sup>1</sup> 1. ECSCRI, Cardiff University 2. IMIBIC, Cordoba University

3. CRUK Scotland Institute, Scotland

### Concentrative Nucleoside Transporter 1 (hCNT1)/SLC28A1 and Equilibrative Nucleoside Transporter 1 (hENT1)/SLC29A1 in human colon cancer, the clinical and therapeutic considerations

Matthew McKenna<sup>1</sup>, Amber Li<sup>1</sup>, Lin Ye<sup>1</sup>, Tracey Martin<sup>1</sup>, Wengou Jiang<sup>1</sup>, Rachel Hargest<sup>1</sup>

1. Cardiff University

### Development and Validation of a Novel Multi-Functional Iron Oxide Nanoparticle for the Targeted Induction of Ferroptosis in Cancer

Darius McPhail<sup>1</sup>, James Cronin<sup>2</sup>, Rebecca Wurelly<sup>2</sup>, Rhiannon Beadman<sup>2</sup>, Joel Crane<sup>3</sup>, Mark Davies<sup>1</sup>, Debabrata Tripathy<sup>4</sup>, Richard Yuxiong Su<sup>4</sup>, Andrew Tee<sup>1</sup>, Juan Mareque-Rivas<sup>3</sup>

- 1. School of Medicine, Cardiff University
- 2. Swansea University Medical School, Swansea University
- 3. Department of Chemistry, Swansea University
- 4. Division of Oral and Maxillofacial Surgery, University of Hong Kong

#### Impact of Brain-Derived Neurotrophic Factor (BDNF) on Tight Junction (TJ) Proteins and Cell Adhesion and Migration in Breast Cancer: Implications for Brain Metastasis

Milad Eshmela<sup>1</sup>, Wen G. Jiang<sup>1</sup>, Lin Ye<sup>1</sup>, Tracey A. Martin<sup>1</sup> 1. CCMRC, Cardiff University School of Medicine, Cardiff, Wales, UK

### Artemisinin Modulates Tight Junction Integrity in Breast Cancer Brain Metastasis Through the Wnt/ $\beta$ -Catenin Pathway

Wenxiao Ji<sup>1</sup>, Wen G. Jiang<sup>1</sup>, Tracey A. Martin<sup>1</sup> 1. Cardiff China Medical Research Collaborative

### A Molecular Dynamics Study of Differential Base Excision Repair in Cancer Associated DNA loci by OGG1 Machinery.

Lily James-Knight<sup>1</sup>, James Davies<sup>1</sup>, Georgina Menzies<sup>1</sup> 1. School of Biosciences, Cardiff University, Wales

### Long-read transcriptomics of alternatively spliced RNA isoforms in pancreatic ductal adenocarcinomas.

Garan Jones<sup>1</sup>, Harsh Bhatt<sup>1</sup>, Duncan Baird<sup>1</sup>

1. Division of Cancer and Genetics, Cardiff University

### Exploring the mechanism and predictability of KRASG12D cell elimination mechanisms in the adult pancreas.

<u>Non Williams<sup>1</sup></u>, Beatriz Salvador-Barbero<sup>1</sup>, Maria Secrier<sup>2</sup>, Catherine Hogan<sup>1</sup>

- 1. European Cancer Stem Cell Research Institute, Cardiff University
- 2. UCL Genetics Institute, University College London

#### Investigating the predictive value of cancer-associated fibroblasts (CAFs) in prostate cancer

<u>Anna Richards</u><sup>1</sup>, Tegen Hooper<sup>1</sup>, Jasmine Owen<sup>1</sup>, Leah Officer-Jones<sup>2</sup>, Silvia Cusumano<sup>2</sup>, Michelle Somerville<sup>3</sup>, Lisa Spary<sup>4</sup>, Awen Gallimore<sup>3</sup>, John Le Quesne<sup>2</sup>, Helen Pearson<sup>1</sup>

- 1. The European Cancer Stem Cell Research Institute, School of Biosciences, Cardiff University
- 2. Cancer Research UK Scotland Institute (CRUK SI), Glasgow
- 3. School of Medicine, Cardiff University
- 4. Wales Cancer Bank, University Hospital Wales

### A systematic approach to identify charged repurposed therapeutics for affinity-based local drug delivery systems for glioblastoma treatment.

<u>Sabarni Sarker<sup>1,2</sup></u>, Christodoulos Theodoulou<sup>1</sup>, Benjamin Newland<sup>1</sup>

- 1. School of Pharmacy and Pharmaceutical Sciences, Cardiff University
- 2. Department of Pharmacy, Jagannath University, Dhaka

### Noninvasive Microstructure Reconstruction for Prostate Cancer Using Diffusion MRI: Phantom Validation and Clinical Potential

Yang Yang<sup>1,2</sup>, Adam Threlfall<sup>1,3</sup>, Leandro Beltrachini<sup>1,2</sup>

- 1. Cardiff University Brain Research Imaging Centre (CUBRIC), Cardiff University
- 2. School of Physics and Astronomy, Cardiff University
- 3. School of Computer Science and Informatics, Cardiff University

### Identification of CENPB as a Novel Candidate Therapeutic Targets in Acute Myeloid Leukaemia using Proteomic Analysis of Patient Material

Halawi, MA<sup>1,2</sup>, Smith, D<sup>3</sup>, Alanazi, MO<sup>1,4</sup>, Rizzo, S<sup>1</sup>, Hughes, OM<sup>1</sup>, Alruwaili, AM<sup>1,6</sup>, Knapper, S<sup>1</sup>, Tonks, A<sup>1</sup>, Darley, RL<sup>1</sup>

- 1. Department of Haematology, Division of Cancer and Genetics, School of Medicine, Cardiff University, Cardiff, UK
- 2. College of Pharmacy, Jazan University, Jazan, Saudi Arabia
- 3. Cancer Research UK Manchester Institute, University of Manchester, Manchester, UK
- 4. College of Applied Medical Science, Shaqra University, Riyadh, Saudi Arabia
- 5. Department of Haematology, Division of Cancer and Genetics, School of Medicine, Cardiff University, Cardiff, UK
- 6. Medical Laboratory Technology Department, College of Applied Medical Sciences, Northern Border University, Arar, Saudi Arabia

#### TRPML1, a novel drug target for broad use in Triple Negative Breast Cancer treatment

Bethany Tattersdill<sup>1</sup>

1. Cardiff University

### Adaptive therapy treatment: Utilising the evolutionary dynamics between different tumour cell populations for Cancer treatment

Liam Ryall-Friend<sup>1</sup>, Noemi Picco<sup>1</sup>, Mark Davies<sup>2</sup>

- 1. Faculty of Science and Engineering, Swansea University
- 2. Cardiff University

#### **Incorporating Toxicity Feedback to into Adaptive Cancer Therapy**

Mark Davies<sup>1</sup>, Joel Brown<sup>2</sup>, Jana Gevertz<sup>3</sup>, Harsh Jain<sup>4</sup>, Irina Kareva<sup>5</sup>, Eduardo Sontag<sup>5</sup>, Kathleen Wilkie<sup>6</sup>

- 1. Department of Cancer and Genetics, Cardiff University
- 2. Department of Integrated Mathematical Oncology, Moffitt Cancer Center
- 3. Department of Mathematics and Statistics, The College of New Jersey
- 4. Department of Mathematics and Statistics, University of Minnesota Duluth
- 5. Department of Mathematics, Northeastern University
- 6. Department of Mathematics, Toronto Metropolitan University

### Assessing an $\alpha v \beta 6$ integrin selective virus-directed enzyme prodrug therapy (VDEPT) in pre-clinical models of Gastric and Head and Neck cancers

Jaya L Vangara<sup>1,3</sup>, Luned M Badder<sup>1</sup>, Sandeep Berry<sup>4</sup>, Toby J Phesse<sup>2</sup>, Mererid Evans<sup>1,3</sup>, Alan L Parker<sup>1</sup>

- 1. School of Medicine, Cardiff University
- 2. European Cancer Stem Cell Research Institute, Cardiff University
- 3. Velindre Cancer Centre
- 4. Department of ENT, University Hospital of Wales

### Evaluation of PDK1 as a Therapeutic Target in Acute Myeloid Leukaemia: Mitigating ROS-Induced PI3K-AKT Activation

Alruwaili AM<sup>1,2</sup>, Rizzo S<sup>1</sup>, Shahid Ullah<sup>1</sup>, Hughes O<sup>1</sup>, Flores J<sup>1</sup>, Gough F<sup>1</sup>, Alanazi MO<sup>1,3</sup>, Halawi M<sup>1,4</sup>, Niamh O'Neill<sup>1</sup>, Knapper S<sup>1</sup>, Darley RL<sup>1</sup>, Tonks A<sup>1</sup>

- 1. Department of Haematology, Division of Cancer & Genetics School of Medicine, Cardiff University, Cardiff, CF14 4XN, Wales, UK.
- 2. Medical Laboratory Technology Department, College of Applied Medical Science, Northern Border University, Arar 91431, Saudi Arabia.
- 3. College of Applied Medical Science, Shaqra University, Shaqra 15572, Saudia Arabia.
- 4. College of Pharmacy, Jazan University, Jazan 82913, Saudi Arabia.

### Examining the clinical impact of telomere length and dysfunction in squamous cell carcinoma of the head and neck (HNSCC)

Ashley Poon-King<sup>1,2</sup>, Kevin Norris<sup>1,3</sup>, Paola Foulkes<sup>4</sup>, Sandeep Berry<sup>5</sup>, Mererid Evans<sup>1,2</sup>, Duncan Baird<sup>1,3</sup>

- 1. Department of Cancer and Genetics, School of Medicine, Cardiff University
- 2. Velindre NHS Trust
- 3. Telonostix Ltd Biotechnology Services
- 4. Wales Cancer Biobank, Cardiff University
- 5. Cardiff and Vale University Health Board

### The Wales Cancer Biobank Digital (WCB Digital) project: An All-Wales approach to integrated sample and genomic data access for the cancer research community.

Liz Merrifield<sup>1</sup>, Dr. Peter Giles<sup>1</sup>, Prof. Richard Clarkson<sup>2</sup>, Prof. Richard Adams<sup>2</sup>, Dr. Lisa Spary<sup>2</sup>, Abigail Macarthur<sup>2</sup>, Sian Morgan<sup>3</sup>, Dr. Erik Waskiewicz<sup>3</sup>, Dr. Sophie Shaw<sup>3</sup>

- 1. BioResource Data Accelerator, Wales Gene Park, Cardiff University
- 2. Wales Cancer Biobank, Cardiff University
- 3. All Wales Medical Genomics Service

#### Gleason Grading of Prostate Cancer Tissue using novel DRAQ5&Eosin Fluorescent Labels and AI classification algorithms.

<u>Michail Georgios Papachristos</u><sup>1</sup>, David Hywel Thomas<sup>2</sup>, Finni Akinade<sup>3</sup>, Anna Wilson<sup>4</sup>, Emiliano Spezi<sup>5</sup>, Rachel Errington<sup>6</sup>, Dimitris Parthimos<sup>1</sup>

- 1. School of Medicine, Division of Cancer and Genetics, Cardiff University
- 2. Consultant Histopathologist, University Hospital of Wales
- 3. School of Medicine, Cardiff University
- 4. University of Alabama at Birmingham
- 5. School of Engineering, Cardiff University
- 6. Head of School of Medicine, Cardiff University

### Identifying signal transducer and activator of transcription 3 as a therapeutic target to block extracellular matrix deposition and tumour growth in Tuberous Sclerosis Complex

Samia S. Alzahrani<sup>1</sup>, Jesse D. Champion<sup>1</sup>, Darius McPhail<sup>1</sup>, Mohammad A. M. Alzahrani<sup>1</sup>, Brian L. Calver<sup>1</sup>, Elaine Dunlop<sup>1</sup>, Mark Davies<sup>1</sup>, Andrew R. Tee<sup>1</sup>

1. Division of Cancer and Genetics, Cardiff University, Heath Park, Cardiff, CF14 4XN, UK

### Towards Non-invasive Cancer Detection and Grading Through the Characterisation of Tissue Microstructure via Diffusion MRI

Adam Threlfall<sup>1,2</sup>, Yang Yang<sup>1,3</sup>, Emiliano Spezi<sup>4</sup>, Derek Jones<sup>1,5</sup>, Marco Palombo<sup>1,2</sup>, Leandro Beltrachini<sup>1,3</sup>

- 1. CUBRIC, Cardiff University
- 2. School of Computer Science and Informatics, Cardiff University
- 3. School of Physics and Astronomy, Cardiff University
- 4. School of Engineering, Cardiff University
- 5. School of Psychology, Cardiff University

#### Long Read Sequencing Technologies and Lung Cancer Liquid Biopsies

Karam Aboud<sup>1,2</sup>, Joanne Morgan<sup>3</sup>, Nigel Williams<sup>3</sup>, Magdalena Meissner<sup>1,2,4</sup>, Rachel Dodds<sup>1</sup>, Sian Morgan<sup>1</sup>, Sophie Shaw<sup>1</sup>

- 1. All Wales Medical Genomics Service, Cardiff and Vale University Health Board
- 2. School of Medicine, Cardiff University
- 3. Division of Psychological Medicine and Clinical Neurosciences, School of Medicine, Cardiff University
- 4. Velindre University NHS Trust

#### Exploring a role for SLC39A zinc transporters in the dissemination of breast cancer cells

Georgia Farr<sup>1</sup>, Samuel Jones<sup>1</sup>, Kathryn M Taylor<sup>1</sup>

1. School of Pharmacy and Pharmaceutical Sciences, Cardiff University

### Investigating the role of PREX2 in Prostate Cancer as a new avenue to sensitise to MAPK/PI3K/AKT targeted therapies

Samuel C. Hawkins<sup>1</sup>, Boris S. Shorning<sup>1</sup>, Wytske Van Weerden<sup>2</sup>, Richard W.E. Clarkson<sup>1</sup>, Andrew D. Campbell<sup>3</sup>, Helen B. Pearson<sup>1</sup>

- 1. The European Cancer Stem Cell Research Institute, Cardiff University, Cardiff, UK
- 2. ERASMUS Medical University, Rotterdam
- 3. Cancer Research UK Scotland Institute, Glasgow, UK

### The BioResource Data Accelerator: An all-Wales approach to sample and genomic data access serving both the rare disease and cancer research communities

<u>Liz Merrifield<sup>1</sup></u>, Dr. Peter Giles<sup>1</sup>, Dr Andrew Fry<sup>1</sup>, Rhys Vaughan<sup>1</sup>, Prof. Richard Clarkson<sup>2</sup>, Prof. Richard Adams<sup>2</sup>, Dr. Lisa Spary<sup>2</sup>, Abigail Macarthur<sup>2</sup>, Sian Morgan<sup>3</sup>, Dr. Joseph Halstead<sup>3</sup>, Dr Sophie Shaw<sup>3</sup>, Dr Erik Wasckiewicz<sup>3</sup>, Joanna Zabkiewicz<sup>4</sup>

- 1. Wales Gene Park, Cardiff University
- 2. Wales Cancer Biobank, Cardiff University
- 3. All Wales Medical Genomics Service
- 4. Cardiff ECMC, Department of Cancer and Genetics Cardiff University

#### Telomere dysfunction and fusion in gliomas: defining prognosis and genome instability

Harsh Bhatt<sup>1,2</sup>, Kevin Norris<sup>1</sup>, Kez Cleal<sup>1</sup>, Megan Hodgson<sup>3</sup>, Christopher Herbert<sup>4</sup>, Kathreena M. Kurian<sup>5</sup>, William P. Gray<sup>2,6</sup>, Duncan M. Baird<sup>1</sup>

- 1. Division of Cancer and Genetics, School of Medicine, Cardiff University, Cardiff, UK
- 2. Department of Neurosurgery, University Hospital of Wales, Cardiff, UK
- 3. School of Medicine, Cardiff University, Cardiff, UK
- 4. Bristol Haematology and Oncology Centre, University Hospitals Bristol National Health Service (NHS) Foundation Trust, Bristol, UK
- 5. Brain Tumour Research Centre, Bristol Medical School, Bristol, UK
- 6. Brain Repair and Intracranial Neurotherapeutics (BRAIN) Unit, School of Medicine, Cardiff University, Cardiff, UK

#### Exploring primary lung cancer resistance using tissue and circulating ctDNA biomarkers

Karam Aboud<sup>1,2</sup>, Erik Waskiewicz<sup>2</sup>, Sophie Shaw<sup>2</sup>, Sian Morgan<sup>2</sup>, Rachel Dodds<sup>2</sup>, Rhian White<sup>2</sup>, Kirsty Hambridge<sup>2</sup>, India Tresadern<sup>2</sup>, Rob Jones<sup>3</sup>, Paul Shaw<sup>4</sup>, Richard Adams<sup>5</sup>, Magda Meissner<sup>1</sup>

- 1. Cardiff University (DCG)
- 2. All Wales Medical Genomics Lab (AWMGL)
- 3. Cardiff University (DCG)
- 4. Velindre Cancer Centre
- 5. Centre for Trials Research, Cardiff

#### Validation of ASAH1 as a novel target for Glioblastoma

Loren Waters<sup>1</sup>, Saul Michue-Seijas<sup>1</sup>

1. Medicines Discovery Institute, Cardiff University

#### Short and long-distance communication in cancer: Feedback regulation of Ras signalling in tumourigenesis and cachexia

Shijun Fang<sup>1</sup>, Silvia Ziliotto<sup>1</sup>, Hoi Ping Weeks<sup>1</sup>, Jack Bruton<sup>1</sup>, Fisun Hamaratoglu<sup>1</sup>

1. School of Biosciences, Cardiff University

#### De-targeting species D Human Adenovirus serotype 10 and enhancing its transduction to cancer cells via fiber modifications.

Mahulena Marušková<sup>1</sup>, Emily A Bates<sup>1</sup>, Rebecca Bayliss<sup>1</sup>, Alan L Parker<sup>1,2</sup>

- 1. Division of Cancer & Genetics, School of Medicine, Cardiff University, Cardiff, Wales, UK
- 2. Systems Immunity Research Institute, School of Medicine, Cardiff University, Cardiff, Wales, UK

### Emerging role of IGF1R in the downregulation of Kidins220-promoted disease progression of pancreatic cancer

Deepa Shankla<sup>1</sup>, Qingping Dou<sup>2</sup>, Wen G. Jiang<sup>1</sup>, Lin Ye<sup>1</sup>

- 1. Cardiff China Medical Research Collaborative, Division of Cancer and Genetics, Cardiff University School of Medicine, Cardiff, CF14 4XN, UK
- 2. Barbara Ann Karmanos Cancer Institute, Departments of Oncology, Pharmacology and Pathology, School of Medicine, Wayne State University, Detroit, MI 48201, USA

# Loss of bone morphogenetic proteins (BMP) and BMP receptors in gastric cancers is associated with disease progression and poor prognosis

Manal Alamri<sup>1</sup>, Yongning Jia<sup>2</sup>, Xiangyu Gao<sup>2</sup>, Ke Ji<sup>2</sup>, Shuqin Jia<sup>2</sup>, Fiona Ruge<sup>1</sup>, Wen G. Jiang<sup>1</sup>, Lin Ye<sup>1</sup>

- 1. Cardiff China Medical Research Collaborative, Division of Cancer & Genetics, Cardiff University School of Medicine, Cardiff, CF14 4XN, UK.
- 2. 4Key Laboratory of Carcinogenesis and Translational Research (Ministry of Education, Beijing), Gastrointestinal Tumour Centre, Peking University Cancer Hospital & Institute, Beijing, P.R. China

#### Immuno-oncology

### Re-expression of MHCII in Colorectal Organoids: Investigating the novel role of EHMT1 in regulating MHCII expression

Nahla Elzefzafy<sup>1</sup>, Louise Tee<sup>1</sup>, Maria Pinna<sup>1</sup>, Neeraj Lal<sup>1</sup>, Gary Middleton<sup>2</sup>, Andrew Beggs<sup>1</sup>

- 1. Institute of Cancer and Genomics , University of Birmingham
- 2. Institute of Immunology and Immunotherapy, University of Birmingham

#### Developing precision adenovirotherapies for glioblastoma

Emily Bates<sup>1</sup>, Rebecca Bayliss<sup>1</sup>, Mahulena Maruskova<sup>1</sup>, Alan Parker<sup>1</sup>

1. Division of Cancer and Genetics, School of Medicine, Cardiff University, Heath Park, Cardiff, CF14 4XN, UK

### Localised delivery of chemoattractants and immune checkpoint inhibitors using a precision virotherapy in pancreatic cancer

Charley Lovatt-Travers<sup>1</sup>, Luned M. Badder<sup>1</sup>, James Davies<sup>1</sup>, Catherine Hogan<sup>2</sup>, Alan L Parker<sup>1</sup>

- 1. Division of Cancer and Genetics, School of Medicine, Cardiff University
- 2. European Cancer Stem Cell Research Institute, School of Biosciences, Cardiff University

### Development of a precision immunovirotherapy expressing a bispecific immune cell engager for treatment of Glioblastoma

Rebecca J Bayliss<sup>1</sup>, Courtney Stewart<sup>1</sup>, Emily A Bates<sup>1</sup>, Alan L Parker<sup>1</sup>

1. School of Medicine, Cancer and Genetics Building, University Hospital Wales, Heath Park, Cardiff University, Cardiff CF14 4XN

### Developing pseudotyped $\alpha v \beta 6$ -integrin targeted adenovirus 5-based vectors for tumour selective virotherapy

Emma A. Swift<sup>1</sup>, Rebecca Wallace<sup>1</sup>, Emily A. Bates<sup>1</sup>, James A. Davies<sup>1</sup>, Pierre J. Rizkallah<sup>2</sup>, Alan L.Parker<sup>1</sup>

- 1. Division of Cancer and Genetics, Cardiff University School of Medicine, Cardiff, CF14 4XN
- 2. Division of Infection and Immunity, Cardiff University School of Medicine, Cardiff, CF14 4XN

#### Manipulating T-cell responses to improve anti-GBM immunity

<u>Mathew Clement<sup>1,2</sup></u>, Sarah Lauder<sup>1</sup>, Michelle Sommerville<sup>1</sup>, Awen Gallimore<sup>1,2</sup>

- 1. Division of Infection and Immunity, School of Medicine, Cardiff University, Cardiff, UK
- 2. Systems Immunity Research Institute, Cardiff University, Cardiff, UK

### Patients' experiences of cancer immunotherapy with immune checkpoint inhibitors: A systematic review and thematic synthesis

Tessa Watts<sup>1</sup>, Judit Cstontos<sup>1</sup>, Dominic Roche<sup>1</sup>

1. Cardiff University, School of Healthcare Sciences

### Novel approaches to reduce immune-related adverse events associated with successful cancer therapy; combined targeting of PI3K $\delta$ and the immune checkpoint receptor LAG3.

<u>Sarah N Lauder</u><sup>1</sup>, Lorenzo Capitani<sup>1</sup>, Ana Pires<sup>1</sup>, Kathryn Smart<sup>1</sup>, Michelle Somerville<sup>1</sup>, Andrew Godkin<sup>1</sup>, Bart Vanhaesebroeck<sup>2</sup>, Awen Gallimore<sup>1</sup>

- 1. Division of Infection and Immunity, Cardiff University School of Medicine, SIURI, Cardiff, CF14 4XN, UK
- 2. UCL Cancer Institute, Paul O'Gorman Building, University College London, 72 Huntley Street, London WC1E 6BT, UK

### Development and Optimisation of a Patient Derived Organoid Model for T-cell Co-culture of Colorectal Cancer (CRC) in Animal-free Matrices

Chloe Harris<sup>1</sup>, Stephanie Burnell<sup>1</sup>, Lorenzo Capitani<sup>1</sup>, Kasope Wolffs<sup>1,2</sup>, Fiona Morgan<sup>2</sup>, Paola Foulkes<sup>2</sup>, Andrew Godkin<sup>1,3</sup>, Awen Gallimore<sup>1</sup>

- 1. Division of Infection and Immunity, School of Medicine, Cardiff University, Heath Park, Cardiff, CF14 4XN, UK
- 2. Wales Cancer Bank, UHW Main Building, Heath Park, Cardiff, CF14 4XN, UK
- 3. Department of Gastroenterology and Hepatology, University Hospital of Wales, Heath Park, Cardiff, CF14 4XN, UK

4. Division of Cancer and Genetics, School of Medicine, Cardiff University, Heath Park, Cardiff, CF14 4XN, UK

#### Knockdown of hnRNPAO Induces G2/M Arrest and reduces cell growth in acute myeloid leukaemia

Alanazi, M0<sup>1,2</sup>, Halawi, M<sup>1,3</sup>, Hughes, OM<sup>1</sup>, Rizzo, S<sup>1</sup>, Gilkes, AF<sup>1</sup>, Yoosuf Aly, Z<sup>1</sup>, Alruwaili, AM<sup>1,4</sup>, Knapper, S<sup>5</sup>, Darley, RL<sup>1</sup>, Tonks, A<sup>1,6</sup>

- 1. Department of Haematology, Division of Cancer and Genetics, School of Medicine, Cardiff University, Cardiff, UK
- 2. College of Applied Medical Science, Shaqra University, Shaqra, Riyadh 15572, Saudi Arabia.
- 3. College of Pharmacy, Jazan University, Jazan, Saudi Arabia
- 4. Medical Laboratory Technology Department, College of Applied Medical Sciences, Northern Border University, Arar 91431, Saudi Arabia.
- 5. Clinical Professor of Haematology, Cardiff Experimental and Cancer Medicine Centre, School of Medicine, Cardiff University, Cardiff, UK
- 6. Acting Head of Department of Haematology, Department of Haematology, Division of Cancer and Genetics, School of Medicine, Cardiff University, Cardiff, UK

### Assessment of a pre-clinical adenoviral vectored cancer immunotherapy designed to harness antiviral immunity against cancer cells

<u>Kate Milward<sup>1</sup></u>, Aimee Lucignoli<sup>1</sup>, Katie Topley<sup>2</sup>, Elise Moses<sup>1</sup>, Garry Dolton<sup>2</sup>, Lucy C Jones<sup>2,3</sup>, Andrew Sewell<sup>2,4</sup>, Carly M Bliss<sup>1,4</sup>, Alan L Parker<sup>1,4</sup>

- 1. Division of Cancer & Genetics, Cardiff University
- 2. Division of Infection & Immunity, Cardiff University
- 3. Cwm Taf Morgannwg University Health Board
- 4. Systems Immunity University Research Institute (SIURI), Cardiff University

### Cell Talk: Adipocyte Derived Exosomes Promote Cell Invasion and Challenge Paclitaxel Efficacy in Ovarian Cancer

Michael Ellis Williams<sup>1</sup>, David Howard<sup>1</sup>, Claire Donnelly<sup>1</sup>, Fereshteh Izadi<sup>1</sup>, Jezabel Garcia Parra<sup>1</sup>, Megan Pugh<sup>1</sup>, Kadie Edwards<sup>1</sup>, Kerryn Lutchman-Sigh<sup>2</sup>, Sadie Jones<sup>3</sup>, Lavinia Margarit<sup>1,4</sup>, Lewis Francis<sup>1</sup>, R Steven Conlan<sup>1</sup>, Francesca Taraballi<sup>5</sup>, Deyarina Gonzalez<sup>1</sup>

- Swansea University Medical School, Swansea University
- 2. Department of Gynaecology Oncology, Swansea Bay University Health Board.
- 3. Department of Obstetrics and Gynaecology, Cardiff and Vale University Health Board
- 4. Department of Obstetrics and Gynaecology, Cwm Taf Morgannwg University Health Board.
- 5. Center for Musculoskeletal Regeneration, Houston Methodist Research Institute, Houston

### Preclinical Advances in Ovarian Cancer Therapy: Development of an Antibody-Drug Conjugate Targeting RAGE

<u>Jezabel Garcia-Parra</u><sup>1</sup>, Claire Donnelly<sup>1</sup>, Lilianna Ordonez<sup>1</sup>, Melanie Boudaud<sup>2</sup>, Belen Pan-Castillo<sup>1</sup>, David Howard<sup>1</sup>, Emenike Onyido<sup>1</sup>, Kate Murphy<sup>3</sup>, Gilian Seaton<sup>4</sup>, Richard Clarkson<sup>4</sup>, Kerryn Lutchman-Singh<sup>5</sup>, Sadie Jones<sup>6</sup>, Lavinia Margarit<sup>7</sup>, Nadia Alfaidy<sup>2</sup>, R Steve Conlan<sup>1</sup>, Deyarina Gonzalez<sup>1</sup>

- 1. Medical School, Swansea University
- 2. Interdisciplinary Research Institute of Grenoble, University Grenoble Alpes
- 3. Department of Cellular Pathology, Swansea Bay University Health Board
- 4. Cardiff University School of Biosciences, Cardiff University
- 5. Department of Gynaecology Oncology, Swansea Bay University Health Board
- 6. Department of Obstetrics and Gynaecology, Cardiff and Vale University Health Board
- 7. Department of Obstetrics and Gynaecology, Cwm Taf Morgannwg University Health Board

#### Investigation of Adenovirus Species D Serotypes as Novel Oncolytic Vectors

<u>Rebecca Wallace<sup>1</sup></u>, Emily Bates<sup>1</sup>, Rosie Mundy<sup>1</sup>, Carly Bliss<sup>1</sup>, Alan Parker<sup>1</sup>

1. Division of Cancer & Genetics, Cardiff University School of Medicine

#### Investigating the Role of Exosomes in Antibody-Drug Conjugate Therapy: A Preliminary Study

Saoirse Wilson<sup>1,2</sup>, Claire Donelly<sup>1</sup>, David Howard<sup>1</sup>, Kadie Edwards<sup>1</sup>, Caitlin Rees<sup>1</sup>, Abdul Nagi<sup>1</sup>, Lewis Francis<sup>1</sup>, R Steve Conlan<sup>1</sup>, Deyarina Gonzalez<sup>1</sup>

- 1. Medical School, Swansea University
- 2. Biomedical Sciences, Cardiff University

#### Development of an Oncolytic Adenovirus platform expressing a suicide transgene to target Pancreatic Ductal Adenocarcinoma

Luned M. Badder<sup>1</sup>, Emily Bates<sup>1</sup>, Catherine Hogan<sup>2</sup>, Alan L. Parker<sup>1</sup>

- 1. Division of Cancer & Genetics, Cardiff University School of Medicine, Cardiff, Wales
- 2. European Cancer Stem Cell Research Institute (ECSCRI), School of Biosciences, Cardiff University, Wales

#### The Generation of an Organoid Toolkit

<u>Stephanie Burnell<sup>1</sup></u>, Chloe Harris<sup>1</sup>, Lorenzo Capitani<sup>1</sup>, Stefan Milutinovic<sup>1</sup>, Carina Owen<sup>1</sup>, Julia Grimstead<sup>2</sup>, Sara Seifan<sup>2</sup>, Duncan Baird<sup>2</sup>, Luned Badder<sup>2</sup>, Alan Parker<sup>2</sup>, Kasope Wolffs<sup>1,3</sup>, Fiona Morgan<sup>3</sup>, Paola Foulkes<sup>3</sup>, Andrew Godkin<sup>1,4</sup>, Awen Gallimore<sup>1</sup>

- 1. Division of Infection and Immunity, School of Medicine, Cardiff University, Heath Park, Cardiff, CF14 4XN, UK
- 2. Division of Cancer and Genetics, School of Medicine, Cardiff University, Heath Park, Cardiff, CF14 4XN, UK
- 3. Wales Cancer Biobank, UHW Main Building, Heath Park, Cardiff, CF14 4XN, UK
- 4. Department of Gastroenterology and Hepatology, University Hospital of Wales, Heath Park, Cardiff, CF14 4XN, UK

#### The Urinary Microbiome Shifts in Women with Breast Cancer

Nur Aimi Aliah Zainurin<sup>1</sup>, Matthew Hegarty<sup>1</sup>, Dimitra Ivanova<sup>1</sup>, Tim Gate<sup>3</sup>, Helen Tench<sup>4</sup>, Mandana Pennick<sup>2</sup>, Luis A. J. Mur<sup>1</sup>

- 1. Department of Life Sciences, Aberystwyth University,
- 2. Glan Clwyd Hospital, Betsi Cadwaladr University Health Board,
- 3. Wrexham Maelor Hospital, Betsi Cadwaladr University Health Board,
- 4. Bronglais General Hospital, Hywel Dda University Health Board

#### Radiotherapy

#### Addressing national barriers for UK clinical oncology trainees in radiotherapy research

Shannon Rowlands<sup>1</sup>, Richard Adams<sup>2,3</sup>, Jonathan Helbrow<sup>1</sup>, Daniah Thomas<sup>1</sup>, Sarah Gwynne<sup>1</sup>

- 1. South West Wales Cancer Centre, Swansea
- 2. Centre for Trials Research, Cardiff University, Cardiff
- 3. Velindre Cancer Centre, Cardiff

### Exchange time from time-dependent diffusion-weighted MRI as a potential biomarker for treatment response in human brain metastasis

Elise Gwyther<sup>1</sup>, Sahar Iqbal<sup>2</sup>, James Powell<sup>2</sup>, Jennifer Golten<sup>2</sup>, Beat Jucker<sup>3</sup>, Maëliss Jallais<sup>1</sup>, Derek Jones<sup>1</sup>, Chantal Tax<sup>1,5</sup>, Marco Palombo<sup>1,4</sup>

- 1. Cardiff University Brain Research Imaging Centre (CUBRIC), School of Psychology, Cardiff University, Cardiff, United Kingdom
- 2. Velindre Cancer Center, Cardiff, United Kingdom
- 3. Glaxosmithkline, Pennsylvania, United States
- 4. School of Computer Science and Informatics, Cardiff University, Cardiff, United Kingdom
- 5. University Medical Center Utrecht, Utrecht, Netherlands

# Cardiff University School of Medicine MRC equipment bid (2025): How a Small Animal Radiation Research Platform (SARRP) will enhance translational science across Wales and the South-West.

Paul Shaw<sup>1</sup>, Stephen Paisey<sup>2</sup>, Ian Brewis<sup>3</sup>

- 1. Department of Clinical Oncology, Velindre University NHS Trust
- 2. PETIC, University Hospital of Wales and Cardiff University
- 3. School of Medicine, College of Biomedical and Life Sciences, Cardiff University

### Benchmarking and quality assurance of a new prostate cancer brachytherapy service: prospective data collection and 2 year patient reported outcome measures

Jake Tanguay<sup>1</sup>, Jane Powell<sup>2</sup>, Alice Roebuck<sup>3</sup>, Emily Renninson<sup>1</sup>, Donna Llewllyn<sup>4</sup>, Katie Hook<sup>5</sup>, Nachi Palaniappan<sup>1</sup>

- 1. Clinical Oncology, Velindre Cancer Centre
- 2. Radiotherapy Physics, Velindre Cancer Centre
- 3. Data and Insights, Velindre Cancer Centre
- 4. Radiotherapy, Velindre Cancer Centre
- 5. Urology CNS, Velindre Cancer Centre

#### Advanced MRI techniques highlight distinct vascular characteristic across Glioma subtypes

Eleonora Patitucci<sup>1</sup>, Stefano Zappalà<sup>2</sup>, James Powell<sup>3</sup>, Najmus Sahar Iqbal<sup>3</sup>, Richard Wise<sup>4,5</sup>, Michael Germuska M<sup>6,7</sup>

- Cardiff University Brain Research Imaging Centre (CUBRIC), School of Psychology, Cardiff University, Cardiff, UK
- Cardiff University Brain Research Imaging Centre (CUBRIC), School of Computer Science and Informatics, Cardiff University, Cardiff, UK
- 3. Department of Oncology, Velindre University NHS Trust, Cardiff, UK
- 4. Department of Neurosciences, Imaging, and Clinical Sciences, University 'G. D'Annunzio' of Chieti-Pescara, Chieti, Italy

- 5. Institute for Advanced Biomedical Technologies, University 'G. D'Annunzio' of Chieti-Pescara, Chieti, Italy
- 6. Cardiff University Brain Research Imaging Centre (CUBRIC), School of Physics and Astronomy, Cardiff University, Cardiff, UK
- 7. Department of Radiology, University of California Davis Medical Center, Sacramento, CA, United States of America

#### A comparison of gas-free MRI methods for CMRO2 quantification in primary brain tumour

Stefano Zappalà<sup>1</sup>, Eleonora Patitucci<sup>2</sup>, James Powell<sup>3</sup>, Sahar Iqbal<sup>3</sup>, Fabian Küppers<sup>4</sup>, Jon Shah<sup>4</sup>, Richard Wise<sup>5</sup>, Michael Germuska<sup>6</sup>

- Cardiff University Brain Research Imaging Centre (CUBRIC), School of Computer Science and Informatics, Cardiff University
- 2. Cardiff University Brain Research Imaging Centre (CUBRIC), School of Psychology, Cardiff University
- 3. Department of Oncology, Velindre University NHS Trust
- 4. Institute of Neuroscience and Medicine 4, INM-4, Forschungszentrum Jülich
- 5. Department of Neurosciences, Imaging and Clinical Sciences, University "G. D'Annunzio" of Chieti-Pescara
- 6. Department of Radiology, University of California Davis Medical Center

#### **Cancer clinical trials**

#### Optimising Therapy in FLT3-Mutated Acute Myeloid Leukaemia

Dolce Advani<sup>1</sup>, Joanna Canham<sup>1</sup>, Angela Casbard<sup>1</sup>, Sylvie D Freeman<sup>2</sup>, Nicola Potter, PhD<sup>3</sup>, Abin Thomas<sup>1</sup>, Amanda Gilkes, PhD<sup>4</sup>, Sean Johnson<sup>1</sup>, Lucy Marsh<sup>1</sup>, Jane Leahy<sup>5</sup>, Hayley Timmins<sup>1</sup>, Richard Dillon, MA<sup>3</sup>, Steven Knapper, MRCP, FRCPath, DM<sup>6</sup>

- 1. Centre for Trials Research, Cardiff University, Cardiff, United Kingdom
- 2. Institute of Immunology and Immunotherapy, University of Birmingham, Birmingham, United Kingdom
- 3. Department of Medical and Molecular Genetics, King's College London, London, United Kingdom
- 4. Department of Haematology, Division of Cancer & Genetics School of Medicine, Cardiff University, Cardiff, United Kingdom
- 5. Private affiliation, PPI Representative, London, United Kingdom
- 6. Cardiff University School of Medicine, Cardiff, United Kingdom

### Collecting patient outcome data across Wales for medicines accessed via the All Wales Therapeutics and Toxicology Centre (AWTTC) One Wales Medicines process

Rosie Spears<sup>1,2</sup>, Rachel Jonas<sup>1,2</sup>, Gail Woodland<sup>1,2</sup>, Craig Barrington<sup>3</sup>

- 1. All Wales Therapeutics and Toxicology Centre
- 2. Cardiff and Vale University Health Board
- 3. Department of Oncology, Swansea Bay University Health Board

# Emma Williams and her team of research nurses and clinical colleagues are helping to encourage more nurses to get more involved in research

Emma Williams<sup>1</sup>, Katja Williams<sup>1</sup>, Jenni Davies<sup>1</sup>, Louise Jenkins<sup>1</sup>, Bethan Ingram<sup>2</sup>, Sarah Doherty<sup>3</sup>, Emily John<sup>4</sup>, Faye Blackborrow<sup>5</sup>

- 1. Clinical Research Group Cardiff
- 2. Senior Nurse
- 3. Advance Nursed Practitioner, Bone Marrow Transplant
- 4. CART Clinical Nurse Specialist
- 5. Advance Nursed Practitioner

### Change of study design during the feasibility part of a non-randomised multicentre study (QuicDNA) to roll out routine ctDNA testing for lung cancer in NHS Wales

<u>Muhammad Riaz</u><sup>1</sup>, Angela Casbard<sup>1</sup>, Georgina Gardner<sup>1</sup>, Margherita Carucci<sup>1</sup>, Sian Morgan<sup>3</sup>, Rachel Dodds<sup>3</sup>, Richard Adams<sup>1</sup>, Magdalena Meissner<sup>2</sup>

- 1. Centre for Trials Research, College of Biomedical & Life Sciences Cardiff University
- 2. Division of Cancer and Genomics, Cardiff University and Velindre Cancer Centre
- 3. All Wales Medical Genomics Services, NHS, Wales

#### Evolving from Phase II into Academia's Largest Head and Neck Cancer Trial

<u>Christie Heiberg</u><sup>1</sup>, Lisette Nixon<sup>1</sup>, Christopher Hurt<sup>2</sup>, Joanna Canham<sup>1</sup>, Ceri Frayne<sup>1</sup>, Charlotte Martin<sup>1</sup>, Sean Johnson<sup>1</sup>, Mererid Evans<sup>1</sup>, Terry M Jones<sup>3</sup>

- 1. Cardiff University
- 2. University of Southampton
- 3. Liverpool University

### The Evolution of GastroSCOPE – proposed as the first UK-led trial of high-dose radiotherapy for inoperable gastric cancer

Amy Case<sup>1,2</sup>, Elena Brogdan<sup>3</sup>, Lisette Nixon<sup>3</sup>, Angela Casbard<sup>3</sup>, Owen Nicholas<sup>1,2</sup>, Kieran Foley<sup>4,5,6</sup>, Gina Brown<sup>7</sup>, David Watkins<sup>1</sup>, Tom Crosby<sup>6</sup>, Richard Adams<sup>3,6</sup>, Deborah Fitzsimmons<sup>2</sup>, Ganesh Radhakrishna<sup>8</sup>, David Chuter<sup>10</sup>, Sue Campbell<sup>10</sup>, Colin Askill, Christopher M. Jones<sup>9</sup>, Christopher J Peters<sup>7</sup>, Sarah Gwynne<sup>1,2</sup>

- 1. South West Wales Cancer Centre, Swansea Bay University Health Board
- 2. Swansea University
- 3. Centre for Trials Research, Cardiff University
- 4. Division of Cancer & Genetics, School of Medicine, Cardiff University
- 5. Cwm Taf Morgannwg University Health Board
- 6. Velindre Cancer Centre, Velindre University NHS Trust
- 7. Imperial College London
- 8. The Christie NHS Foundation Trust
- 9. Department of Oncology, University of Cambridge
- 10. Private Affiliation, Patient and Public Involvement Representative

### Hemithoracic Irradiation with Proton Therapy in Malignant Pleural Mesothelioma. UK National Proton Radiotherapy Study (NCT05655078)

P. Shaw<sup>1</sup>, A. Gosling<sup>2</sup>, K. Durno<sup>3</sup>, C. Clarke<sup>4</sup>, C. Gardiner<sup>5</sup>, C. Hiley<sup>2,6</sup>, P. Patrick<sup>6</sup>, N. Counsell<sup>2,6</sup>

- 1. Dept Clinical Oncology, VUNHST
- 2. UCL Hospital, London
- 3. Barking, Havering & Redbridge University Hospitals NHS Trust, London, UK
- 4. UCL, London, UK
- 5. University Sheffield, Sheffield, UK
- 6. UCL Cancer Institute, London UK

### Embedding research in NHS organisation systems: Survey results of clinical ownership, support and integration of clinical trials in NHS business.

Christopher Scrase<sup>1,2,3</sup>, Carla Pothecary<sup>1</sup>, Carys Thomas<sup>4</sup>, Nicola Williams<sup>5</sup>, Tom Crosby<sup>1,6</sup>

- 1. NHS Wales Executive
- 2. Bangor University
- 3. Department of Oncology, Ysbyty Glan Clwyd, Betsi Cadwaladr University Health Board
- 4. Welsh Government
- 5. Health and Care Research Wales
- 6. Velindre Cancer Centre

#### Piloting a standardised variable syntax in a new skin cancer trial: SCC-AFTER

 $\underline{Ceri\ Frayne^1},\ Casbard\ A^1,\ Nixon\ L^1,\ Porter\ C^1,\ White\ A^1$ 

1. Centre for Trials Research, Cardiff University

### Application of a practical method for eliciting prior beliefs about cancer survival in a phase 3 randomised trial of radiotherapy for patients with skin cancer

<u>Ms Angela Casbard<sup>1</sup></u>, Dr Emilia Peleva<sup>2</sup>, Dr Rachel Abbott<sup>3</sup>, Dr Marisol Vazquez<sup>3</sup>, Professor Catherine Harwood<sup>2</sup>, Malavika Babu<sup>1</sup>, Professor Agata Rembielak<sup>4,5</sup>, Mr Lincoln Tarirai Mahachi<sup>1</sup>, Dr Jerry Marsden<sup>6</sup>

- 1. Centre for Trials Research, Cardiff University
- 2. Department of Dermatology, Barts Health NHS Trust
- 3. Cardiff and Vale University Health Board
- 4. The Christie NHS Foundation Trust
- 5. The University of Manchester
- 6. University Hospitals Birmingham NHS Foundation Trust

#### **Management of a Complex Dataset**

<u>Charlotte Martin</u><sup>1</sup>, Ceri Frayne<sup>1</sup>, Christie Heiberg<sup>1</sup>, Christopher Hurt<sup>2</sup>, Sean Johnson<sup>1</sup>, Joanna Canham<sup>1</sup>, Lisette Nixon<sup>1</sup>, Terry M Jones<sup>3</sup>, Mererid Evans<sup>1</sup>

- 1. Cardiff University
- 2. University of Southampton
- 3. Liverpool University

#### Streamlining Cancer Clinical Trial Setup: Key Milestones, Facilitator Roles, and Strategies for Accelerated Timelines

Claire Bryant<sup>1</sup>

1. Research and Development, Velindre University NHS Trust

#### Palliative and supportive oncology

### Barriers to and facilitators of access, acceptability and adherence to cancer prehabilitation: a mixed methods systematic review

<u>Dr Tessa Watts<sup>1</sup></u>, Dr Nicholas Courtier<sup>1</sup>, Dr Sarah Fry<sup>1</sup>, Dr Nichola Gale<sup>1</sup>, Elizabeth Gillen<sup>1</sup>, Dr Grace McCutchan<sup>2</sup>, Manasi Patil<sup>1</sup>, Tracy Rees<sup>3</sup>, Dr Dominic Roche<sup>1</sup>, Dr Sally Wheelwright<sup>4</sup>, Professor Emirata Jane Hopkinson<sup>1</sup>

- 1. School of Healthcare Science, Cardiff University
- 2. Division of Population Medicine, Cardiff University
- 3. Velindre Oncology Academy, Velindre University NHS Trust
- 4. Brighton and Sussex Medical School, University of Sussex

### A service improvement project assessing the current practice for discharge letter documentation within a specialist oncology hospital.

Dr. Caitlin Cahill<sup>1</sup>, Professor Nikki Pease<sup>2</sup>

- 1. Junior Clinical Fellow in Palliative Medicine, Velindre University NHS Trust
- 2. Professor of Palliative Medicine, Velindre University NHS Trust

#### Nurses' experiences of caring for people with cancer in a general hospital setting

Karen Gillespie<sup>1</sup>, Jeorgia Greenfield<sup>1</sup>, Dr Tessa Watts<sup>2</sup>

- 1. Acute Oncology, Cardiff and Vale UHB
- 2. School of Healthcare Sciences, Cardiff University

# Implementation of cancer-specific Holistic Needs Assessment (HNA) tools in clinical practice and their applicability to the brain tumour population; systematic review and narrative synthesis.

Sivell S<sup>1</sup>, Mann M<sup>1,2</sup>, Hamilton T<sup>3</sup>, Baddeley E<sup>1</sup>, Byrne A<sup>4</sup>, Retzer A<sup>5</sup>

- 1. Marie Curie Research Centre, Division of Population Medicine, Cardiff University
- 2. Specialist Unit for Review Evidence, Cardiff University
- 3. Palliative Care, Aneurin Bevan University Health Board
- 4. Velindre University NHS Trust
- 5. Centre for Patient-Reported Outcomes Research & NIHR Applied Research Collaboration West Midlands, Institute of Applied Health Research, University of Birmingham

### Informing the definition of Future Care Planning within end of life care: a scoping review of the literature.

<u>Sivell S<sup>1</sup></u>, Mann M<sup>1,2</sup>, Hackett R<sup>3</sup>, Harding E<sup>4</sup>, Taubert<sup>5</sup>

- 1. Marie Curie Research Centre, Division of Population Medicine, School of Medicine, Cardiff University
- 2. Specialist Unity for Review Evidence, Cardiff University
- 3. Velindre University NHS Trust and City Hospice Palliative Care Team, Cardiff
- 4. Velindre University NHS Trust, Wales
- 5. School of Medicine, Cardiff University

#### Population health-based cancer prevention and early diagnosis

### A Third Sector Campaign to Increase Symptom Awareness of Oesophageal and Stomach Cancer in Wales

Madeleine Young<sup>1</sup>, Stephanie Jones<sup>2</sup>, Hasan Habibi<sup>3</sup>, Catrin Hallert<sup>1</sup>, Greg Pycroft<sup>1</sup>, Lowri Griffiths<sup>1</sup>

- 1. Tenovus Cancer Care
- 2. Bath University
- 3. Cardiff and Vale Health Board

#### Current Landscape of Drug approvals for Genitourinary (GU) Cancers in North America and Europe.

Jose C. Tapia<sup>1</sup>, Javier Gavira<sup>2</sup>, Diana Matthews<sup>1</sup>, Matteo Santoni<sup>3</sup>, Matthew Young<sup>4</sup>, Louis Blondel<sup>5</sup>, Ronan Flippot<sup>2</sup>, Ricky Frazer<sup>1</sup>, Georgia Anguera<sup>6</sup>, Pablo Maroto<sup>6</sup>

- 1. Velindre Cancer Centre, Velindre University NHS Trust, Cardiff, Wales, United Kingdom
- 2. Medical Oncology Department, Institut Gustave Roussy, Paris Saclay University, Villejui, France

- 3. Oncology Unit, Macerata Hospital, via Santa Lucia 2, 62100, Macerata, Italy
- 4. Barts ECMC, Barts Cancer Institute, Queen Mary University London, London, United Kingdom
- 5. Institut Gustave Roussy, Paris Saclay University, Villejui, France
- 6. Department of Medical Oncology, Hospital de la Santa Creu I Sant Pau, Barcelona, Spain

#### Disparities in Urothelial Carcinoma (UC) Drug Approval: Contrasting North America and Europe

Jose C. Tapia<sup>1</sup>, Javier Gavira<sup>2</sup>, Diana Matthews<sup>1</sup>, Matteo Santoni<sup>3</sup>, Matthew Young<sup>4</sup>, Louis Blondel<sup>5</sup>, Ronan Flippot<sup>2</sup>, Ricky Frazer<sup>1</sup>, Georgia Anguera<sup>6</sup>, Pablo Maroto<sup>6</sup>

- 1. Velindre Cancer Centre, Velindre University NHS Trust, Cardiff, Wales, United Kingdom
- 2. Medical Oncology Department, Institut Gustave Roussy, Paris Saclay University, Villejui, France
- 3. Oncology Unit, Macerata Hospital, via Santa Lucia 2, 62100, Macerata, Italy
- 4. Barts ECMC, Barts Cancer Institute, Queen Mary University London, London, United Kingdom
- 5. Gustave Roussy, clinical pharmacy department, Villejuif, France
- 6. Department of Medical Oncology, Hospital de la Santa Creu I Sant Pau, Barcelona, Spain

#### The Epidemiology of Cancer and Cardiovascular Disease Diagnosis in the UK

<u>Caitlin Partridge</u><sup>1</sup>, James Rafferty<sup>1</sup>, Keith R Abrams<sup>2</sup>, Rhiannon K Owen<sup>1</sup>

- 1. Department of Health Data Science, Swansea University
- 2. Department of Statistics, University of Warwick

#### How can we equitably support people if self-sampling becomes a part of cervical screening? Foundations for a decision SUpport intervention to support Choice in Cervical scrEEning moDality (SUCCEED)

<u>Dr Eleanor Clarke<sup>1</sup></u>, Dr Denitza Williams<sup>1</sup>, Dr Kate J Lifford<sup>1</sup>, Lindsay Haywood<sup>2</sup>, Prof Fiona Wood<sup>1</sup>, Prof Jo Waller<sup>3</sup>, Prof Adrian Edwards<sup>1</sup>, Dr Natalie Joseph-Williams<sup>1</sup>, Dr Caroline Evans<sup>2</sup>, Gareth Powell<sup>4</sup>, Dr Rhiannon Phillips<sup>5</sup>, Prof Andrew Carson Stevens<sup>1</sup>, Dr Katie Walbeoff<sup>4</sup>, Dr Ardiana Gjini<sup>6</sup>, Prof Kate Brain<sup>1</sup>

- 1. Cardiff University
- 2. PPI Partner
- 3. Queen Mary University of London
- 4. Public Health Wales
- 5. Cardiff Metropolitan University
- 6. Hywel Dda Health Board

#### **PROSTAD: Development of a Model Prostate Cancer Diagnostic Pathway**

<u>Savita Shanbhag</u><sup>1</sup>, Rachel Gemine<sup>2</sup>, Stephen Farrington<sup>3</sup>, Yeung Ng<sup>4</sup>, Chris Hopkins<sup>3</sup>

- 1. Medical Directorate, Hywel Dda University Health Board
- 2. NHS Wales Joint Commissioning Committee
- 3. TriTech Institute & Innovation, Hywel Dda University Health Board
- 4. Urology Department, Hywel Dda University Health Board

### Acceptability and accessibility of using a peer-led WhatsApp group for sharing prostate cancer risk information: protocol for a pilot study for proof of concept

Dr Sarah Fry<sup>1</sup>, Dr Shancang Li<sup>2</sup>, Dr Georgios Theodorakopoulos<sup>2</sup>, Dr Nicholas Courtier<sup>1</sup>, Dr Harriet Quinn-Scoggins<sup>3</sup>

- 1. School of Healthcare Sciences, Cardiff University
- 2. School of Computer Science and Informatics, Cardiff University
- 3. School of Medicine, Cardiff University

# Insights, challenges and opportunities for cancer clinical care, workforce, innovation and research in Wales from the HIWBRIS Study (Healthcare Innovation, staff Wellbeing and Burnout: Researching Interactions and Solutions; IRAS 346499)

Dr Mick Button<sup>1</sup>, Jennet Holmes<sup>2</sup>, Dr Tom Howson<sup>3</sup>, Dr Roderick Thomas<sup>4</sup>, Professor Nick Rich<sup>4</sup>

- 1. Medical Directorate, Velindre Cancer Services, Velindre University NHS Trust
- 2. Innovation Lead, Velindre University NHS Trust
- 3. Bevan Commission
- 4. School of Management, Swansea University

Inclusion in cancer prehabilitation: Qualitative research to explore access and adherence to cancer prehabilitation in Wales

Alexandra Mitchell<sup>1</sup>, Manasi Patil<sup>1</sup>, Sherina Lowe<sup>1</sup>, Akhilesh Ramachandran<sup>1</sup>, Tessa Watts<sup>1</sup>, Jane Hopkinson<sup>1,2</sup>

- 1. School of Healthcare Sciences, Cardiff University
- 2. On behalf of the NIHR I-Prehab Project research team

### Understanding the barriers and facilitators affecting the use of remote consultations among marginalised communities: a mixed-methods systematic review

Julia Hiscock<sup>1</sup>, Grace McCutchan<sup>2</sup>, Kate Brain<sup>2</sup>, Richard Neal<sup>3</sup>

- 1. North Wales Centre for Primary Care Research, Bangor University
- 2. Cardiff University
- 3. University of Exeter

#### Could we utilise 'one stop shop' clinics to help ensure our cancer patients meet endoscopy waiting targets?

Jennifer Waterman<sup>1</sup>, Michael Beddard<sup>2</sup>, Heuy Yi Chong<sup>2</sup>

- 1. University Hospital of Wales, Cardiff and Vale University Health Board
- 2. Centre for Healthcare Evaluation, Device Assessment and Research (CEDAR), Cardiff and Vale University Health Board

### CRT Together Improving the Cancer Journey programme: 1-year evaluation findings of a referral service addressing the non-clinical needs of people affected by cancer

Ann Broadway<sup>1</sup>, Alice Timbrell<sup>2</sup>

1. Coalfields Regeneration Trust

2. Urban Foresight

#### **Emergency Cancer Diagnoses - Impact on Healthcare Staff: Initial Analysis**

Karen Wingfield<sup>1,2</sup>, Dr Sarah Fry<sup>3</sup>, Emeritus Professor Daniel Kelly<sup>4</sup>

- 1. PhD Student School of Healthcare Sciences, Cardiff University
- 2. Macmillan Acute Oncology CNS, Cwm Taf Morgannwg UHB
- 3. School of Healthcare Sciences, Cardiff University
- 4. Emeritus Professor, School of Healthcare Sciences, Cardiff University

### How might the provision of smoking cessation services be adapted to improve uptake and success for people in low socioeconomic groups? A qualitative study (PROCESS Study)

<u>Dr Pamela Smith</u>, PhD<sup>1</sup>, Lucia Dahlby, MScR<sup>2</sup>, Dr Evgeniya Plotnikova, PhD<sup>2</sup>, Dr Rebecca-Bell Williams, PhD<sup>3</sup>, Rebecca Thorley<sup>3</sup>, Dr Fiona Dobbie, PhD<sup>2</sup>, Dr Tessa Langley, PhD<sup>3</sup>, Dr Ilze Bogdanovica, PhD<sup>3</sup>, Prof Kate Brain, PhD<sup>1</sup>, Prof Rachael Murray, PhD<sup>3</sup>, Dr Leah Jayes, PhD<sup>4</sup>

- 1. Cardiff University, Wales
- 2. University of Edinburgh, Scotland
- 3. The University of Nottingham, England
- 4. Nottingham Trent University, England

#### Using a behavioural science approach to raise awareness of breast screening.

Naomi Morgan<sup>1</sup>, Charlotte Cullum<sup>1</sup>, Rhian Meaden<sup>1</sup>

1. Cwm Taf Morgannwg University Health Board

### Preparing the public for equitable and informed implementation of Multi-Cancer Early Detection (MCED) blood tests

<u>Delyth Price<sup>1</sup></u>, Richard Adams<sup>2</sup>, Kate Brain<sup>1</sup>, Julie Hepburn<sup>3</sup>, Rashmi Kumar<sup>3</sup>, Laura Marlow<sup>4</sup>, Uju Ogbonna<sup>1</sup>, Fiona Wood<sup>1</sup>, Harriet Quinn-Scoggins<sup>1</sup>

- 1. Division of Population Medicine, Cardiff University
- 2. Centre for Trials Research, Cardiff University
- 3. Lay Representative
- 4. Centre for Cancer Prevention, Screening and Early Diagnosis, Queen Mary University of London