

# REMEDY

Engaging  
Communities:  
*Eisteddfod Anglesey 2017*

Inside:

MEDIC at the Maes

Embracing engagement

The importance of public involvement in research

Exploring barriers to cervical screening amongst ethnic minority women

# Welcome

## Welcome to the twenty sixth edition of ReMEDy



It's the start of another academic year and I hope an enjoyable summer was had by all. This engagement themed edition of ReMEDy aims to highlight how we, as a School of Medicine, engage with communities of the Cardiff Capital region, Wales and internationally.

The School of Medicine is committed to putting the public at the heart of everything we do, appreciating that quality public engagement and involvement with research can support the realisation of a wide range of benefits:-

- Generating dialogue and trust between research and society
- Informing and enriching our research programmes
- Strengthening the quality and impact of research
- Enhancing our learning and teaching opportunities, helping us to educate and train the best doctors
- Enhancing and enriching schools' curriculum and inspiring future generations of talent towards careers in science and medicine
- Supporting us in delivering effective and efficient innovations that meet a need and maximise our impact on the community.

This edition's spotlight shines on the importance of patient/public involvement in research, highlighting the work of the Brain Repair and Intracranial Neurotherapeutics (BRAIN) Unit. We also learn of a Student Selected Component (SSC) that has engaged women of Black, Asian and Minority Ethnic (BAME) origin to develop an educational intervention, leading to an increase in awareness of the cervical screening programme.

The main feature focuses on our engagement activity at this year's Eisteddfod in Anglesey. We also hear from one of our PhD students, Mihil Patel, who describes his reasons for getting involved in public engagement with research, and how he has combined his recently acquired Welsh language skills with raising the aspirations of school children across Wales.

Excitingly, this term, the School of Medicine is launching a MEDIC Ambassadors scheme with the aim of expanding engagement activity with schools and communities across Wales. The scheme will provide additional support and mentoring to pupils and teachers, enhance the curriculum and hope to raise aspirations in careers in science and medicine.

To find out more about the scheme and/or sign up please contact: [medicambassadors@cardiff.ac.uk](mailto:medicambassadors@cardiff.ac.uk)

### Professor Ian Weeks

Acting Dean, School of Medicine

## C21 update

Engagement is at the core of C21, embodied within the philosophy that patient care should be at the centre of the modern medical curriculum, with many stakeholders being consulted and contributing, allowing the students to study medicine through the wide-angle lens of a broad and varied experience.

On a larger scale, engagement with the NHS in Wales is key to the delivery of the curriculum. Without this patient-centred experience on our doorstep, students would not get the personal experience they need to develop the empathetic clinical and communication skills that are so important for excellent practitioners. The Welsh NHS should be highly commended as it has embraced the changes and contributed to all facets of curriculum delivery, despite the challenges that have been so evident in recent times.

There are many more examples of smaller, yet equally important, engagement activities where individuals and smaller groups have worked together with the faculty to allow the students to see unique perspectives on patient care, particularly for underserved groups.

One of the best examples of engagement in the course are the Self-Selected Components (SSC). Whilst not new to the C21 programme, the SSC has been significantly refined and re-ordered to give it new purpose within the curriculum. From the outset, students are encouraged to interact with groups and individuals outside the Centre for Medical Education gaining insight into research, clinical and biopsychosocial issues that affect patient care. Dr Sam Hibbitts and her team are encouraging students to design their own bespoke projects for this key aspect of the curriculum. We are now at the stage

where 70% of students in year 3 and 100% students in year 4 design their own project in conjunction with researchers and clinicians around Wales. Many of these projects lead to presentations at conferences worldwide and some are published in peer-reviewed Journals. We want to encourage more colleagues from across the sector to work with our students to stimulate growing engagement and create positive impact from these medical education activities.

Our most challenging activity is the commitment, together with Welsh Government, we have made to widening access to medical careers for Welsh-domiciled school pupils. Engaging within the communities of Wales to raise, not only the profile of medicine, but the aspiration of children in Wales to aim for a career in medicine. There will be a concerted drive to achieve these ambitions over the coming years.

## In conversation with our alumni: Quentin Sandifer MBBCh 1985, MPH, EMBA (London), EMBA (Columbia), FRCGP, FFPH



Quentin is Executive Director of Public Health Services and Medical Director for the Public Health Wales NHS Trust. Quentin is responsible for all the national screening programmes offered in Wales, as well as health protection and public health emergency planning and response across Wales, together with most of the clinical and laboratory microbiology and infectious disease services provided in Wales.

In conversation with Quentin, he explains that: "there is no such thing as a regular day and the unplanned happens nearly every day. My time is mostly taken up with executive management responsibilities, usually involving meetings with staff and teams within Public Health Wales and stakeholders outside, including health boards and other trusts, Welsh Government, and bodies elsewhere in the UK and internationally."

Quentin chose Cardiff School of Medicine as it was convenient for his home, which was just outside of the city. He says: "I was never the most academic of students and success at medical school did not come easily. Furthermore, at the end of my second year my father died prematurely and I seriously considered dropping out. However, with the support of school staff and fellow students, together with a determination to honour my father's memory by completing my studies, I not only graduated but left with a sense of purpose that has defined my life and career since." Quentin returned to Cardiff in 2012 and lives with Anne,

his wife of 32 years, whom he married straight after graduating.

Quentin explains that his most memorable time as a medical student was: "My elective in India working in a mission hospital in Bihar State followed by the opportunity to travel across the north of this wonderful country. My father had served in India during the second world war and I was keen to see something of the country he had spoken of so fondly. Etched to this day in my memory is my experience of the contrast between the new emerging wealth I saw in the major cities and the grinding poverty elsewhere. This disparity was even more vivid when I reached Bihar State, then the poorest state in India, and a state in conflict with some of its tribal communities. Despite the evident tensions, I never felt threatened and remember only the generous hospitality and kindness from all those with whom I came into contact."

Immediately after graduating, Quentin completed his first six-month house job in Singleton Hospital and then moved to Stockton-on-Tees. After his house jobs, Quentin trained in general practice in Shrewsbury before moving to Canada where he practiced as a family physician with hospital privileges in a rural community in Alberta. Quentin continues: "After three years, and by then with three small children, I was 'persuaded' by my wife to return to Wales where I retrained in public health. I became a consultant in public health medicine almost exactly 20 years ago, worked in the Swansea, Neath Port Talbot, Bridgend area (for lechyd Morgannwg Health), first as a consultant and then as a director of public health, before moving to the south east of England. For the next eight and a half years I worked in a variety of public health director roles in the south east and London before returning to Wales in 2012 on my appointment to my current post. My experiences in England included regional responsibilities for screening and health emergency planning and response, including involvement in the 2009 flu pandemic and the 2012 Olympics, preparing me for my current role, which has included public health leadership during mass gatherings like the NATO Summit and oversight of the NHS response in Wales to the threat from Ebola."

"What drew me back to Wales was the prospect of working for a national public health organisation that has the potential to make a real difference for a population that is just the right size. In the five years since my return our screening and child immunisation programmes are defining new standards in the UK, we are leading the UK in other policy areas like adverse childhood experiences and we are empowered by world leading legislation for public health. As we develop a new 10-year strategy, Public Health Wales really does feel like an organisation that knows where it is going."

Quentin concludes: "For me, Cardiff University is a university that welcomed me as a sixth form student still unsure of his place in the world. A university situated in the heart of Cardiff that defines Cardiff as much as Cardiff defines it."

### Quentin's shared alumni wisdom:

"Be open to possibilities you have not considered. Don't take yourself or your studies too seriously - there really is more to work (and life) than the honours and awards you feel compelled to collect."

Quentin's five words describing Cardiff School of Medicine:

Ambitious  
for all its  
students.



# In the Spotlight: The importance of patient involvement in research.

BRAIN involve

The Brain Repair and Intracranial Neurotherapeutics (BRAIN) Unit is a research group based at Cardiff University, funded by Welsh Government through Health and Care Research Wales and works to develop new therapies for brain diseases.

**The BRAIN Unit believes that active involvement with members of the public leads to research that is more relevant, more reliable and more likely to be used to improve health and social care services.**

## What is BRAIN Involve?

BRAIN Involve is a public and patient involvement group made up of people who are, or have been, directly affected by neurological diseases such as epilepsy, Huntington's disease (HD), Multiple Sclerosis (MS) or Parkinson's disease (PD).

By bringing their personal experiences to the research table, members contribute to the design, development, implementation and dissemination of the Unit's research around brain repair and developing new therapies for brain conditions.

BRAIN Involve has two dedicated coordinators, Professor Monica Busse and Dr Laura Bunting, who support both members and researchers. The group is also linked to the HCRW Public Involvement and Engagement Involving People Network, which offers a range of free training and support events to help members gain the most from their experience.

Since inception two years ago, the group has recruited 14 members with two people even becoming co-applicants on research grants in HD and MS.

## Pioneering research and treatments

A big part of patient involvement is helping to shape and inform not only research, but also the pioneering treatments delivered by the BRAIN Unit.

In March 2016, the Unit's Professor William Gray performed the first ever robot-assisted epilepsy procedure in Wales with patient Denise Casey, who was diagnosed with epilepsy when she

was 31 and suffered up to six fits every day for the past 20 years.

With the robotic arm, created by technology company Renishaw, it took Professor Gray 55 minutes to accurately identify and operate on the epileptogenic zone in a procedure that would normally take four hours. Denise, who has not suffered any seizures since her two procedures, recently hailed the neurosurgery as 'wonderful' in a BBC Wales interview.

BRAIN has also been awarded research funds to undertake the first trial in Wales assessing the impact of neural transplantation in people with Huntington's Disease. BRAIN Involve input from the outset will help support and develop this vital trial to understand the possible treatments for this currently incurable and devastating condition.

## Case study: Peter Roberts

Former deputy head teacher Peter Roberts had been shaving in the bathroom when he suffered his first epileptic seizure and his wife Christine found him lying unconscious on the floor. Although Peter made a good recovery, he went on to suffer four more epileptic fits and quickly began to realise the value of providing patient insight for epilepsy research.

Now BRAIN Involve members, Peter and Christine delivered a talk to share their personal understanding of epilepsy and stress the importance of research into neurological conditions.

"My original motivation for getting involved with BRAIN Involve was actually



Repair & Intracranial Neurotherapeutics

my mother's experience of Parkinson's disease," Peter explained.

"In the later stages of her life, my mother suffered greatly with PD – the last three years of her life were hell. This is one of the many reasons why the BRAIN Unit's research is so vitally important. If there is anything at all I can do to support or progress Cardiff University's treatments in PD or epilepsy – I will do so!"

## How do I get involved?

As a member of BRAIN Involve, core activities may range from attending meetings with the research team, writing/reviewing research grants, or helping to organise, chair and attend meetings with other members.

"The importance of patient/carer involvement in our neuro-research and development of novel therapies cannot be overstated," said BRAIN Unit Manager, Laura Bunting.

"Being a member of BRAIN Involve is not about taking part in research, but about using your experiences to help inform and develop research ideas and projects that are relevant to your condition."

If you are interested in playing a role in shaping the unit's work, contact the BRAIN Unit team:

[brainunit@cardiff.ac.uk](mailto:brainunit@cardiff.ac.uk)

or visit BRAIN Involve :

[www.brain.wales/get-involved](http://www.brain.wales/get-involved)



From left to right, back to front: Dr Mark Postans, Dr Joseph Merola, Dr Samantha Loveless, Professor William Gray, Andy Davison, Chloe Ormonde, Dr Shirin Davies, Dr Laura Bunting, Dr Eirini Messaritaki, BRAIN Involve member Peter Roberts, and Joanne Bagshawe.

# Embracing Engagement



**Mihil Patel** is in the third year of his PhD in viral immunology, researching Cytomegalovirus in the laboratory of Dr Eddie Wang. Mihil is from Bristol and studied Pharmacy as an undergraduate. In 2014 he decided to do a PhD, as he wanted to work in life sciences.

Mihil is a passionate engager of science and research as well as a keen linguist, becoming conversationally fluent in Welsh within a year. Here Mihil describes his reasons for getting involved in engagement activity and how he has combined his recently acquired Welsh language skills with raising the aspirations of school children across Wales.

I started looking for PhD's about nine months into my old office job. Whilst there was 'science' in my job title, there was no science involved and as somebody who gets bored easily, coming back to the lab was a welcome chance to do real science and escape dress down Fridays and council tax for a little while longer.

Even before starting my PhD, I knew that I wanted to get involved with engagement. My first time working at Cheltenham Science Festival I found myself discussing antibodies and epitopes with kids less than a third of my age, albeit through the medium of Play-Doh. Through interaction and tactile learning, the children could understand far more than expected. I'm under no impression that they remembered everything they saw, but the lesson I learnt is that often it's not just what we demonstrate, but how.

With no shortage of work experience students coming in to the lab to have a glimpse into the world of biomedical research, I'm always keen to emphasise that grades and exam results don't convey an individual's scientific ability. Whilst testing may have some role, they are not a measure of intelligence. Good science is not, and will never be a timed memory test. I certainly don't advocate that everyone chooses a career in science. After all a world with fewer artists, athletes and musicians would be tragic. But given that many pupils have decided if they want a career in science by age 14, it's important that they see what science is like so that they can make their own informed decision.

Shortly after starting my PhD, I became involved with the Life Sciences Challenge Quiz, run by Dr James Matthews. The quiz follows a University Challenge

format and gave me the chance to go into schools across South Wales. Whilst the quiz is aimed at year 9 and 10 pupils, we write questions which stretch them far beyond the curriculum by incorporating concepts from the work we do as biomedical scientists. We emphasise that as researchers we value prior discoveries, but when first stepping through unknown scientific territory, understanding how to interpret new data is what pushes us forward. Many of the rounds follow the format of game shows and we incorporate data analysis, videos and music into the questions to ensure the audience and pupils enjoy taking part, and it's not just a case of 'fingers on buzzers please'.

Nine months after starting my PhD, I came across Tafwyl, Cardiff's annual Welsh Language festival. I'd always been fascinated by languages, but being from the city, the rusticness and musicality of the language appealed to me and made me want to learn, so that I could get a chance to understand what's in the heart

of this nation. I've always believed that just as genetic diversity has allowed life to adapt and thrive, cultural and linguistic diversity too has allowed us to thrive by attributing depth and meaning to our lives in an incredible array of ways.

Once I was proficient enough, I leapt at the opportunity to combine my newly found language skills with science. I have worked the science stand at Tafwyl twice and I have presented the Life Sciences Challenge quiz in Welsh medium Schools.

What I enjoy about engagement work is the same as what I enjoy about my PhD. I can use skills and knowledge learnt outside the confines of the conventional classroom. That is, bypassing textbooks, thinking independently and being able to be more creative; not just about the questions we ask, but about the answers we receive too. Creativity is the most unique of human characteristics. It enriches our lives in innumerable ways. It allows us to forego our biological imperative and pushes us at our most challenging moments to ask, 'what if...?'.



Mihil at the semifinal of the 2017 Life Science Challenge Quiz at Ysgol Botwnnog, North Wales.

# MEDIC at the Maes 2017

With over **147,000 visitors** every year, **6,000 competitors** and **over 250 stalls**, the National Eisteddfod during the first week of August is the culmination of 2 years' worth of community action, fundraising and organisation by people in a different part of Wales.

This year, it was the turn of Anglesey to host what is described as 'Wales' leading mobile regeneration project' and fields near the village of Bodden in the north of the island were transformed into one of the largest cultural/arts festivals in Europe.

Cardiff University held over 30 events over the week, on the theme of 'Cardiff Connected – how Cardiff University and its students, staff and alumni are connected to Wales and beyond'. Three groups from across the School of Medicine, namely the Centre for Medical Education; the Wales Kidney Research Unit and the Division of Population Medicine were delighted to successfully bid to run activities on the Cardiff University stand alongside other University colleagues.

The flagship public engagement activity was the '**Know Your Blood Pressure'**

campaign that medical students and the Clinical Skills and Simulation Centre have been pioneering for 3 years in partnership with the Stroke Association. Piloted successfully for a day at the Eisteddfod in Abergavenny in 2016 with 5 students, it was decided to scale up the activity this year, and 17 students were recruited to lead the event over 3 days. Under the guidance of Clinical Skills and Simulation Centre Staff **Sian Williams**, **Jayne Menin-Steere** and the Phase 1 Community Lead **Dr Sue Emerson**, the students, many native to North Wales and Anglesey itself, worked tirelessly to recruit and advise members of the public of their blood pressure – through wind, rain and blazing sunshine! Over 700 participants were recruited in 3 days, and many were advised that they needed to seek medical assessment in the very near future and were given lifestyle guidance according to their blood pressure results.

In addition to this, **Awen Iorwerth**, Clinical Lecturer, **Lowri Roberts**, Year 3 student and **Rhiannon Murphy Jones**, Year 4 student and BMA Cymru Student Rep shared their experiences of applying, studying and training as medics during a Q&A session '**How to become a doctor**'. This session was to highlight the widening access initiatives that are developing across Wales to encourage a wider pool of applicants to medicine, and the imminent BMA Cymru booklet 'How to become a doctor'.

Awen Iorwerth also had an opportunity to reinforce this message during her keynote lecture '**Mon, Mam, Meddyg**' (Mon, Mam, Medic). She discussed the role that Anglesey has had in producing notable and influential doctors and the developments needed to support the next generation of Welsh young people into medicine.

**Micaela Gal, Rhiannon Phillips, Behnaz Schofield, Emma Thomas-Jones** from the Division of Population Medicine brought to life their '**Microorganisms; the good, the bad and the ugly**' activity giving people of all ages the chance to learn some fascinating facts about microorganisms, the current research, antibiotic resistance, and join in some practical fun sessions.

For first-timers participating in an engagement activity like this, the team found it a steep but enjoyable learning experience and enjoyed the opportunity to learn some conversational Welsh. Key to success was thorough planning and preparation, including a trial run of the activities with colleagues and their children which helped to iron out any last-minute wrinkles.

On the day, Emma and Rhiannon delivered a presentation, then all hands were on deck to support the engagement and education activities. There were lots of information posters and pictures and activities including fun and messy things like crafting your own microorganisms, making Eisteddfod bread with live microorganisms (yeast), looking at some weird and wonderful microbes that had been grown from our environment (e.g. pond water, soil and plant leaves), tasting, smelling and guessing some foods made with microbes (from cheese to chocolate), a quiz and buggy prizes.

The Eisteddfod provided a wonderful opportunity for the team to share their research, talk with people about what they do, give people the opportunity to learn something new and hopefully inspire researchers of the future.

Three members of the Wales Kidney Research Unit, **John Martin, Glyn Morris** and **Sophie Wheeler**, utilised interactive activities to raise awareness of kidney disease and inform visitors how the Unit is researching ways to provide early detection and treatment.





**The Biomarker Game – ‘Do I have Kidney Disease?’** informed participants of what a biomarker is - a naturally occurring molecule, gene, or characteristic by which a particular disease can be identified. Participants could then measure the level of biomarkers in three urine samples, labelled 1,2,3 from different individuals to discover which patient has kidney disease. By placing test paper in the sample and using a ‘colour’ key to measure the levels of biomarker, participants could then identify the patient with kidney disease and go on to further investigate the type and decide on a specific treatment.

Scarring in the kidney can be considered as aberrant wound healing. **The Healthy Healing game** explored how to make lifestyle choices to encourage healthy healing. Players were given wounds (game boards) that needed to be healed. Cards on the table corresponded to random lifestyle activities. Initially all the cards were turned upside down on the table. One by one each player picked a card, turned it over and placed it on their game board. Each card represented either a healing item (green) or a wounding item (red). Players continued until their board was

full (6 cards). Winners had the most green cards.

Diabetes is now the most common cause of kidney disease and the Unit’s research focuses on ways of detecting small molecules called microRNA biomarkers in urine to enable early diagnosis and treatment of diabetic kidney disease (DKD). The third activity focused on **detecting early changes in DKD** and interactively demonstrated what happens to the kidney as diabetic kidney disease develops. Participants poured coloured balls in water (representing protein in the bloodstream) through nets with increasingly larger holes (representing the leaky kidney ‘sieve’). The balls passed through the large holes in “advanced disease” and were detected in the filtered “urine” at the bottom. The participant then added coloured glitter (representing microRNAs) to the “blood” and repeated the pouring. The relatively smaller size of the glitter means that they were clearly visible in the filtered “urine” even at the very earliest sign of damage, when the net holes were too small for the large protein molecules (coloured balls) to pass through.

Feedback from all School of Medicine activities run during the week was nothing but positive:

#### **Centre for Medical Education – Know Your Blood Pressure**

*Keep at it - there is a great need for Welsh speaking doctors across the country*

*Thank you for training Welsh speaking doctors*

*Very grateful for blood pressure test*

#### **Division of Population Medicine - Microorganisms; the good, the bad and the ugly**

*I didn't realise that coffee and chocolate were made using microorganisms.*

#### **Wales Kidney Research Unit:**

*Aled age 5 “Amazing, how does it change colour”*

*Sophie age 12 “I really enjoyed learning about my kidneys”*

*Daniel age 17 “I never knew Kidneys were so important”*

*Angharad age 19 “I had never heard of a microRNA before”*

*The School of Medicine is looking forward to having a presence at the 2018 National Eisteddfod in Cardiff.*

# 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 New Blood Cancer Test

Technology that can detect the length of small DNA structures in cancer cells could hold the key to predicting the outcome of patients with two different types of blood cancer. The test, used in conjunction with current methods, may help doctors make better choices about the most appropriate and effective treatment option for individual patients.

This research shows that measuring sections of DNA called telomeres is a highly accurate indicator of how disease will progress in patients with the bone marrow cancer myeloma and pre-leukaemia myelodysplastic syndromes (MDS).

Professor Duncan Baird, who led the research, said: Our research provides strong evidence that shortening of telomeres plays a vital role in the progression of these blood cancers and that a significant number of patients should be receiving different levels of treatment."

### 2 Life Changing for Learners

The latest Phoenix Project initiative supported student 'ambassadors' from Cardiff and the University of Namibia (UNAM) to mentor a group of around 40 high school children from the south of the country. The 'UniCamp' involved academic content, workshops, activities, games and sports to improve participants' knowledge, self-esteem, teamwork, communication skills and literacy.

During this period Namibian pupils devised and launched a national public health campaign – Heart Health Namibia - to promote healthy living.

Chantel Kaffer, 18, of JA Nel Senior Secondary School, said: "We are privileged to be part of the UniCamp.

"Many of us didn't know the risk factors to an unhealthy heart but now we know they are diet, smoking, alcohol and lack of exercise."

More about the campaign can be found on a website that the learners have put together: [hearthealthnamibia.com](http://hearthealthnamibia.com)

### 3 Doctoriad Yfory Returns

Back for a second series, Green Bay media production company follows the progress of Tomorrow's Doctors – medical students at Cardiff University. Over six programmes, we watch these young people grow and develop from the Lecture Theatre to their first contact with patients at the University Hospital and in other units and clinics all over Wales – and even in some cases as far as their 'elective' placements in Antigua.

Doctoriad Yfory 2 starts at 8.25 pm on Tuesday 24th October on S4C.

### 4 Clinical Investment in Biomedical Research

Cardiff University is joining forces with a major Chinese biomedical service provider to explore key biomedical and clinical research opportunities.

Realcan, which operates primarily in China, will provide funding of £1m to the UK university over a three-year period.

Collaboration will focus on Cardiff University College of Biomedical & Life Sciences key research themes: cancer; integrative biosystems; mind, brain and neuroscience; immunology, Infection and Inflammation; and population health.

The £1m investment will provide funding for Realcan PhD students to partner with the University's leading clinicians and biomedical scientists, and Realcan research fellows.



Delegation at Cardiff, left to right: Professor Wen G Jiang, Cardiff University School of Medicine; Madam RenHua Zhang, CEO of RealCan; Mrs TJ Rawlinson, Director, Cardiff University Development & Alumni Relations; Professor Ian Weeks, Acting Head of School of Medicine, Cardiff University; Mr ChunLin Han, Deputy CEO of RealCan; Mr Xu Han, Chairman of RealCan; Mr Nanjun Wang, Director of the China Foreign Trade Association

### 5 Refurbished Lecture Theatres and Communal Spaces

The School of Medicine has access to a fantastic selection of teaching and learning facilities, each of which are furnished with the latest audio and video capture technology.



The large lecture theatres can accommodate more than 400 students at a time allowing the delivery of large group learning.

There are also several classrooms that are ideal for small group learning and interactive workshops.

In addition to these learning facilities there is a common room and a student union hub (dubbed the IV lounge). Here students can relax, socialise and engage with one another in-between their studies.



## 6 MEDIC Ambassadors Engagement Scheme Launch

At the start of the academic year 2017-18 the School of Medicine is launching a MEDIC Ambassadors scheme with the aim of expanding engagement activity with schools and communities across Wales. The scheme will provide additional support and mentoring to pupils and teachers, enhance the curriculum and hope to raise aspirations in careers in science and medicine. The staff, students and alumni who sign up will benefit from enhanced mentoring, pedagogy, communication and employability skills. As well as current initiatives and events, the Engagement team will create additional opportunities to engage with schools and colleges, by building upon its already established links with science teachers across Wales.

To find out more and/or sign up to the scheme please contact [medicambassadors@cardiff.ac.uk](mailto:medicambassadors@cardiff.ac.uk)

## 7 Dr Ann Ager at Soapbox Science Cardiff

Dr Ann Ager was selected from a competitive pool of Welsh researchers to participate in this year's Soapbox Science event on 10th June. This event provides a platform for female scientists to share their discoveries and help to promote women scientists as well as inspiring future generations of children to think about science as a career.



Ann took this opportunity to talk about her research on "Directing the traffic of killer T cells: getting them to the right place at the right time". Reflecting on this experience Ann said:

"I was told it would be equally scary and exciting to stand on a soapbox and it was true. To get my messages across I used a lot of props to describe the basics of immunology and my research into killer T cells."

Hearing applause at the end was quite unexpected. All in all, a fun day, but completely exhausting. Must have been the soapbox stagefright!"

## 8 Turning Lipids Research into New Drugs

A lipid (fat) whose anti-inflammatory activities were discovered by Cardiff University, with colleagues from Universities of Pittsburgh, Oregon and Michigan, is being developed into a new drug for the treatment of diseases that currently have limited therapeutic options.

Detailed study of the lipid by the groups of Professor Valerie O'Donnell (Cardiff University) and Bruce Freeman (University of Pittsburgh) found it could dampen down inflammation in circulating blood cells, making it an excellent candidate for development into a drug for several inflammatory diseases.

Now under license to the biopharmaceutical company Complexa, the new drug - CXA-10 - has just received \$62M of funding to enter phase 2 clinical trials where it will be tested on patients with FSGS (a rare disease that attacks the kidneys) and pulmonary arterial hypertension (a progressive disease caused by narrowing or tightening of the pulmonary arteries).

## 9 Two New Genes Linked to Alzheimer's Risk

Two genes that influence a person's risk of developing Alzheimer's disease has been identified by researchers from the School of Medicine. Dr Rebecca Sims said: "in addition to identifying two genes that affect the risk of developing Alzheimer's disease, our new research reveals a number of other genes and proteins that form a network likely to be important in its development..."

"These particular genes, which suggest that immune cells in the brain play a causal role in the disease, are also very good targets for potential drug treatment."

There are currently around 850,000 people in the UK with Alzheimer's. During the course of the disease, proteins build up in the brain to form structures called



plaques and tangles. The connections between nerve cells are lost, and eventually the nerve cells die and brain tissue volume is reduced.

## 10 Inspiring the Next Generation of Brain Researchers

The MRC Centre for Neuropsychiatric Genetics and Genomics hosted its annual summer school in brain disorder research, welcoming 40 delegates from around the world.

Over four days, delegates learned about ground breaking neuropsychiatric research, took part in interactive workshops around genetic sequencing and making neurons from stem cells, and attended clinical and scientific career workshops.

Dr Niran Okewele, who travelled from Nigeria to attend the summer school said, "Besides the opportunity to meet world-class faculty, the school provided an opportunity to mix with peers from different parts of the world - I enjoyed hanging out during and after dinner with colleagues from Croatia, Pakistan, Germany and Egypt – with friendships formed which may well span a lifetime, as a new generation of brain researchers emerge and grow (the field) together."



# MEDIC people



ReMEDy talks to **Dr Georgie Budd (MBBCh 2015), alumnus;**  
**Lewis Oliva, undergraduate student;**  
**Dr Shahla Seyidova, postgraduate student**  
and **Professor Ann Taylor, member of staff,**  
to ask the questions we love to know the answers to!

## What do you listen to first thing in the morning?

**GB** At the moment the ward tea trolley and patient buzzers, but by choice its got to be upbeat; either some punk rock or some classic Motown.

**LO** I go through phases. Currently it's Van Morrison, however I have been known to listen to The Eagles, The Who or U2- great soundtracks to wake me up with my morning coffee. Or something on Radio 4 when I'm feeling studious.

**SS** BBC News/Euro news

**AT** Chris Evans, BBC Radio 2.

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

**GB** A nurse, like my Mum. I always knew

### Dr Georgie Budd

I'm an F2 that graduated from Cardiff but I'm currently on a bit of a career break for unforeseen circumstances. I was 8 months into my F2 year when I had a car crash and broke my T12 vertebrae. As a result I'm now a paraplegic and at this moment still recovering as best I can



in Rookwood Hospital - feel free to check out my progress on my Facebook based blog 'Learning to Walk'; the rehab efforts of Georgie Budd. However, I fully intend to return to practice as soon as possible and in the meantime I'm persuing my interest in medical education and intending to write a book on my experience as a patient.

I wanted to help people who were unwell like my Gran who suffered badly with Rheumatoid arthritis and Asthma/COPD. As I grew I decided I was interested not only in caring for people but the fascinating diagnostic puzzle and how our incredible bodies work.

**LO** James Bond.

**SS** Doctor in primary school - designer in secondary school and again doctor in higher school.

**AT** Singer.

## Who are your heroes and villains?

**GB** Heroes – My family, especially my mum, dad and brother. They always have my back. Also Amanda Palmer, Robin Williams and JC!

Villains – I try not to give too much thought to bad people in real life so... Gaston? Does he count?

**LO** There are not many famous faces who truly inspire me. I'm a big fan of everyday people doing extraordinary things which is why my fiancée Ciara is my biggest hero. Cheesy I know. However, I'll never understand how she manages to complete everything at such a high level. From going to the Olympics in Rio 2016 through to becoming a passionate physiotherapist, she can do anything. Villains? Probably Ciara again when she forgets to do the hoovering!!!

**SS** My heroes: Huseyn Javid-prominent Azerbaijani poet and playwright of the early 20th century. In his philosophical, epic tragedies, and family dramas Huseyn Javid philosophised about the idea of a universal religion to lift inter-religious barriers between humans.

My villains: Machiavelli and Machiavellian people

**AT** Heroes – my mum, Obama and Malala

Yousafzai. Villains – white supremacists, those that abuse others.

## If you could change one thing what would it be?

**GB** Well the obvious right now having my legs work again is going to be at the forefront of my mind; trust me never take your miraculous body for granted. However, before the accident, as idealistic as it may be, I would have people be more considerate to their fellow humans. You never know what another person is going through, so be kind and treat people as you would wish to be treated.

**LO** More hours in the day- meaning more time to train! And study of course.....

**SS** To unite all people around the world- NO BORDERS and NO WARS.

**AT** Brexit result – I don't want to leave.

### Lewis Oliva

Currently I have just passed my first year of medical exams at Cardiff university waiting to go into second year!



I formed part of the GB cycling team for 8 years when based in Manchester. I have won multiple medals at various world cups and European championships as well as being the reigning British champion. Next year is a big target for me as it will be my third commonwealth games after Delhi 2010 and Glasgow 2014.

## What is your secret ambition? (just between us)

**GB** To get my Dad to his dream destination of Machu Picchu - he's got Hypertrophic Obstructive Cardiomyopathy and I'm now a full time wheelchair user so it is going to be a challenge - and to take Mum on the Orient Express to Venice. They gave a lot so I could have my first dream of going to Medical school, so cheesy or not I want them to have theirs.

**LO** Well, I'm a simple man. So secretly, I've always wanted to complete the entire Xbox Halo series on legendary mode. Not to be sniffed at!! Currently I'm stuck on Halo 2, not ideal when there are about 6 more games to get through.

**SS** No secret ambition, but I do have

an ambition to be powerful enough to improve the lives of humans all over the world.

**AT** To be a comedian.

### Dr Shahla Seyidova

Since 2004 till present I have been working for BP in different positions and locations. Currently I am health adviser for Midstream Azerbaijan covering all BP Onshore facilities in the Country. I graduated from State Medical University in 1998 and worked as doctor in hospital till 2004. I continued my professional development and hold a number of British Occupational Hygiene Society (BOHS) certificates, a Level 4 Award in Managing Food Safety in Catering from the Chartered Institute of Environmental Health UK, an MBA Diploma in International Business Management from Georgia State University and I am currently studying a distance learning MSc in Occupational Health (Policy and Practice) at Cardiff University.



### What does the School of Medicine need more of?

**GB** When I was studying I always wanted more patient contact but I know the new curriculum means students are out on placement earlier now, which I cannot overstate as a really good thing. Also maybe baby animal therapy, nothing dissolves stress like puppies and kittens!

**LO** Exams! Only joking who really wants them!! I think it's great and I honestly wouldn't change anything about it.

**SS** I get all the knowledge and support I need, so it's difficult to say.

**AT** Money... no joking, needs more of us to listen, have conversations and less emailing.

### What advice would you offer medical students today?

**GB** Communicate as openly and honestly as you can with patients, listen to them properly and take your time when you are explaining things. It is scary to be a patient, worse if you don't understand what's going on and most of the time people just want to feel that you've

listened to them and are doing your best to help. Essentially treat each person as you would want yourself, or your loved ones to be treated – because one day it may be.

### Which book did you re-read most as a child?

**GB** The Owl and the Pussycat or Meg and Mog stories.

**LO** I was and still am a massive James Bond fan. So, I really got into Anthony Horowitz's series about the teenage spy Alex Rider. I must have read those books about 100 times!

**SS** Cinderella, Hansel and Gretel by Brothers Grimm (die Brüder Grimm).

**AT** Jungle Book.

### Which one question would you really like to know the answer to?

**GB** Does anything of who we are exist after we die?

**LO** If it takes a man a week to walk a fortnight, how many apples on a bunch of grapes?

**SS** What is out of our galaxy?

**AT** What happened to Uncle Bryn and his nephew in Gavin and Stacey?

### How do you relax?

**GB** It was always a long hot bath with a nice drink, a good book and my iTunes on shuffle. Until I can save for a fancy pants bathtub with a hoist I currently have to put part of the routine on hold. Don't take the little things for granted.

**LO** Listen to music, watch TV or go for a pint. But to be honest, with balancing training and studying, there isn't much time to chill out.

**SS** Gardening, reading - depends on the weather.

**AT** Dog walking, boating, G&T.

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

**GB** This is the hardest question on here. I have spent ages trying to come up with a reply. When I was asked to do this I had already had my accident and the one thing I didn't want to do was relate every answer to that, but at the same time those who know me will know I'm always bluntly honest. I'd be lying if I said that my knee jerk reaction when I read this question wasn't 'I wouldn't have left the house the day of my car crash'. It's not a funny or profound answer but it's

true. However, since my accident the one thing I've said more than anything is that dwelling on things, and wishing I could change them won't help me get better; what's done is done. Actually I bought a T-shirt in the sale last week because I thought it was apt and the words on it have quickly become my new mantra – 'Don't look back. You aren't going that way.' In a similar vein before my crash I would like to think I would have said 'nothing'. Every choice we make, everything we do makes us who we are, even our mistakes. I like who I am and working legs or not I am still the same person. There is no point in regretting the past and wishing to change it, the important thing is to look forward and make positive change.

**LO** Learn Welsh as a kid. As a Welshman I'm a bit embarrassed that I can speak it!

**SS** Worry less.

**AT** Nothing important really, am a happy and contented person.

### Professor Ann Taylor

I have just been appointed to the post of Director of Post Graduate Studies in the Centre for Medical Education. We have just had a College Review of our PGT programmes so there is plenty to do. I also gained a personal chair on a T&S pathway. PGT MEDIC has 20 programmes, CPD and stand alone activity and is the largest PGT provider in the UK.



### What is your best holiday?

**GB** Boa Vista, Cape Verde. Family trip just before my graduation.

**LO** Our family trip to Australia was pretty cool, we went everywhere from Sydney, to Queensland and the Great Barrier Reef! It was insane and we were there for a month. However, my best holiday was a modest trip to Ireland (the motherland of my fiancée) where I popped the question. Don't think I'll be forgetting that any time soon.

**SS** Spending time in the mountains with loved ones.

**AT** Sight seeing, not sitting on a beach type, Vietnam was the best ever, travelling from the North to South, amazing.

# Transcultural Medicine Student Selected Component (SSC)

## Exploring barriers to cervical screening amongst ethnic minority women



The GP Academic Fellows in the Division of Population Medicine have been running the Transcultural Medicine 3rd year medical student SSC for the last two years. The six week SSC engages local communities in Butetown, Riverside and Grangetown, through working with Communities First, a community-focused anti-poverty programme funded through Welsh Government via Cardiff Council. The SSC is also supported by the screening division of Public Health Wales.

### Background to the SSC

The cervical screening programme is estimated to prevent approximately 4500 deaths per year in the UK<sup>1</sup>. However, uptake of regular cervical screening is failing to meet the national target of 80%, and is particularly low in women of British Black, Asian and Minority Ethnic (BAME) origin<sup>3</sup>. Previous studies have identified emotional, cognitive and practical barriers towards cervical cancer screening amongst BAME women<sup>4</sup>, and that educational interventions may increase uptake of screening in these groups<sup>5</sup>.

### Aims of the SSC

Students learn about the cervical screening programme and its uptake in ethnic minorities, as well as qualitative interviewing and educational theory. This enables them to explore awareness of, and barriers to cervical screening in BAME women and design an educational session to address these.

### What does the SSC involve?

Each year, six third year medical students are taught the above aims facilitated by GP Academic Fellows, Communities First, Public Health Wales and researchers in the Division of Population Medicine.

The students then conduct focus groups with women of BAME origin, and use this information to design and deliver a health

education intervention to members of the BAME community.

### What have we learnt?

The focus groups identified significant barriers to attending cervical screening including:

- lack of knowledge about screening
- emotional barriers such as embarrassment and fear of a positive result
- language and practical barriers
- cultural factors such as women prioritising their family's health over their own, and not attending healthcare appointments when feeling healthy.

Participant feedback showed that the educational intervention led to an increase in awareness of the cervical screening programme.

Through this SSC, students develop a clear awareness of how culture and ethnicity could affect healthcare choices in ethnic minority groups.

### Next steps

The Academic Fellows have been exploring, with Public Health Wales colleagues, different ways to reach this community, as this year's educational session was not as well attended by local BAME women. They are also keen to move the focus to Bowel screening, where there are even more pronounced inequalities in uptake amongst ethnic minority groups<sup>6</sup>.

Next year's SSC plans to create a culturally-specific patient story video resource to promote bowel screening uptake. Students will seek the views of people in these communities to help them design and create the video, which will then be used by Public Health Wales to encourage participation in these hard to reach groups.

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Leaders at the South Riverside Community Development Centre took the students on a walking tour of Butetown, Grangetown and Riverside, showing them the history of these multi-cultural areas, and the problems faced by their communities

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