

REMEDY



SCIENCE
inhealth

LIVE!



**Celebrating
25 years of
inspiring future
scientists and
clinicians**

Inside:

*PACE trial findings lead to safe reduction
in antibiotic use in patients with chronic
obstructive pulmonary disease (COPD)*

Welcome

In this thirty second edition of ReMEDy, we celebrate the 25th anniversary of the flagship schools' engagement event, Science in Health LIVE, which takes place every March to coincide with National Science and Engineering Week.

This is a massive achievement for Science in Health LIVE and congratulations to all academic and administrative staff and students at all levels, from postgraduates to Professors, representing the Schools of Medicine, Pharmacy, Healthcare Sciences, Dentistry and Optometry within the College, who successfully support and deliver this event. As you will read, this event clearly impacts on budding scientists and healthcare professionals at a crucial decision-making time in their lives. This often first contact with the School of Medicine and other Schools across the College has seeded many inspiring career paths and demonstrates the important role that Universities play in delivering inspiring events such as Science in Health LIVE.

This edition's alumnus conversation is with Dr Matt Morgan, a 2004 graduate of the School of Medicine who is now an Intensive Care Consultant working at the University

Hospital of Wales Cardiff. This year, Matt published his first book entitled "Critical" which takes you on a journey of the science of critical care medicine throughout the body – it's a great read!

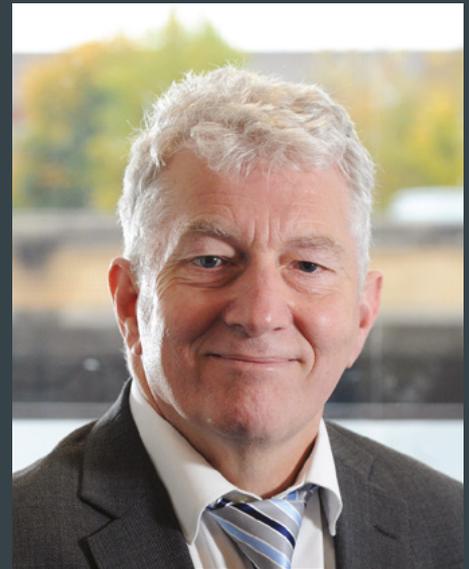
We put the spotlight on the fantastic work of the Student Recruitment and Engagement team, in the Centre for Medical Education, led by Vicki Roylance. We also highlight the impact of a pilot school engagement project led by Dr Sarju Patel which involves our medical students delivering regular tutoring sessions to year 9 pupils from Fitzalan High School in Cardiff.

ReMEDy is available electronically to the School's alumni and to ensure that you receive your copy, please inform us if you have changed your contact email address.



Update your details now:

www.cardiff.ac.uk/alumni-update



Professor Ian Weeks
Acting Dean
School of Medicine

Curriculum Update

This update comes hot off the press after having attended the 2019 Graduation events at Cardiff's St David's Hall.

This was another outstanding day with a reminder of the history of Medical Education in Wales as Professor Stephen Tomlinson CBE received his Honorary Fellowship.

Things continue to change apace as we seek to further contribute to the challenges faced by the NHS in Wales. The C21 curriculum has now graduated its second cohort and we continue to look for ways to ensure our educational pedagogy fits with our mission statement within the Centre for Medical Education. This has led us to an exciting collaboration with Bangor University which sees the introduction of a C21 North Wales course in September 2019. This will deliver an equivalent student experience for students studying Medicine in North Wales.

Utilising the principles of educational continuity and community engagement these students will learn from Bangor University, Cardiff University and Betsi Cadwaladr faculty. This is certainly a step in the right direction to reap the benefits of widening access and distributed medical education for the future of the NHS in Wales. There will be more on this innovation in the next edition of ReMEDy as the Undergraduate team continue their hard work to deliver an excellent student experience.

We now have a real sense of 'community of practice' across School of Medicine Postgraduate Taught Courses (PGT) as the team have relocated to new office space. The completion of the actions from the PGT review undertaken 2 years ago will place us in a great position to develop these courses further in the future.

I am delighted to report that the Postgraduate Research (PGR) team achieved a 95% on time completion rate for PhD's and a 90% overall satisfaction in the Postgraduate Research Experience Survey. The BSc Medical Pharmacology course also had another outstanding year in the National Student Survey achieving 100% overall satisfaction. This is an excellent course producing excellent scientists and future doctors alike. Congratulations to all teams involved for these excellent achievements which demonstrate continued staff dedication to our student experience.

Undoubtedly, these are challenging times but the Centre for Medical Education continues to work hard to innovatively deliver and help to meet these challenges head on.

Professor Stephen Riley
Dean of Medical Education

In Conversation with our Alumni

Dr Matt Morgan (MBBCh 2004, PhD 2015)

Matt works as a doctor in the intensive care unit at the University Hospital of Wales Cardiff.



Matt describes it as: "The most wonderful, the most complex, yet the simplest place in the hospital. I say simple because we use complex technology and cutting edge science to give patients just one thing - time. Time for us to discover what is wrong with them, time for them to get better, and sometimes, sadly, time for them to say goodbye."

A typical day for Matt combines caring for critically ill people, researching how to do this better and then trying to get this message across to others. "My days normally start early, finish late and involve a lot of coffee!"

Immediately after graduating Matt launched himself into working 56 hours a week, most weekends and most Christmas holidays as a doctor in South Wales. Matt describes his career since graduating as "messy but good messy". He continues: "I have worked in some of the biggest hospitals in the UK and Australia, I spent a short time in the military, did a PhD using artificial intelligence in medicine and then settled back in Cardiff working in the University Hospital of Wales."

"The last year has been writing my first book - "Critical". I want to take readers on a

tour around the intensive care unit, one of the most fast-paced, pressurised places in a modern-day hospital. Along the way, they will meet some of my most interesting and memorable cases. Through these stories, they will learn about the wonders of the human body and celebrate the incredible resilience of the human spirit. If you like stories, or science or simply humans, this book is for you!"

On being asked why he chose to study at Cardiff University, Matt describes how he told his careers tutor in school that he wanted to be Fox Mulder from the X-Files. "However, coming from a Welsh comprehensive school this apparently wasn't an option. After going to one of the first "Science in Health" events organised by Cardiff University, I applied there to do medicine instead." This may explain why Matt is such a supporter of engaging the public in research and why he himself has got involved in several engagement initiatives and regularly participates in the School of Medicine's Science in Health programme, informing and engaging the public in the latest intensive care research and inspiring the future medics and scientists of the future.

Whilst studying medicine, Matt recalls having a fascinating time during his overseas elective period working with patients with HIV in Brazil. "It opened my eyes to objective poverty alongside the beauty of a very different part of the world."

Reflecting on how Cardiff School of Medicine contributed to his success, Matt says: "Firstly, they took a chance by saying "yes" when I asked them to turn me from a spotty 18-year-old student into a doctor. Then they took me back to do a PhD over a decade later."

"Cardiff University School of Medicine is a place that nurtured me and allowed me to grow into new pastures."

Matt's shared alumni wisdom:

"There is no such thing as a temporary tattoo."

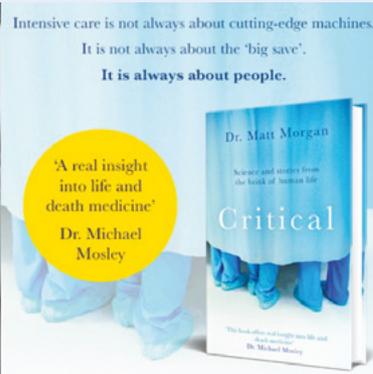
Matt's five words describing Cardiff School of Medicine:

Friendly

and very

education

focused



In the Spotlight:

The Student Engagement Team, Centre for Medical Education



Led by Vicki Roylance, this small team is dedicated to ensuring the University and our community are celebrating the success of our medical students.

Our students are incredible ambassadors for the course and the career. Not only do they undertake their medical studies with 100% commitment but many are involved in lots of other projects inside and outside of the Medical School. Some students are known to the team and many are not. The team are keen to hear about extra-curricular activities students are engaging with to ensure they get the recognition they deserve.

Every year around February, the School of Medicine comes together to celebrate student success through our prestigious award ceremony 'Surgam' (Latin for 'I shall rise'). The event is a glamorous affair with dancing, music and inspirational stories. Families of the students come along to share in their glory and to sit with pride (and very often a tear in their eye!) to see what these amazing students have achieved. Formalities begin with a delicious afternoon tea and move on to awards and celebrations.

Our social media presence is a fine platform to share in our student successes. Following our facebook posts (Undergraduates: @CardiffC21; Postgraduates (Taught) @cardiffpostgradmedic) will almost certainly make Cardiff University staff/alumni and stakeholders proud to be associated with such a high-achieving group of people. From students on electives to graduation, facebook captures it all.

Medical Students flock to take part in many outreach projects run by staff which is greatly appreciated. One community outreach project, which recently took place in Grangetown, Cardiff called 'Promoting Academic and Community Excellence' (PACE), described in more detail later in this edition of ReMEDY, involved year two student role models Gabrielle Kelly and Fleur Archer. Gabrielle and Fleur single-handedly organised and ran a two-day summer school for pupils from Fitzalan High School. Their energy, initiative and friendliness ensured the pupils had a wonderful time learning and having fun in the School of Medicine.

?

Do you know of any medical students who are making an outstanding contribution to the community in some way?

More than likely they are an 'unsung hero'. We would love to hear from you – C21@cardiff.ac.uk.

Together we can make sure our students get the praise they deserve.

School of Medicine senior management provides physical as well as moral support for student recruitment. Pictured from the Student Engagement team from left to right are Janet Batters, Vicki Roylance and Caitlin Golaup at an Open Day, alongside Tracey Booth (second left), PA to the Head of School, Professor Dave Wilson, Chair of the Admissions Group and Professor Steve Riley (far right), Dean of Medical Education.

Our students make the most wonderful role models. Hundreds of medical students help on numerous recruitment events throughout the year.

It would take forever to list all the wonderful comments we receive about our students, but here is a snapshot to give you a flavour:

"The students helping on the Taster Days were a real credit to the University".

"All of the students I spoke to were really informative and friendly".

"The students were friendly, funny, honest and full of information".

"The students were brilliant. They did a superb job. Well done to all."

PACE trial findings...

...lead to safe reduction in antibiotic use in patients with chronic obstructive pulmonary disease (COPD)

Researchers at Cardiff University with colleagues from University of Oxford and King's College London hosted a targeted engagement meeting on 6th June at Wales Millennium Centre to discuss the potential ground breaking results from the **PACE study**.



PACE team from left to right: Dr Guru Naik; Professor Chris Butler; Mr Jonathan Bidmead; Professor Nick Francis; Ms Janine Bates; Dr Patrick White; Dr Carl Llor; Dr Dave Gillespie; Dr Emma Thomas-Jones; Mr Nigel Kirby, Dr Mandy Wooton and Dr Micaela Gal.

The event brought together a range of stakeholders including policy makers, industry, the third sector, researchers and patients in the format of plenary talks and group discussions, to ensure that learning from the trial is implemented into policy and guidelines and make a real difference to patients, their families, wider society and the NHS.

About a million people in the UK have been diagnosed with COPD. People with COPD often experience acute exacerbations (AECOPD), also known as flare-ups, where their symptoms - including breathlessness, coughing, and phlegm - suddenly become worse. Three out of four are prescribed antibiotics. However, two-thirds of these flare-ups are not caused by bacterial infections and antibiotics often do not benefit patients.

Researchers set out to test whether a finger-prick blood test that can be carried out in GP surgeries in a few minutes could help clinicians decide when to prescribe antibiotics for COPD flare-ups. C-reactive protein (CRP) is a marker of inflammation that rises rapidly in the blood in response to serious infections. When people with a COPD flare-up have low levels of CRP, they are much less likely to benefit from antibiotics.

Results published in the July issue of the *New England Journal of Medicine*, show that a fingerprick blood test carried out in GP surgeries can safely reduce antibiotic use in patients with chronic obstructive pulmonary disease (COPD).

The PACE study is the first randomised controlled trial to address the question of whether measuring CRP with a point of

care test in people with AECOPD in primary care could lead to fewer antibiotics being consumed without having negative effects for patients. General practitioners and clinical staff at primary care practices involved in the study were trained in use of the CRP point of care test and how to interpret the results to guide care.

653 people who were seen at their GP surgeries in England and Wales for a COPD flare-up (AECOPD) were randomly assigned to either 1) usual care without the test or 2) usual care with the addition of a CRP point of care test. Antibiotics were taken for COPD flare-ups by 77% of people in the usual care group but only 57% of people in the CRP point-of-care test group in the four weeks following their initial consultation; a reduction of 20% in antibiotic use. Importantly, these *reductions in antibiotic use did not have a negative effect on patient's recovery* over the first two weeks after their consultation at their GP surgery, and on their well-being and use of health care services six months later. This showed that using the CRP point of care test could safely reduce the use of antibiotics for COPD flare ups.

Professor Francis, one of the study's Chief Investigators said: "Governments, commissioners, clinicians, and patients living with COPD around the world are urgently seeking tools to help them know when it is safe to withhold antibiotics and focus on treating AECOPD with other treatments. Our trial has demonstrated a 20% absolute reduction in antibiotic prescribing by clinicians as well as

antibiotic use by patients with AECOPD. This is a patient population that are often considered to be at high risk from not receiving antibiotics, but we were able to achieve a reduction in antibiotic use that is about twice the magnitude of that achieved by most other antimicrobial stewardship interventions, and demonstrate that this approach was safe."

The researchers recommend that primary care clinicians use a CRP point of care test, with the guidance used in this study, to inform their antibiotic prescribing decisions for AECOPD with appropriate patients. Safely reducing the use of antibiotics in this way may help in the battle against antibiotic resistance.

"The research 'C-reactive Protein Guided Antibiotic Prescribing for COPD Exacerbations'" is published in the *New England Journal of Medicine* at www.nejm.org/doi/full/10.1056/NEJMoa1803185

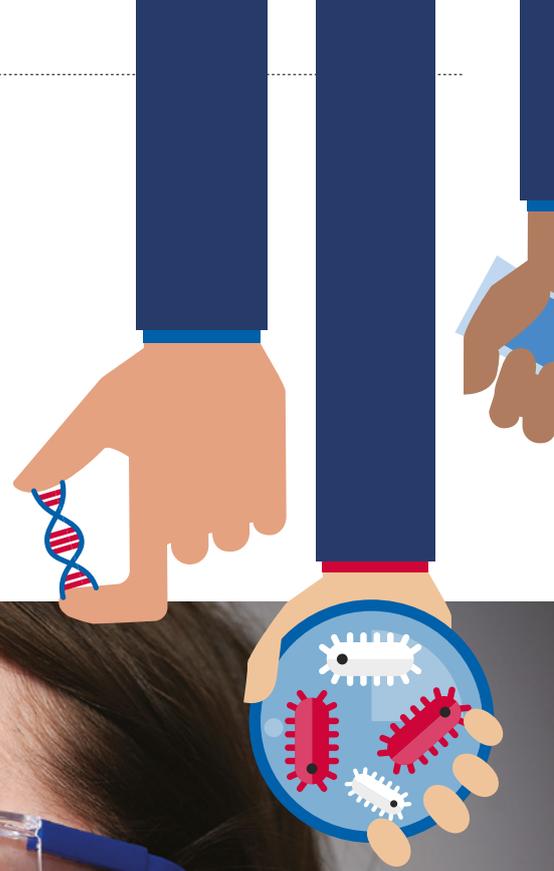
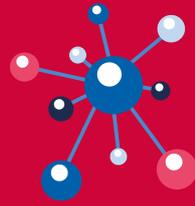
Watch our short summary here: <https://youtu.be/AtZ7bnbpNk>

This study/project was funded by the National Institute for Health Research (NIHR) [HTA programme]. The views expressed are those of the author(s) and not necessarily those of the NIHR or the Department of Health and Social Care.

25th anniversary of

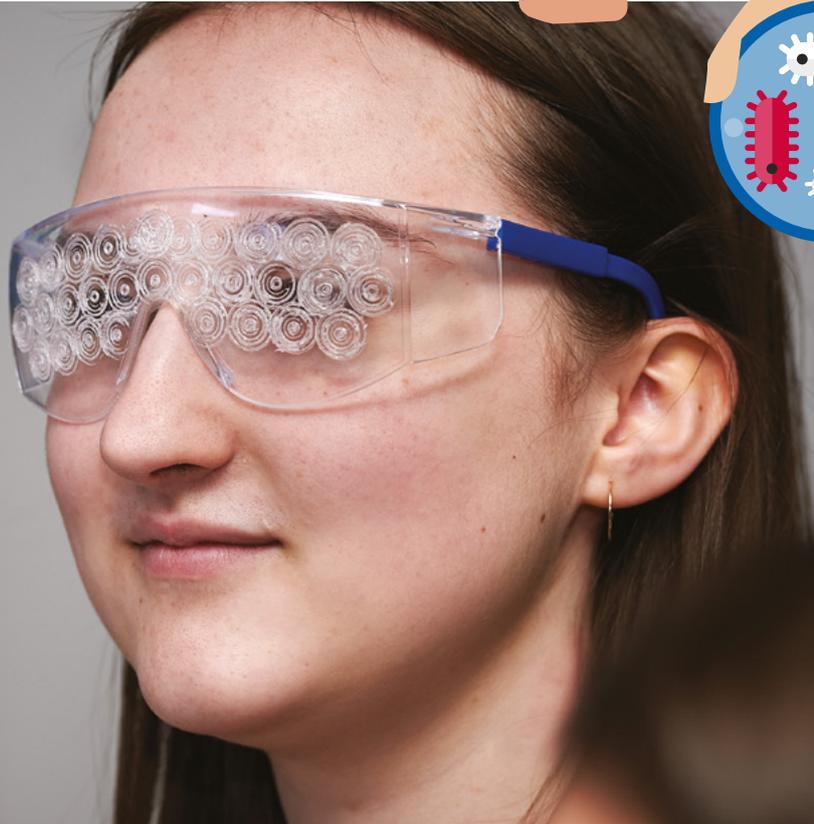
SCIENCE in health

LIVE!



Celebrating 25 years of inspiring future scientists and clinicians

Since 1995, Cardiff University's School of Medicine has welcomed sixth form pupils from schools across Wales with the aim of engaging and inspiring them with the exciting science underpinning clinical management of disease and medical research.



A key feature of this event is to show how scientific curiosity can sometimes quite unexpectedly lead to major breakthroughs in medicine. A classic example includes how the study of a luminous jellyfish led researchers in the School of Medicine to develop a technology now used in several hundred million clinical tests per year worldwide.

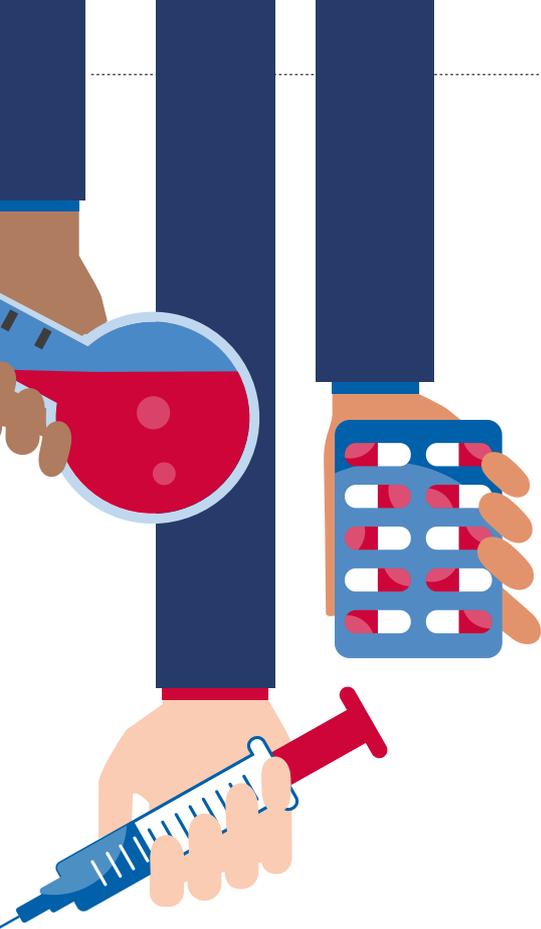
This year, the event celebrated its 25th anniversary and pupils once again participated in laboratory tours to gain a feel for the excitement and challenges of biomedical research; visited a wide range of interactive exhibitions, listened to a series of talks on various hot topics in biomedical science and met and questioned scientists and clinicians from across the whole spectrum of scientific and healthcare careers.

Over the years, it has become clear that Science in Health LIVE, alongside other Science in Health initiatives is having a positive impact on influencing career choices and supporting pupils to realise those choices in terms of gaining university entrance.

Thomas Grother, a fifth-year medical student, who intercalated in medical education last year, said: "I attended the Science in Health LIVE event when I was a sixth-former. It gave me the opportunity to explore lots of different science courses on offer in university. I had already considered medicine, and it was great to have the opportunity to have hands-on experiences and ask staff and students questions throughout the day. I went on to apply to study medicine, and was offered a place here in Cardiff. If you think you may want to study a science course in university, then definitely come along to Science in Health LIVE!"

Lisa Jeffers, whom graduated this summer, attended Science in Health LIVE and work experience in 2012. She said: "My time at medical school, now sadly coming to an end, has been shaped for the better thanks to Science in Health. I am extremely grateful to the event and the individuals involved in its running. I have been heavily involved in academia and research throughout my degree, I believe this interest all began back in 2012 with this event. The opportunities I've had have been endless, including an intercalated degree at Imperial College London, publications and an elective placement opportunity with the University of Toronto. The friends I made back in 2012 have also become friends for life. Thank you, Science in Health!"





Nicholas Alford, Deputy Director of Faculty of Science, St Cyres School, has been bringing year 12 pupils to Science in Health LIVE for over 10 years. He said: "I look forward to bringing our students to the event. They get to see the great breadth of opportunities for careers in the medical professions. The laboratory tours are a highlight of the day; showing the diversity of techniques used in modern diagnosis and treatment. The hands-on activities are great fun and an ideal time for students and teachers to network. It is great to see how the event has evolved over the time I have been bringing students. The Science in Health team are an inspiration to all; their love of their work shows through in their enthusiasm for the event. I highly recommend Science in Health LIVE to any science teacher; it is consistently the best A level trip we take the students on."

Dr Matt Morgan, Consultant in Intensive Care Medicine and Honorary Senior Research Fellow, attended Science in Health LIVE when he was a year 12 pupil. Matt said: "I would never have guessed that attending this brilliant event over 20 years ago would be so important for my future. I am not sure I would have still become a doctor, a researcher, an author and a teacher without this. Thank you."

Professor Sir Leszek Borysiewicz, encouraged and supported the very first Science in Health LIVE, in 1995 and presented a plenary talk 'Health Care - 25 years of progress but more to come?'. Professor Anthony Campbell, a longstanding Chair of the Science in Health group, also presented a plenary talk entitled "25 years that have revolutionised medicine".



He added: "The Science in Health LIVE initiative, originally called PUSH (Public Understanding of Science in Health), has been an inspiration to me, hundreds of staff, and thousands of pupils and teachers, since we started it 25 years ago. Grass roots involvement has been crucial to its success and sustainability. It has pioneered engagement with schools and the public, not just in Wales, but throughout the UK and internationally. Central to our mission was to excite budding young scientists and health care professionals about what science we do in a medical school, and University, and how this can impact on patient care, technology, and the economy. Long may it continue!"

Dr James Matthews, current Chair of the Science in Health group, who has participated in all 25 Science in Health LIVE's, said: "A great deal of effort goes into the design of the individual tours, talks, panels, quiz and exhibits for SIH-Live but it is very clear that this effort pays dividends in inspiring the next generation of scientists and clinicians."

"This year, we introduced a CPD session for teachers which we hope will be a developing part of what Science in Health LIVE will offer in the future."

The feedback from this year's event was overwhelmingly positive, with over half the pupils completing the feedback indicating that they were now more likely to study at Cardiff University and over half confirming that the event helped to further future career goals.

Praveena Pemmasani, from Whitchurch High School attended Science in Health LIVE on the 13th of March. Here she describes her experience of the event:

"The day was the perfect opportunity for me to engage with various branches of medicine that I had previously not encountered. It allowed me to be curious about specialities and research that I had



never heard of before. Firstly, the plenary talks were a valuable insight into the last 25 years in Medicine and left me amazed by how much has been accomplished in the last few decades only, and the many new and exciting prospects still to come.

The exhibition was the highlight of the day, presenting complex ideas in an enjoyable manner for us sixth-formers to understand. I especially loved the clinical skills exhibit where I got to take blood! I felt like a medical student and was nervous I was going to mess it up! It was entertaining to stimulate the body's signalling pathways on a pool table in the rheumatoid arthritis exhibit, and it showed me that science is a constant presence in hospitals and is not necessarily confined to research labs.

The laboratory tour further reinforced the idea of science supporting the development of Medicine. I learnt about the role of T-cells in health and disease and how understanding them is a significant factor in producing targeted medicines.

Finally, the expert panel was immensely helpful about clearing up any doubts I had about applying to medical school, and made it seem a less daunting process. The whole experience reminded me that I will be studying a subject I am passionate about, one with many, many possibilities."

Watch our Science in Health LIVE video here: <https://youtu.be/WgZ98FKe13E>

To find out more about our engagement activity with Schools please visit: www.cardiff.ac.uk/medicine/about-us/engagement

Or email: medicengagement@cardiff.ac.uk

10 ways

MEDIC is MAKING an IMPACT

The School of Medicine has a successful track record of contributing to society through its Research, Learning and Teaching, and Innovation and Engagement activity. Efforts by many staff and students highlight a rich variety of ways in which the School is engaging and benefitting society. Here are just ten recent examples:

1 Raising Awareness of Cancer Symptoms

Professor Kate Brain and Dr Grace McCutchan have been working with Cwm Taf Morgannwg University Health Board to develop a vague cancer symptom awareness campaign for people living in the South Wales Valleys. We know that low public awareness of vague cancer symptoms (e.g. persistent unexplained tiredness) combined with fearful beliefs about cancer can put people off going to the doctor – the campaign aims to overcome these known barriers. The campaign will get cancer awareness messages to the public through trained local cancer champions and targeted adverts (e.g. on pharmacy bags, buses, and Facebook) to empower people to visit their doctor with important symptoms.



2 Queen's Birthday Honours Recognition

Professor Antony Bayer was awarded an MBE for services to Healthcare in the Queen's Birthday Honours. Professor Bayer is a Professor of Geriatric Medicine and Director of the Memory Assessment Service at Cardiff and Vale UHB, University Hospital Llandough. Professor Bayer's research focuses on the epidemiology, assessment and clinical management of cognitive disorders and neurodegenerative disease, especially Alzheimer's disease. His interests also extended to the clinical trials of new pharmacological and nonpharmacological treatments for dementia and the organisation of services.

3 Researchers Uncover New Cause of Abdominal Aortic Aneurysm

Researchers have discovered that a family of lipids (fats) contribute to the development of a serious aortic disease, by driving clotting in the blood vessel wall.

The team, involving researchers at Cardiff, Oxford and Erlangen, discovered that the lipids, called eoxPL, promote the development of abdominal aortic aneurysm (AAA) - a disease of the aorta where inflammation causes damage and can ultimately lead to rupture.

Professor Valerie O'Donnell, who led the research, said: "After discovering new lipids that promote blood clotting, we wondered if they also played a part in AAA, as we know the condition is linked to blood clotting.

"Our research found that these lipids in circulating blood cells did promote AAA formation in the vessel wall, because they directly regulate blood clotting.

"Unexpectedly, when administered into the blood system, the same lipids were also found to have preventative properties because rather than being made by circulating blood cells in the vessel wall, they instead mop up clotting factors, causing them to be removed from circulation, and preventing disease."

The findings could lead to the development of new treatments for this potentially life threatening condition.

4 DIY Surgery at Tafwyl

On the Sunday of the Tafwyl festival in Cardiff Castle grounds, fifth year undergraduate medical students, Rhiannon Jones and Gwenllian Rhys hosted a DIY surgery session. Lots of young future surgeons came to the Cardiff University tent and had fun with the laproscopic kit.



Rhiannon said: "It was a great to be a part of this year's Tafwyl, I thoroughly enjoyed engaging with people young and old. It was fantastic to share and see such enthusiasm about medicine."

5 SASH – Study of Attitudes towards Smoking and Health



Study of Attitudes towards Smoking and Health

Psychosocial variables such as self-efficacy and social support are known influences on an individual's motivation to quit smoking; however, evidence regarding their impact

on quit motivation in the population of older smokers from deprived backgrounds is limited. The aim of the current study is to identify determinants of quit motivation in older smokers from deprived communities. An online survey of smokers, aged 50 years or older and from socioeconomically deprived backgrounds is currently being conducted. The survey findings will be used to identify modifiable psychological variables that may be targeted in a future supportive smoking cessation intervention.

6 Superbugs Pop Up Science Shop



Superbugs came to Cardiff city centre this summer, providing hundreds of families with the opportunity to learn about the microbial world and discover the bacteria that live in, on and around us.

Dr Jonathan Tyrrell, who led this public engagement initiative following a successful application to the Wellcome Institutional Strategic Support fund said: "It was exciting to take the science behind antibiotic resistance out to the community and see so many families engaging with the science and learning the part they can play in helping us to solve this global problem."

"This was a massive undertaking but I am thrilled with the feedback and initial evaluation from the event which supports a massive increase in knowledge on antibiotic resistance and I am delighted that so many children took the opportunity to become Antibiotic Resistance Champions."

For further information on this event, please visit www.cardiff.ac.uk/superbugs

7 Raising Awareness of Organ Donation in Welsh Schools



From left to right: Anna-Louise Bates, Believe Organ Donor Support, Rachel Evans, Jasmin Ranu, Emily Hare, Emma Walker, Olivia Crannage (third year undergraduate medical students) and Bethan Moss, Specialist Nurse in Organ Donation).

Working in partnership with NHS Blood and Transplant, medical students have been delivering teaching sessions on organ donation to year 6 and year 8 pupils across South East Wales. This forms part of a pilot project aiming to stimulate conversations and debate about organ and tissue donation among children, and to encourage them to have conversations about their wishes and to learn about the wishes of their family members. The pilot involved 18 primary and 6 secondary schools. The sessions have received positive feedback and the project is now being evaluated, with a view to rolling it out across Wales.

8 Trial of Potential New Treatment for Type 1 Diabetes

Over 300,000 people in the UK have Type 1 diabetes and the drug used to treat them – insulin – has not changed in 98 years. Researchers at Cardiff and Swansea Universities are running a new trial to investigate whether a medicine currently used for the skin condition psoriasis could also be used to help people with type 1 diabetes produce some of their own insulin.

Professor Colin Dayan, said: "In the early stages of type 1 diabetes about 20% of insulin producing cells could still be working. We're offering newly diagnosed patients the opportunity to potentially save some of these cells, making it easier for them to control blood glucose levels. This could also reduce their risk of complications."

Professor Colin Dayan concluded: "We hope that at the end of this study we'll have some idea of whether this drug is well tolerated and whether it works to hold on to the insulin."

For more information on the USTEKID trial visit: www.type1diabetesresearch.org.uk/current-trials

9 Improving Breast Cancer Treatment

Millions of patients with incurable breast cancer could benefit from Welsh-led research which shows it is possible to control the cancer for twice as long by combing an investigational therapy with standard treatment.

Involving 140 patients from 19 hospitals across the UK, the cancer trial called FAKTION investigated whether researchers could reverse or delay resistance to hormone therapy in post-menopausal women whose cancer had spread by adding the drug Capivasertib, which neutralises a protein that has been shown to cause resistance to hormone therapy.

One of the patients, retired doctor Susan Cunningham from Cardiff, joined the trial in 2017 after she discovered her cancer had spread and was incurable. "Being on a trial

has given me great hope for the future. It's meant that I have been relatively well for the past two years. Initially I thought I wasn't going to see my grandchildren but now I have hope that I am going to survive an awful lot longer and see my family grow."



FAKTION Trial team (from left to right): Miss Catrin Cox, Statistician, Centre for Trials Research (CTR); Dr Sacha Howell, FAKTION Chief Investigator, University of Manchester; Dr Magda Meissner, FAKTION Research Fellow; Dr Rob Jones, FAKTION Chief Investigator; Dr Margherita Carucci, Clinical Trial Manager, CTR; Professor Richard Adams, Director of CTR.

10 Boosting the Cancer-Destroying Ability of Killer T-Cells

More types of cancer could potentially be destroyed by patients' own immune cells, thanks to new research by Cardiff University.

The team of researchers discovered that increasing the amount of the molecule L-selectin on T-cells can vastly improve their ability to fight solid tumours.

Professor Ann Ager, from Cardiff University's Systems Immunity Research Institute, said: "These results mean that immunotherapy could be used to fight most cancers. This is great news as this type of treatment is more targeted and doesn't damage healthy cells."

Dr John Maher, from King's College London, added: "This research revealing a new role for L-selectin in cancer immunotherapy offers great promise as a novel device to enhance the efficacy of engineered T cell immunotherapies for solid tumours."

The research '**L-selectin enhanced T cells improve the Efficacy of Cancer Immunotherapy**' is published in *Frontiers in Immunology*.

MEDIC people

David Li (Medicine 2015-)



Age: Classified

Height: 5'7-5'9 depends (on the time of measuring)

Hobby: Basketball, Hiking, CANNOT play piano

Origin: Hong Kong

Work: Cardiff University, still a medical student. Been a student for long time.

ReMEDy talks to **Dr Louise Paramore**, alumnus; **David Li**, undergraduate student; **Samantha Haynes**, postgraduate student and **Mike Roberts**, member of staff, to ask the questions we love to know the answers to!

1. As a child what did you want to be when you grew up?

LP As a child I always dreamed of becoming a pilot, especially of old planes. I have a real love of flying – I just like the freedom!

Louise Paramore

(MBBCh 2013)



Hi I'm Louise a Urology ST3 Registrar working in University Hospital of Wales. I studied at Cardiff University and graduated in 2013 and since then undertook both Foundation and Core Surgical Training in Wales. In my free time I love to travel, dive and spend time with friends and family.

DL I always dreamed of having a superpower when I grew up and to become a scientist and invent something cool. I still do have this dream sometimes!

SH I have always wanted to be a healthcare professional, I was interested in biology at school. I started working in a nursing home when I was 16 years old and this was 'the light bulb moment', I knew that nursing was for me. I had a placement with district nurses in the final year of my degree and community nursing has been part of my identity ever since.

MR When I was 7 or 8 I remember watching The Fall Guy every Saturday evening and wanting to grow up to be a stuntman!! I also loved playing football so being a professional footballer would have been right up there too.

2. Who is your personal or professional hero?

LP My personal heroes are not only my parents and younger sisters who always inspire and support me but having recently seen them in concert in Cardiff – the Spice Girls!

DL My personal heroes are my 'house' parents from boarding school. They taught me a lot of things in life, when my parents were not around. My professional hero is Dr. Strange. He and Marvel have enlightened my world.

SH My mum is my hero. Mum has cared for my Dad following his sub-arachnoid haemorrhage in 2000. She is amazing and in my opinion, the carers in our society are unsung heroes.

MR Sir David Attenborough is someone I would consider a hero of mine. I could sit and listen to him for hours on end. His knowledge and the continued passion he has for what he does is inspiring.

3. What first brought you to our School of Medicine?

LP I first came as an undergraduate and was attracted because of the quality and method of anatomy teaching in Cardiff.

DL Aled Philips, Clinical Professor of Nephrology and previous Dean of Admissions at the School of Medicine. He was the man who decided to maintain my offer (it is my ONLY offer lol) and allow me to transfer to Cardiff. Without him, I would not be here today. Since then I have met so many wonderful staff and people at Cardiff School of Medicine that have helped me, please don't make me name them all.

SH I started my MSc in Wound Healing and Tissue Repair in 2017. It has been one of the greatest challenges in my life but one of the best experiences. I have learnt so much, shared my learning with my team and this has had a positive impact on our patient outcomes and experiences.

MR I fancied a new challenge, career wise. I had been in my previous employment for almost 16 years and decided the time was right to move on. I've always found Medicine fascinating so it was a perfect fit.

4. What is/was your favourite thing about living and working in Wales?

LP My favourite thing about Wales is the people that live here, both patients and staff, everyone is so friendly and helpful even when the Six Nations is on and being English means that there is some lighthearted banter!

DL People are very nice and friendly. Cardiff is very student-friendly, you can get cheap and cheerful cinema tickets.

SH I attended Cardiff University for 5 years of lectures at the beginning of my first and second year of my masters. My experience of being part of Cardiff University has been fantastic; informative lectures from eminent academics and an incredibly supportive tutor, Sam Holloway. I also enjoyed the opportunity of exploring Cardiff city and Cardiff bay – there are some fabulous places to eat and a particularly good gin bar!

MR Impossible to pick one thing...being surrounded by my family and friends, the stunning landscape we have on our doorstep, the Welsh people. I was born and bred in Cardiff and love the city. I could never imagine leaving.

5. What does a day in your life look like?

LP My day usually starts with an early ward round before moving to theatre or clinic. After work I'm often out visiting friends in and around Cardiff.

DL Work > eat > sleep > work again > many days later > exam > stress > post-exam shock > de-stress > next exams > many years later > hopefully in medicine.

SH Very busy! I get up early to organise my family and ensure they get to school and college on time. Then off to work. I care for patients with complex wounds in our clinic, in their own homes, GP surgeries or in nursing homes, and provide support and advice to staff either face-to-face or on the advice line that we run every afternoon. A big part of our role is teaching and I teach our Tissue Viability modules, clinical updates and provide bespoke training to Solent staff. I have also taught post-graduate nursing students at Southampton University. Then I go home to start again! I study until about 10pm in between taking my teenage children to their different activities.

MR I'm usually up early busy getting my 11 year old son ready for school. After the school drop off I make my way into work to get on with the day job. Then it's a quick dash back home to get some food in me before dashing back out again either taking him to rugby, or football, or boxing. Never a dull moment!

6. How do you relax?

LP Often with glass of G+T and good company.

DL **Low level stress:** Movies; **Moderate level:** Eat; **High level:** Sleep

SH I love to spend time with my family and friends. I like to listen to Radio 4, reading and going to the cinema. Recently I've joined a running club and that has provided me with some much needed head space.

MR During the week, on the rare occasions I get chance to relax, I'm a big film fan so have always got a list of movies to catch up on. When we can, we love to go camping with friends. Even though (as an ex boy scout) I'm usually constantly busy keeping the camp going and keeping the kids entertained, I do love it though.

7. What is your secret ambition? (just between us)

LP My secret ambition is to travel the world experiencing the culture and diving where possible!

DL Ok just between you and me. I want everyone to pass their ISCE exams and for all hard working medical students to get the job that they want. Let me tell you a secret instead, I cheekily sent Christmas cards to Professor Philips every year anonymously in a red envelope (with smily face).

SH I am passionate about the Archers and listen to my podcast daily. I would love to have a small part in the Archers!

MR To retire as early as possible and travel the world. My dad was lucky enough to retire at 55 and has spent the last 15 years exploring the 4 corners of the world. I would love to do that.

8. What is the funniest thing that has happened to you recently?

LP Nothing I can share with you!

DL This happened to me today, all of my friends promised to help me out and complete my SSC survey. However, when I checked today I saw that no one had completed my survey but I had the click option to buy responses!

Sam Haynes (MSc 2017-)



I'm part of the Solent NHS Tissue Viability Team.

My role is varied and involves caring and teaching. I particularly enjoy our health promotion events such as the Legs Matter and Stop the Pressure Campaigns –

its vital to raise the profile of wounds and their prevention as they are one of the biggest challenges that we face in our NHS today. I'm currently doing a part-time distance learning MSc in Wound Healing and Tissue Repair at Cardiff University.

SH I recently met Simon Stevens, Chief Executive Officer of NHS England; we had an interesting conversation about needing to raise the profile of wounds in the UK and I ended up talking about a storyline on the

Archers involving a horse and a pressure ulcer! Perhaps not my finest hour!

MR Last Saturday I helped to push a car out that was stuck in some mud. I foolishly stood by the back wheel and the mud splattered all over me.....like some sort of comedy sketch. Hilarious, for everyone but me!

9. If you could have any job in the whole wide world that you could imagine or make up, what job would that be?

LP I'm not sure what my dream job title would be but it would have to involve learning to fly, travelling the world and diving whilst still practicing medicine (on a very part time basis) with non-profit organisations.

DL To be fair, I would still want to become a doctor, but I would love a secret power. I want to become Dr. Strange so I could teleport or freeze time. This would allow me to spend more time with the people I wanted and to do the things that I wished to do but never have enough time to do.

SH I love the job I am doing! In my ideal world, it would be great to extend our tissue viability service and team to include a podiatrist, dermatologist and psychotherapist and to have other clinics across Southampton City. I really admire the work that Accelerate CIC are doing in Tower Hamlets and would love to replicate that model.

MR I love cooking and socialising. I think if I could have a small café on a beach somewhere exotic and spend my days cooking nice food for a few friendly people that would do me nicely.

10. What advice would you offer School of Medicine students today?

LP My advice would be to see and experience as much as possible within medicine, it is your best opportunity to do so – If you want to see more you only have to ask! My other piece of advice would be to enjoy your down time – as a doctor that is very limited!

DL Try to enjoy the process and find the right work-life balance for you, not only physically but also mentally. The journey of being a medical student can be long and tough, but it makes us a better person at the end of the day. Cherish your friendships and be thankful to all those accompany and help you along the way. We can all be quite pessimistic sometimes, but try to see things on the brighter side. A lovely piece of song composed of high and low notes, it's the ups and downs of our journey that make it special. Don't be disheartened if things don't go as planned. Everything will turn out OK in the end.

SH Work hard, play hard.

MR Work hard and make the most of every second. Your time in Uni is very short (in the grand scheme of things) and even though you'll cram a lot of things into that time, be sure to do everything you can to make it enjoyable. It's a time of your life you'll never ever forget.

Mike Roberts



My role is the Web and Digital Communications Officer as part of the Engagement and Communications team here in the school. I completed my studies in Swansea where I got a BSc in Multimedia and I have worked in the field of web design and production for the last 20 years. I grew up on Maindy Road in Cathays and it has been amazing for me to see the transformation that the innovation campus has brought to that particular area of the city.

11. What does the School of Medicine need more of?

LP The School of Medicine needs to be more supportive of Junior Doctors who would like to teach by increasing opportunities for them and becoming more flexible.

DL The School of Medicine does a lot of things to the best of their ability. But perhaps it works both ways, it needs more students to voice their opinions and work with the School of Medicine. I think It needs 3 more things: Free pizza, free pizza and free pizza.

SH Money - it would be great if there were more sponsorship opportunities available to healthcare professionals to undertake post graduate courses.

MR Positivity and a willingness to go above and beyond to help fellow colleagues. We have so many amazingly skilled people working here, if we all went out of our way to help and support one another we could achieve so much more.

12. If you could turn the clock back, what would you do differently?

LP Take more time out from training after F2, I went to Australia for 11 months to work and it was one of the best things I have ever done, once you're on the training treadmill its hard to get off!

DL I would try to memorise my dad's bank account details: password and username. Seriously, I would try:

- To have a peaceful mind to accept things that are out of my control.
- To have the courage to change things that I can control
- To have the wisdom to differentiate between the above two

SH My daughter is currently taking a year out and has visited Thailand, Cambodia and Vietnam. She is currently in Texas working for Camp America. I wish I had had the courage to travel more when I was younger.

MR Not sure if I would do much differently to be honest. As a child/teenager I was painfully shy and, looking back, I think it held me back a little. My son is the complete opposite, he's so outgoing and full of confidence...I love to see that, makes me proud.

Promoting Academic Excellence (PACE)

Within Secondary Schools

This pilot project was set up by lecturers (Drs Sarju Patel; Jeff Allen and Thanasi Hassoulas) within the Centre for Medical Education to inspire students to consider applying to University.

Since November 2018, thirty medical students ran weekly sessions for over twenty Year 9 pupils at Fitzalan High School, to enhance the teaching and learning of the science curriculum. This concluded in June 2019, when the pupils involved in the project attended a specially designed summer school held at the School of Medicine. The key aim of this day was to start to give the pupils a feeling of belonging and show that university is not an unattainable aspiration. With the help of a small group of enthusiastic medical students, the group were given a taste of what University teaching and learning is about.

The pupils started off the day with a tour of the Cochrane library and were encouraged to collect textbooks to aid their case-based learning. A taster patient case was developed, from which the pupils learned about heart attacks. This pathology was chosen as teaching in school had covered the heart and the Year 2 medical students' teaching had also included pathologies with regards to the heart.

The group were given the opportunity to learn practical skills, including hands-on exercises to perform when someone is having a heart attack. Time was spent in the Clinical Skills suite to contextualise and embed the new



knowledge gained and the day ended with pupil presentations, for which prizes were awarded.



Positive feedback from the group indicated that out of 24 pupils, **19 would consider a career in medicine** and all **24 said they would consider applying for university**. The pupils particularly enjoyed the case study, the practical exercises, meeting medical students and experiencing what it was like to be a student. The medical students involved in the day found it equally rewarding in enhancing their teaching and communication skills.



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The Editor wishes to thank all contributors to this edition of ReMEDy.

The Editor reserves the right to edit contributions received. Whilst care is taken to ensure the accuracy of information, this cannot be guaranteed.

Views expressed in 'ReMEDy' do not necessarily reflect those of the School.

Feedback and items of interest relating to the School are welcome and should be sent to:

✉ remedy@cardiff.ac.uk

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