

# Bradford ChemBio

What's been going on in our school for the past three months...

June-August 2018



# Welcome!

## Welcome from your Newsletter Editors...

We would like to offer all new and returning students a staff a very warm welcome to the **School of Chemistry and Biosciences**. We hope you've all had a relaxing and productive summer, and are keen to crack on with everything that the coming semester will bring. For those of you who are new to the School, our names are **Dr Kirsten Riches-Suman** and **Dr Andrew Tedder** (you may have met us at Open Days or during Clearing) and we produce this newsletter every three months. We're always looking for new contributions from staff and students, so if you've got anything to celebrate please let us know! We're also looking for volunteers to join the Athena SWAN team (see below) and to interview our professors (see page 24).

During the summer, staff have been incredibly productive in securing research funding and publications, and travelling the world discussing our fascinating findings – you can read more about these achievements on pages 3-11. Furthermore, we've all been working hard to ensure our students have a seamless transition into university life (or into years 2 and 3) when the new term starts – from lecturers completing their postgraduate certificates in higher education practice (page 14) to learning about your new VLE (pages 13-14) and thinking of novel ways to teach and support students (page 12). We're always working hard to ensure we are providing students with a positive and successful learning experience.

Speaking of success, this summer saw our graduation ceremonies and it was an absolute delight to see so many students achieve their degrees and go out into the working world to fly the flag for our School. We're excited to see what they go on to do in their future careers, and hope that they serve as an inspiration to new students joining us!

If you have any suggestions for the newsletter, please don't hesitate to let us know.

**Dr Kirsten Riches-Suman** and **Dr Andrew Tedder**



## Athena SWAN Charter

**Athena SWAN:** The EDOC has worked hard over the last few months and started to implement some of the actions outlined in our action plan. We have launched a maternity mentoring scheme and hosted a day packed full of science activities for our children at the Open Day in June (see page 17). We would like to welcome **Dr Anais Pitto-Barry** (Post-doc) and **Miss Whitney Obule** (PhD student) who have recently joined our team. Applications for joining our team are always welcome, we are particularly looking for applications from undergraduate students and part-time staff.

**Staff survey:** To understand our School's culture, whether staff and/or students feel supported in e.g. developing their career, work load model, and whether there are any particular equality issues that need addressing we will run another staff survey. This will help us to identify trends or opinions on particular issues and can help us identify the short term impact of our actions that we have already implemented. The staff survey will go live within the next few days and it is important for our equality work to have a high response rate. In our previous submission, we were commended for our high response rate in our Staff (and student) surveys and we aim to get at least 80% response rate in each survey. Therefore we hope that you will again participate in the survey and highlight areas that we do well and areas where we need to take action to ensure that our School is a great place to work for everyone. The survey is anonymous and will give you the opportunity to let us know how you perceive your work environment and how you would like this to develop. The survey will collect information required for our future Athena SWAN submission. Please have a look out for e-mails regarding the launch of the staff survey within the next few days.



**Athena SWAN Award Ceremony:** **Prof Anne Graham** travelled to Swansea University on 16th July to pick up the Bronze Department award on behalf of our School. The awards were presented by **Sir Paul Nurse**, the Athena SWAN Charter Patron and a number of case studies were presented from Athena SWAN leads in institutions and units who had received Gold awards to share good practice. Our New Appointees Committee, lead by **Dr Kirsten Riches-Suman**, to improve existing induction structures and create an inclusive environment for staff was highlighted as good practice from our School. Our award trophy is displayed in the School's cabinet on C-floor.

**Dr Gisela Helfer**, **Chair of Equality, Diversity and Opportunities Committee**

# People

A warm welcome to all our new staff and students, and a fond farewell to some...

## Fond farewells...

This summer has seen the departure of four of our Biomedical Science staff, who will be sorely missed. **Prof Des Tobin** has taken up a new position at The Charles Institute of Dermatology, School of Medicine, University College Dublin; and post-doc **Dr Irene Castellano-Pellicena** has joined him in his new venture. We wish them all the best for their future endeavours and look forward to building more links with Dublin through collaborations.



**Prof Des Tobin** with his CSS colleagues **Richard Baker, Jing Qin Tay, Julie Thornton, Su Shergill, Rachael Sedman** and **Steve Sikkink**

**Dr Natasha Botchkareva** has also left the department. Most of Natasha's teaching was on the MSc course and in biomedical science final year research projects and we are sure that the students will miss her. She was also a highly productive and well-respected researcher in the Centre for Skin Sciences and we will miss her impact here.

**Mrs Pam Dunn** has moved on to a training position within the NHS in Harrogate. Pam was a much-loved member of staff who had a massive impact throughout the BSc Healthcare Science course and the Clinical and Analytical Biochemistry module for BSc Biomedical Science. She will be delivering a small number of lectures in the Clinical and Analytical Biochemistry module at the start of teaching in semester 1 so we thank her for providing her expertise in diagnostic/clinical biochemistry at the start of the 2018/19 academic year.



**Natasha Botchkareva (L)** and **Pam Dunn (R)**

We wish all of our former members of staff the best for the future, and look forward to catching up with them (and collaborating!) very soon.

## Post-Docs...

Hello, my name is **Dr Joan Soldevila** from Barcelona, Spain. I studied my BSc in Chemistry at the Univeristat de Barcelona (Barcelona). In 2009 I got the opportunity to visit Prof. Peter Sadler FRS laboratory (Warwick University) as an ERASMUS student, and I fell in love with both United Kingdom and the research topic I was working on. As a consequence, I decided to extend my period at Warwick University by doing my PhD (Development of catalytic metalodrugs) which I obtained in 2014. In 2014, I was awarded an IAS early career fellowship which allowed me to conduct postdoctoral research for 1 year at Prof. Peter J. Sadler laboratory. In 2015 I obtained an Alexander von Humboldt postdoctoral fellowship to join Prof. Nils Metzler-Nolte research laboratory at Ruhr Bochum University (Germany), where I developed catalytic anticancer peptide-metalodrugs bioconjugates. Although I enjoyed my stay in Germany, I decided to come back to the U.K. and work as a post-doctoral researcher with **Dr Nicolas Barry** on the development of 16-electron species and their applications as anticancer agents.



## Research Scientist...

**Dr Ryan Rees** has temporarily joined the school on a short-term, part time contract, acting as a Research Scientist assisting in ongoing projects within the Polymer Research group, working with **Dr Tom Swift** on Poly(oxazoline) and poly(N-isopropylacrylamide) characterisation. Dr Rees received his PhD from the University of Sheffield and has since spent several years in industry, working for companies such as AkzoNobel and PPG before looking to return to academic institutions.

# Research

Funding cutting edge research

## Research Development Fund (RDF) Success

The first **University RDF** results were announced in early August and the School performed really well obtaining five of the eight Faculty successes in the pump priming category and six of the seven in the early career research category.

We offer our congratulations to:

- **Dr Chien-Yi Chang** (Development of novel biosensors for discovery of natural compounds targeting on *Pseudomonas aeruginosa* quorum sensing: a synthetic biology approach)
- **Dr Gisela Helfer** (Evaluating chemerin as a drug target to develop novel therapies for treating obesity)
- **Dr Zak Hughes** with the Computational Chemistry Supergroup (**Dr Beverley Stewart**, **Dr Clare Towse** and **Dr Colin Seaton**; Software support for the computational chemistry supergroup).
- **Dr Sarah Pike** (Tuning the photochemical properties of novel platinum(II) complexes for therapeutic purposes in the fight against cancer; Establishing the importance of the hydrogen bonding properties of biologically relevant species in the metal-ligand domain; Investigation of the origin of helical faults in synthetic oligomers)
- **Dr Tom Swift** (with **Dr Rianne Lord** and **Dr Steve Hickey**; Preliminary Poly(oxazoline) work to support future applications in nanoparticle science and bioinorganic chemistry)
- **Dr Andrew Tedder** (Ancient DNA in tropical hardwoods – novel interdisciplinary developments in bioinformatics and archaeological science; The genetic basis of a recent loss of self-incompatibility in North American *Arabidopsis lyrata*)
- **Dr Clare Towse** (Pathological conformations in the humanin peptide induced by amino acid isomerisation)

These internal funds will produce vital preliminary data which will lead to external grant applications in the future so watch this space!

## Translate: MedTech

**Dr Tom Swift** received funding from **Translate: MedTech** to support current student **Mariya Kalinichenko** carry out a summer research project within the school. Mariya is studying polymer / bacteria interactions using micro calorimetry, scanning electron microscopy and fluorescence to further our understanding of a new material recently developed within the school.

## Leeds Access Innovation Commercial Projects

**Dr Tom Swift** has just completed two commercial projects part funded by the Leeds City Region to develop and apply university expertise in an industrial setting. These collaborations with local companies have led to collaborative research projects worth £30,000, with a further £30,000 project currently underway within the school. Besides assisting local companies develop new capital projects this has given student employment experiences to a recent graduate (**Talha Lakhi**) and current 2nd year Chemistry student (**Matthew Bullman**) to add to their CVs.

## Travel Awards

**Dr Sanjit Nayak** was awarded an **RSC travel grant** for travelling to Japan to present his work in 43rd International Conference on Coordination Chemistry (ICCC2018).

## Other Funding

**Dr Krzysztof Poterłowicz** received an additional £24,000 on top of his £52,000 funded collaboration with a global skin healthcare company in which he is applying artificial intelligence methods to big genomics data to investigate environmental effects on the skin.

## Grant Submissions

**Dr Nicolas Barry** submitted a **BBSRC-GCRF** grant proposal as Co-Investigator in July 2018 for a requested value of £1,147,784 to work on an exciting project with Prof. Anant Paradkar in Pharmacy.

## Memoranda of Understanding

An MoU has been signed between **University of Bradford** and **Indian Institute of Technology** coordinated by **Prof Stephen Rimmer** and **Dr Sanjit Nayak** from University of Bradford. This MoU will facilitate more intense research collaboration and student exchange between these two institutes.

### Analytical Science and Archaeology

In July Drs **Richard Telford** and **Alex Surtees** from the Analytical Centre started on a collaborative project with Southwell Archaeology, Reverend Cannon Nigel Coats of Southwell Minster and the **Heritage Lottery Fund** to preserve medieval art work.

The first stage of the project centres around the "Saracens Head Inn" in Newark. The venue contains some excellent examples of medieval frescoes that through age and neglect have lost some of their majesty. Working alongside Drs Chris Brook and Angela Kirkham, Alex and Richard aim to identify the original pigments used in the painting in order to more accurately date the piece and understand its restoration history. The main area of artwork is to be found in the "Kings Suite". This room was made famous in 1646 as it is where King Charles I entertained the Scottish Commissioners, hosting a dinner at the Saracens Head the night before surrendering to the Commissioners at Newark Castle. Charles believed he had secured sanctuary from Cromwell and the Parliamentarians. The Scottish Commissioners betrayed the King and handed him over to the Parliamentarians for a substantial fee.

Typically in this type of work fragments of paint would need to be removed and sent for, often destructive, laboratory analysis. Using portable Raman spectroscopy Alex and Richard were able to analyse the fresco in situ and without fear of damaging any of the art work. After several hours of analysis they had recorded several spectra that alongside some EDX analysis will identify the pigments used.

The second day of the trip saw Alex and Richard visit Southwell Minster. Southwell Minster contains fluid carvings of plants, animals and green men found within the Chapter House - known collectively as 'The Leaves of Southwell'. They are regarded as the best example of 13th century naturalistic carving in the United Kingdom, are of global importance and currently considered at risk.

The aim, aided by a grant of £352,000 from the HLF, is to identify the original colour and gilding of the carvings so that they can be lit up and made much more accessible and widely known to future generations. The identification of pigment residues on the stonework will be made by Alex and Richard using portable Raman and XRF spectroscopy. A second visit is planned in September to collect more data.

Further details of the project can be found here: [www.leavesofsouthwell.org.uk/the-project](http://www.leavesofsouthwell.org.uk/the-project)



Alex and Richard setting up the portable spectrometer in the Kings Suite. The 11<sup>th</sup> century fresco can be seen on the far wall.



A detailed view of the fresco

### Visiting Professorship

Dr **Rianne Lord** has been awarded an **August-Wilhelm Scheer visiting professorship** by the Technische Universität München (TUM, Germany) which will allow her to conduct research under the guidance of Professor Fritz Kühn. The scheme is for distinguished international professors to further internationalise TUM's curricula and intensify international research collaborations, with particular focus on new and innovative approaches in cutting-edge research fields. Rianne was nominated for this award by Professor Kühn and will conduct the work between September and December 2018. Her research will be focused on "Gold and silver amino acid based NHC complexes in biological studies", and she will also deliver some specialised seminars on bioinorganic chemistry.

# Research

## Publications and Conferences

### Papers in Press...

Castellano-Pellicena I, Uzunbajakava, Mignon CA, Raafs B, Botchkarev VA, Thornton MJ. **Does blue light restore human epidermal barrier function via activation of Opsin during cutaneous wound healing?** *Lasers in Surgery and Medicine* 2018.

Chen JW, Lau YY, Krishnan T, Chan KG, Chang CY. **Recent advances in molecular diagnosis of *Pseudomonasaeruginosa* infection by state-of-the-art genotyping techniques.** *Frontiers in Microbiology* 2018;9:1104.

Childers MC, Towse CL, Daggett V. **Molecular dynamics-derived rotamer libraries for D-amino acids within homochiral and heterochiral polypeptides.** *Protein Engineering, Design and Selection* 2018.

Doroshenko N, Rimmer S, Hoskins R, Garg P, Swift T, Spencer HLM, Lord RM, Katsikogianni M, Pownall D, MacNeil S, Douglas CWI, Shepherd J. **Antibiotic functionalised polymers reduce bacterial biofilm and bioburden in a simulated infection of the cornea.** *Biomaterials*. *Science* 2018(6):2101-2109

Gong Y, Zhao Y, Zhang X, Qi S, Li S, Ye Y, Caulloo S, McElwee KJ, Zhang X. **Serum level of IL-4 predicts response to topical immunotherapy with Diphenylcyclopropenone (DPCP) in Alopecia Areata.** *Experimental Dermatology* 2018.

Hughes ZE and Walsh TR. **Distinct differences in peptide adsorption on palladium and gold: Introducing a polarisable model for Pd(111).** *J. Phys. Chem. C*. 2018.

Jalili RB, Kilani RT, Li Y, Khosravi-Maharloolie M, Nabai L, Wang EHC, McElwee KJ, Ghahary A. **Fibroblast cell-based therapy prevents induction of alopecia areata in an experimental model.** *Cell Transplant* 2018;27(6):994-1004.

Joly-Tonetti N, Wibawa JID, Bell M, Tobin DJ. **An explanation for the mysterious distribution of melanin in human skin – a rare example of asymmetric (melanin) organelle distribution during mitosis of basal layer progenitor keratinocytes.** *British Journal of Dermatology* 2018.

Kobielska PA, Telford R, Rowlandson J, Tian M, Shahin Z, Demessence A, Ting VP, Nayak S. **Polynuclear complexes as precursor templates for hierarchical microporous graphitic carbon: An unusual approach.** *ACS Applied Materials Interfaces* 2018.

Sultan AM, Hughes ZE, Walsh TR. **Effect of calcium ions of peptide adsorption at the aqueous rutile titanium(110) interface.** *Biointerphases* 2018.

Florah Moshapa presenting her PhD research with supervisor Dr Kirsten Riches-Suman

### Special Issues

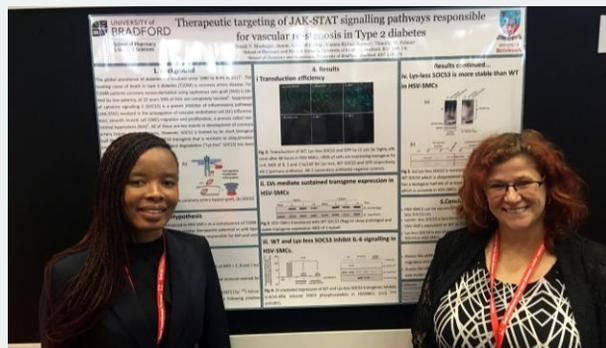
Dr Kirsten Riches-Suman is co-editing a special issue of the journal *Cardiology Research and Practice*. Led by Professor Tim Palmer (School of Pharmacy), Kirsten and co-editors Prof Yvonne Alexander (Manchester Metropolitan University) and Prof Graeme Nixon (University of Aberdeen) are compiling cutting edge submissions on the topic of 'vascular inflammation and remodelling in cardiovascular disease'. Submissions closed on the 31<sup>st</sup> August so we look forward to reading more about it in future editions!

### Textbooks

Dr Rianne Lord was invited by the authors and editors of the **Chemistry<sup>3</sup>** textbook, to return for a meeting at Burlington House, London. This meeting was designed to discuss and plan the future of upcoming 4th edition. Rianne will take lead on trialling new online and interactive teaching material which will be linked to the textbook, she will use her student feedback to improve the user experience and give new ideas to the future of these online tools.

### BSCR 2018

In early June, Dr Kirsten Riches-Suman attended the **British Society for Cardiovascular Research (BSCR)** / British Atherosclerosis Society (BAS) / British Cardiac Society (BCS) joint meeting in Manchester. This annual event is always a highlight in the cardiovascular calendar and features the premier cardiovascular basic and clinical researchers from across the globe. Kirsten's work from her collaboration with the University of Leeds was presented as a poster (Relationship between miR-145 and vascular smooth muscle cell senescence in diabetes). Closer to home, Kirsten's PhD student Florah Moshapa (co-supervised with Prof Tim Palmer, School of Pharmacy) presented her PhD work in a poster entitled 'Therapeutic targeting of JAK-STAT signalling pathways responsible for vascular restenosis in type 2 diabetes'. Florah did a fantastic job of networking throughout the two days and presented her work with confidence. All abstracts for the presentations were published in the journal *Heart* which is another fine addition to Florah's CV!



### ICCC2018

Dr Sanjit Nayak attended the 43rd **International Conference on Coordination Chemistry (ICCC2018)** in Sendai, Japan, to present their exciting work on "Polynuclear Complexes as Precursor Templates for Hierarchical Microporous Graphitic Carbon: An Unusual Approach.". The talk caught great attention of many researchers working on porous carbon materials. The conference was possibly the largest assembly of coordination chemists with a record number of participants over 2500 from all around the world. The conference was a great success with plenty of networking opportunities to meet many of his international peers and collaborators. Some new friendships were also made!



L-R: Prof Eugenio Coronado, Dr Selvan Demir, Prof Annie Powell and Dr Sanjit Nayak

### ICOMC 2018

The Barry group shared via oral presentations their recent work at the **28<sup>th</sup> International Conference on Organometallic Chemistry (ICOMC)** conference in Florence (Italy) between 15<sup>th</sup>-20<sup>th</sup> July. Nicolas presented our work on nanocrystallisation while Anaïs focused on the biological properties of our 16-electron complexes. We also talked about how great Bradford is with some distinguished chemists, such as Ben Feringa!



Dr Nicolas Barry and Dr Anaïs Pitto-Barry talking to Ben Feringa about the virtues of Bradford

### ACS 2018

Dr Rianne Lord attended the 256th **American Chemical Society Meeting & Exposition, Boston (19-24th August)**, and presented three oral presentations and a poster presentation. In particular, her talk entitled "Solid state synthesis of vanadyl(IV) complexes: Simple design with high potency towards cancerous cells" was very well received and has allowed her to make new connections and potential collaborations with researchers in the USA. She was also lucky enough to meet one of the winners of the 2016 Nobel Prize in Chemistry, Sir Fraser Stoddart, and discuss some of the barriers for early career academics.



Rianne meeting Nobel Prize-winning chemist Sir Fraser Stoddart.

Rianne at the conference venue.



### The British Society for Proteome Research Annual Scientific Meeting 2018



It is with great pleasure that the University of Bradford hosted the **British Society of Proteomics Research (BSPR) Annual Scientific Meeting**, with the theme of **"One Health and Wellness"** from 9<sup>th</sup> to 11<sup>th</sup> July in the Norcroft Conference Centre. Proteomics is a rapidly developing field significantly, impacting on our understanding of how biological systems work, be they viruses, bacteria, plants or animals, and providing the next generation of clinical diagnostics and therapeutic target identification in all diseases. The meeting was organised by **Dr Chris Sutton** (School of Chemistry and Biosciences) and Professor Tim Palmer (School of Pharmacy and Medical Sciences).



Left: Plenary lecturer **Professor Dan Chan**, Johns Hopkins University, Baltimore. Right: **Professor Andy Pitt** (Aston University) with the casual look!

**One Health**, in which proteomics plays a significant role, linking human, animal, nutrition and environmental health, is a global initiative to connect medical, veterinary, agricultural and physical disciplines and to understand the interrelationships with our surroundings. One of the consequences of One Health is the development of the concept of wellness. **Wellness** is the active process by which we will self-monitor our own health and adjust our individual requirements to remain healthy. An understanding and ability to profile our own personal proteomes and to regularly visualise the results, will enable us to make informed decisions about our own health trajectory.

The three-day meeting was attended by more than 100 proteomics students and experts from as far afield as the University of Otago, New Zealand. The meeting was opened by BSPR President and HUPO President elect, Professor Stephen Pennington from the University College Dublin and followed by plenary lectures by Professor Dan Chan (Johns Hopkins University) and Dr. Julia Chamot-Rooke (Institut Pasteur). The OVA1 ovarian cancer test described by Professor Chan provided an excellent example of how protein diagnostics are gaining FDA approval, whilst Dr. Chamot-Rooke highlighted the role of proteomics in the discovery of solutions to anti-microbial resistance. This set the scene for a superb, high quality scientific programme with keynote and plenary lectures by Professor Emøke Bendixen (Aarhus University), Professor Claire Eyers (University of Liverpool), Dr Ben Collin (ETH Zurich), Dr Henning Hermjakob (EMBL-EBI, Cambridge), Dr Paul Skipp (University of Southampton), Professor Angus Lamond, FRS (University of Dundee), Professor Stephen Gordon (University College Dublin), Professor Kathryn Lilley (University of Cambridge), Dr Paul Cutler (UCB Pharma) and Dr. Chuna Ram Choudhary (University of Copenhagen). The programme also provided opportunities for many young investigators and PhD students to present their results in the lecture and poster sessions including posters from our very own **Dr Sadr-ul Shaheed** and **Mrs Ghasaq Kashil**.



Enjoying Bradford culture in all it's dimensions (Cartwright Hall)

### The British Society for Proteome Research Annual Scientific Meeting 2018

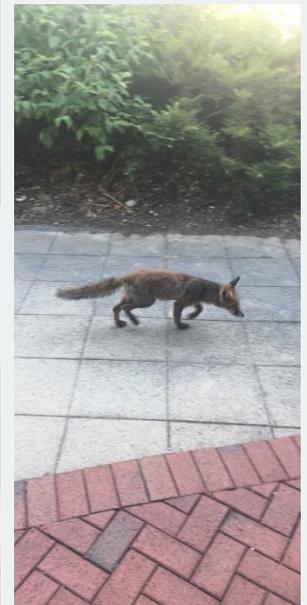
In addition, the meeting encompassed a vibrant exhibition, attended by 18 vendors and sponsors, a Beer and Wine Reception at Cartwright Hall, providing an opportunity to show case Bradford culture at its best, and conference dinner in the French Ballroom of the Midland Hotel. By the time of the closing remarks, the general consensus held that the Bradford meeting had been one of the best in the 15 years of the BSPR. The University can be proud of the impression given to this group of distinguished visitors, particularly by those supporting the meeting whether they were students and academics (Dr. Sadr-ul Shaheed, Ghasaq Kashtl, Jodie Bojko, Amy George, Sidra Saeed and Aya Al-Kabariti), Catering, Security or Estates. Remarkably, the only minor complaint was the unusually hot weather!



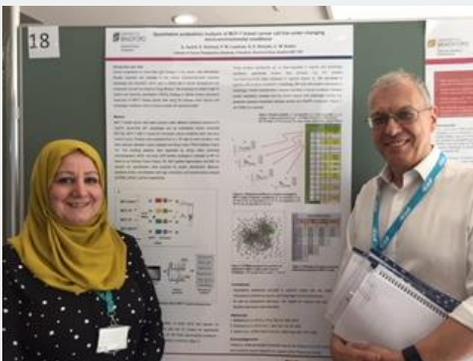
*Selling proteomics to the Danes is like selling ice to the Inuits! Dr John Wilson (Cold Spring Harbour Laboratory) and Erik Verschuuren (Evosep, Odense)*



*Well deserved young investigator and poster prize winners with Professor Rainer Cramer (University of Reading)*



*An unexpected visitor!*



*Mrs Ghasaq Kashtl and Dr Chris Sutton presenting their research*



*The University of Bradford Proteomics Team*

A full copy of the meeting programme is available from Chris upon request ([c.w.sutton@bradford.ac.uk](mailto:c.w.sutton@bradford.ac.uk)).

### GCC2018 and BOSCC2018

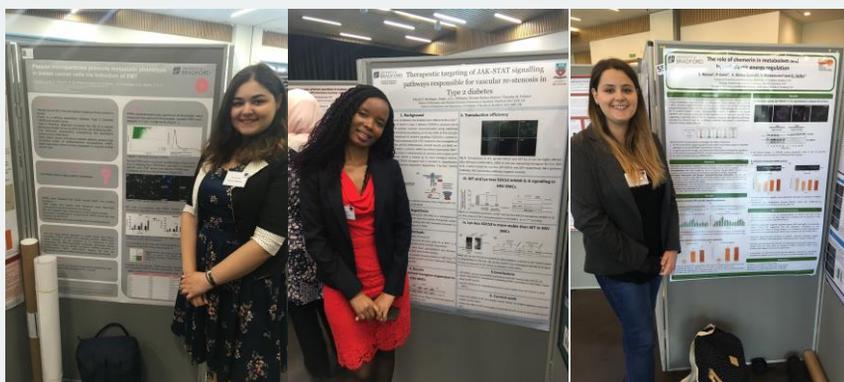
Dr Krzysztof Poterłowicz attended the **2018 Galaxy Community Conference (GCC2018)** and **Bioinformatics Open Source Conference 2018 (BOSCC2018)** in Portland, Oregon, United States, between June 25<sup>th</sup>-30<sup>th</sup> 2018, where he presented biomedical software developed in his laboratory.

### North of England Cell Biology Forum

At the very end of August, a large number of staff and students from Chemistry and Biosciences descended on the University of Huddersfield for the **North of England Cell Biology Forum**. This is an annual meeting in its 15<sup>th</sup> year, and the focus is always on providing a relaxed atmosphere for early career researchers (PhD students and post-docs) to present their work. This year it welcomed its largest delegation ever of 140 participants. Amongst these were a great deal from Bradford – of the 60 posters, 8 were ours, one of our PhD students from the School of Pharmacy gave a talk, and **Dr Kirsten Riches-Suman** and **Dr Jim Boyne** were oral and poster judges respectively. It's fairly safe to say that the University of Bradford has a strong regional recognition for cell biology!



L-R: Florah Moshapa (School of Pharmacy), **Anca Tutuianu**, **Sophia Nanou**, Gillian Durham (School of Pharmacy), **Prof Anne Graham**, Sara Mellid, Pablo Jabalera, **Dr Jacobo Elies**, **Dr Talat Nasim** (all School of Pharmacy), **Dr Kirsten Riches-Suman** and **Dr Emily Casely**



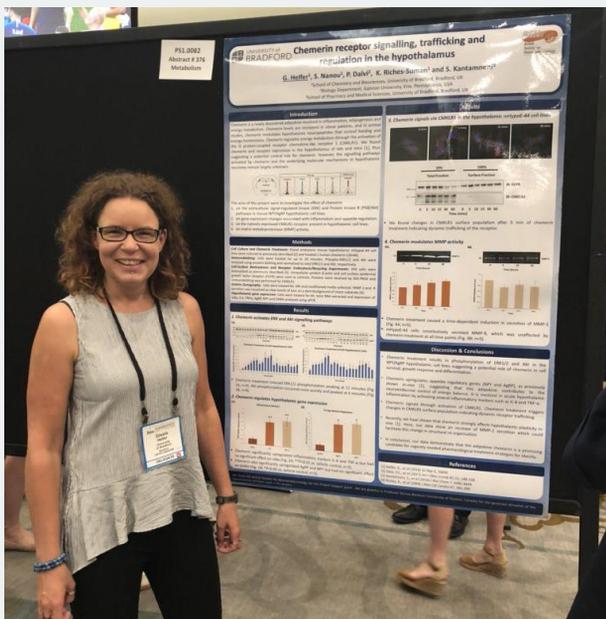
L-R: **Anca Tutuianu** presenting her PhD studies with **Dr Jim Boyne**, **Dr Kirsten Riches-Suman** and **Dr Wayne Roberts** (Leeds Beckett); Florah Moshapa presenting her PhD work with **Prof Tim Palmer** (School of Pharmacy) and **Dr Kirsten-Riches-Suman**; and **Sophia Nanou** presenting her research with **Dr Gisela Helfer**, **Dr Kirsten Riches-Suman** and **Dr Sriharsha Kantamneni** (School of Pharmacy)



**Dr Kirsten Riches-Suman** and **Dr Jim Boyne** announcing the conference prize-winners

### ICN2018

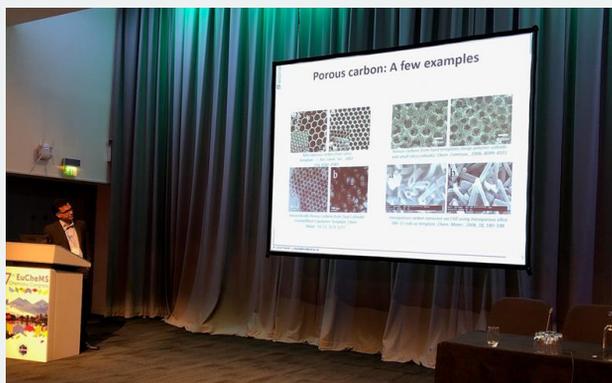
Dr Gisela Helfer attended the **9th International Congress of Neuroendocrinology**, which took place in Toronto, Canada in July 2018. The highly interactive meeting had a fantastic programme through the inclusion of eminent senior and newly emerging junior researchers. Gisela presented her work on Chemerin receptor signalling in the hypothalamus during the poster session, which coincided with the FIFA World Cup Final, and was therefore very well-attended. The networking event took place at Niagara Falls and offered the opportunity to discuss work with neuroendocrine colleagues in an unforgettable environment, of course the delegates also enjoyed to taste some of the best wine from the Niagara region. The next ICN will take place in Glasgow in 2022 and Gisela has been invited to be part of the local organising committee.



Dr Gisela Helfer presenting her poster at the ICN2018 and enjoying the glory of Niagara Falls!

### EuCheMS 2018

Dr. Sanjit Nayak presented exciting work of his group on porous complex-derived carbons (ComDC) with high hydrogen storage properties in recent **EuCheMS-2018** conference in Liverpool in August. Porous carbons have great potential for applications in several areas including efficient hydrogen storage devices for automobiles. This work by Nayak et al. has shown a novel way to prepare porous carbons using cluster-based molecular precursors. For more details, please see the recently published article: ACS Appl. Mater. Interfaces 10, 31, 25967-25971



Dr Sanjit Nayak presenting his work at EuCheMS 2018

### In the press...

As a world-leader in the field of pigmentation and hair, Prof Des Tobin was invited to comment a recent BBC News article regarding the growing phenomenon of women turning their backs on hair dye. You can read the full article: **'The women choosing to love their natural grey hair'** by Kelly-Leigh Cooper, 19<sup>th</sup> July 2018, here: <https://www.bbc.co.uk/news/world-44871058>

Slime has always had a certain appeal to children (those of us who are members of staff will undoubtedly remember the regular 'slimings' on TV shows such as Noel's House Party!), and lo and behold it is finding an audience with a new generation of children. There have been concerns in the press regarding the safety of the sticky substance, and Dr Philip Drake was invited to comment with his thoughts on the topic. The full article, **'The science of slime'** by Sally Clifford, Telegraph and Argus, 23<sup>rd</sup> July 2018 can be found here: <http://www.thetelegraphandargus.co.uk/news/16370894.the-science-of-slime-bradford-expert-talks-about-the-latest-childrens-craze/>

Prof Diana Anderson was highlighted in the Telegraph and Argus on the 25<sup>th</sup> August 2018 in an article by David Jagger regarding an award ceremony at the prosper Academy in Bradford. You can read the full report here: <http://www.thetelegraphandargus.co.uk/news/16599120.university-of-bradford-professor-to-be-guest-of-honour-at-an-awards-ceremony/> and see our piece on page 17.

### Conference Organisation

The University is always busy during term time, with students rushing to and from lectures, and staff preparing their teaching material and conducting research. What a lot of students don't realise is that once they go off on their summer or winter holidays, staff are all incredibly busy in the department. This is typically the time for research with lots of proposals going in but it's also a time conferences. As you can see from the report on page 7-8, the University plays host to very successful conferences for research communities around the world, and the coming term is no different – we will be hosting two more conferences before Christmas!

#### RAPS 2018

The **19th Annual Recent Appointees in Polymer Science Meeting** (RAPS 2018) will be held at the University of Bradford from 5-7th September 2018, and has been organised by **Dr Maria Katsikogianni**.

The RAPS meeting provides an ideal opportunity for RAPS members to form networks and collaborations, as well as presenting their latest research. It has a strong focus on career development and features a number of plenary speakers who provide an overview of their careers, as well as specialist talks and discussions on areas such as scientific publishing, technology transfer and science journalism.

#### NVBF 2018

The 6th annual **Northern Vascular Biology Forum** (NVBF 2018) will be held at the University of Bradford on the 10th December 2018, and is being organised by **Dr Kirsten Riches-Suman** in collaboration with colleagues in Pharmacy (Prof Tim Palmer, Dr Jacobo Elies, Dr Stacy-Paul Wilshaw, Dr Matt Hardy and Dr Talat Nasim).

The NVBF provides early career vascular researchers an opportunity to present and network in a relaxed environment. It now encompasses the Universities of Bradford, Leeds, Hull-York, Liverpool, Liverpool John Moores, Liverpool Hope, Manchester, Manchester Metropolitan, Sheffield, Sheffield Hallam and Wolverhampton.



#### 19th Annual meeting Recent Appointees in Polymer Science



September 5th -7th 2018 University of Bradford

We are delighted to welcome you to the 19th Annual RAPS meeting that **brings together early career academics (>1 year post doc) and industrialists with the aim of developing their peer network within and outside the UK**. Opportunities to present your work both orally and through posters are available (with prizes).

Our **generously subsidised** conferences offer ideal and informal opportunities for networking and collaborations. We also focus on **practical early career advice** from a range of experienced speakers on subjects from generating funding, interacting with the media to building a lab.

#### Plenary speakers:

Professor Rachel O'Reilly, Polymer Chemistry, University of Birmingham  
Professor Giuseppe Mantovani, Biomedical Polymers, University of Nottingham  
Professor Ben Whiteside, Polymer Processing, University of Bradford

Childcare can be arranged through the Campus Nursery.

Sincerely,  
RAPS committee

Spaces are limited so register at [www.raps.org.uk](http://www.raps.org.uk)

Confirmed sponsors:



Agilent Technologies



**IOP** Institute of Physics  
Polymer Physics Group

#### Northern Vascular Biology Forum 2018



The University of Bradford is delighted to host the **Northern Vascular Biology Forum 2018!** Come along for a friendly meeting highlighting the most recent innovative discoveries in vascular science from our up-and-coming researchers.

**When? Monday 10th December 2018**

**Where? Norcroft Centre, University of Bradford**

For further information please contact Kirsten Riches-Suman ([k.riches@bradford.ac.uk](mailto:k.riches@bradford.ac.uk), 01274-232145).



UNIVERSITY of  
**BRADFORD**

# Teaching

Apprenticeships, new courses, and where your degree can take you

## Learning, Teaching and Research Conference

In early June, the University holds an annual **Learning Teaching and Research Conference**, organised by Ruth Whitfield in the Centre for Educational Development. For all members of staff, particularly those with a responsibility for teaching, it's really important to keep up-to-date with the latest developments in pedagogical research – that is, the way in which we teach as a theoretical concept. Lecturers learn a lot about this if they engage on the postgraduate certificate in Higher Education Practice (see page 14 for the most recent graduates!) and this conference provides a forum for all staff and students to engage in higher education research.



**Daniel Khosravinia, Dr Lijun Shang and Yana Hristova** talking about the benefits of student-led teaching

This year, we had three members of staff who chose to present at the conference on developments that they found particularly interesting:

**Dr Lijun Shang** hosted an entertaining session that was led by two of our first-year students – Biomedical Sciences student **Daniel Khosravinia** and Healthcare Science student **Yana Hristova**. 'Enhancing discipline learning and student engagement through student-led lectures' was a nice example of getting students involved in delivering teaching and the benefits that this can bring to the undergraduate cohort as a whole.

**Dr Kirsten Riches-Suman**, in collaboration with **Dr Jim Boyne**, switched the focus towards the postgraduate community with her session on 'Methods to improve PhD student mental health and wellbeing'. This was a well-received seminar which posed challenging questions (and some disturbing numbers) about the state of mental well being for University of Bradford PhD students. It also postulated that perhaps research supervisors need to look at themselves, their practices and their wellbeing before pushing them onto the next generation.



**Dr Kirsten Riches-Suman** presenting her findings on PhD student mental health

**Dr Krzysztof Poterłowicz** discussed 'The Carpentries community - teaching researchers foundational computational and data science skills' with engaging discussion focusing on teaching skills for working with data effectively and reproducibly.

## MSc Project Technical Support

Once the undergraduates leave for the summer, our postgraduate **MSc Biomedical Science** and **MSc Skin Sciences and Regenerative Medicine** students start their nine-week projects in the laboratories. This is where our technicians come to the fore in supporting all our students, and we'd like to include some of the student feedback here to shine a light on the fantastic work they do!

"**Martin** has been absolutely wonderful – always motivating / pleasant / amazing techie! **Anisha** has also been so lovely and helpful, always answering every question no matter how silly!! Thank you everyone ♥"

"Everybody - thank you so much for everything! I **can't imagine my research project and MSc without any of you**. You did such an amazing job! Experience working near you is the best what happened during all my MSc course. I am so happy! I wish you all to be even more successful and hope all your dreams will come true! You are the best!"

"All the technical staff were very helpful, kind and friendly. They always offered advice on how to use equipment and were available when equipment wasn't functioning. A great working environment was created by the technical staff. Thank you for all the help and support – you guys are great 😊"

"All staff so helpful, very attentive to needs. Asked for anything, they would be willing to help and provide anything needed. **Lorraine, Martin, Anisha** and **Juanvi** have been great help – thank you so much!"

"Everyone was great! Will miss you all!"

# Teaching

Apprenticeships, new courses, and where your degree can take you

## Canvas – your new VLE

Canvas is the home for all your online learning.

### Getting online with Canvas:

Go to: [bradford.instructure.com](http://bradford.instructure.com)

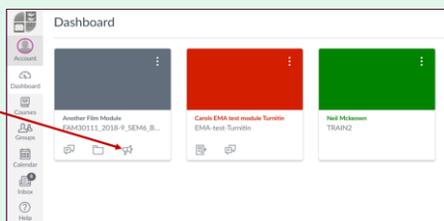
Sign in with your University username with @bradford.ac.uk appended, for example: jrblogg2@bradford.ac.uk (note: this is not the same as your University email address) and your University password.

Don't forget to download the Canvas Mobile App (Android and iOS)! Search your device's app store for **Canvas Student**.

### Navigating Canvas:

When you sign in to Canvas, you'll see your Dashboard. Your modules (called 'Courses' in Canvas) appear here.

'Course cards' display notifications for upcoming events, feedback and announcements



The menu:

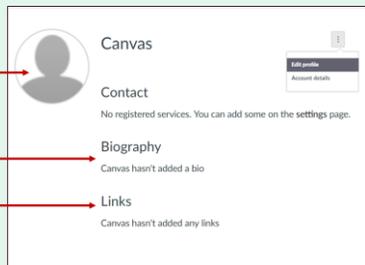
	<b>Account</b> - update your profile and access your settings
	<b>Dashboard</b> - access your <b>favourited</b> modules and see what's happening
	<b>Courses</b> - access to <b>all</b> your modules (modules are called 'courses' in Canvas)
	<b>Calendar</b> - view your assessment calendar and other events added to Canvas
	<b>Inbox</b> - send and receive messages to others on your module
	<b>Help</b> - get help with Canvas 24 / 7

### Setting up your profile:

Go to **Account > Profile > Edit Profile**:

Drag your cursor over the image to add your profile picture

Add biographical text and links to other online profiles (eg, a personal blog)

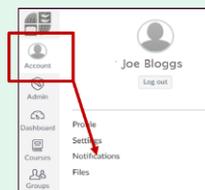


### What about my preferences?

Go to **Account > Notifications**

Notifications are sent as one of:

- 'Notify me right away'
- 'Send daily summary'
- 'Send weekly summary'
- 'Do not send me anything'



**WARNING: if you select 'Do not send me anything' you may miss important information!**

Any changes made to settings are immediate.

Notification preferences			
	<input type="radio"/> Notify me right away	<input type="radio"/> Send daily summary	<input type="radio"/> Send weekly summary
<b>Course activities</b>			
Due Date	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Grading policies	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Course Content	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Files	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Announcements	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>



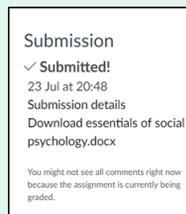
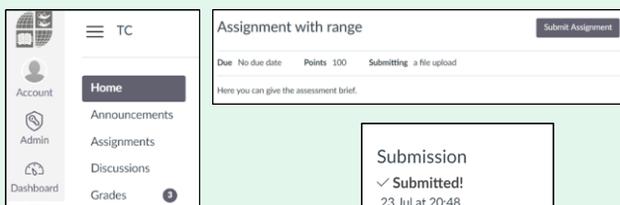
The course (module) home page provides useful links:

### How do I submit an assignment?

Go the module you wish to submit for and click on **Assignments**.

From the list displayed, select the assignment you want to submit and then click on **Submit Assignment**.

You'll see a confirmation message in the top right of the screen (**you will not receive an email notification**)



# Teaching

Apprenticeships, new courses, and where your degree can take you

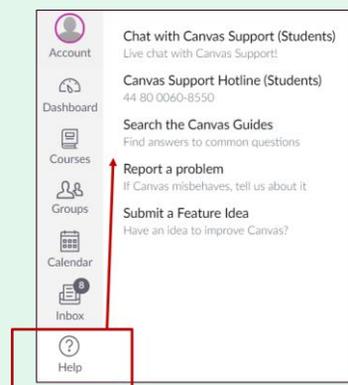
## Canvas – your new VLE

Want some help with **Canvas**?

### Getting help with Canvas:

- See the 'Student Guide to Canvas' course on your Dashboard
- Get help directly from Canvas via:
  - online chat
  - phone
  - email

Ask them about any aspect of the Canvas, whenever you need, in the way that suits you!



## Teacher and Advisers Conference

**Dr Clare Towse** and **Dr Colin Seaton** both took part in the **Taking Augmented Reality from the Lab to the Classroom, Teacher and Advisers Conference**, University of Bradford, 10th July. Clare gave a talk on her experience with augmented reality, and Colin gave a talk regarding crystal chemistry and related teaching resources. Hands-on tutorials were then given by both Colin and Clare following their talks to give the delegates a fully immersive and memorable training experience.

## PGC(HEP) Graduation

For students who were here last year, you may know that some of your lecturers were studying for the Postgraduate Certificate in Higher Education Practice (PGC(HEP)). This is a teaching qualification for university lecturers, and all new lecturers must complete it. As well as conveying Fellowship of the Higher Education Academy, this award also allows us to fully immerse ourselves in the 'student 'experience' – we have to write assignments, stick to deadlines, swipe in and out of class and get feedback from our tutors! It makes the undergraduate journey that our students are currently on much more relatable. It also teaches us about different styles of teaching, how to make sure our teaching is inclusive to everyone, and what is expected of a lecturer in Higher Education.

We are delighted to announce that a number of our staff received their PGC(HEP) this summer:

**Dr Nicolas Barry**  
**Dr Rianne Lord**

**Dr Gisela Helfer**  
**Dr Kirsten Riches-Suman**

**Dr Nadeem Javid**  
**Dr Clare Towse**

**Dr Maria Katsikogianni**

Only a few could attend their graduation ceremony in mid-July, but we're very proud of all of our members of staff for their fantastic achievements!



**Dr Clare Towse, Dr Kirsten Riches-Suman and Dr Rianne Lord** all dressed up for their graduation... complete with very rational fear of falling off shoes on the stage!

# Teaching

Apprenticeships, new courses, and where your degree can take you

## Where my Bradford degree took me...

**Anisha Haris** is a recent graduate from the School of Chemistry and Biosciences, who is now studying for a PhD at the University of Warwick. Here, she shares with us what she got from her time at Bradford and how it's helped her with her current studies...

### What did you do at Bradford?

I completed an integrated master's degree (MChem) with industrial experience at the University of Bradford.

### What are your lasting memories of your time here?

During my time at Bradford, I thoroughly enjoyed learning about the wide range of analytical techniques and instrumentation, which are available in the analytical centre. My interest in this area of chemistry really stemmed from the taught modules on this course as I was able to develop and focus on my practical and analytical skills.

During the entire course and especially during my master's year, the support that I have received from the academic staff in the chemistry department, especially my final year academic supervisor **Dr Richard Telford** have been invaluable.

It was also through this course that I met my closest friends, Zakira Haji and Tajinder Heer, who have always encouraged me and inspired me to work as diligently as I have throughout the course.

### How do you think your studies here have played a role in the development of your career?

My studies here have not only guided my academic growth but also my personal growth as I have been able to gain confidence in my abilities as a research-orientated chemistry student. For example, during my final year at university, there were significant opportunities to present my research project via posters and oral presentations.

During my master's year, I carried out a 12-month extended placement at Shimadzu Research Laboratory (SRL), where I was primarily involved in applications work testing an advanced prototype mass spectrometer incorporating a differential ion mobility spectrometer.

My studies at the University of Bradford and my placement at SRL have equipped me with the knowledge and necessary scientific skills. Both have given me the confidence to pursue a PhD in analytical chemistry at the University of Warwick.

I am currently a PhD student in the mass spectrometry group at the University of Warwick, where I hope to utilize all of the fragmentation methods available on the Bruker 12T Fourier transform ion cyclotron resonance mass spectrometer to differentiate isomers of individual amino acids in peptides and proteins.

### What advice would you have for students currently on our courses?

Prepare well for your lectures and laboratory sessions. Paying attention and diligently taking notes, which you can refer back to later on has always been useful to me. Time management is crucial, particularly in the final year of your course. Use all of the resources available at the university such as the textbooks available in the library and institutional access to journal articles. It is also important to work on your scientific writing style, which you can do through the various written laboratory reports that you will be required to submit. The academic staff in the chemistry department are approachable and willing to help so be sure to ask if you do not understand something or require advice. Finally, I believe that having a strong work ethic greatly contributes to the development of many of the skills that you gain from studying a chemistry course at the university so students should be motivated to succeed and take advantage of all the opportunities that are available to them.



## Clearing 2018

With the main recruitment cycle having come to an end, the clearing portion began in earnest at 6.00 am on Thursday 16 August. Teams from Chemistry and Bioscience worked tirelessly across the entire two week period to ensure that we were able to speak to as many applicants as possible.

Early indications suggest that we have hit target for both Chemistry and Biomedical sciences, and conversion activity will continue up until term begins in September. Obviously this represents very positive news for the school, and clearly reflects the amount of hard work all our staff have put in across the year. I would like to express my gratitude to all those who gave up their time to contribute to all our recruitment activities throughout the year, without you, we wouldn't have been able to manage.

Wouldn't it be nice to be able to leave on such a positive note? Sadly, the hard work isn't done, and the main recruitment cycle for 2019/2020 is already upon us! This year we will have an ambitious schedule of Open days, experience days and taster days with which to engage potential students, and demonstrate what we as a school can offer. As ever, we need your continued support to make these days a success.

If you have any ideas for interactive activities to run in either the G-floor labs or indeed in the atrium, please let me know! These activities are always very well received by our applicants and their families, and really do contribute to our success as a department.

### Dates for the diary:

### Upcoming open days

- Friday 5<sup>th</sup> October
- Saturday 6<sup>th</sup> October
- Saturday 3<sup>rd</sup> November (am)
- Wednesday 21<sup>st</sup> November (pm)

### AEDs

- Saturday 8<sup>th</sup> December
- Wednesday 23<sup>rd</sup> January



## Chemistry featured at EuChemS congress

The School of Chemistry was selected by the RSC to be featured at their flagship international conference in Liverpool. This involved a professional film crew visiting for the day to get some footage of our team at work, and to put together a video which features some of the exciting, world leading research we are undertaking.

**Prof. Stephen Rimmer, Dr Steven Hickey, Dr Maria Katsikogianni, Dr Zak Hughes and Dr Nadeem Javid** all take to the screen to highlight the work they do, and discuss some of what makes us unique here in Bradford.

To see the finished film, please visit:

<https://www.youtube.com/watch?v=o7cfpldmuJg&feature=youtu.be>

Obviously being selected represents a glowing endorsement about the quality of work we are all doing, and how we are perceived by other chemists around the world. We hope that this will lead to some very positive impact for our UG and PG recruitment campaigns.

# Outreach

## School visits and charity work

### Open Days

As part of the School's commitment to be family-friendly, some of our academics with children around the same age, got their kids involved in the Open Day in June. Josh, Leah, Gerry and Niklas enjoyed a science-filled day at the University. They built some molecules, played with dry ice and even loaded an Agarose gel. Parents took turn supervising the kids which allowed them to run their own presentations and workshops while at the same time spend quality and science-inspired time with their youngsters. The day ended with a pub visit and some very wet children who decided to go for a swim in Bradford's City Pool. All kids hugely enjoyed the day, and we are keen to organise a similar event for the upcoming Open Days.



### Children's University

In June, the University hosted the graduation of **Children's University (CU)**. The goal of CU is to increase young people's engagement with learning activities. Year 7 children from Beckfoot School, Bingley, collected 'credits' in their Passports to Learning and were awarded with an University-style graduation ceremony. Our own academic offspring, Niklas Helfer, collected over 300 hours in his Passport by taking part in Scouts activities and camps, after-school clubs, e.g. Beckfoot Baking Club, and many visits to museums and places of interest (also very educational for the rest of the family). The graduation was an enjoyable evening for parents and kids, with inspirational talks from Prof Bradshaw, Prof McCarthy and the staff from Beckfoot School. Niklas has now decided that he certainly wants to go to University, although perhaps not in Bradford, as the prospect of being lectured by his Mum does not seem too appealing to him.



### National Collaborative Outreach Programme

Dr Clare Towse took part in the **Outreach: National Collaborative Outreach Programme (NCOP) Summer School (Class of 2024)** on the 18<sup>th</sup> July 2018. Clare led a workshop session to provide a taster of biological chemistry teaching at the university, and the use of augmented reality and 3D visualisation software in learning.

### Prosper Academy Prize-giving

In August, **Prof Diana Anderson** was delighted to attend the **Prosper Academy** in Little Horton Lane, Bradford to bestow students with certificates to celebrate their performance in their recent exams, and to give an inspirational talk about science and studying. The Prosper Academy was established by Mohammed Azhar Ishfaq, a graduate of Biomedical Science at Bradford (2008). He went on to qualify as a science teacher and established his tutoring academy last year.

Following Prof Anderson's visit, Azhar said "I want to thank you from the bottom of my heart for attending the event and making the event a success. The students and parents really enjoyed your talk and were inspired by your words. Some of the parents said to me after, they have been to many events before but this one was unique fuelled with motivational talks that really encouraged both girls and boys to do well in their studies."

You can read more about the event in the press release here: <https://www.bradford.ac.uk/news/2018/student-awards.php> and by following the link to the Telegraph and Argus news article on page 10.



# Student Zone

Successes, societies  
and inspiration

## Undergraduate Graduations

We extend a very hearty congratulations to all our undergraduates who graduated during this summers' ceremonies. Graduation is always a fantastically happy time to celebrate success, and we are very proud of all our **BSc Biomedical Science**, **BSc Chemistry** (with Drug Discovery, Forensic Sciences, Medicines Development, Pharmaceutical and Forensic Science ± Industrial Experience options), **BSc Healthcare Science (Life Sciences)** (with Blood Sciences, Genetics, and Infection Sciences options), **MChem Chemistry** (with Analysis, Drug Discovery, Forensic Science, Medicines Development and Pharmaceutical and Forensic Science ± Industrial or Research Experience options) graduates. We also had a couple of **MSc Analytical Sciences** and **MSc Skin Sciences and Regenerative Medicine** graduates as well. Congratulations to all, we're very proud of you and please keep in touch with what you go onto in the future!



*The class of 2018 in Chemistry (upper) and Biomedical and Healthcare Sciences (lower).*

## Undergraduate Successes

As well as conferment of degrees, Graduation was also a time for prize giving. Please see below all of our Chemistry and Biosciences prize-winners – very well deserved!



**Maria Todorova Azmanova** receiving the **JEOL (UK) Ltd Prize** from **Prof Richard Bowen**



**Ellen Catherine Castley** receiving the **Christopher Bardwell prize** from **John Bardwell**



**Amy Feather** receiving the **Prof Michael Gardner Biochemistry prize** from **Prof Anne Graham**



**Amy George** receiving the **Cancer Biology prize** from **Dr Steve Picksley**



**Holly Anna Illing** receiving the **Nufarm prize** from **Toby Sharif** and **Prof Richard Bowen**, and the **Phillipa Tucker Prize** from **Prof Richard Bowen**

**Nahid M Khan** receiving the **Sue Parkin Healthcare Science prize** from **Pam Dunn**



**Alex Popescu** receiving the **Royal Society of Biology prize** from **Dr Steve Picksley** and the **Medical Cell Biology prize** from **Prof Des Tobin**



**Connor Robinson** receiving the **Haematology prize** from **Gillian Jaggard**



# Student Zone

Successes, societies  
and inspiration

## Undergraduate Successes

Following graduation, two of our prize-winners gave testimonials regarding their time at Bradford. We are grateful to them for sending us these kind words!

"I am honoured to receive 'The Don Whitley Scientific Prize for Microbiology'. This is a huge accomplishment for me, a reward for all the hard work and time I invested during my time at the University of Bradford. There was so much to learn during my time on the Biomedical Science course. I had the luck to be guided by dedicated lecturers and inspired by the passion of PhD students. Choosing Medical Microbiology as my final year option allowed me to focus on the subjects I was most interested in and opened my eyes to current issues, such as emerging viruses and antimicrobial resistance. This influenced me in choosing to pursue a research career in virology after graduation. I will carry everything I learned during my undergraduate degree on to the MSc in Molecular Biology and Pathology of Viruses at Imperial College London and afterwards during a PhD in the same research area."

**Christiana Victoria Cismaru, BSc(Hons) Biomedical Science, 1<sup>st</sup> class**



**Victoria Cismaru** receiving the **Don Whitley Scientific Microbiology prize** from Andrew Pridmore



**Cassie Harold** receiving the **IBMS President's Prize** from Zeshaan Ejaz

"I've really enjoyed studying biomedical science at the university of Bradford over the last three years as there's something to suit everyone's interests, whether it's microbiology or human physiology. The teaching staff and lab technicians are invaluable and contribute largely to the overall experience, without them the course wouldn't have been the same. Over the last three years I have really enjoyed lab work and getting to test the theories we hear about in lectures as well as investigating new ideas and potential approaches to enhance the field of medicine, particularly with the dissertation topics. The lab facilities that Bradford have are fantastic and are definitely a feature that attracted me to study at UoB and I certainly wouldn't hesitate to advise others to study there too. Currently I'm gearing up for a masters in experimental medicine at Queen's university and thanks to the skills and qualities developed whilst at Bradford. I will definitely keep in touch with the teaching staff, as well as following the achievements and successes of UoB as they continue to make new developments and discoveries in a variety of fields. I couldn't imagine completing my undergraduate degree at a different university as the experience I've had at Bradford both academically and socially has been amazing and I wouldn't hesitate to recommend the degree at the university. I look forward to the next chapter and hope that I will be as successful as previous alumni of the university."

**Cassie Harold, BSc(Hons) Biomedical Science, 1<sup>st</sup> class**

## PGR Research Symposium

The **PGR Research Symposium** was held in early June, and we are delighted that **Kasia Murat** was awarded the best presentation prize. Kasia said "The PGR Research Symposium was a great opportunity for me to present my work and to get feedback from local researchers. During my presentation I mainly focussed on my MPhil project supervised by **Dr Krzysztof Poterłowicz**: 'EWAS GALAXY' a tools suite for population epigenetics integrated into the Galaxy platform. The conference gave me a chance to introduce bioinformatics as a very useful research tool available for our postgraduate students. I am pleased and very thankful to have received this award as it will have a significant impact on my future research and career development." Congratulations again!



Prize-winner **Kasia Murat** (4<sup>th</sup> from right) with the other presenters at the PGR Symposium

## PhD Graduations

It was a pleasure to see our PhD graduates during the summer ceremony. **Dr Azeza Guma** completed her PhD entitled 'Genotoxic effects of nano and bulk forms of aspirin and ibuprofen on blood samples from prostate cancer patients compared to those from healthy individuals' under the supervision of **Prof Diana Anderson** and Dr Adi Baumgartner (York St John University). **Dr Irene Castellano Pellicena** completed her PhD entitled 'The role of photoreceptors in human skin physiology; potential targets for light-based wound healing treatments' under the supervision of **Dr Julie Thornton** and **Prof Vladimir Botchkarev**, and **Dr Inemo Asamaoewei** completed her PhD entitled 'The role of polycomb repressive complex 2 in epidermal homeostasis and hair growth' under the supervision of **Dr Natasha Botchkareva**, **Prof Vladimir Botchkarev** and **Dr Andrei Mardaryev**. In addition, **Dr Charlie Bridgewood** was conferred his PhD but was unable to attend. He completed his PhD entitled 'Psoriasis activation of cells important in cardiovascular disease' under the supervision of **Prof Anne Graham** and Dr Miriam Wittmann (University of Leeds). We wish them all the best for the future!



L-R: **Dr Azeza Guma**; **Dr Irene Castellano-Pellicena** with **Dr Julie Thornton**; **Dr Inemo Asamaoewei** with **Dr Julie Thornton**; **Inemo Asamaoewei** and **Dr Irene Castellano-Pellicena** with the soon-to-be double doctor **Jing Qin Tay**

# Student Zone

Successes, societies  
and inspiration

## PhD student successes

**Jing Qin Tay**, David Sharpe Research Fellow, has successfully defended his PhD with the title "The Roles of Vitamins D in Cutaneous Wound Healing" on the 12th July 2018. His three-year PhD was fully funded by the Plastic Surgery and Burns Research Unit at the University of Bradford. **Dr Julie Thornton** and **Prof Anne Graham** were his project supervisors.

He would like to thank Bradford community and everyone who have generously supported the burns research unit over the past 33 years. He hoped that the work that have been done will go a long way in improving patients' care and would like to dedicate his success in memory of the "56" and all the families that were affected by the Bradford City fire.

L-R: **Dr Julie Thornton**, **Jing Qin Tay** and his examiners **Dr Kirsten Riches-Suman** and **Prof Barbara Conway** (University of Huddersfield).



## The Shape of Information: diagrams in art and science

**Michael Whittle** is an alumnus who graduated from BSc Biomedical Sciences (Biochemistry) with a first class honours in 1998. Since then, his career has taken a non-traditional route, and he now works at the interface of art and science, which highlights the diverse range of careers that the skillset you're taught in Biomed can lead you to. Andrew currently has an exhibition in Kyoto (see details below), and hopefully will bring his work back to UK soil so we can all go and see this fascinating work. He is keen to engage with academic staff in Bradford.

### Exhibition statement:

Diagrams are a powerful and ancient tool that has helped to shape human thought on our journey from the stone age to the information age. We now know that the first cave wall maps are 5 times older than the earliest writing, and over time, diagrams evolved to become not only the creative engines of the scientific revolution, but the visual language of science itself. British artist and diagram researcher Michael Whittle has gathered together a collection of some of the most ambitious, creative and mysterious diagrams from science and mathematics. From a Renaissance tree of all human knowledge to the recently discovered God particle and echo of the big bang that marked the start of space and time, these images capture our innate drive to understand reality through the power of the diagram. Presented alongside these are a series of intricate new diagrammatic drawings and paintings created by Whittle during his time at Kyoto University's centre for advanced studies, where he was able question scientists about their latest research and findings, as part of the artist's quest to develop what he calls a romantic - objective 'poetics of science'.

### About Diagram research:

One of the most important academic disciplines to have arisen over the last two decades, Diagrammatology is the study of diagrams as a fundamental mode of human communication. Diagrams permit information to be stored and shared with high fidelity, but they also mobilise and shape new knowledge by allowing both intuition and rational thought to play a role in the creative process. Artists have incorporated diagrams to their creative practices to give rise to some of the most important and challenging art works from the modern period, such as Duchamp's 'Large Glass', Arakawa and Gins 'Mechanism of Meaning' series and the wall drawings of Sol Le Witt.

### About the Artist:

Michael Whittle qualified and trained as a biochemist before changing subjects to study fine art. During his MA at the Royal College of Art, he won a scholarship to study at Kyoto City University of Arts, Japan's oldest art school. He was later awarded a prestigious Monbusho scholarship to return to Japan, where he wrote his award winning PhD thesis 'Romantic Objectivism: diagrammatic thought in contemporary art'. The thesis proposed an entirely new field of diagrammatic fine art and helped establish deep philosophical, semiotic and aesthetic links between art and science. He currently lives and works in Kyoto and exhibits and lectures internationally.

## Student Society

The Biomedical Science Society is the departmental society for Biomedical Sciences students: Year 1; Year 2; Year 3; Masters and PhD. Our aims are to bring a sense of community to the department, encourage positive Student-Staff liaison, provide fun and all-inclusive social events, promote and provide academic support with workshops and to listen to and act upon feedback to improve the society.

Last year we ran a Meet and Greet, an Executive Q&A, a Christmas Karaoke, Mathematics Workshops, Raffles Trips to museums and universities as well as the Biomed-Ball. This year we hope to run the same as well as regular revision sessions for all years.

But why should you join? Perhaps the obvious benefit of joining a student society is the impact it will have on your social life, with you being able to meet students who share similar interests to yourself, but also employability skills to add to your CV, especially as at the time of writing this article some executive positions remain vacant.

Above all, at the Biomedical Science Society we want you to have fun. With all of the hard work you're doing – from studying for exams to maybe looking for work experience- you deserve some down time. Societies are a great chance to relax and de-stress from your day-to-day work!

I hope to see many people joining the society this year

**Jacob Livingstone** ([j.t.c.livingstone@bradford.ac.uk](mailto:j.t.c.livingstone@bradford.ac.uk))  
President of the Biomedical Science Society



## VOLUNTEERS NEEDED!!!



Are you interested in helping out with the newsletter? Do you want to quiz your professors on how they reached their positions? If so, then we would like to hear from you! We are looking for volunteers from either Chemistry or Biomedical Science (or indeed both) who would be interested in conducting the 'Meet Your Professor' interviews that are normally found at the end of this newsletter. All it takes is a ~1 hour timeslot with yourself and the professor, and then a write up of what you discussed. It's easy, and our two roving reporters from last year (**Absari Choudhury** and **Ridha Ali**) really enjoyed the experience. If you would like to volunteer, please contact **Dr Kirsten Riches-Suman** ([k.riches@bradford.ac.uk](mailto:k.riches@bradford.ac.uk)) or **Dr Andrew Tedder** ([a.tedder@bradford.ac.uk](mailto:a.tedder@bradford.ac.uk)) – we're looking forward to hearing from you!

## 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**

