Chemistry Update

ISSUE 355 • MAY 2023

Calendar of Events

Research Seminar
Speaker: Prof Matt Fuchter, Imperial College, London
Date: Monday 5 June
Time: 1pm-2pm
Location: C/A/101

Research Seminar
Speaker: Prof Laura Herz, University of Oxford
Date: Wednesday 7 June
Time: 1pm-2pm
Location: C/A/101

Research Seminar
Speaker: Dr Joe Beckwith, University of Cambridge
Date: Friday 9 June
Time: 2pm-3pm
Location: C/A/122

Chemistry Pride Celebration
Date: Friday 9 June
Time: 3.30pm-5pm
Location: The Quad

Research Seminar
Speaker: Dr Simon Grant, Thomas Swan & Co Ltd
Date: Tuesday 20 June
Time: 3pm-4pm
Location: C/A/101

Research Seminar
Speakers: Dr Darren Wilcox, University of Manchester, Dr Adrian Chaplin, University of Warwick, Prof Nick Williams, University of Sheffield
Date: Wednesday 21 June
Time: 3pm-5pm
Location: C/A/101

Roger Mawby GTA Awards
Date: Friday 23 June
Time: 4pm-6pm
Location: C/B/102

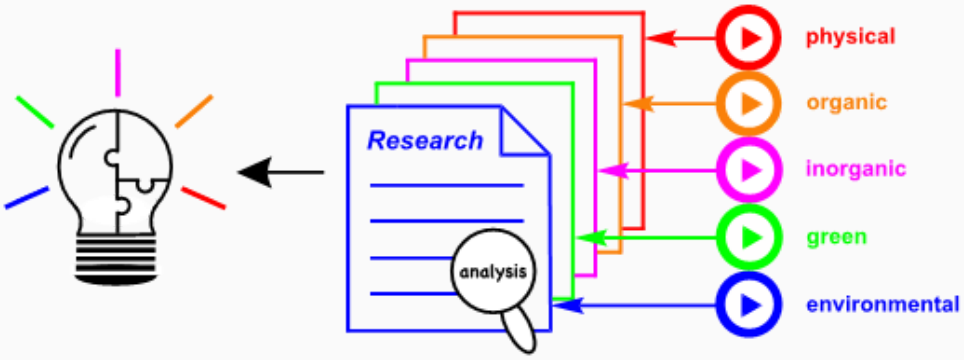
Staff Summer Party/BBQ
Date: Friday 30 June
Time: 4pm-6pm

This issue:

Research-Led Learning in Action

The outcomes and lessons learned from an innovative research-led module for final year MChem students in the Department of Chemistry at York has recently been published.

At its heart, research-led learning is when students are taught subject matter that aligns with the research strengths of the tutor. Linking research and teaching has several advantages in enhancing student learning. Students' knowledge about a subject can benefit from exposure to the cutting edge of a discipline by helping them see the relevance of the subject.



Launched in 2017, a new research-led online course for all chemistry students in the final year of their master's degree at York, was developed by Professor Andrew Parsons and Dr Julia Sarju. Distinctively, this course showcased departmental research by using research papers, published by York researchers, in the areas of atmospheric and environmental, green, inorganic, organic and physical chemistry. The use of research articles was aimed at familiarising students with departmental research and researchers, as well as helping them develop literacy skills and it contextualised the chemical theory covered during lecture courses in earlier years.

The course design and objectives, together with the course outcomes, has been published in a recent Journal of Chemical Education article. The article includes an analysis of student feedback surveys that evaluated different features of the course design, from 'meet the author' videos, to discussion forums, and revision checklists.

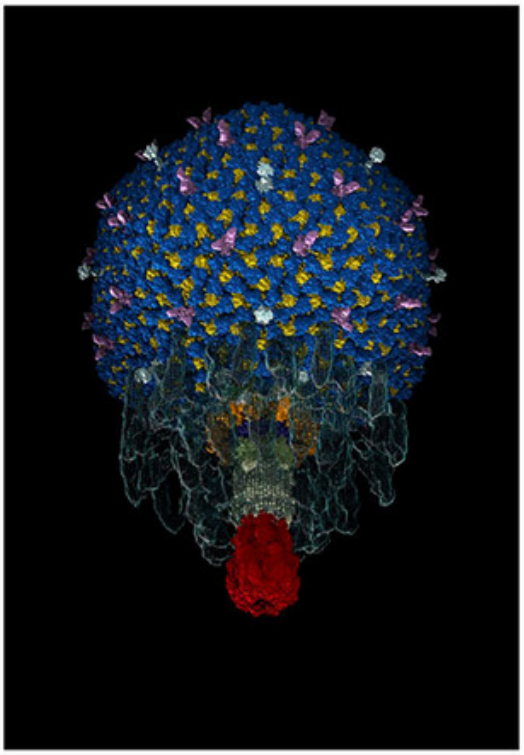
The development of the course involved contributions from many academic staff, and staff whose research was highlighted reported that they appreciated the benefits of showcasing their research to prospective postgraduates. Undergraduate students cocreated the course materials and informed course development. The project demonstrated the positive impact student partners make in developing course content. This included creating multiple-choice questions for formative assessments, and producing screencasts that introduce the papers, and highlight how to tackle the more challenging concepts in the papers. Dr Julia Sarju noted "I particularly valued working in partnership with creative students who reflected on their own lived experiences as learners to inform the course. Students shared their interpretations of the research articles and highlighted areas that could cause confusion to students".

Reflecting on the paper, Professor Andy Parsons says "One of the positive outcomes of the course has been seeing our students develop an appreciation of research conducted at York, in many more areas and in greater depth, than was once the case".

The paper is published in the Journal of Chemical Education.

Structural Atlas of a human gut Crassvirus

The research paper 'Structural Atlas of a human gut Crassvirus' by Dr Oliver Bayfield and Professor Fred Antson appeared in Nature in early May.



An image of the structure of the most abundant virus from the human gut microbiome, determined by cryo-electron microscopy.

Funded by the Wellcome Trust and carried out in the York Structural Biology Laboratory, the team's research focused on a Crassvirus, the most abundant and one of the most genetically diverse virus families in the human gut.

Professor Antson says he hopes the research findings could be used in the development of diagnostics techniques for detecting bacterial infections, and possibly developing new treatments for gut disorders.

He said: "The research will inform our understanding of how these viruses control bacterial populations in the gut and hence how they impact our health.

"The findings will also inform the development of new diagnostic tools for detecting bacterial infections and, potentially, other diseases of the gut. The research may also impact the development of new therapies for treating gut disorders caused by harmful bacteria."

Professor Antson says the team will now focus on learning how the Crassvirus multiplies and spreads, as well as looking closely at related viruses.

"We'll also study close relatives of these viruses, found in environmental samples such as sea water and soil, to understand evolutionary relationships, and potentially how they could be used for bioremediation and other environmental applications."

Dr Oliver Bayfield says recognition in Nature could itself be a pivotal moment in increasing understanding of the Crassvirus.

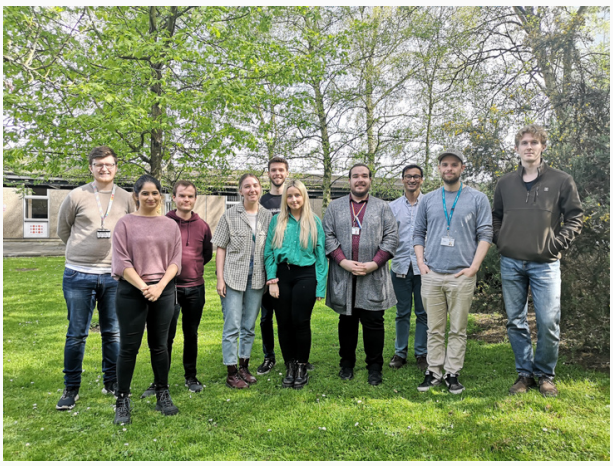
"Obviously it is a huge honour to have our work accepted for publication in a prestigious and storied journal such as Nature. Hopefully this will allow our findings to reach scientists across a variety of disciplines and ultimately inspire further research to help understand this fascinating group of viruses."

Read 'Structural Atlas of a human gut Crassvirus'
Read the Nature briefing

Easter Conference Prize Success

The outstanding performance of PhD and PDRA staff members from the Department of Chemistry has been highlighted across the recent Easter conference season.

The 2023 Easter conference season resulted in spectacular success for PhD and PDRA staff members winning prizes for poster and oral presentations. Across the Department, 16 prize winners were celebrated in the last six weeks at national and international conferences. This success speaks to the strength, quality and diversity of research that is being presented at conferences from our Department, whether a prize winner or not. Congratulations to all!



Prize winners:

- Isabelle Pickles, PDRA - Poster prize winner at the RSC Carbohydrate Group Spring Meeting (Gideon Davies' Group)
- Mahima Sharma, PDRA - ECR talk prize at the RSC Carbohydrate Group Spring Meeting (Gideon Davies' Group)
- Lorna Tang - PDRA - Poster prize winner at RSC Biotransformations II conference in Burlington House in London and Poster prize winner at 'Novel Enzymes' meeting in Greifswald Germany (Gideon Grogan's Group)
- Nick Garland, PhD - Flash prize winner at the National JM iCASE studentship conference in Warwick (Alison Parkin/Duncan MacQuarrie Group)
- Ruhee Dawood - PhD - Johnson Matthey PhD Poster Competition 2023, Dept of Chemistry, University of York (Alyssa Avestro's Group)
- Fraser Arnold - PhD - Fossey Memorial Poster Prize, John Fossey Memorial Symposium, University of Birmingham (Alyssa Avestro's Group)
- Islam Araar, First poster prize - RSC Organic Division NE Regional Meeting in Northumbria University (Peter O'Brien Group)
- Yuran Wang, First poster prize - RSC Organic Division NE Regional Meeting in Northumbria University (Peter O'Brien Group)
- Kris Altus, PDRA - Poster prize winner RSC Dalton Division Meeting, Warwick (Andrew Weller Group)
- Mat Cross, PhD - Poster prize winner RSC Dalton Division Meeting, Warwick (Andrew Weller Group)
- Helena Lancaster, PhD - Prize honourable mention RSC Dalton Division Meeting, Warwick (Andrew Weller Group)
- Chloe Van Beek, PhD - Poster prize honourable mention RSC Dalton Division Meeting, Warwick (Andrew Weller Group)
- Rosalind Booth, PhD - Faraday Discussion, York (Anne Duhme Klair Group)
- Lukas Geciauskas, PhD - Poster prize RSC Dalton Division Meeting, Warwick (Anne Duhme Klair Group)
- Callum Gater, PhD - Johnson Matthey PhD Poster Competition 2023, Dept of Chemistry, University of York (Simon Duckett Group)
- Promeet Saha, PhD - Johnson Matthey PhD Poster Competition 2023, Dept of Chemistry, University of York (Paul McGonigal Group)

Dr. Charles Barry Thomas 1942-2023

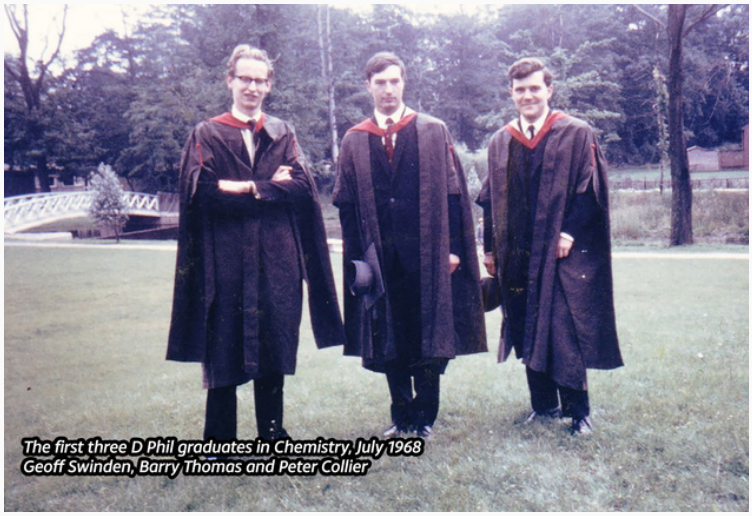
When the first Chemistry students and staff arrived in York in October 1965, Barry had already been here for several months. Fresh from his Chemistry BA degree at Oxford (as a student at St. John's College), he worked as a temporary junior lab technician with David Waddington and Alwyn Taylor, setting up lab experiments, prior to starting a DPhil with the new Head of Department, his former tutor, Professor Dick Norman. Barry's career at the University (he 'retired' from Chemistry in 2008, but never left it) continued through to appointment as Principal of Vanbrugh College from 2013 until 2016: a remarkable progression of commitment to the support of students and the University.

Barry's DPhil, completed in 1967 (one of the first Chemistry Doctorate awards, and a Kathleen Mary Stott Prize-winner), concerned the oxidation of organic compounds with metal-based reagents, using product studies, chromatography, and mass spectrometry, for which he became the Department's expert. At a time when metals were glorified with the labels 'noble', 'precious' or 'rare', Barry characterised his as 'heavy' or even 'grotty'. His contemporary graduates shared long hours in the labs (opened by the Duke of Edinburgh), followed by a late evening pint in the Charles XII. Barry thrived in the refreshing atmosphere of York, and threw himself into a variety of activities.These included rugby for the University First XV, cricket, some golf, and squash in the staff league; in a memorable match against Ampleforth College staff, Barry drew the short straw by playing the Abbot, Basil Hume, later to become Cardinal and Archbishop of Westminster, who was wise, as you might expect, and venerable, but not vulnerable, being the First XV coach and very fit.

We gradually discovered more about the breath-taking scope of his general knowledge, which included trains, ships, planes, military history, Yorkshire, ornithology and, handily, aerial views of British bridges: as a result, he was in particular demand as a member in the annual RSC 'Top of the Firm' quiz night at the York Brewery. Barry was the (not so) secret weapon in securing victory at least half a dozen times between 2008 and 2019.

As a proud Yorkshireman, he took immense pleasure in guiding his friends and colleagues on trips to Bempton Cliffs (before the RSPB put up safety fences), to Robin Hood's Bay, where the lovely view was best revealed by tramping through the disused, pitch-black, railway tunnel), and treasure hunts with the Technicians' Car Club (as a brilliant navigator)

With Dick Norman, Barry took us to watch a Rugby League International at Odsal stadium (Bradford), a Victorian ground whose capacity had once been 100,000 - mostly standing. Tea followed at his home in Wibsey, where his Mum had brought him up, with his two brothers. And Barry's involvement with the University wildfowl, and the lake(s), started when he persuaded Lord James (the Vice-Chancellor) to give £1000 for a project to attract native wild birds, including ducks and geese, to the lake. Barry then helped manage one of the University's most notable features throughout his career.



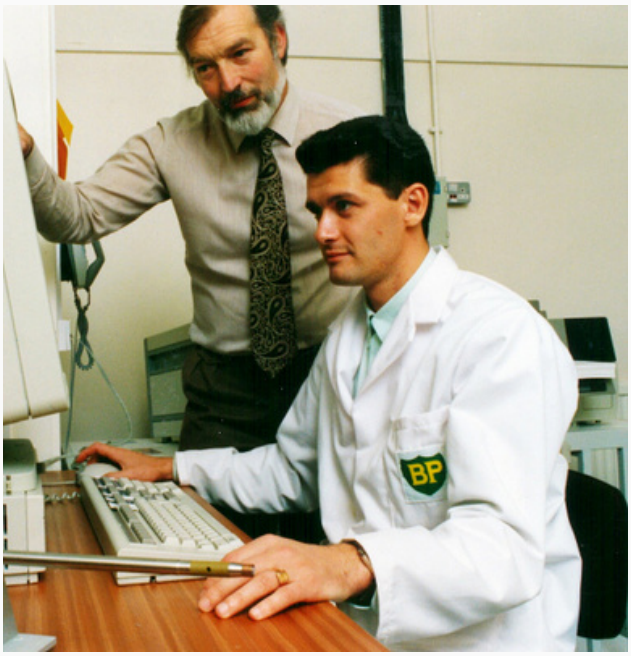
The first three D Phil graduates in Chemistry, July 1968
Geoff Swinden, Barry Thomas and Peter Collier

After completing his DPhil, Barry became a Tutorial Teaching Fellow, and then, following a post-doctoral research year in Adelaide with Professor Athel Beckwith, a Lecturer at York (and later Senior Lecturer). His teaching was initially focussed on lecture courses on organic reaction mechanisms and mass spectrometry, direct contributions to our Laboratory courses, and, most notably, one the team of tutors in Langwith College (of which he would subsequently become Director of Studies). He was a great believer in the importance of providing weekly tutorials for students, within a college system in which tutors were responsible for teaching and pastoral care. He was successful at both; tutorial assignments were always meticulous, his marking detailed and fair, and his feedback helpful and firm: Judith Bennett, one of our former students, now an Education Professor, says that he was the only one of the tutors for which she had to burn the midnight oil - but that she couldn't read his writing. He was especially sensitive and well-tuned to the needs - and potential weaknesses - of students, and was adept at providing support, including visits to students in hospital when they met with mishap or illness, or communications with families and friends when that might be helpful.

Barry particularly welcomed the development of the Chemistry, Management, and Industry and the Chemistry, Resources, and the Environment degree courses, and quickly became involved in both. He developed lectures and lab experiments, particularly in areas of his expertise (e.g. water sources and resources), and, with David Rowe, a series of visits to a power station and sites of geological or geographical interest (e.g. Yorkshire's water sources). The visits helped us build up good working relationships with local companies, who subsequently provided opportunities for student scholarships, work experience, and prizes (for example with ICI, BP Chemicals, Hickson and Welch, and Yorkshire Chemicals). Barry was also very supportive of the pilot exchange schemes offering work experience with BP Chemicals (first in Hull, but also in Marseille, then Aachen). These schemes formed the basis of what would later become the very successful Year-in-Industry option.

When the Department developed four-year integrated Master's Courses (MChem), Barry was highly supportive and closely involved. These programmes introduced an extra year's study, largely involving an assessed research project, with advanced courses taught in-person or on-line, and the year-away variant spent in industry or at universities abroad (initially in Europe-and taught and examined in the foreign language). Setting these up, and achieving the necessary validation and accreditation (for example, to satisfy the University and the Royal Society of Chemistry) would have been impossible without the huge commitment and detailed knowledge of Brian Grievson (Industry) and Barry (European Exchange). The success of the plans - and hence additional opportunities for enhancement of the student experience - owed a great deal to their careful liaison between the Department and the companies and universities, and to regular visits to check on the progress and welfare of the students. In Barry's case that meant negotiation at partner universities in France (Caen, Grenoble, Marseille, Strasbourg), Germany (Aachen, Munster), Italy (Milan), Spain (Seville), and Finland (Helsinki). Barry clearly loved these trips (by train where possible); he explained how you could get back from Marseille to York in a day! The list of options is now much wider, but his initial work, dedication and wisdom underpin this international aspect of the Department's profile. Barry's list did not include Berlin, which he had always wanted to visit; so it is particularly poignant to know that he finally got there with his children, Beth and Edward, as his chosen 80th Birthday present.

Barry's wide experience of teaching and student support was also recognised through his appointment as a senior member of the University's Teaching Committee, for which he worked on scrutiny of proposals for new courses, consideration of examiners' reports, and visits to other Departments to share good practice. He was also involved in the validation of external courses validated by York. A further recognition of his expertise came with his invitation from the British Council to teach in India and Egypt.



Barry's research generally involved cooperation with others in the Department, including co-supervision with Dick Norman and John Lindsay Smith and members of the ESR group, with considerable industrial liaison. It was largely physical-organic chemistry, involving product studies and spectroscopy to understand mechanisms of reactions as a means to develop better routes to novel products. The reactions mostly involved metallic elements from lower down the Periodic Table (including lead, especially, iron, copper, manganese, and even thallium-as well as gold and palladium, to add some glamour), and some non-metallic combinations involving iodine, for example. Barry's work was to reveal the nature of key reaction intermediates, as well as short-lived species in which the organic fragments are bonded to the metals.

His Unilever-funded work on free-radicals from carbohydrates helped reveal the points of attack, the structure of the radicals and their relevance to natural degradation pathways. With Athel Beckwith he used isotope-labelling and product studies to investigate radical additions and rearrangements.

Two tributes stand out. Stan Higgins, an HNC student from Sellafield, joined the Department as an undergraduate and after a visiting Lecturer from Reckitt and Colman described problems with a synthetic procedure, persuaded his project supervisor (Barry) to follow this up with a vacation project and then leverage of some industrial funding for his DPhil, leading to research papers and more student support - and a successful career for Stan. Professor Ian Fairlamb describes how Barry influenced the next generation of organic chemists - almost invisibly but positively - having a huge impact at a time of rapid change, involving much larger student numbers, professionalisation of research, and greater business orientation: 'Barry completely altered my thinking on leaving-group ability, subtly (and charmingly) pointing out that I was teaching it the wrong way'- a key review by Ian in the prestigious journal Angewandte Chemie is dedicated to Barry. And other students comment warmly on his advice and guidance - and on the challenges of sharing a fume cupboard with a family of growing coots, raised from eggs from the lake.

Barry's contributions to the running and administration of the Department were widespread, with particular focus on the development of new courses and in the context of small-group teaching and supervisorial support. His most notable role was to work in the Undergraduate Admissions team, initially with Roger Mawby, later with Paul Walton, Jason Lynam and notably Andy Parsons, to increase the annual intake of Chemistry students from 55 (in 1965) to nearly 200 today, without compromises in the quality of the students. Their policy was to give applicants as much information as possible, via student visits, personal interviews, and guided tours of the Department and Campus (with parents in tow!). Feedback followed to the applicants and their schools - with additional invitations to schools to come for visits and Sixth-Form Conferences. Roger wrote about Barry 'Over a twenty-year period, his tact, organisational skill, and sheer hard work were invaluable to me'. And Annie Hodgson, who worked closely with them, and Editor of Chemistry Review, a Sixth Form magazine created in the Department, praises the support of Barry as a 'founding Editor, the go-to person for nomenclature, provider of wisdom regarding organic stereochemistry and with impeccable attention to detail, proof-reader in chief, even during lockdown'.

Barry, together with chemistry colleagues, at the Times Higher Education Leadership and Management Awards 2011 (nominated for the Outstanding Student Admissions Team)

At a University level, Barry helped over two hundred new colleagues navigate the stresses of relocation, through the work of the Welcome Service, with advice about accommodation, school admissions, bank accounts etc. Marina Knight, Professor of Statistics, writes 'Barry truly made a difference and his name still resonates in me with a friendly University of York connotation'. After formal retirement, he was invited to become Principal (and Head of College) for Vanbrugh - bringing to bear his experience of student support and academic leadership, alongside an Administrator, in a new model for colleges This he did until 2016. The College Manager, Georgina Heath, recalls his enthusiasm, humility, humour, energy and willingness to be involved in the support for students, individually and collectively; and what better accolade from the students than to have the College Bar (and Thursday night open-mic sessions) named after him (Barry's Bar). Barry also continued to be a very strong supporter of the University in other ways, for example as a member of the Langwith Senior Common Room.

Tributes speak of his lasting contribution to planning and development at all levels. Paul Walton says that Barry 'was at the heart of what the Department stood for -the man to go to when we wanted advice or help, or a calming sage voice: unfailingly generous, consistently patient, singularly pleasant and utterly reliable.' Richard Taylor describes him as 'an outstanding colleague - his knowledge of the subject, of teaching methods and of University rules and regulations was outstanding - but most of all, he was there to listen and, after due consideration, to give advice.' Caroline Dessent adds, 'someone who was an entirely kind and warm human being.' Robin Perutz reminds us that 'it was Barry who over many years promoted the biodiversity of the campus, both practically and in committees; without that legacy the beautiful campus environment might now be very different'.

In recent years Barry also made time to contribute indelibly to the community in ways which reflect his educational experience and range of interests. These include the British Trust for Ornithology (e.g. counting and ringing birds): Sue Mendus, formerly Professor of Politics and University Director of Admissions, recounts her enjoyment of making bacon butties when her husband returned from Barry's 'dawn patrol' bird-counting for the British Ornithological Trust - work that was continued by Barry as a member and Chair of the York Ornithological Group. Barry had also been involved with local focus groups involving Bus Services and GP surgeries and, especially, in his role as Parent Governor and then Chair of the Governors for Hempland School (from 1990 until 2019). From 2010 he had worked closely with York Education Authority and North Yorkshire County Council, on Panels for Schools' Appeals, and, for York City Council, as a member of their Safeguarding of Children Panel. He was still very active, particularly bringing his expertise, knowledge, and sense of fairness, to the Appeals processes, in the days before he died. Tributes from them all show that he brought them the knowledge, dedication, and enthusiasm we have all shared.

David Waddington wrote ‘It was typical of Barry that he organised and edited ‘50 Years of Chemistry at York’. Looking at the book it is almost impossible to find out who the editor is. Eventually you can find it buried in the Acknowledgements. There are some lovely interludes and images, which he included throughout the book -unsigned, of course. The whole is crafted by someone who loved the Department well.’ The same message is given, in Barry’s own words, in his personal Memories.

We hope that the knowledge of a life so well-lived will bring consolation and comfort to his children, Beth and Edward, and to their families, which include his much-loved six grandchildren, and to his brothers Nigel and Neil.

University Legacy Newsletter Feature

Ambar Shaikh a first year PhD student in Caroline Dessent's Group has recently been featured in the latest edition of the University Legacy Newsletter where she talks about her experiences as a Wild Fund Scholar.

Read the full article here.

Masters Publication Success

An MChem Year 3 Group Mini Project that ran during the second UK lockdown (2021) produced enough findings to support a wider study, led by one of the students and is now published in Acta Crystallographica Section D: Structural Biology.

Jordan Dialpuri, a third-year MChem student at the time, created Python scripts and helped coordinate a team of 19 other students to process preliminary data extracted from the Protein Data Bank (PDB); the data proved good enough to warrant investigation and further developments. During a summer internship in 2021 and in the background of his placement year, Jordan developed new scripts and gathered exhaustive data based on the protocols implemented during the group mini-project, compiling them into a database that would eventually make its way into the Privateer carbohydrate validation software, a leading package in the field. Fast forward to summer 2022, and Jordan was analysing the results and liaising with other members of the team (Haroldas Bagdonas and Mihaela Atanasova) to provide user access to these data through a graphical interface and reports. Funded by The Royal Society, **Lucy Schofield**, a third-year MBioChem student who had earlier in the year taken Dr Agirre's 3D Structures strand of the Data Analysis module (BIO000058M), joined the team to analyse the results and create publication-grade 3D pictures using the CCP4 Molecular Graphics project (CCP4mg, developed at the York Structural Biology Laboratory).

Jordan Dialpuri and Lucy Schofield holding the proofs of their article. Photo credit: Haroldas Bagdonas (YSBL).

The resulting code will become available to users around the world through the Privateer software, which is part of the CCP4 suite of crystallographic software. The article describing it, submitted as part of the CCP4 Study Weekend special issue, has just been published in Acta Crystallographica Section D: Structural Biology (IUCr Journals). Although their data was ultimately not used in the publication, the 19 other Group Mini Project students were individually named and acknowledged in the article. The research and software written up on the article are a considerable contribution and achievement by Jordan and Lucy, who have become a very important part of Dr Jon Agirre's group (popularly known as Glycojones team in structural glycobiology circles). The published article can be found here

Jordan remarked: “Extending the work completed during the Year 3 Mini Projects into a published article was a challenging but rewarding experience. The opportunity to develop my technical skill has been invaluable and will undoubtedly help me in the future.”

When asked about her experience as part of this study, Lucy said: “I am extremely grateful to Jon for giving me the opportunity to contribute to this work. Having the experience of working with Jon, Jordan and the rest of the Glycojones team has taught me so much, both in terms of technical knowledge, but also the academic writing process and the importance of collaborating with others. Hopefully, this will encourage other undergraduates to approach academics whose research they find interesting, as well as encourage staff to trust students to produce meaningful work.”

O'Brien Group News

This May, Andres Gomez Angel, Lucy Tomczyk, Islam Araar and Stuart McHale represented the O'Brien group at the RSC 25th Lakeland Symposium in Grasmere (Lake District). Fascinating talks and in-depth scientific discussion were held in the quaint village hall of Grasmere village, sitting amongst the picturesque landscape archetypal of the Lake District. Notable speakers included Chris Willis, Mark Lautens, Thorsten Bach, Daniele Leonori, Géraldine Masson and David Procter, though this is no exhaustive list by any means.

A stunning presentation was delivered by Andres on the synthesis of modular 3D building blocks for fragment elaboration. Stuart and Lucy (2 nd year PhD students) presented their work to date on sp3-sp2 Suzuki-Miyaura cross-couplings and Islam (MSc by research) presented on the application of fragment elaboration to medicinal chemistry.

Outside of presentations and poster sessions, three great walks were led by Andrew Smith, chair of the Grasmere symposium, with the final walk a 4 hour hike up Fairfield ridge. Finally, the conference came to a close with a lovely banquet followed by drinks and Karaoke.

AstraZeneca Visit
Peter recently visited AstraZeneca in Cambridge as part of his Royal Society Industry Fellowship. In addition, he gave an invited lecture on recent research in the group, which led to a lot of interesting discussion.

Congratulations!

New appointment **Paul McGonigal** (Reader in Functional Organic Materials) has been awarded the 2023 Liebig Lectureship by the Organic Division of the German Chemical Society (Gesellschaft Deutscher Chemiker) for his advancements in the dynamic processes of organic functional materials. The award is given each year to an outstanding young scientist in organic chemistry, preferably one working in a European country outside Germany. Paul will be celebrated during a multi-institution lecture tour across Germany in November this year.

Fraser Arnold (final-year PhD in Avestro Group) has been awarded a a Japanese Society for the Promotion of Science JSPS Summer Fellowship by JSPS London to carry out a two-month research stay with the groups of Masaaki Akamatsu (Department of Chemistry and Biotechnology, Tottori University) and Professor Katsuhiko Ariga (WPI Research Center for Materials Nanoarchitectonics (MANA), National Institute for Materials Science (NIMS)). Fraser will be working to integrate functional organic macrocycles developed at York into ion-conductive membranes and transistor devices and will hosted by Professor Ariga at NIMS in Tsukuba, Japan.

York Chemists support Sustainability in the Research and Innovation Endeavour

May 16th and 17th saw senior leaders from industry and academia as well as scientists, technicians, and students working in a wide range of scientific environments including physics, engineering, chemistry, biology, and clinical research converge on the Royal Society in London for the Sustainability in the research and innovation endeavour | Royal Society conference.

This hybrid conference, developed in partnership with the Royal Society of Chemistry, offered a forum to connect a broad range of individuals working within both wet and dry laboratory environments who have an interest in enhancing the environmental sustainability of research and innovation activities

Co-chaired by Helen Sneddon (University of York) and Roger Sheldon (Delft University of Technology), the event took a discursive approach to highlight and explore this topic, considering trade-offs and myths, examining examples of good practice and promising innovations, exploring current and future challenges, discussing how progress might be measured and fostering opportunities for collaboration.

There will be a full report on the event coming out in September and it's intended that the conference will lead to tangible recommendations and actions to ensure that valuable research does not have unwanted environmental consequences. Richard Gammons (University of York) did an excellent job on the panel on "Sustainable research: perspectives from technicians, analysts and laboratory scientists".

For more information about the event contact with Helen Sneddon or Richard Gammons

Congratulations!

Alyssa-Jennifer Avestro (Royal Society Dorothy Hodgkin Fellow; Lecturer in Synthetic Molecular Materials) has been awarded a 3-year Royal Society Dorothy Hodgkin Renewal Award (starting July 2024) to extend their programme of research to study novel aromaticity and stimuli-responsive electronic properties of three-dimensionally chiral pi-molecular materials. Fellowship Renewal Awards are granted to rising-star Royal Society Research Fellows who have been successful at establishing independence through research achievements and a strong international early-career profile during their initial 5-year fellowship period. In addition to salary, research and professional development costs, this award will fund the recruitment of a 4-year PhD student and 1.5-year PDRA to help execute their fundamentally novel research proposal as part of the Molecular Materials Research Theme at York. Congratulations Alyssa!