

# Bradford ChemBio

What's been going on in our school for the past three months...  
July – September 2022



@UoBChem

@UoBBio



Have an item for the newsletter? Email [k.riches@bradford.ac.uk](mailto:k.riches@bradford.ac.uk) or [m.sutherland@bradford.ac.uk](mailto:m.sutherland@bradford.ac.uk) with 'Newsletter' in the heading

# Welcome!

## Welcome from your Newsletter Editors...

A warm welcome to the 2022-23 academic year! We hope you are all doing well and that students and staff alike are settling into semester 1. The beginning of term can always be stressful as we get back into the swing of things so remember to give yourselves time to adjust!

In this issue we have a bumper crop of student achievements which is great to see. Head to the Student Zone at the end of the newsletter to learn about our undergraduate student prizes at the recent graduation, our postgraduate students showcasing their work at the annual PGR symposium, and the great work that some of our undergraduates have achieved during summer studentships within the school.

At the staff level, conference season has been in full swing and our intrepid researchers have been travelling the globe (or going to Manchester) to keep abreast of all the most recent developments in our fields. Most conferences are back in person now which is great for networking and fully immersing yourself in the experience, but are perhaps not quite so accessible. Our students have done a great job of putting themselves out there and presenting whenever they can.

Another highlight over the summer has been the recognition that our teaching technicians have received – both from their students and from the wider University. Technicians underpin much of the fabric of our teaching and are often the 'unsung heroes' of our courses so we are delighted to see them getting the recognition they deserve!

We hope you enjoy reading the newsletter and celebrating our collective successes. If you have anything you would like to see in future editions please do get in touch.

**Dr Kirsten Riches-Suman** and **Dr Mark Sutherland**



## Welcome to our new Dean of FoLS

I'm proud to have taken over the role of Dean of Life Sciences and look forward to working with colleagues on both the 'what' we can achieve and 'how' we wish to work together over the 5 years of my tenure. I'd like to thank colleagues for being so welcoming and helping me on that journey of transition into 'Team Bradford'. Clearly, as Dean, I can't have favourites within a Faculty, however at heart I'm a biologist. Luckily both my parents worked at zoos at some point in their careers (that's how they met) because as a child I was forever wanting to keep different animals; this got me into all kinds of trouble, particularly when my stick insects escaped at primary school leading to my classmates standing on their chairs whilst I hunted down the escapees! Not to be dissuaded, I maintained an interest in biological sciences throughout school and beyond. I even met my wife when we were both studying Zoology based courses at Leeds. Most of my research has been focused on biomechanics and/or muscle physiology, often applied to a biological question. So don't be surprised when I appear in seminars in your school! As some of you will have already found, I'm keen to facilitate growth and development of the school programmes and student numbers. I am also cognisant we need to support staff through their career journey, whatever that may look like, to enable them to develop in their research/enterprise/profession etc. I am opening up other opportunities for staff to speak to me to enable me and the wider Faculty Leader-

ship Team to better understand the key issues affecting your work here. This will help guide decisions made in Faculty and help us to work with senior colleagues across the University - for instance to achieve improvements in systems and processes that support the work that we do. Alongside my role as Dean, I have just agreed to be the Executive Board advocate for Wellbeing and Mental Health, so I will be familiarising myself with the support available for staff and looking to see what we can do as an institution to support staff wellbeing more widely. On that note, for my wellbeing I enjoy walking in the hills!

**Prof Rob James**, Dean of the Faculty of Life Sciences



## New PhD students

**Shane Terry** is a new PhD student studying the protein mechanisms involved in aggregation-related diseases under the supervisor of **Dr Yvonne Nyathi**. Throughout his academic pathway, Shane has been deeply invested in the scientific field and wishes to pursue a career in researching neurodegenerative diseases. He developed his passion within his Biomedical Sciences degree at the University of Bradford where he found his love for the laboratory environment and achieved the Michael Gardner Prize for Biochemistry. Outside of academia, Shane immerses himself in multiple volunteer roles working with children through Scouting and summer activity camps. He wishes to incorporate this experience into creating a PhD student outreach program for schools to inspire children about science and research from a young age.



## New PhD students

Hello, I am **Francesca Manocchio**, a visiting PhD student from Italy. I did my BSc in Biological Science and I started to be passionate about nutrigenomics by joining the research group of Prof. Muller at Quadram Institute of Bioscience in Norwich. I enrolled to MSc in Cellular and Molecular Biology, and I joined the Nutrigenomics Research Group at the Universitat Rovira i Virgili (URV), Spain. Being in a research environment on a daily basis increased my curiosity about underlying molecular effects of nutrition. I could reach my goal to pursue research in nutrition by gaining a grant to develop my PhD thesis with the Nutrigenomics Research Group (URV). I am currently studying the metabolic effects of consumption of polyphenol-rich fruits and their interaction with seasonal rhythms. To be able to include neuroendocrine research in my studies, I contacted **Dr. Gisela Helfer** who gave me the opportunity to join her research group for 5 months at the University of Bradford. I gained a research visit grant from British Society of Neuroendocrinology, to support my research stay. Our interest is to look at seasonal markers and appetite regulating neurons in hypothalamic tanycytes. Moreover, I will contribute to active projects in the lab. Working under her supervision and getting involved in a new exciting research environment would be an extraordinary contribution to my future career.



## Carpentries Instructor

**Dr Sara Khalil** is officially awarded the title of Carpentries Instructor. The Carpentries builds global capacity in essential data and computational skills for conducting efficient, open, and reproducible research. It offers a platform to collaboratively develop openly available lessons and deliver these with evidence-based teaching practices.

This Summer, Sara was awarded the title of Carpentries Instructor after successfully completing the official training programme and presenting her final project of the course. At Bradford, Sara is currently working on a UKRI-funded project led by Krzysztof Poterłowicz as Data Stewardship Content Developer and Trainer. Her new instructor title and acquired skills will improve the development of the courses delivered through this project and has already helped position the University of Bradford as a training centre in data stewardship in the life sciences.

## Brad-ICOOUNT

Congratulations to **Dr Sobia Kauser**, **Dr Beverly Stewart** and **Dr Yvonne Nyathi** who recently joined the first cohort of the **Brad-ICOOUNT Leadership Training programme**. This course is designed to take positive action to address the under-representation of women and staff from ethnic minority backgrounds in leadership positions within the Faculty of Life Sciences.

## Promotions

Congratulations to **Prof Simon Tweddell**, our former head of school, who has been promoted to Professor in recognition for his extensive impact in TBL and Pharmacy learning.

Congratulations to **Dr Yvonne Nyathi** who has been promoted to Assistant Professor.

## Chinese Scholarship Council

The **CSC Visiting Scholar Research Fellowship**, awarded by Chinese Scholarship Council, Sep 2022 – Sep 2023, applicant: Han-Kui Wu, co-applicant: **Dr Anna Wu**, £16,200 research on alkynyl phosphine functionalisation. Dr. H.K. Wu will join N. Wu group for postdoctoral research.

## MITACs Globalink

First year PhD students **Francesca Standeven** and **Gwyn Dahlquist-Axe** have received a **MITACs Globalink** grant totaling \$12,000 (CAD) to travel to the University of British Columbia in Canada to conduct a 3 month research project involving the preparation and extraction of ancient DNA from dental calculus from post-medieval individuals, as well as post-sequencing analysis of the bacterial species and their associated antibiotic resistance genes. This project will be a collaboration between the University of Bradford and Dr Camilla Speller's Ancient DNA and Proteins laboratory at UBC.

## RSC

**Dr Philip Drake** has been awarded an **RSC Enablement Grant** for £10,000. This is to build a collaboration with Dr Andang Miatmoko and Professor Rento Sari (both Universitas Airlangga, Indonesia) in the area of functionalised chitosan-iron oxide nanoparticles (CH-IONPs) for drug delivery and hyperthermia applications. Dr Ilma Amalina will visit us in Semester 1 with Visiting Research Status in the faculty until Summer 2023. This will be the start of a long lasting relationship with Indonesia where Bradford will help leverage value added potential to the waste product of the prawn industry. Chitosan is a valuable material obtained from crustaceans - by applying Material Chemistry research the team hope to develop a greater understanding of its potential and a range of new applications.

## MRC Confidence in Concept

**Dr Tom Swift** has, in collaboration with Dr Amalia Ruiz and Prof Klaus Pors (School of Pharmacy), won an MRC Confidence in Concept award for the development of a smart delivery system using contact lenses for the treatment of ocular diseases.

## Papers in Press...

**Asare-Amankwah Y, Riches-Suman K. The complex role of RhoA in regulating vascular smooth muscle cell phenotype in Type 2 diabetes.** *Vessel Plus* 2022 in press

**Azmanova M, Rafols L, Cooper PA, Seaton CC, Shnyder SD, Pitto-Barry A. Anticancer Water-Soluble Organoruthenium Complexes: Synthesis and Preclinical Evaluation.** *ChemBiochem.* 2022 15:e202200259

**Chua KO, Norton P, Trus P, Katsikogianni M, Thornton MJ, Chan KG, Chang CY. Draft Genome Sequence of the Multiple Antibiotic Resistant Pseudomonas aeruginosa PAO1-UB Subline.** *Microbiol Resour Announc.* 2022 22:e0064622

**Cope H, Willis CRG, MacKay MJ, Rutter LA, Toh LS, Williams PM, Herranz R, Borg J, Bezdán D, Giacomello S, Muratani M, Mason CE, Etheridge T, Szewczyk NJ. Routine omics collection is a golden opportunity for European human research in space and analog environments.** *Patterns* 2022 in press

**Eltaboni F, Singh S, Swanson L, Swift T, Almalki ASA. Fluorescence spectroscopy analysis of fly ash removal from aqueous systems: adsorption of alginate to silica and alumina.** *Soft Matter* 2022;18: 5687-5698

**Helfer G, Kadmiel M, Jethwa PH. Editorial: Women in integrative physiology: 2021.** *Frontiers in Physiology*, 2022. 13

**Hill J, Nyathi Y. USP5 enhances SGTA mediated protein quality control.** *PLoS ONE* 2022;17(7): e0257786

**Lyall GK, Birk GK, Harris E, Ferguson C, Riches-Suman K, Kearney MT, Porter KE, Birch KM. Efficacy of interval exercise training to improve vascular health in sedentary postmenopausal females.** *Physiology Reports* 2022;10(16):e15441

**Mahmoud L, Telford L, Livesey T, Katsikogianni M, Kelly A, Terry L, Ting V, Nayak S. Zirconium-based MOFs and their biodegradable polymer composites for controlled and sustainable delivery of herbicides.** *ACS Appl. Bio Mater.* 2022;5(8):3972–3981

**Norton P, Chua KO, Katsikogianni M, Thornton MJ, Chan KG, Chang CY. Draft Genome Sequence of a Multiple Antibiotic Resistant Staphylococcus aureus NCTC 6571-UB Laboratory Strain.** *Microbiol Resour Announc.* 2022 23:e0044822.

## RDF Publication Prize

**Dr Anna Wu** recently won the Research Development Fund monthly **Publication Prize** for her paper entitled "Synthesis of orthogonal push-pull chromophores via click reaction of arylamines".

## C&En

Dr **Debbie Crawford's** work was recently highlighted in **C&En** - see news article link: [Mechanochemists want to shake up industrial chemistry – using mechanical force to drive reactions offers greener routes to molecules, but chemists need to demonstrate that mechanochemistry can work on industrial scales.](#)

## UKSB

Dr **Thomas Swift** presented at the Annual Conference, hosted at the University of Sheffield. The work was from a publication with **Edward Dyson**, **Dr Richard Hoskins** and **Prof Stephen Rimmer** regarding highly branched biologically responding additives that lead to deformation in polyurethane wound dressings.

## BBA Rising Star

Congratulations to **Dr Kirsten Riches-Suman** who recently won the **BBA Rising Stars award for Molecular Basis of Disease**. The *Biochimica et Biophysica Acta* suite of journals are well established and world renowned for their publications across all areas of Biochemistry and Biophysics. Their Rising Stars awards are biannual and aim to recognize the accomplishments and promise of researchers in the early stages of their independent careers and draw international attention to the work they are doing. Kirsten was short-listed as a finalist for the award and invited to publish a review article on her research field, alongside the other 7 finalists. This article was published earlier this year. The executive editors of BBA then appraised the finalists publications and gave the award to Kirsten on the basis of her scientific innovation, rigour and vision. Kirsten will be interviewed by BBA and produce a webinar on her research promoted through BBAs global channels, as well as join the Editorial Board of BBA Molecular Basis of Disease (IF 6.683).

## ICN

**Dr Gisela Helfer**, **Dr Katie Hanna** and **Haesung Yun** attended the **ICN2022** conference in Glasgow on 7 to 10 August 2022. Katie presented a poster on 'Circadian rhythms in hypothalamic tanycytes' and Haesung presented a poster on 'Chemerin/CMKLR1 axis is involved in the regulation of energy homeostasis and neuroinflammation in the hypothalamus'. Haesung also attended the Early Stage Researchers Symposium from the British Society of Neuroendocrinology which took place before ICN 2022.

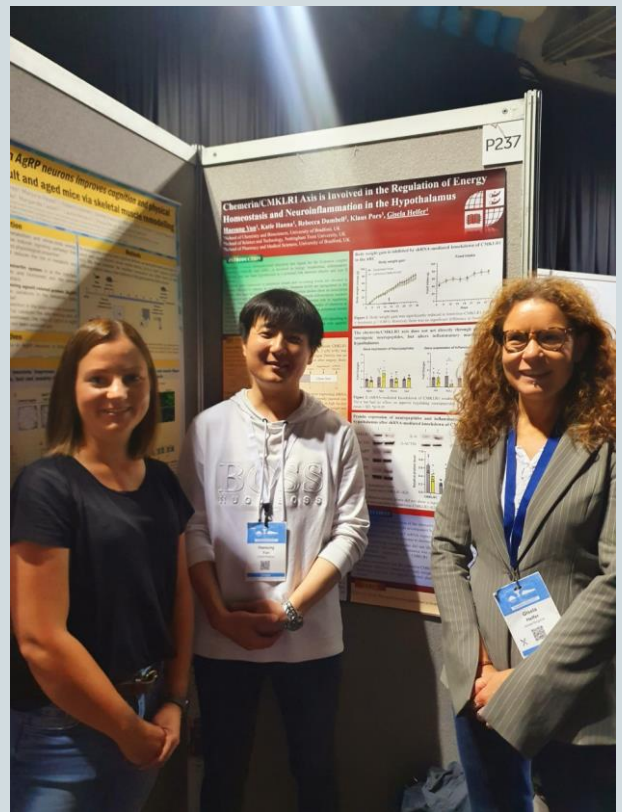
## The Conversation

Dr **Gillian Westgate** published an article on The Conversation in September 2022:

- Uncombable hair syndrome: New study finds the genes responsible

## R&I Newsletter

Dr **Gillian Westgate** wrote a piece on how the work in CSS has had a real impact on the marketplace by translating research to brands for business growth and consumer communication. This was included as one of the impact case studies in REF2021 and CSS continues to drive new developments in this area. **Dr Kirsten Riches-Suman's** recent Rising Stars award was also picked up in the newsletter which focussed on the personal development and journey behind such awards. Kirsten highlighted the benefits of therapy in overcoming imposter syndrome and its value for professional progression.



## Northern BUG

Bradford hosted the half day **Northern BUG** meeting as a hybrid meeting on Friday 9th September. Thanks to **Dr Krzysztof Poterłowicz** and his team for organising and hosting the meeting with support from the University's HPC manager Martin Wolstencroft.

## RAMS2022

Recent Appointees in Materials Science was held at the University in early September. The Organising Committee comprised **Dr Sanjit Nayak**, **Dr Debbie Crawford**, **Dr Philip Drake**, **Dr Nadeem Javid**, **Dr Colin Seaton**, **Dr Beverly Stewart**, **Dr Thomas Swift** and **Dr Richard Telford**. All the delegates enjoyed science, local culture, and cuisine. We are already aware of a large number of future collaborations evolved from this conference. Both of our sponsors, RSC and Nature Publishing Group were very happy and satisfied with the quality of organisation, selection of speakers, and hospitality. We had 40 contributions including 24 oral presentations from speakers from all across the UK.



Talks from our School included:

- **Maria Azmanova**: Electron-deficient and saturated organoruthenium complexes as anticancer drug candidates.
- **Dr Zak Hughes**: Manufactured nanomaterials in the environment: Elucidating the interaction of natural organic matter with nanomaterials via molecular simulation.
- **Dr Colin Seaton**: Isostructural molecular crystals: Combining experimental and computational screening

There were also a number of posters from our School and **Mitali Singhal** won the MSDE people's choice poster award for her work on metal organic frameworks for the delivery of antineoplastic drug mitoxantrone to treat breast cancer.



## Asia Skin Microbiome Congress

**Prof Julie Thornton** gave an invited talk at the Skin Research Institute of Singapore (SRIS) at the Asia Skin Microbiome Congress. Julie shared her knowledge on the impact of the menopause on the skin microbiome.



## Cosmetics Cluster UK

**Dr Gill Westgate** represented the University of Bradford and the Cosmetics Cluster UK at the IFSCC 32<sup>nd</sup> Congress in London, hosting the Technology Showcase Challenge.



## Mancunian Skin Club

**Paul Norton**, **Dr David Ansell** and **Prof Julie Thornton** attended the two-day at the "Mancunian skin club annual conference" in September.

## Mass Spec Society

Nathan Fenwick and his supervisor Prof Richard Bowen presented their work at the **42<sup>nd</sup> British Mass Spectrometry Society Annual Meeting** at the Royal Northern College of Music in Manchester in early September. Their posters were entitled:

- Hammett Correlation in Fragmentation of Ionized Substituted Benzophenones,
- Proximity Effects in Electron Ionization Mass Spectra of Substituted Cinnamamides

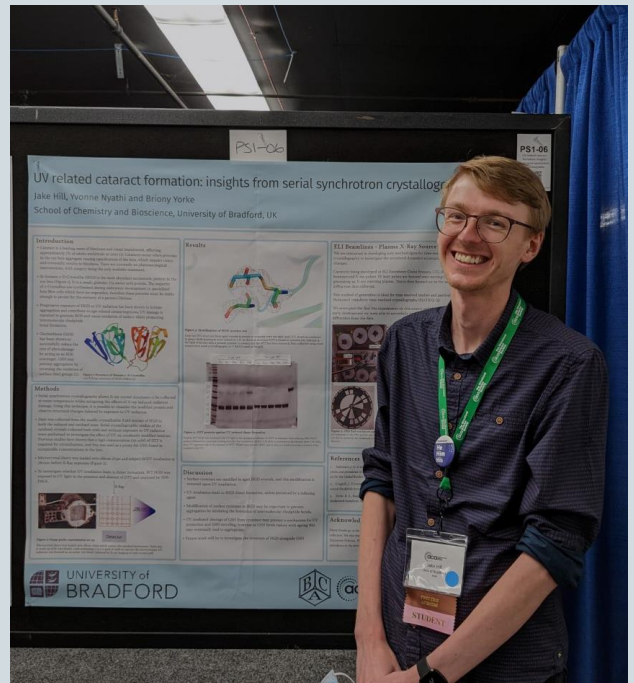
## Eurobiofilms

Paul Norton attended the **Eurobiofilms** conference in Mallorca 2022 in September. Paul survived many incidents that would have challenged the hardest of academics, such as battling with a poster for almost an hour that would not stay put (and resorting to forbidden tactics to get it to behave – pins!), and the organisers deciding that he was from Italy rather than the UK. Nonetheless, Paul had a great time and made a number of valuable links within the biofilms community.



## ACA 2022

PhD student **Jake Hill** was awarded the American Crystallographic Association travel grant and the Arnold Beavers Bursary from the British Crystallographic Association (BCA) to attend the **American Crystallography Association Annual** meeting in Portland Oregon. He wrote an insightful piece about his experiences at the conference for the BCA Crystallography Newsletter which can be found online. In particular, Jake enjoyed being able to personally contribute to the three-minute thesis competition and a busy and engaging poster session. The Young Scientists Scientific Interest Group (YSIG) did an excellent job organising both academic and social events which were a great opportunity to meet other young scientists.



## NECB

Many members from the School attended the North of England Cell Biology Forum in Manchester in September. **Mitali Singhal** gave a talk and a poster on her PhD research whilst **Alisah Hussain, Ayesha Masood, Yaw Asare-Amankwah** and **Sabia Khan** presented posters. Fellow PhD students **Sirli Anniko** and **Paul Norton** attended for networking, as did **Prof Anne Graham, Drs Kirsten Riches-Suman, Yvonne Nyathi, David Ansell** and **Jenny Waby**. It was an excellent meeting that covered the whole gamut on cell biology – from cell lines to yeast, from cancer to neurobiology and everywhere in between.



# Teaching

## Outstanding Achievement

In August the School's **Teaching Technicians** were presented with certificates for **Outstanding Contribution to the Faculty**. I'm sure we all agree with how valuable our technicians are, especially with their student feedback - congratulations to them!



## Curriculum Development

We were very pleased that the BSc(Hons) Biomedical Science and BSc(Hons) Healthcare Science curriculum development for 2023-24 onwards has been approved. This represents a vast amount of work from the curriculum development team. **Dr Kirsten Riches-Suman** led the team and would like to offer her sincere thanks to everyone who engaged with the curriculum design in a forward-thinking way to provide an excellent educational experience for our future students. Thank you to **Drs Juanvi Canet-Perez, Giulia Grimaldi, Gisela Helfer, Sobia Kauser, Pete Nicholls, Antony Scimone, Andrew Tedder, Kara Thornton** and of course **Jenny Waby** as our DoS who did a sterling job of presenting to the panel. We received six commendations from the panel for our inclusive design that puts the focus on student employability. The next step is to prepare for IBMS and RBS accreditation panels in the coming months.

The Phase 1 application for BSc(Hons) Healthcare Science at distance has also been approved by the university. **Kara Thornton, Gillian Jaggard** and **Hassan Naeem** are now preparing for the Phase 2 panel with a view of accreditation applications at the same time.

Well done and thank you to all staff who have contributed to these substantial teaching and scholarship developments!

## The Biomedical Scientist

**Tracey Warnett**, Teaching Technical Manager, has had a piece published in the August edition of **'The Biomedical Scientist'**. Entitled 'A call to arms: Returning to practice in the pandemic', Tracey discusses her experiences of returning to practice at Bradford Royal Infirmary as a Biomedical Scientist to validate and verify analysers for the rapid testing of SARS CoV-2 during the peak(s) of the COVID-19 pandemic. Prior to joining our technical team in 2016, Tracey was a Chief Biomedical Scientist in Clinical Biochemistry. Even though use of this technology was outside the scope of her usual discipline, she was able to aid the NHS in such a time of crisis. As well as the benchwork, Tracey also trained the laboratory staff to run the analyser to provide a 24/7 service and complete the documentation required for UKAS accreditation and later trained emergency department staff in the use of a Point of Care analyser for SARS CoV-2.

## External Examining

**Dr Gisela Helfer** has been appointed as external examiner for the University of Glasgow to oversee the courses Applied Animal Management and Veterinary Bioscience. Her term runs until September 2026.

## HEA Fellowship

**Dr Juanvi Canet-Perez** has successfully achieved his Fellowship of the Higher Education Academy (FHEA). Congratulations, Juanvi!

## Ilkley Walk

In September, our MSc students were led on a very damp and windy walk to Ilkley by **Drs Pete Nicholls, Andrew Tedder, David Ansell, Katie Hanna** and **Gisela Helfer**. Although the weather was wet, spirits were high. For some of the students, this was their first experience to see our beautiful Yorkshire landscape.





## Student Feedback for the Teaching Technicians

We all know how incredibly hard our teaching technicians work to keep the School practical provisions running smoothly. This summer, we have had some fantastic feedback from our students to share with you all!

Here is some of the feedback for the Biomedical Science teaching technicians from MSc students who completed their studies in the G floor labs over the summer:

Most important was the encouragement we students readily got from the team especially staff in G2. Thank you everyone!



All the technical staff have been really fantastic. We couldn't complete our project without you. And we really appreciate your time, efforts and help. You will be forever remembered for your kind gestures.

I had a friendly, smooth-running and accommodating learning environment

Thank you so much for your co-operations. I have enjoyed my lab while working with such friendly and supporting staff. They help us in every instance. Thank you! ☺

My MSc project experience was very pleasant mostly due to the fact that the lab technicians (**all of them**) were extremely kind and helpful. Them being cheerful creates a nice atmosphere knowing that if I make a mistake I can always ask for help without any awkwardness

And it's not just the Biomed technicians - **Nigel Templeton** in the chemistry team received this from a grateful student for his support during practical classes and also for his pastoral care and empathy shown when she was at a low point during her studies. Well done Nigel!



## Learning and Teaching Away Day

The School Learning and Teaching Away Day took place on Tuesday August 30th 2022. The morning focussed on National Student Survey 2022 results and improving student engagement. In the afternoon there were programme team specific discussions, Learning Teaching and Student Experience (LTSE) strategy implementation and a breakout session looking at ideas for new programmes. Lots of informative discussions were had and as a result for 2022-23 academic year the School will be focussing on improving assessment feedback and engagement with the feedback.

# Admissions and Outreach

## Admissions

Thank you to everyone who got involved with Open Days and Clearing leading up to the start of the 2022/2023 academic year and look forward to your continued support in our admissions activities. Unfortunately, our student number intake doesn't reflect the effort put in by the Outreach team and academics visiting local schools and colleges.

A task team has been set up to try improve our initial uptake and some potential areas have been identified. We have made some changes to our entry requirements for both Chemistry and Biomedical sciences based on what is being taught at colleges. Our first Open Day for the 2023/2024 academic year on Saturday 1<sup>st</sup> October had the best turn out we have seen in a while, hopefully a positive sign for the year ahead.

Thank you to **Alex Surtees** who has been involved with chemistry over the last few years and welcome to **Deborah Crawford** who will be taking over for Chemistry.

The dates for future Open Days haven't been released yet but we have Applicant experience days on 8 February, 25 March and 10 May. Please check your calendars and see if you are available to help out at any of these.

We need short activities of 5 to 15 minutes for the Open days and Applicant Experience Days, please email me if you have anything that will leave an impact (Fluorescent cells, beating cells).

**Dr Mark Sutherland**, Director of Marketing and Admissions

## Local News

**Dr Kirsten Riches-Suman's** work was highlighted in the local newspaper, the **Telegraph and Argus**. This highlighted her plans for developing a clinical test for detecting the molecular age of blood vessels with a view to designing new drugs for patients vulnerable to early vascular ageing, such as those with type 2 diabetes, high blood pressure or aneurysm disease.

This was also picked up by **BCB Radio** and Kirsten was interviewed by David Clapham who asked very insightful questions about the research including why such a test was needed, if it could be used instead of traditional lifestyle changes for improving vascular health, and if epigenetics was playing a role in the premature ageing process. Kirsten was not expecting to be having an interview in the basement of a restaurant in Oxford on the first day of her holiday, but it was an enjoyable experience nonetheless!

### Potentially life-saving test could detect heart attack or stroke risk

19th August

## Telegraph & Argus



Dr Kirsten Riches-Suman, associate professor in Biomedical Science at the University of Bradford, pictured inset. The University of Bradford is seen behind the image. Picture: University of Bradford



**By Natasha Meek**  
Digital Reporter  
@journomeek

Share    1 Comments

# Admissions and Outreach

## Radio Hosting

On 24th of July 2022, **Dr Gisela Helfer** hosted Research Matters on BCB Radio 106.6FM. The programme featured Dr Russell Delderfield, Senior Skills Advisor at the University of Bradford. Russell talked about his research on male eating disorders and explained why there is little research on male eating disorders. Gisela was also joined by Prof Simon Tweddell, Professor of Pharmacy Education in the School of Pharmacy and Medical Sciences, our former Head of School. Simon talked about his recent promotion to Professor and his outstanding work reshaping pharmacy teaching.

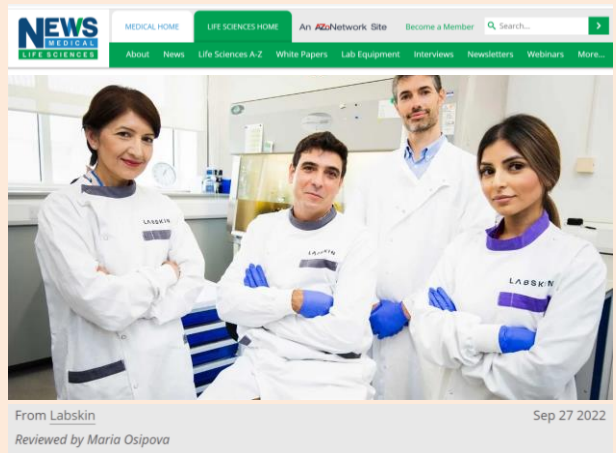
**BCB Research Matters 106.6 FM & online  
24<sup>th</sup> July 2022, 1pm**



[www.bradford.ac.uk/researchmatters](http://www.bradford.ac.uk/researchmatters)

## Labskin

**Dr Sobia Kauser, Dr Omera Bi**, Dr Jacobo Elies (School of Pharmacy and medical Sciences) and Dr David Cabellaro-Lima (Labskin) were highlighted in Medical Life Sciences News for their work on developing a pigmented, lab-grown skin equivalent that can be used commercially. This is a critical breakthrough not only for science but also for equality, as it means that factors affecting the skin can be modelled for different ethnicities; an area which has been sadly lacking thus far.



## Café Scientifique

The 2022/23 programme for Café Scientifique was launched this summer. The new programme will be in person only in the National Science and Media Museum. The first Café took place on the 22nd of September 2022 with our new Dean of Faculty of Life Sciences Prof Rob James discussing 'Using muscle to improve drug safety testing'.

The next event will take place on 18th of October and is part of the National Science and Media Museum Lates event. This event celebrates 100 years of BBC with Dr Kristyn Gorton from the University of Leeds discussing past television.

For more information and to book your free tickets please visit the National Science Media Museum website <https://www.scienceandmediamuseum.org.uk/whats-on/cafe-scientifique> or follow us on twitter @BfdCafe.

Programme director **Dr Gisela Helfer**

**Bradford Café Scientifique**

- Sept 22nd 2022 6.30 pm Rob James  
Using muscle to improve drug safety testing
- Oct 18th 2022 6.30 pm Kristyn Gorton  
Caring for past televisions: the case of children's television
- Nov 24th 2022 6.30 pm Laura Carter  
Antibiotics and the environment
- Dec 15th 2022 6.30pm Peter Mitchell  
Autism and the double empathy problem
- Jan 19th 2023 6.30 pm Gareth Addidge  
Vulnerability and risk - a policing paradox
- Feb 16th 2023 6.30 pm Sarah Knight  
When hearing isn't the same as understanding
- Mar 23rd 2023 6.30 pm Mark Lorch  
Behind the scenes of 50 years of Rat screens
- Apr 20th 2023 6.30 pm Lara Helfer  
Brain circuits driving body weight
- May 18th 2023 6.30 pm Dianne Wepa  
5 ways to wellbeing
- Jun 22nd 2023 6.30 pm Kirsten Riches-Suman  
The confused blood vessel
- Jul 20th 2023 6.30 pm Yvonne Nyathi  
Untangling the gordian knots: are protein aggregates drivers of disease?

Book your free tickets online.  
<https://www.scienceandmediamuseum.org.uk/whats-on/cafe-scientifique>

BRADFORD SCIENCE MEDIA MUSEUM TM

## Graduation Ceremonies

Congratulations to our class of 2022! Our BSc(Hons) Biomedical Science, BSc(Hons) Healthcare Science, BSc(Hons) Chemistry and MChem degrees were conferred in July 2022. We are very proud of all our students and would like to highlight the following prizes that were awarded:

**Carolina Gabado Ramos de Cabedo** BSc Biomedical Science Aveda Prize for Medical Cell Biology

**Jake Garnett** BSc Chemistry Nufarm Prize

**Richard Hall** BSc Healthcare Science Institute of Biomedical Science President's Prize

**Richard Hall** BSc Healthcare Science Sue Parkin Prize

**Danyaal Hussain** BSc Biomedical Science Cancer Biology Prize

**Shane Terry** BSc Biomedical Science Professor Michael Gardner Prize for Biochemistry

**Theodora Tsiaousi** BSc Biomedical Science Royal Society of Biology Prize

**Theodora Tsiaousi** BSc Biomedical Science Haematology Prize

**Anum Waseem** BSc Biomedical Science Don Whitley Scientific Microbiology Prize



## Life Sciences Postgraduate Symposium

The annual Life Sciences PGR Symposium was held in September. This event is compulsory for all School PhD students, regardless of their PhD stage, and is an excellent opportunity to practice both poster and oral presentations in a welcoming and friendly environment.

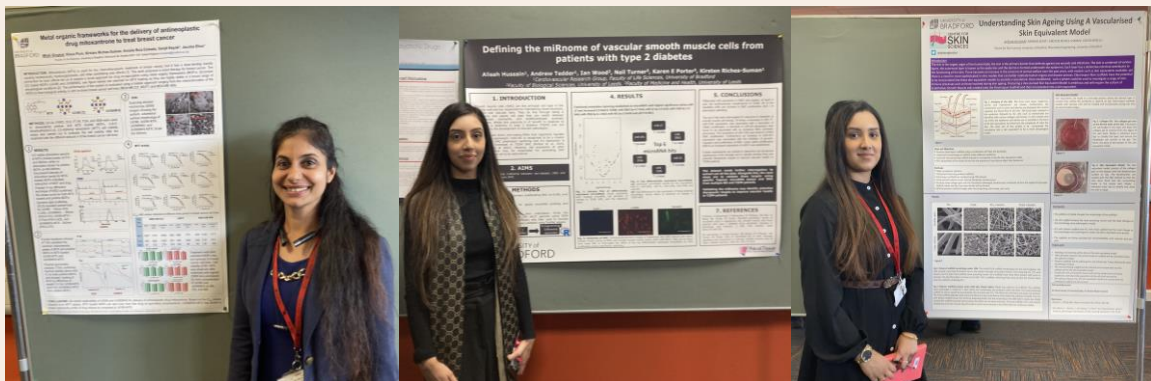
We had a number of talks on the day including from:

- **Anoff Anim** (supervisors **Dr Sanjit Nayak**, Prof AL Kelly, **Dr Maria Katsikogianni**)
- **Sirli Anniko** (supervisors **Dr Peter Nicholls**, **Dr Krzysztof Poterłowicz**, Prof Sherif El-Khamisy)
- **Yaw Asare-Amankwah** (supervisors **Dr Kirsten Riches-Suman**, Prof Anne Graham)
- **Jake Hill** (supervisors **Dr Briony Yorke**, **Dr Yvonne Nyathi**, Dr Jonathan Dennis)
- **Mohammad Ihsun** (supervisors **Dr Beverly Stewart**, **Dr Stephen Hickey**)
- **Paul Norton** (supervisors **Dr Julie Thornton**, **Dr Maria Katsikogianni**)
- **Mitali Singhal** (supervisors **Dr Jacobo Elies**, **Dr Sanjit Nayak**, **Dr Kirsten Riches-Suman**)
- **Haesung Yun** (supervisors **Dr Gisela Helfer**, Prof Klaus Pors)

A large number of students also gave posters including:

- **Junior Bowen** (supervisors **Dr Sam McLean**, **Dr Gisela Helfer**, **Dr Katie Hanna**)
- **Gwyn Dahlquist-Axe** (supervisors **Dr Andrew Tedder**, **Dr Gisela Helfer**)
- **Hanan El Bsir** (supervisors **Dr Krzysztof Paluch**, Dr Helen Sheldrake, **Dr Maria Katsikogianni**)
- **Mohamed Elshorbagy** (supervisors **Prof Colin Wright**, Dr Talat Nasim)
- **Daniel Hall** (supervisors **Dr Clare Peyton**, **Dr Jenny Waby**)
- **Alisah Hussain** (supervisors **Dr Kirsten Riches-Suman**, Prof Julie Thornton)
- **Ayesha Hussain** (supervisors **Dr David Ansell**, **Dr Kirsten Riches-Suman**, Dr Farshid Sefat)
- **Tayah Livesey** (supervisors **Dr Sanjit Nayak**, Prof AL Kelly, **Dr Maria Katsikogianni**)
- **Chioma Nganwuchu** (supervisors Dr Talat Nasim, **Prof Colin Wright**)
- **Nehnah Siddique** (supervisors **Prof Stephen Rimmer**, **Dr Jonathan Fletcher**)
- **Francesca Standeven** (supervisors **Dr Andrew Tedder**, **Dr Gisela Helfer**)
- **Harriet Walker** (supervisors **Dr Hannah Moody**, Prof Sherif El-Khamisy, **Dr Deborah Crawford**)

Well done to all the speakers and poster presentations ☺ Huge congratulations go to **Paul Norton** for winning the best talk prize and **Ayesha Hussain** for winning the best poster prize!



## Undergraduate Summer Studentships

Dr Kirsten Riches-Suman and Dr Yvonne Nyathi have both secured funding from the **Biochemical Society** to sponsor two summer studentships. This competitive national scheme requires applications from the supervisors but also critically from the student(s) who are going to take up the positions. Grants are awarded on the basis of their scientific merit, the research culture of the host laboratory and the drive and ambition of the student. **Shehryar Qureshi** and **Isa Nadim**, both second year BSc (Hons) Biomedical Science undergraduates, were keen to step up to the challenge and their efforts have been rewarded with a stipend for 6 weeks of work.

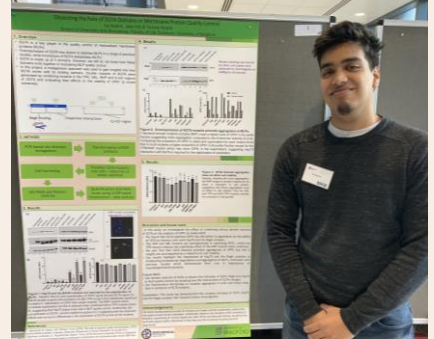
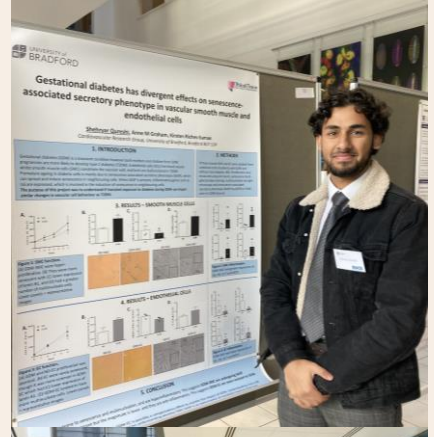
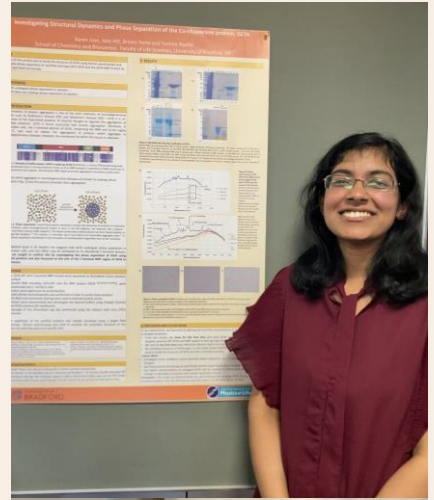
Shehryar is working in Kirsten's laboratory and is examining whether there are markers of early vascular ageing in samples from mothers who have gestational diabetes. Early vascular ageing, also known as EVA, is a condition where blood vessels appear more aged than the persons' actual age and can predispose the person to conditions such as heart attacks or strokes. EVA is known to occur in type 2 diabetes but Shehryar will be discovering whether gestational diabetes also imparts these changes which could identify new targets for therapeutic intervention to correct EVA. He will be presenting his findings at the North of England Cell Biology Forum in Manchester in September.

Isa is working in Yvonne's laboratory and is investigating how protein clumping is regulated in the human body. Proteins are the workhorses of the human body and their function relies on them being in tip-top shape. When proteins lose their shape, they clump together leading to disease. Protein clumping is a hallmark in neurodegenerative diseases (such as Alzheimer's and Parkinson's), type 2 diabetes, cardiovascular diseases and cancers. However, we still do not understand what drives proteins in our body to clump together. Isa's work will contribute to our understanding of processes which normally prevent protein clumping and how these change with age and could identify new targets for drug design.

Yvonne has also been successful in securing funding from **Physics for Life**. This covers a stipend for **Karen Jose**, who recently graduated from the University of Bradford with a first class honours degree in Biomedical Science. Karen is developing a new method to study how proteins clump together. Karen will make proteins using bacteria as production factories and study how such proteins clump outside the human body. She will develop a method to track protein clumping and use this method to investigate conditions which promote or delay protein clumping. Karen's work will lead to a deeper understanding of factors that promote protein clumping and how this knowledge can be harnessed towards novel therapeutic interventions.

Dr Peter Nicholls and Dr Gisela Helfer secured funding for **Awaba Mussadiq**, another second year BSc(Hons) Biomedical Science student, through the Vacation Studentship from the **British Society for Neuroendocrinology**. During the 8-week project, Awaba analysed the expression of signalling receptors in Naked Mole Rats. These are a unique model organism to study due to their longevity and resistance to disease. During these studies, Awaba identified new evidence for a negative feedback pathway in naked mole rats, operating from the gonads to the pituitary. Dr **Giulia Grimaldi** hosted two students, **Azaan Khan** and **Manisha Sambi**, to work on the development of organ-on-a-chip models. This work was supported by the University Careers office.

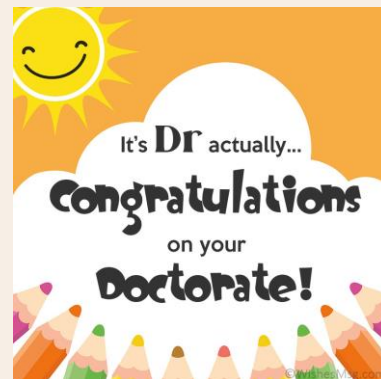
The research landscape is getting increasingly competitive at all levels, from post-graduate to post-doctoral, and laboratory experience is highly sought after by both employers and future research supervisors. Through this scheme, Shehryar, Isa and Karen are gaining invaluable hands-on experience in how to work in a research laboratory, how to deal with technical challenges and how to generate and analyse robust datasets which will greatly enhance their future prospects.



## PhD/MD Completions

Congratulations to the following students for passing their PhD/MD - welcome to the title of Doctor!

- **Dr Parisa Naeem** (supervisors: **Dr Mojgan Najafzadeh**, **Prof Diana Anderson**, **Dr Mohammed Isreb**). **The anti-carcinogenic/therapeutic effect of cord-blood derived exosomes in malignant melanoma**
- **Dr Ali Ebraik Algaddafi** (supervisors: **Dr Philip Drake**, **Dr Tomas Swift**, **Prof RA Abd-Alhameed**) **Designing and building a novel magnetic heating system to investigate the dependence of the magnetic system and the optical emission from nanoparticles**
- **Dr Nagah Mohmed A. Bobtina** (supervisors: **Prof Diana Anderson**, **Dr Mojgan Najafzadeh**) **Genotoxic effects in human peripheral lymphocytes from healthy individuals and head and neck cancer patients after treatment with hydrogen peroxide and pembrolizumab liposome.**



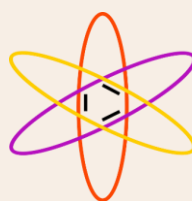
## PhD Progression

Congratulations to the following students who have progressed onto the next stage of the PhD studies:

- **Wafa Mohammed Saif Alshly** (supervisors: **Dr Krzysztof Poterłowicz**, **Dr Andrei Mardaryev**)
- **Anoff Anim** (supervisors: **Dr Sanjit Nayak**, **Prof AL Kelly**, **Dr Maria Katsikogianni**)
- **Daniel Hall** (supervisors: **Dr Clare Peyton**, **Dr Jenny Waby**)

## Student Societies

We have two societies for our students – **ChemSoc**, and the **Biomedical Science Society**. Did you know you can even join both if you fancy it? Please keep an eye out as to how to join and all the different events that they put on – it's a great part of being an undergraduate. While you're at it, why not follow the School on twitter - @UoBBio and @UoBChem to find out all our latest developments.



**ChemSoc**

## Join our LinkedIn Groups

LinkedIn is a great tool for building your professional network, showcasing your skills and can even lead to employers contacting you, rather than the other way around. Here at Bradford we have our own LinkedIn groups so please, sign up for your free LinkedIn profile at [www.linkedin.com](http://www.linkedin.com) and join the community!

**Bradford University School of Biomedical Sciences**  
**Bradford University School of Chemistry**

