CANCER RESEARCH UK | MANCHESTER CENTRE

MANCHESTER CANCER RESEARCH CENTRE

Training and Education Newsletter

Spring / Summer 2022

Contents

Icons

To aid navigation, the following icons are shown throughout the newsletter to highlight non-clinical, clinical and/or Allied health professional researchers and related activities.

Non-clinical

Clinical

AHP Allied health professional

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MANCHESTER CANCER RESEARCH CENTRE

A partnership founded by

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Welcome

Our Newsletter celebrates postgraduate, postdoctoral and alumni successes and is driven by your contributions. We are grateful to those who have taken time to contribute new items to this edition. New submissions and suggestions for content for our Autumn/ Winter 2022 Newsletter can be sent to MCRCtraining@manchester.ac.uk.

Professor Robert Bristow, Director of the MCRC and CRUK Manchester Centre

"Welcome to the third edition of our MCRC-CRUK Manchester Centre Training & Education Newsletter, which celebrates the many successes of our PhD researchers, postdocs and alumni.

As in-person events start to resume, our Newsletter sees researchers attending STEM for Britain and EACR amongst other events, as well as engaging with students at multiple local schools during British Science Week 2022.

I was particularly excited to read about work on Equality, Diversity and Inclusion and the development of a urine test as an alternative to current cervical screening from one of our Cancer Research UK-funded Clinical Fellows, as well as read about our students' broad range of graduate destinations.

In May 2022, we hosted our first collaborative PhD Showcase with the Division of Cancer Sciences, which included 16 oral presentations, 23 posters, a careers panel and two excellent keynotes from Professor Philip Quirke (University of Leeds) and Professor Nicola Curtin (Newcastle University). We will be spotlighting the Showcase in our next edition, so keep your eyes peeled!

Finally, I'd like to thank Professor Andrew Renehan and Professor Dean Jackson for their work as our Education Chairs over the past years. They have provided great oversight of our education activities and I'm now excited that Professor Cliona Kirwan and Dr Andrew Gilmore have accepted the roles of our Clinical and Non-Clinical Education Chairs. I look forward to further advancing our training and development portfolio with them in the coming years.

I wish all our students and staff a very enjoyable summer and look forward to continuing to celebrate your achievements in the next academic year and beyond."

Professor Cliona Kirwan, Clinical Education Chair, MCRC and CRUK Manchester Centre

"It is wonderful to hear about the fantastic work and achievements that are happening in the MCRC and CRUK Manchester Centre. The breadth of research is impressive and demonstrates the huge diversity of talent we have in Manchester.

I am delighted to take on the role of new Clinical Education Chair. It is an honour to be part of the selection process for the new PhDs and MB-PhDs and watch them develop into successful cancer researchers.

At the MCRC-CRUK Manchester Centre, we prioritise Team Science, from the laboratory bench to the patient. We have the ambitious vision of creating a future free of cancer. By training tomorrow's world leading cancer researchers, we aim to realise that vision.

As a clinician scientist and oncoplastic breast surgeon, one of my aims is to minimise the harm of cancer treatment, in part through early diagnosis and through response adapted treatment. As an alumni of the University of Manchester, I really appreciate the wealth of expertise from the laboratory scientists, translational scientists, allied healthcare professionals, and clinicians that facilitate this goal, so it is a delight to welcome new researchers to this great environment."

Dr Andrew Gilmore, Non-Clinical Education Chair, MCRC and CRUK Manchester Centre

"It is always exciting to read about the breadth of discoveries made within the MCRC-CRUK Manchester Centre research community. The hard work and inspiration of our PhD students, postdoctoral researchers and alumni is the driving force behind these discoveries, and an important part of the MCRC is to support them so that they can achieve their goals. I am, therefore, particularly excited to take on the role as Non-Clinical Chair of the MCRC-CRUK Manchester Centre Education Committee. This role will allow me to help to select the new PhD and MB-PhD researchers that will come into the MCRC and help support them as they set out on their careers to become the next generation in the battle against cancer.

As a basic scientist, I am interested in how cells communicate with their microenvironment, how this tells them to behave appropriately, and importantly how this communication goes wrong to initiate cancer. An important part of my research is making basic discoveries that will ultimately be relevant to patients, and the Team Science approach within the MCRC-CRUK Manchester Centre encourages communication between basic and clinical researchers to ensure that this is the case. This team approach is central to our ethos, and one which will provide our new researchers with opportunities to ask the most important questions."

Welcoming Our Trainees

We spoke to some of our new researchers about what brought them to Manchester, their research projects and ambitions...

Research Group: Translational Cancer Immunotherapy (University of Leeds)

Dr Robbie Samuel,
Leeds-Manchester Clinical Research Training Fellow

PhD Title: Rationally developing the next generation of personalised target drug-chemotherapy combination trials in anal cancer
PhD Supervisors: Dr Adel Samson, Prof. David Sebag-Montefiore, Dr Sarah Brown, Dr Natalie Cook, Prof. Andrew Renehan, Prof. Mark Saunders

"I started a Cancer Research UK-funded Leeds-Manchester Clinical Research Training Fellowship in October 2021 and prior to this I was a clinical oncology specialist trainee in the West Yorkshire programme. I graduated from the University of Edinburgh before moving to Newcastle for Academic Foundation Training and then to Leeds for an Academic Clinical Fellowship.

I have an interest in both radiotherapy clinical trial design but also laboratory science and my PhD combines these aspects nicely. My long-term research ambitions are to be an academic clinical oncologist in lower gastrointestinal (GI) oncology, combining translational laboratory science with early phase trial expertise to improve patient outcomes."

Research Group: PRECISE

Dr Emma Biglin,
Postdoctoral Research Associate

"I first joined the PRECISE group in 2017 when I undertook my PhD on a project involving the development of zoomorphic radiation dosimetry phantoms and 3D cellular models of glioblastoma. Prior to this, I completed postgraduate training in therapeutic radiography, so I was grateful for the excellent opportunity to apply my clinical experience in an institution at the heart of radiotherapy research.

I am currently investigating the radio-sensitivity and DNA damage repair response of several paediatric sarcoma cell lines to radiation, with a focus on the impact of hypoxia in these responses. The aim is to identify novel therapeutic combinations that can overcome hypoxia-mediated radio-resistance.

This year, I will start a Training Fellowship that I have been awarded by the National Centre for the Replacement, Refinement & Reduction of Animals in Research (NC3Rs). The aim of this fellowship is to advance the dosimetry phantoms I designed during my PhD."

Empowering Future Leaders

Active Training Portfolio

70
MCRC-CRUK Manchester Centre PhD Candidates*

5
NIHR Academic Clinical Lecturers (Oncology)

4
NIHR Academic Clinical Fellows (Oncology)

44
CRUK Manchester Institute PhD Candidates

51
Christie International Fellows

*including MCRC-CRUK Manchester Centre researchers and AHPs based in the Division of Cancer Sciences

Researcher Voices

Postgraduate and postdoctoral researchers at the MCRC-CRUK Manchester Centre are represented internally at funder, School and Divisional levels and externally by members of thier cohort. In these roles, they advocate for change in key areas and are instrumental in highlighting and providing training and development opportunities.

Julia Gerda Sokk, The University of Manchester Students' Union and MSc Organisational Change and Development student, The University of Manchester

"As postgraduate research students, you are often overloaded with information and responsibilities regarding your research, and it is easy to miss information on where to find any support or get a chance to socialise with other postgraduate researchers. The Students' Union knows this and we have run annual student elections for a full-time Postgraduate Officer who is exclusively there to campaign, run projects and represent postgraduate research and taught students. This is a 12-month sabbatical role which runs from August to August, for which I am currently in post.

However, even with this existing role, postgraduate researchers have fed back that they do not feel represented enough and they need someone to support and represent them exclusively. Having listened to this feedback, from August 2022 onwards there will now be a full-time Research Officer focused on improving the postgraduate research experience and representation. Nevertheless, the role of the current Postgraduate Officer encompasses campaigning to support postgraduate students, including different groups of postgraduates such as commuter postgraduate students, student parents and carers, international postgraduates and many more.

I regularly sit on University meetings and committees and meet the Senior Leadership Team to represent postgraduates and raise any issues they bring up to push for change and improvement in the postgraduate life both in and outside academia. I also work with the Postgraduate Research Association (UMPA) on postgraduate research related projects. Here are some projects to support postgraduates that I have been involved in – have a read and see if you have heard about any of them!

- The first ever Students' Union Postgraduate Week in partnership with the University Library and the Careers Service (February 2022). It included different events to network, socialise, support postgraduate employment and academics, suitable for both postgraduate research and taught students.

- As a result of Postgraduate Week, we also launched a Postgraduate Hub where we list postgraduate events and volunteering opportunities. The Hub is currently going through some changes, as we want to make it more interactive for postgrads and make it a space where they can submit any queries and give feedback, organise campaigns etc.

- Arranging postgraduate research focus groups on topics such as supervisory relations, postgraduate research support, and working conditions and rights. The focus groups will feed into the UKRI New Deal for Postgraduate Research consultation that the University and the Students' Union are responding to.

- Collating information on postgraduate research mental health support to feed into the University Mental Health Charter report to highlight good practice in the University, and critically analyse where support is lacking and recommend improvements.

- In partnership with the Postgraduate Research Association, passing a policy at the Students' Union Senate on the PGR Welcome Experience. The policy was based on a survey the Postgraduate Research Association did amongst postgraduate researchers. The results highlighted disparities and issues with the welcome experience and the policy aims to provide mandates to students and Students' Union Officers to push for a better PGR Welcome Experience both at the Students' Union and the University.

- As a lot of postgraduates are student parents or have caring responsibilities, after several meetings with student parents across the University, I have been working to launch a student parent survey for them to identify themselves and discuss any support they might need, as well as creating a Student Parents' and Carers Hub where we can offer information on support and list any socials those with and without children can attend. The Hub will also provide an opportunity for postgraduates from these groups to feed back.

- Finally, from feedback from postgraduate students we are looking into creating a Postgraduate Society, which would possibly be split into postgraduate taught and postgraduate research students as there is a wish for these to be kept separate.

- At the end of February 2022, the Postgraduate Research Association and I co-held a PGR Research Exhibition at the Students' Union, which was open to all PGRs across all three faculties. 24 PGRs submitted their research posters and we had peer judges vote on two winners and a public vote that any student at the SU could vote in. The winners won £100 vouchers.

Although I will end my tenure in office in August, the new Research Officer will begin their role then and they are there to support any postgraduate research students. Until then, please feel free to reach out to me on postgrad.su@manchester.ac.uk if you have any ideas on improving postgraduate life or have any issues that I can help you with. If you want to stay up to date with Postgraduate projects and events, keep an eye on the Postgraduate Hub!"

Equality, Diversity & Inclusion

The MCRC and CRUK Manchester Centre are committed to ensuring equality, diversity and inclusion across the recruitment and retention of postgraduate and postdoctoral trainees, and to tackling health inequalities in our research projects. By encouraging diversity in our training programmes, we aim to ensure equality and equity in those entering the academic workforce, whilst actioning areas where we can address inequalities in the future. Each issue we will hear from trainees who are championing EDI (Equality, Diversity & Inclusion) at Manchester and beyond.

Research Group: Endometrial Cancer (Team Womb)

Dr Jennifer Davies-Oliveira,
Clinical Research Training Fellow and Gynaecology Trainee

PhD Title: Urine high-risk human papillomavirus detection – an alternative strategy for cervical screening
PhD Supervisors: Prof. Emma Crosbie, Dr Alex Sargent, Prof. Tanya Walsh

"My name is Dr Jennifer Davies-Oliveira and I am a second year clinical PhD student funded by Cancer Research UK undertaking the ACES trials. ACES stands for Alternative Cervical Screening and focuses on the development of a urine test as an alternative to current cervical screening.

The NHS Cervical Screening Programme has reduced deaths from cervical cancer by an astonishing 70% since its introduction. However, uptake of screening is low and falling, with only 70.2% of eligible individuals attending. Screening uptake is lower in those under the age of 30, in people of non-White British ethnicities, those who identify as LGBTQIA+ and in socio-economically deprived communities.

Barriers to screening include access, embarrassment and the need for a speculum examination. A urine test can detect high risk human papillomavirus (hr-HPV), the virus that causes cervical cancer, and could break down barriers and crucially increase the number of those being screened, fundamentally saving lives.

My research aims to improve urine testing for hr-HPV and to discover how accurate it is by comparison to the current cervical sampling method (the 'smear'). We have completed recruitment for the ACES colposcopy study in which 550 individuals attending St Mary's Hospital provided urine and cervical samples for test comparison.

We are currently in the process of analysing results and look forward to sharing the results of this study in the near future. The ACES Primary Care study has also started recruitment in which urine hr-HPV testing is being tested in the general screening population in order to evaluate further how accurate a urine test is for cervical screening.

Alternative CErvical Screening

Key to the implementation of urine as a screening tool is exploring what people's thoughts are about using this test in the future. Most importantly is to explore how acceptable a urine test would be in communities where the screening rates are even lower including the LGBTQIA+ community, who are more likely to benefit from an alternative screening method. This prompted a team of us at The University of Manchester to embark on research exploring the acceptability of self-sampling methods for cervical screening within the LGBTQIA+ community.

The most important and enlightening part of this work was to co-create this survey with community members, which gave a tailored insight into the barriers to screening and how best to overcome these. We had a two-hour Zoom session with individuals who shared experiences of screening and how best to capture these experiences in a survey and their thoughts on self-sampling methods. Our online survey had an overwhelming 503 responses with Twitter reaching respondents from all over the globe! The results are currently being analysed and will be shared at a community organised event in Manchester in July 2022. We are very excited to share and discuss these results, and to celebrate this work and the LGBTQIA+ community at this event.

This work has aimed to give an inclusive and diverse voice to the future of the NHS Cervical Screening programme. Through this research, we can better understand the barriers to healthcare and screening that exist and explore more options to increase the numbers of those screened and ultimately reduce the rates of people developing cervical cancer".

Publications and Papers:
Postgraduate Spotlight

Research Group: Endometrial Cancer (Team Womb)

Dr Kelechi Njoku,
Clinical Research Training Fellow

PhD Title: Developing tests for endometrial cancer detection
PhD Supervisors: Prof. Emma Crosbie, Prof. Anthony Whetton

frontiers in Oncology

Dr Kelechi Njoku is a CRUK Manchester Centre-funded Clinical Research Training Fellow and Wellcome Translational Informatics Scholar, specialising in clinical oncology. His PhD research investigates novel diagnostic biomarkers for endometrial cancer using proteomic approaches. Kelechi was recently published in **Frontiers in Oncology** as first author.

Njoku, J.; Agnew, H. J.; Crosbie, E. J. Impact of Type 2 Diabetes Mellitus on Endometrial Cancer Survival: A Prospective Database Analysis. **Frontiers in Oncology 2022**, 12:899262. https://doi.org/10.3389/fonc.2022.899262

Purpose: Type 2 diabetes mellitus (T2DM) is an established risk factor for endometrial cancer but its impact on endometrial cancer survival outcomes is unclear. The aim of this study was to investigate whether pre-existing T2DM impacts survival outcomes in endometrial cancer.

Patients and Methods: Women diagnosed with endometrial cancer were recruited to a single centre prospective cohort study. Relevant sociodemographic and clinico-pathological data were recorded at baseline. T2DM status was based on clinical and biochemical assessment, verified by general practitioner records and analysed in relation to overall, cancer-specific and recurrence-free survival using Kaplan-Meier estimation and multivariable Cox-regression.

Results: In total, 533 women with median age and BMI of 66 years (Interquartile range (IQR), 56, 73) and 32kg/m2 (IQR 26, 39) respectively, were included in the analysis. The majority had low-grade (67.3%), early-stage (85.1% stage I/II), endometrial cancer of endometrioid histological phenotype (74.7%). A total of 107 (20.1%) had pre-existing T2DM. Women with T2DM had a two-fold increase in overall mortality (adjusted HR 2.07, 95%CI 1.21-3.55, p=0.008), cancer-specific mortality (adjusted HR 2.15, 95% CI 1.05-4.39, p=0.035) and recurrence rates (adjusted HR 2.22, 95% CI 1.08-4.56, p=0.030), compared to those without, in multivariable analyses.

Conclusion: T2DM confers an increased risk of death in endometrial cancer patients. Well-designed longitudinal studies with large sample sizes are now needed to confirm these findings.

Publications and Papers:
Postdoctoral Spotlight

Research Group: PRECISE

Dr Noemie Defourny,
Research Associate

Having undertaken a PhD at Ghent University, Belgium and worked as a Health Economist for ESTRO, Dr Noemie Defourny now works as a Research Associate for PRECISE, investigating population-based health service research for external beam radiotherapy and proton therapy in the UK. Noemie was recently published in **Radiotherapy and Oncology.**

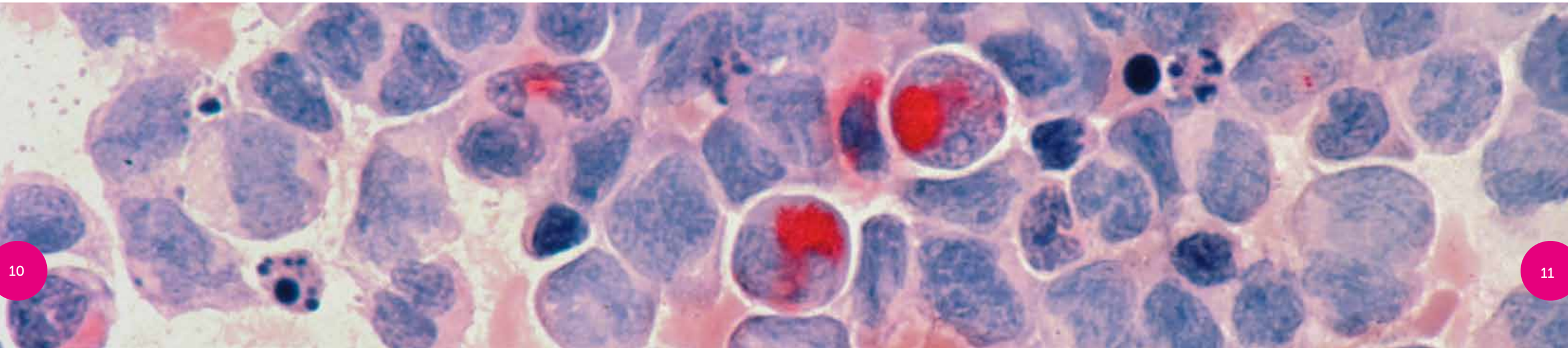
Spencer, K.; Defourny, N.; Tunstall, D.; Cosgrove, V.; Kirkby, K.; Henry, A.; Lievens, Y.; Hall, P. Variable and fixed costs in NHS radiotherapy; consequences for increasing hypo fractionation. **Radiotherapy and Oncology 2021**, 166:180-188. https://doi.org/10.1016/j.radonc.2021.11.035

Background/Purpose: The increased use of hypofractionated radiotherapy changes department activity. While expected to be cost-effective, departments' fixed costs may impede savings. Understanding radiotherapy's cost-drivers, to what extent these are fixed and consequences of reducing activity can help to inform reimbursement strategies.

Material/Methods: We estimate the cost of radiotherapy provision, using time-driven activity-based costing, for five bone metastases treatment strategies, in a large NHS provider. We compare these estimations to reimbursement tariff and assess their breakdown by cost types: fixed (buildings), semi-fixed (staff, linear accelerators) and variable (materials) costs. Sensitivity analyses assess the cost-drivers and impact of reducing departmental activity on the costs of remaining treatments, with varying disinvestment assumptions.

Results: The estimated radiotherapy cost for bone metastases ranges from 430.95€ (single fraction) to 4240.76€ (45 Gy in 25#). Provider costs align closely with NHS reimbursement, except for the stereotactic ablative body radiotherapy (SABR) strategy (tariff exceeding by 15.3%). Semi-fixed staff costs account for 28.1–39.7% and fixed/semi-fixed equipment/space costs 38.5–54.8% of provider costs. Departmental activity is the biggest cost-driver; reduction in activity increasing cost, predominantly in fractionated treatments. Decommissioning linear accelerators ameliorates this, although can only be realised at equipment capacity thresholds.

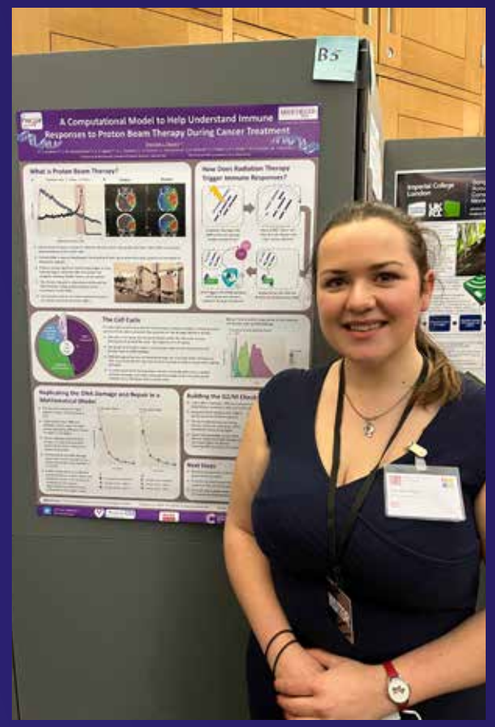
Conclusion: Hypofractionation is less burdensome to patients and long-term offers a cost-efficient mechanism to treat an increasing number of patients within existing capacity. As a large majority of treatment costs are fixed/semi-fixed, disinvestment is complex, within the life expectancy of a linac, imbalances between demand and capacity will result in higher treatment costs. With a per-fraction reimbursement, this may disincentivise delivery of hypofractionated treatments.



Posters and Presentations:
Postgraduate Spotlight

Research Group: PRECISE

Charlotte Heaven, Postgraduate Researcher (Non-Clinical)



PhD Title: ProtonSTING: Can the unique characteristics of proton radiation be utilised in immunotherapy?
PhD Supervisors: Dr Michael Merchant, Dr Jamie Honeychurch, Prof. Karen Kirkby, Prof. Norman Kirkby, Dr Christine Schmidt

STEM for Britain, London, March 2022
"At the beginning of March, I had the pleasure of attending the STEM for Britain poster finals at the Houses of Parliament in London. I had not heard of this competition previously but was sent the information by my supervisor in late December and was encouraged to enter.

STEM for Britain is an annual competition which started in the late 90s. It is a collaborative event between the Parliamentary and Scientific Committee and various national STEM societies, as well as having some financial backing from industry. Finalists are invited to the House of Commons to present their work in one of five categories (biology and biomedical sciences, chemistry, mathematics, physics and engineering). Each category awards prizes up to £1,500 for the top three presenters and there is an overall prize for the best scientific communicator, the Westminster Wharton Medal.

Although I thought I had very little chance of getting into the finals, especially given my very hastily written abstract, I was invited down to Westminster to present my poster. The day was very busy but well run, with around 30 finalists in each category. MPs and poster judges strolled around the posters asking questions and writing notes while the finalists chattered busily away to their neighbours (never wishing to miss an opportunity for scientific networking!).

Both the standard and the breadth of the research was outstanding, with all areas of biological sciences surrounding me. From crop plantations to obesity to wound healing, every area of scientific research seemed to be covered and all the posters looked great. Unfortunately, I was not in with a shot at the prizes this time around, however even I had to admit that the winning posters were very well deserved and I was excited to find out more about their research.

Overall STEM was a great experience and also something I feel is a great message. Being around other young researchers in that environment is not really something I have experienced elsewhere and being able to talk to Members of Parliament about why your area is so important was invaluable. I would strongly encourage others to enter this great competition and get their research out there even if it is just for the experience of the day. It is definitely one I will not forget".

Posters and Presentations:
Postdoctoral Spotlight

Research Group: Translational Radiobiology

Dr Sapna Lunj, Postdoctoral Research Associate

AACR, New Orleans, USA, April 2022
Dr Sapna Lunj presented a poster on 'Systemic immune response of prostate cancer patients to alpha-emitting radiotherapy' at the AACR Annual Meeting 2022.

Presenter/Authors: Sapna Lunj, Hitesh Mistry, YeePei Song, Kamlesh Patel, Hannah Nightingale, Tim Smith, Peter Hoskin, Catharine West, Ananya Choudhury. University of Manchester, Manchester, United Kingdom, The Christie NHS Foundation Trust, Manchester, United Kingdom.

Abstract
Targeted alpha therapy (TAT) is a type of radiotherapy (RT) that uses alpha-emitting radionuclides. These radionuclides have a natural affinity for areas of bone metastases (i.e., radium-223, Ra-223) or can label specific tumour targets (i.e., prostate-specific membrane antigen). Conventional photon irradiation (i.e., external beam) can activate or suppress immune responses. The resulting immune response is dictated by the release of soluble markers such as cytokines (i.e., IL-6) and damage associated molecular patterns, DAMPs (calreticulin). Less is known about the immune response induced by alpha-emitters. With increased interest in using TAT for cancer patients, it is important to gain a more in depth knowledge regarding the immune response of alpha emitters.

Aim: Explore the systemic immune response of prostate cancer (PCa) patients to alpha-emitting RT by studying circulating cytokines, checkpoint molecules, matrix metalloproteinases (MMPs) and DAMPs. Methods: The cohort comprised of 43 patients with metastatic castration-resistant PCa treated with up to six four-weekly injections of the alpha emitter, Ra-223. We measured longitudinal changes in 61 plasma markers using the Luminex assay. The plasma markers included cytokines, checkpoint molecules and DAMPs.

Results: Ra-223 induced longitudinal changes in 14 plasma markers over the course of treatment (T2-T6) compared with pre-treatment levels (T1). Most of the observed RT-induced changes occurred after four injections of Ra-223 (T5), where 9 of the 14 plasma markers changed significantly. The table summarises T5 findings (presented as mean concentration, pg/ml; statistical analysis using Wilcoxon matched-pairs signed rank test).

Conclusion: Our data demonstrates that alpha-emitting RT induces systemic immune responses that can be measured in the plasma of patients. Given the diverse role of these markers, further study is needed to explore the biological implications of these systemic changes on patient outcome.

Posters and Presentations

CRUK Manchester Centre MB-PhD Showcase, Manchester, March 2022

Nadin Hawwash, MB-PhD Student (Diabesity and Cancer Research)

Hadiyat Ogunlayi, MB-PhD Student (Manchester Cancer and Thrombosis)

Macarena Fernandez Carro, MB-PhD Student (Hurlstone Lab)

Alexia Strickson (CRUK MI), MB-PhD Student (Leukaemia Biology)

David Withey, MB-PhD Student (Breast Biology)

In March 2022, we heard from some of our MB-PhD students on CRUK Clinical Academic Training (CAT) Award-funded programmes about their cancer PhD projects, which they are conducting whilst intercalating during their undergraduate medical degrees. Audience members had the opportunity to ask questions of our speakers before networking over drinks and refreshments. You can read more about this showcase and the MB-PhD programme at our CRUK Manchester Centre webpage.

L-R: Hadiyat Ogunlayi, Nadin Hawwash, David Withey, Macarena Fernandez Carro

Research Group: Diabesity and Cancer Research

Nadin Hawwash,
MB-PhD Student

Society for Cardiothoracic Surgery (SCTS) in Great Britain and Ireland Annual Meeting,Belfast, May 2022
Nadin Hawwash presented a poster on the 'Impact of Covid-19 and doctor-led online teaching on the confidence of medical students'.

Research Group: Manchester Cancer and Thrombosis (MCAT)

John Castle,
Research Associate

Research Group: Radiotherapy-Related Research (RRR)

Hannah Chamberlin,
Postgraduate Researcher (Non-Clinical)

Manchester Breast Centre Internal Seminar Series, Manchester, November 2021

Manchester Breast Centre
From Molecular Science to the Clinic

Internal Seminar Series
30th November 2021

Sponsored by:
BREAST CANCER NOW The research & care charity

The Manchester Breast Centre's internal seminar series, funded by Breast Cancer Now and hosted live at the Oglesby Cancer Research Building involved researchers from multiple research groups detailed above. John Castle delivered an oral presentation on 'Nobody (but Covid) puts RCTs in a corner: Update on the TIP Trial, a randomised controlled trial of the anticoagulant Rivaroxaban compared to no treatment in ER negative early breast cancer' and Hannah Chamberlin on 'Dose to the breast during lymphoma radiotherapy'. Casey Broadbent chaired a panel discussion on 'Diversity in Research' with Prof. Robert Clarke and Prof. Cliona Kirwan as panellists, alongside Dr Bruno Simões and Hadiyat Ogunlayi. Hadiyat was one of the co-organisers of this event along with three other MCRC students.

Research Group: Breast Biology

Casey Broadbent,
Postgraduate Researcher (Non-Clinical)

Dr Bruno Simões,
Postdoctoral Research Fellow

Research Group: Manchester Cancer and Thrombosis (MCAT)

Dr Emma Blower, Previous Clinical Research Training Fellow, now on Surgical Registrar Rotations, Mersey Deanery

John Castle,
Research Associate

Hadiyat Ogunlayi,
MB-PhD Student

3Rs Poster Event, Manchester, September 2021
At the 3Rs poster event, jointly hosted by the CRUK Manchester Institute with AstraZeneca and Agenda Life Sciences at Alderley Park, Hadiyat Ogunlayi presented a poster on 'Utilising residual breast tissue samples from patients undergoing therapeutic mastectomies to study the relationship between a stromal wound healing phenotype and breast density as a mechanism for breast cancer development.'

British Association of Surgical Oncology Annual Conference (Virtual), November 2021
Dr Emma Blower delivered an oral presentation on 'Rivaroxaban targets procoagulant fibroblasts in the tumour microenvironment to reduce cancer cell migration and stem cell activity'.

San Antonio Breast Cancer Symposium, Texas, US and Online, December 2021
Dr Emma Blower presented a poster on 'Rivaroxaban targets the procoagulant tumour microenvironment in vitro and thereby inhibits breast cancer progression'.

11th International Conference on Thrombosis and Hemostasis Issues in Cancer (ICTHIC), Bergamo, Italy, May 2022
Dr Emma Blower and John Castle gave an oral presentation on 'Rivaroxaban compared to no treatment in early breast cancer patients (the TIP Trial): initial findings for a phase II preoperative window-of-opportunity randomised controlled trial' with their group leader Prof. Cliona Kirwan.

At this conference, Hadiyat Ogunlayi presented a poster on 'Investigating the relationship between a stromal wound healing phenotype and breast density as a mechanism for breast cancer development' and Emma Blower on 'Rivaroxaban targets the hypercoagulant tumour microenvironment to reduce primary tumour growth and stem cell activity in oestrogen receptor positive breast cancer murine models' With Prof. Kirwan, John Castle presented a poster on 'Coagulation and Circulating Tumour Cells as pharmacodynamic biomarkers of response to aromatase inhibitors in breast cancer'.

Research Group: Sharrocks Lab

Dr Christopher Bleaney,
Previous Clinical Research Training Fellow, Now Academic Clinical Fellow in Clinical Oncology

European Association of Cancer Research (EACR), Seville, June 2022
Dr Christopher Bleaney will present a poster at EACR on 'GRHL2 and TEAD transcription factor involvement in the metastasis of gastro-oesophageal adenocarcinoma'. This work formed part of his PhD funded through a CRUK Clinical Research Training Fellowship. A short summary is included below:

We aimed to uncover the transcriptional changes that enable metastasis in gastro-oesophageal adenocarcinoma. To do so we utilised bulk and single cell sequencing techniques to assess chromatin accessibility and transcriptome as well as spatial transcriptomics in cell lines and tissue samples. Metastatic gastro-oesophageal cell lines and human tissue are enriched for GRHL2 and TEAD transcription factor binding sites in differentially accessible chromatin. Increased expression of these factors can be seen in metastatic cell clusters by scRNA-seq and these areas of increased expression visualised with spatial transcriptomics. Manipulating GRHL2 expression and inhibiting YAP-TEAD interaction in metastatic gastro-oesophageal cell lines decreases their invasive capability. We found that modulation of GRHL2 and TEAD activity can play a role in gastro-oesophageal adenocarcinoma metastasis.

Research Group: Taylor Lab

Rosie Brady,
Postgraduate Researcher (Non-Clinical)

Dr Camilla Coulson-Gilmer,
Postdoctoral Research Associate

The PARP Family & ADP-ribosylation, Cold Spring Harbor Laboratory, New York, March-April 2022
Rosie Brady presented a poster on 'Fork Protection Complex factor Timeless integrates PAR dynamics to regulate replication fork speed', as part of her Wellcome-funded PhD project.

Dr Camilla Coulson-Gilmer delivered an oral presentation on 'Nucleoside supplementation rescues PARG inhibitor sensitivity in ovarian cancer models'.

Research Group: Translational Radiobiology

Conrado Guerrero Quiles,
Postgraduate Researcher (Non-Clinical)
Rekaya Shabbir,
Postgraduate Researcher (Non-Clinical)

European Association of Radiobiology, Copenhagen, May 2022
Conrado Guerrero Quiles delivered an oral presentation on 'Hypoxia can impair cell migration due to extracellular matrix compositional and structural changes'.

European Association of Cancer Research (EACR), Sevile, June 2022
Conrado will present a poster on 'Hypoxia-induced changes in the composition of extracellular proteins in bladder cancer cells identifies candidates to explore as potential circulating biomarkers'.

Research Group: Translational Oncogenomics

Dr Amin Ali,
Clinical Research Training Fellow

European Association of Cancer Research (EACR), Seville, June 2022
Dr Amin Ali will present a poster on 'Understanding The Role of Prostate Zones in Cancer Progression'.

Researcher Engagement: **Charity Spotlight**

Research Group: Endometrial Cancer (Team Womb)

Dr Chloe Barr,
Clinical Research Training Fellow
PhD Title: Novel Biomarkers for the Diagnosis and Prognosis of Gynaecological Malignancy.
PhD Supervisors: Prof. Emma Crosbie, Prof. Richard Edmondson

Dr Helen Clarke,
Clinical Research Training Fellow
PhD Title: Defining the feasibility and molecular impact of total diet replacement in endometrial and breast cancer prevention.
PhD Supervisors: Dr Sacha Howell, Prof. Robert Clarke, Prof. Emma Crosbie, Dr Michelle Harvie, Prof. Anthony Howell

Dr Eleanor Jones,
Clinical Research Training Fellow
PhD Title: 'Developing Tests for Endometrial Cancer deTection (DETECT)
PhD Supervisors: Prof. Emma Crosbie, Prof. Richard Edmondson, Dr Jamie Sergeant

Dr Helena O'Flynn, Doctoral Research Fellow and General Practitioner
PhD Title: The early diagnosis of endometrial cancer: overcoming barriers to presentation and developing non-invasive detection tools
PhD Supervisors: Prof. Emma Crosbie, Prof. Aneez Esmail, Prof. Tanya Walsh

Peaches Womb Cancer Trust is a charity founded in 2020 by researchers, doctors and nurses based at St. Mary's Hospital and working alongside Prof. Emma Crosbie. Alongside the above PhD researchers, the charity's core group also includes Helen White, an MSc student and Lilly Pinggera as Research Project Officer.

At the Doctoral Academy Awards 2022, Dr Chloe Barr, Dr Helen Clarke, Dr Eleanor Jones and Dr Helena O'Flynn were issued a group award for Highly Commended for Best Contribution to Society for pioneering, setting up & running Peaches Womb Cancer Trust.

L-R: Dr Eleanor Jones, Dr Chloe Barr, Dr Helena O'Flynn

Peaches Patient Voices
Since its launch last October, Peaches Patient Voices has gone from strength to strength, thanks to the 36 people who have already joined. Following her involvement in Leanne's Shearsmith's research study looking at support for physical exercise following womb cancer treatment, Patient Voices member, Helen Pritchard wrote a fantastic blog post about this, as well as the importance of exercise in helping her own recovery from womb cancer treatment.

Awareness Campaign
Peaches Womb Cancer Trust have sent out their first Awareness packs containing leaflets, business cards and merchandise to 60 Gynaecological Oncology Clinical Nurse Specialist teams. This project was made possible by a grant awarded by GlaxoSmithKline. Their aim is to reach out to all teams within the UK. If you are a CNS or you have contact details for one, please forward these to admin@peachestrust.org so they can reach out to them directly.

Research Bursaries
The charity are proud to have supported two Early Career Researchers to present their work at scientific conferences. Dr Kelechi Njoku, a Cancer Research UK Clinical Research Fellow and Wellcome Trust Manchester Translational Informatics Scholar, and Olivia Aurangzeb, a medical student, were awarded the Peaches Womb Cancer Trust Blair Bell Bursary for the 2022 meeting. You can read more about their research at the charity's website.

Research Group: Diabesity and Cancer Research

Nadin Hawwash,
MB-PhD Student

Nadin Hawwash raised £535 doing a fasted 300km Spin-a-thon for Medical Aid for Palestinians Charity.

Research Group: Manchester Cancer and Thrombosis (MCAT)

John Castle,
Research Associate

Stockport Relay for Life is a 24-hour community festival celebrating year-round fundraising for Cancer Research UK. The Stockport Manchester Scientists Relay team includes scientists from across the MCRC and CRUK Manchester Institute and their friends and family.

John Castle took part in a 'Cancer Research UK Celebrating 25 Years of Relay for Life' promotional video, alongside other Manchester-based researchers. The Relay for Life team is captained by Stephen Lyons (CRUK Manchester Institute). The Relay for Life celebration video was opened by Michelle Mitchell OBE,
CEO of CRUK.

Researcher Engagement: **Science Communications**

Research Group: Diabesity and Cancer Research

Nadin Hawwash,
MB-PhD Student

Nadin Hawwash helped to organise and run a 'Cutting Edge Careers' Sixth Form event with the Royal College of Surgeons. She also ran a 'How to Save a Life' in-person workshop with INTO University and a 'Why Study' workshop at a local high school.

Research Group: Gilmore Lab

Charlotte Mellor,
Postgraduate Researcher (Non-Clinical)

Charlotte Mellor is a University of Manchester Widening Participation Fellow and has designed and delivered workshops for University Gateway days - these are Widening Participation initiatives for Years 8 and 9 secondary school students. One workshop was about mitochondria and aimed to encourage students to question things and think scientifically.

During British Science Week 2022, Charlotte designed and delivered an interactive workshop for Years 5 and 6 junior school children at Peel Hall Primary School in Wythenshawe. She delivered her workshop with different classes across the day and it was received well. This was a hands-on workshop with indoor and outdoor elements. Outdoors was being an 'eco-detective' and trying to find items on the bingo card, whilst indoors was basic forensics activities - fingerprinting and fibre sampling. Charlotte ended her workshop with a Q&A, where the students could ask any questions they had (mostly about being a scientist, but there were some others in there too!)

Research Group: Translational Oncogenomics (CRUK Manchester Institute)

Alexandru Suvac,
Postgraduate Researcher (Non-Clinical)

Cancer Research UK Manchester Institute Research Engagement Programme

L-R: Joanna Kelly, Alexandru Suvac, Dr Duncan Smith, Mihaela Ficu

Researchers at the CRUK Manchester Institute (CRUK MI), including CRUK MI staff based at the Oglesby Cancer Research Building (OCRB), are actively involved in running a Research Engagement programme with the aim to engage with local schools. Students get the opportunity to find out more about the different roles in cancer research, the different pathways to a career in science and get an insight into work undertaken at the CRUK MI and OCRB. The overall aim is to inform students about the science happening in their communities whilst also making it fun and engaging for them, with the ambition of inspiring scientists of tomorrow.

The Research Engagement Programme group visited three local Didsbury and Withington schools during British Science Week, March 2022, engaging with primary and secondary aged students. Their visits consisted of giving a short educational introduction on the nature of cancer as a disease, how we fight it and how CRUK is helping. They also gave students an insight into how they went from sitting in a classroom chair to their jobs in science research. Finally, they ended with a hands-on practical involving DNA extraction, to help turn DNA from a concept to a tangible physical structure they could see and touch.

Feedback thus far has been overwhelmingly positive from all schools, giving the group the motivation and momentum to continue their research engagement work. In the future, the committee hopes to continue school visits, but to also welcome school groups to the OCRB and the new Paterson building. While still in its early stages, its vision is to become a programme that engages with schools on a regular basis over the coming years. If you are interested in finding out more, please contact Dr Andrew Porter.

Achievements and Awards

Research Group: Breast Biology

Casey Broadbent,
Postgraduate Researcher (Non-Clinical)

Dr Hannah Harrison,
Postdoctoral Research Fellow

Mia Nuckhir,
Postgraduate Researcher (Non-Clinical)

Dr Bruno Simões,
Postdoctoral Research Fellow

British Association for Cancer Research (BACR) and FBMH Travel Awards
Casey Broadbent and Mia Nuckhir, second-year MRC-funded PhD students, were fully funded by the BACR to attend the 13th Annual European Network for Breast Development and Cancer Workshop, Switzerland, April 2022.

Dr Bruno Simões, Research Fellow, was fully funded by the BACR/Faculty of Biology, Medicine and Health to attend the Gordon Research Conference on Mammary Gland Biology, Barga, Italy, May-June, 2022.

Promotions
Congratulations are due to Dr Hannah Harrison, who was recently promoted to Research Fellow.

Research Group: Diabesity and Cancer Research

Nadin Hawwash,
MB-PhD Student

At the Faculty of Biology, Medicine and Health's Doctoral Academy Awards 2022, Nadin Hawwash achieved a Research Excellence Awarded for Highly Commended in 'Best Contribution to Society'. Nadin was nominated by Dr Enam Haque, GP and Clinical Senior Lecturer at the University of Manchester, for her work on outreach events such as the AskDoc Champions, creating health communications videos in Arabic for ethnic minority communities. Nadin has developed a national profile in Widening Participation through various collaborations such as setting up a laptop outreach scheme for students from disadvantaged backgrounds. She has provided case-based learning for medical students and has demonstrated leadership in her roles as MB-PhD

Ambassador, Senior Medicine Ambassador and Uni Buddy.

Research Group: Digital Cancer Centre (DCC)

Dr Rob Hainsworth,
NIHR Research Methods Fellow

Mr Arbaz Kapadi,
Research Associate

Dr Jane Miller,
Research Associate

Dr Catharine Morgan,
Research Fellow

Dr Gabriel Rogers,
Senior Research Fellow

Prof. Corinne Faivre-Finn and Dr Gareth Price have now started Prof. Favire-Finn's NIHR programme grant: Can Real-world Data and Rapid Learning Drive Improvements in Lung Cancer Survival? The RAPID-RT Study. This involves multiple postdoctoral researchers within the Christie and The University of Manchester. They have hosted a PPIE event and a Citizen jury that will feed into the clinical study investigating the impact of limiting radiation dose to the base of the heart on survival.

Research Group: Taylor Lab

Samantha Littler,
Research Assistant

The Papin Prizes recognise the invaluable role played by technicians in higher education and research and are the UK's only award ceremony dedicated to celebrating their technical excellence and innovation. At the 2021 awards, Samantha Littler was highly commended for her significant contribution to community/outreach activities.

Research Group: Translational Oncogenomics (CRUK Manchester Institute)

Alexandru Suvac,
Postgraduate Researcher (Non-Clinical)

Alexandru Suvac was awarded a Doctoral Academy Conference Support Grant of £496 to attend The British Association for Cancer Research (BACR) 60th Anniversary Meeting, Nottingham, June 2022.

Viva and Graduation Celebrations

Graduations

Faculty of Biology, Medicine and Health 2020 and 2021 graduates whose ceremonies were postponed due to Covid-19 were able to graduate again at The University of Manchester's in-person ceremonies in April 2022. Those in receipt of degree awards included Dr Syed Adnan Ali, Dr Mbangula Lameck Amugongo, Dr Daniel Bronder, Dr Abigail Bryce-Atkinson, Dr John Chadwick, Dr Abigail Edwards, Dr Anya Golder, Dr Matthew Jones, Dr Tiana Kordbacheh, Dr Swati Pendharkar, Dr Fabrizio Simeoni, Dr Anna Maria Tsakiroglou, Dr Richard Walshaw and Dr Daniel Wilcock, amongst other graduates.

The class of 2022 will graduate on 14th July 2022. You can follow proceedings on Twitter and Instagram using the hashtag #DAGraduation2022. The University will also live stream the ceremony on YouTube, with a link released closer to the date.

Research Group: Breast Biology

Dr Balkese Alhamad,
Postgraduate Researcher (Non-Clinical)

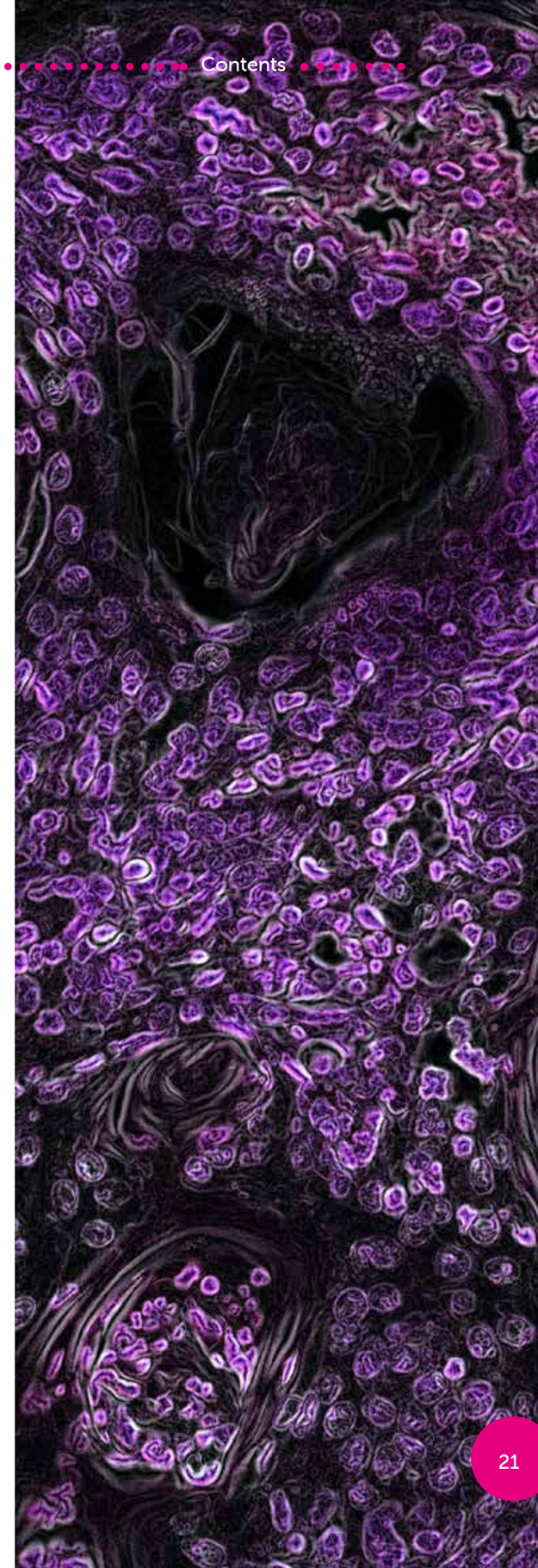
Dr Megan Thompson,
Postgraduate Researcher (Non-Clinical)

Congratulations are due to Dr Balkese Alhamad and Dr Megan Thompson, who both passed their PhD Vivas with minor corrections.

Research Group: Manchester Cancer and Thrombosis (MCAT)

Dr Emma Blower,
Previous Clinical Research Training Fellow, Now on Surgical Register Rotations

Dr Emma Blower, who is part of the Manchester Cancer and Thrombosis (MCAT) and Breast Biology research groups passed her PhD Viva in February 2022 with minor corrections. Her pre-Viva seminar was described as 'exceptional' by her examiner and she did 'fantastically well' in her Viva.



Alumni Achievements

Research Group: Taylor Lab

Dr Daniel Bronder,

Previous Postgraduate Researcher (Non-Clinical), Now Postdoctoral Fellow, Memorial Sloan Kettering Cancer Center, New York

Dr Daniel Bronder was the winner of the Disease Models and Mechanisms (DMM) Outstanding Paper Prize 2021. The prize of $1000 is awarded to the first author of the paper that is judged by the journal's editors to be the most outstanding contribution to the journal that year. To be considered for the prize, the first author must be a student or a postdoc of no more than 5 years standing. His prize was awarded for the following article:

Bronder, D.; Tighe, A.; Wangsa, D.; Zong, D.; Meyer, T. J.; Wardenaar, R.; Minshall, P.; Hirsch, D.; Heselmeyer-Haddad, K.; Nelson, L.; Spierings, D.; McGrail, J. C.; Cam, M.; Nussenzweig, A.; Foijer, F.; Ried, T.; Taylor, S. S. TP53 Loss Initiates Chromosomal Instability in Fallopian Tube Epithelial Cells. **Disease Models and Mechanisms 2021**, 14(11). https://doi.org/10.1242/dmm.049001

Daniel was interviewed by the journal editors about his paper, where he revealed what's next for him: "A few weeks after we submitted our manuscript to Disease Models & Mechanisms, I moved from Bethesda, where I had lived for 2.5 years, to New York.

Here, I started a postdoctoral fellowship at Memorial Sloan Kettering Cancer Center, where I am continuing my work on chromosomal instability in cancer. Even after 6 months, I am still filled with excitement every day to have become part of such a vibrant cancer research community. In my new project, I am focusing on in vivo models of chromosomal instability and its role in therapy response and resistance".

Alumni Profile

Research Group: Taylor Lab

Dr Anya Golder,

Previous Postgraduate Researcher (Non-Clinical), Now Communication Consultant at BrightCarbon

PhD Title: Development of a drug profiling platform for patient-derived ovarian tumour cultures
PhD Supervisors: Prof. Stephen Taylor, Prof. Gordon Jayson
Graduation Date: June 2021

"My PhD Research
My PhD was funded by the Irshad Akhtar Memorial PhD Scholarship to The University of Manchester. My research focused on high-grade serous ovarian cancer, a disease that is frequently diagnosed at a late stage and has a 10-year survival rate of 35%. To better understand this disease, our research group established a living biobank of ovarian ex vivo tumour cultures. In the first half of my PhD, I developed a drug profiling platform, which used time-lapse microscopy to accurately measure the sensitivity of the ovarian tumour cultures to chemotherapy. I subsequently screened a panel of cultures to chemotherapy drugs and performed comparisons with clinical and transcriptomic data to identify hypotheses on what determines sensitivity to these drugs.

For the second part of my PhD, I utilised the ovarian tumour cultures and the drug profiling platform to explore how we can target replication vulnerabilities in these tumours with DNA Damage response inhibitors. I used a multiple low dose approach, which involved combining multiple drugs at a low IC_{10} doses with the aim of completely inhibiting the pathway whilst reducing toxicity and preventing the emergence of resistance. I showed that a four-drug combination of ATR, CHK1, PARG and WEE1 inhibitors induced a potent anti-proliferative effect in most of the ovarian tumour cultures demonstrating that a multiple low dose approach is effective when targeting replication stress.

Post-PhD
After finishing my PhD, I started a role at the Drug Discovery Unit, CRUK Manchester Institute which allowed me to further develop my cancer pharmacology skills in a department at the interface of academia and industry. Here, I had the opportunity to work across multiple drug discovery projects in the DDU portfolio, learn new techniques and work with high-throughput technology.

I reached a point where I realised the parts of my job I really enjoyed were analysing data and communicating my science, therefore I decided to turn my attention to career paths where I could utilise these skills more frequently.

My Current Role
I have always enjoyed using my communications skills, however I was uncertain whether a traditional medical communications role would be the right fit for me. Fortunately, an opportunity arose at the presentation design agency BrightCarbon for a Communication Consultant position with a life science focus. This felt like the perfect role for me, as during my PhD I loved learning how to effectively communicate my work through presentations. BrightCarbon develops compelling visual PowerPoint presentations with the aim of delighting audiences for a variety of clients in a range of industries, from pharmaceutical, to information technology and fintech. BrightCarbon also offers bespoke eLearning creation services, a variety of training courses, and productivity tools for PowerPoint users.

My role as a Communication Consultant at BrightCarbon involves meeting with clients to understand their complex ideas, and then transforming them into visuals that are easy for audiences to engage with: that could be a diagram, a presenter script, or an animation sequence to guide the audience's attention. I then work with designers to turn my sketches and ideas into beautiful slides for our clients. In my role I'm also looking forward to contributing to presentation training, whether that be through delivering sessions for clients, or by developing our free online resources. What I enjoy most about my job is the variety: I'm still very involved in life sciences, but I also get to learn about other industries and other businesses, all with the fast pace of projects to keep things interesting.

My Advice for Current Non-Clinical Postgraduate Researchers
Firstly, I encourage postgraduate researchers to take advantage of the wealth of opportunities present in the MCRC community. Whether your future career interests lie in academia or elsewhere, your PhD is the perfect time to focus on developing wider skills through opportunities such as teaching, science communication, medical writing and volunteering. Highlights of my time as a PhD student included taking part in the NWBI Consultancy Competition and helping to organize the 'Pint of Science' festival. Not only are these great ways to build your network, but they can also be a lot of fun!

My second piece of advice is for those considering careers outside of academia. Recognise the wealth of skills that you gain during a PhD and market yourself. A PhD allows you to manage a multi-year project: you research the literature, develop a strategy and independently seek out the skills and expertise needed to execute it. Additionally, the ups and downs of academic life means that postgraduate researchers are highly resilient. All of these skills are extremely valuable to employers. So when applying for jobs outside the lab, instead of listing the lab techniques you can perform, think about how your experiences and the skills you've gained as a researcher will benefit the employer. Finally, keep an open mind to non-traditional career routes post-PhD and don't hesitate to apply even if you don't fulfil all of the job criteria".

Funding Opportunities

22 July 2022 - Faculty of Biology Medicine and Health #ImageofResearch Competition

29 July 2022 - Faculty of Biology, Medicine and Health Doctoral Academy Conference Fund

The FBMH Doctoral Academy Conference Fund aims to support postgraduate researchers to attend a national or international academic conference to disseminate their findings. This competitive fund is available for FBMH PGRs to present (oral or poster presentations) at a national or international conference. Individual awards will be made, up to a maximum of £500. You can find instructions on how to apply for this fund on the Doctoral Academy website.

There are three funding rounds per academic year, with this academic year's final round upcoming:

- Round 3 - Friday 29 July 2022

12 September 2022 (Multiple Deadlines) – UoM ISSF Professional Development Fund

Are you or your department looking to develop your public engagement skill? Apply to the ISSF Professional Development Fund!

To support the University's strategic goal for Social Responsibility, which includes objectives for Public Engagement (PE) and Civic Engagement, the University has set up a fund for capacity building in PE – the ISSF PE Professional Development Fund. The Fund is open to University Staff, postdocs and Postgraduate Students (PhD and PGT) from every faculty.

If you're applying for yourself, you can apply for up to £2000 to cover all expenses related to taking part in your professional development. If you're applying on behalf of a department/team, you can apply for up to £3000 to cover all expenses related to the development opportunity.

Upcoming Deadlines:

- R4- 09:00 am 13/06/2022
- R5 – 09:00 am 12/09/2022
- R6 – 09:00 am 03/10/2022
- R7 – 09:00 am 31/10/2022
- R8 – 09:00 am 21/11/2022
- R9 – 09:00 am 09/01/2023
- R10 – 09:00 am 30/01/2023

If you have any questions or want to know more, please contact the ISSF PE Project Manager Paolo Arru. Find out more on how to apply here.

14 September 2022 - MRC Career Development Award

This funding supports researchers' who are moving towards working as an independent investigator in a medical research field. Research can focus on any area of MRC's remit to improve human health. Applicants must:

- Have a PhD or equivalent
- Show evidence of career progression
- Show clear plans for developing as a leader in your specialist area of research.

Applicants' research plans must not overlap with those of their current group leader or proposed sponsor. This is an ongoing scheme and application rounds open twice a year, closing in April and September. To find out more, visit the MRC website.

4 October 2022 (Preliminary Submission) - Cancer Research UK Career Development Fellowship

Cancer Research UK's Career Development Fellowship supports new group leaders who do not have a salaried independent position to establish their own independent research group.

Eligibility

Applications are considered from any area of their funding remit, including population, prevention and early detection/diagnosis research, but with the exception of any interventional clinical study/trial and drug discovery.

Applicants should:

- Have space and facilities to run an independent research group
- Be able to demonstrate that they meet the range of skills and experience as outlined in the 'establishing independence' career stage in CRUK's Fellowships Competency Framework.

Find out more about this funding scheme at the CRUK website.

Upcoming Events and Training Opportunities

ACED Summer School 2022 (Virtual), 30th August - 2nd September

The Early Detection Summer School is an immersive and engaging programme that covers themes relevant to cancer early detection research. The programme will provide valuable insight into early detection science and is therefore well suited to trainees from across UK and US member centres.

You can register for this event at the Canary Center at Stanford website.

Developing the Next Generation of Cancer Leaders, Manchester, 1-2 September 2022

Join us for a training and development event for aspiring and recognised cancer leaders, including international keynote from Dr Robert Tillman (Baylor College of Medicine), interactive workshops, expert roundtables, elevator pitches and posters with prizes awarded. For full details and registration, visit EventBrite.

EACR Conference: Cancer Metabolism, Spain, 11-13 October 2022

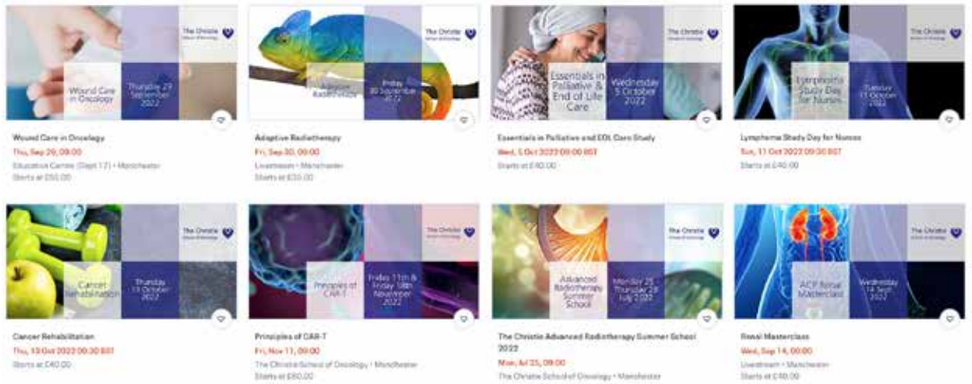
The target audience for this conference is basic and translational scientists and clinicians, both senior and young investigators that want to have a broad and detailed overview of the most recent advances in the field of cancer metabolism.

Key dates

- Bursary application deadline: 01 August 2022
- Abstract submission deadline: 01 August 2022
- Registration deadline: 08 September 2022

Find out more at the EACR webpage.

Christie Education Events, 2022-23



Register via EventBrite. Can't find what you are looking for or want to organise an event? Get in touch via email: the-christie.educationevents@nhs.net or call on 0161 918 7409.

ReproducibiliTea Grassroots Journal Club Initiative, Meeting Monthly

ReproducibiliTea is a grassroots journal club initiative that helps researchers create local Open Science journal clubs at their universities to discuss diverse issues, papers and ideas about improving science, reproducibility and the Open Science movement. Started in early 2018 at the University of Oxford, ReproducibiliTea has now spread to 105 institutions in 25 different countries.

The Manchester branch have restarted and will be meeting monthly, with a short break over the summer. These sessions are being run as a hybrid format, with some in-person gatherings and a Zoom link. If you are interested in joining an in-person meeting, please let the organisers know through this form or just come to 8F30 at AP. If anyone is interested in hosting a group at the OCRB, please also contact the organisers using the details listed below.

george.farmer@manchester.ac.uk

andrew.porter@cruk.manchester.ac.uk (CRUK Manchester Institute)

nathan.khadaroo@postgrad.manchester.ac.uk

Cancer Research UK Research Events and Conferences, 2022-23

Upcoming CRUK events include but are not limited to the below. For further details and events, see the CRUK Research Events and Conferences webpage.

Thank You to Our Funders

Thanks are due to the many funders who continue to support postgraduate and postdoctoral research in Manchester, including, but not limited to:

- Cancer Research UK
- Blood Cancer UK
- Breast Cancer Now
- Wellcome
- Christie Charitable Trust
- National Institute of Health Research, incl. the NIHR Manchester BRC
- The Jon Moulton Charitable Trust
- Oglesby Charitable Trust
- The University of Manchester Philanthropic Donors
- CRUK Manchester Institute
- The University of Manchester
- Biotechnology and Biological Sciences Research Council
- Kay Kendall Leukaemia Fund
- Prostate Cancer UK
- Manchester Cancer Research Centre
- Cancer Research UK Manchester Centre
- The Royal College of Radiologists
- Leukaemia UK
- Manchester Foundation Trust
- Friends of Rosie
- NC3Rs
- British Society for the Study of Vulval Disease
- Marie Skłodowska-Curie Actions
- Wellbeing of Women
- Peaches Womb Cancer Trust
- Medical Research Council
- Royal College of Physicians and Surgeons of Glasgow
- Engineering and Physical Sciences Research Council

Keeping in touch

Visit our websites
www.mcrc.manchester.ac.uk
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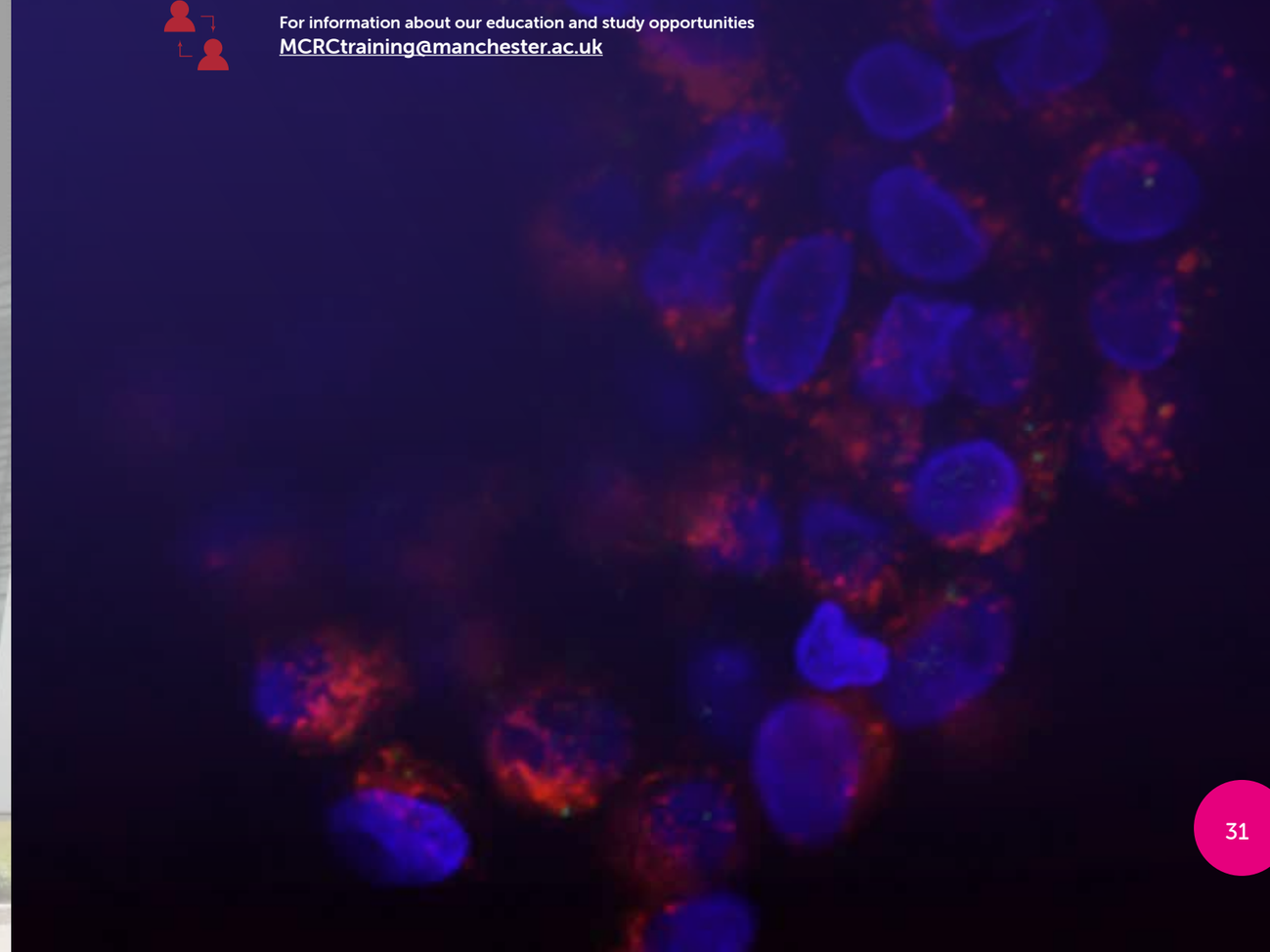
@Cancer Research UK Manchester Centre

For general information or to sign up to our monthly email bulletin
MCRCcomms@manchester.ac.uk

For information about our education and study opportunities
MCRCtraining@manchester.ac.uk



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