Oxford Medicine

Oxford Medical Alumni

THE NEWSLETTER OF THE OXFORD MEDICAL ALUMNI

UNIVERSITY OF OXFORD

OXFORD MEDICINE • JUNE 2020

Osler Centenary

Green College at 40

The Covid Front-line

Oxford Covid Research

And much more...

Above: *The handprints of all the staff and students involved in the ICU COVID-19 effort, currently displayed on the Level 1 Corridor in the John Radcliffe. The display is by Xisto Silva, one of the domestic staff working in ICU.*

President's Piece

Dr Lyn Williamson
OMA President

The Coronavirus pandemic, which has recently consumed our lives, features throughout this summer issue of *Oxford Medicine*. We have all been forced to change plans and re-examine our priorities and principles. At a time when we are justifiably proud of our clinicians and scientists, it is important to remember that we stand on the shoulders of giants.

Mr David Cranston's tribute to Sir William Osler marks the centenary of his death. He reminds us that Osler, the father of modern medicine who had no enemies, showed that both outstanding clinical practice and clinical science could take place in Oxford. Green College was the vision of another great 20th Century Regius, Sir Richard Doll, not without controversy at the time. Dr Laurence Leaver reflects on the influence and achievements of Green Templeton College over the past 40 years. We honour Sir David Weatherall's memory, one year after his commemoration service at Christ Church Cathedral, with the eulogy from the service. The tributes to other great Oxford figures, Sir James Gowans and Professor Peter Matthews, have been specially written or adapted for OMA. Our oldest alumnus, 107-year-old Dr Bill Frankland happily gave us an interview, in between his TV appearances and writing his last paper!

Our congratulations to Professor Bee Wee who was awarded a CBE for her work in palliative care medicine. Her work improving care of the dying and the hospice movement has proved invaluable during the current crisis.

'Following the Science' has been difficult as there is so much of it, and it is evolving so rapidly, so we are grateful to Professor Chris Conlon for his elegant summary of current Oxford COVID research. His review complements the excellent University COVID Conversations series of online lectures. Whilst most of the country has been hibernating, more than 150 Oxford medical scientists have surefootedly attacked almost every aspect of the COVID pandemic. Watch the series and be inspired to contribute with your talent, time, funds and influence.

Thank you to friends from the Oxford 1974-80 years who feature throughout this edition, injecting both gravitas and a touch of levity. Special mention to Professor Alastair Buchan who in 2020 has succeeded in converting the **B** word into something positive – Oxford in **B**erlin.

The testimonies and reflections from colleagues on the front-line will form part of our medical history. Dr Catherine Swales eloquent report for the Medical School speaks to us all, and for us all. Her words resonate with those written by our junior and senior doctors who have worked through this crisis with resilience, resourcefulness, selflessness, and courage. Professor Najib Raman, Respiratory Physician, takes us through the eye of the storm in Oxford. Professor Neil Turner reminds us that Covid is a multisystem, global infection, and we, who have clean water and a free health service, are fortunate.

The way we practice medicine may have changed, but our core principles remain true. Read them carefully and linger, as they are written from the heart.

Contents

Covid (and other) cartoons: *Dr Chris Mason*
Design by: Lucy Walters

A Portrait of Sir William Osler - Looking Back 100 Years

Professor David Cranston
Associate Professor of Surgery, Nuffield Dept of Surgical Sciences, Oxford
Wolfson College (1983-1986)

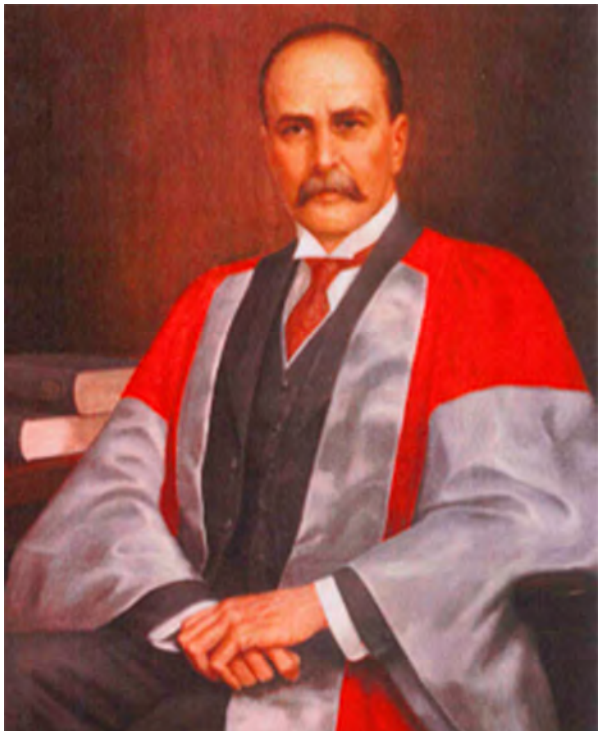
When William Osler died in 1919, the *Lancet* described him as "the greatest personality in the medical world at this time". In many ways, Osler defined the framework for medicine in the 20th century, and his insights and influence brought the whole field of medicine into the scientific arena for the first time, on both sides of the Atlantic.

Moreover, he demonstrated that both compassionate medical care and rigorous science were not only compatible but necessary – and that careful clinical observation was essential. "If you listen to the patient he will tell you the diagnosis." In the current practice of medicine it is all too easy to look at computers, charts and scans, and ignore the patient. Osler never forgot the patient, noting that "it is more important to know about the patient who has the disease than the disease that has the patient".

Born in 1849 in the backwoods of Ontario, Osler completed his medical training at McGill University. He then travelled to Europe, where he took 'a course of operations' from Billroth's assistant, and visited Berlin, where Virchow and Langenbeck were still working. He watched Virchow perform post-mortems with such care and minuteness that four hours might elapse. In Langenbeck's clinic the students were allowed to smoke, and by the time the patient was brought in, the men on the opposite side of the room could barely be seen through a blue haze. Quite a number of the students were badly marked with sword cuts received in duels.

> *"At the time of his death Osler was probably the best known and most beloved figure in the medical world*

Osler spent several fruitful months at London's University College Hospital, working with physiologist John Burdon Sanderson. Sanderson had recently noted that some moulds, probably Penicillium, inhibited certain bacteria. Sadly he did not pursue this further. Osler himself made some observations on platelets that remains one of his most original scientific achievements,



Portrait of William Osler

and would eventually succeed Sanderson as the Regius Professor of Medicine at Oxford.

He moved to Philadelphia, where he spent some of his time researching malaria; his summary was published in the *British Medical Journal* in 1887. Even before the full life-cycle of the parasite was known, he suggested that "in malarial regions the examination of the blood will prove, in skilled hands, a most valuable aid in the diagnosis of many obscure cases".

He then moved to Baltimore, where a merchant by the name of Johns Hopkins had bequeathed $7 million to be divided between a hospital and a university. The original university faculty consisted of 'The Big Four': Osler, William Welch, Howard Kelly, and William Halsted. Halsted was responsible for introducing gloves into surgery after giving Caroline Hampton, his first scrub nurse, a pair of gloves to protect her hands. He subsequently married her!

The Johns Hopkins opened in 1889, and responsibility for organizing the clinics rested primarily on Osler's shoulders. From the beginning he concentrated on taking students to the bedside for their clinical teaching.

Much of 1891 was given over to writing his magnum opus, *'The Principles and Practice of Medicine'*, which became the most influential general medical text for the next 40 years. In 1897, Rev Frederick Gates - a member of John D Rockefeller's philanthropic staff - read Osler's textbook, as he wanted to learn more about medicine. Impressed by its high literary quality, Gates further concluded that medicine would not become a science unless money was available to allow qualified men to engage in scientific research. He suggested to Mr Rockefeller that this was an opportunity for him to

become a pioneer in this area, and in due course the Rockefeller Institute of Medical Research was set up.

In 1904, Osler was invited by Prime Minister Balfour, on behalf of King Edward VII, to become Regius Professor of Medicine in Oxford, taking up the post in 1905 and remaining in Oxford until his death in 1919.

He had married late, to Grace Revere Osler - the widow of great American surgeon Samuel Gross. They had two children: one died at a week old, and the second was named Revere after his wife's great-grandfather Paul Revere, an American revolutionary best known for his midnight ride to warn New England towns of the approach of the British, and dramatised by Longfellow in the poem, 'Paul Revere's Ride'.

Osler's son Revere was mortally wounded at Ypres in 1917, and was attended by Harvey Cushing. He was given a blood transfusion, and late at night other colleagues of his father operated, while Cushing held his pulse. But Revere's wounds were too severe, and he died before sunrise. Cushing cut a button from his tunic for his father, and later described the scene: "We buried him in the early morning. A soggy Flanders field beside a little oak grove on an overcast, windy, autumnal day. [...] The boy wrapped in an army blanket and covered by a weather-worn Union Jack. A strange scene. The great-great-grandson of Paul Revere under a British flag, and awaiting him a group of some six or eight American medical officers saddened with the thoughts of his father."

13 Norham Gardens

When Osler and his wife heard the news he wrote to friends: "We are heartbroken, but thankful to have the precious memory of his loving life. We will take up our shattered lives and do the best we can."

In October 1919 Osler developed a fever and cough. On 5th December he had his chest aspirated at home for pleurisy, empyema and a pulmonary abscess. On 10th December, Sir Thomas Horder, physician to Edward VII, was called in. He found the infection "strongly entrenched", and morphia was necessary to control the coughing. Osler had a further anaesthetic to drain his chest for a chest abscess. The end came in the afternoon of 29th December, quietly and without pain, after hemorrhage from the wound. In those pre-antibiotic days the haemorrhage was probably a blessed

Working on 'The Principles and Practice of Medicine'

relief from several further weeks of pain. The following day, in accordance with his wishes, a postmortem was performed, which confirmed the diagnosis and cause of death. Osler had said he wished he could have been present, as he had a lifelong interest in the case!

At the time of his death he was probably the greatest and most beloved figure in the medical world. No man was so capable of drawing together British and American medicine. He had no enemies. His reputation was founded partially on his scientific work, but also largely upon his inspiring and stimulating clinical teaching. His legacy is best summed up in his own words: "I desire no other epitaph than the statement that I taught medical students in the wards, as I regard this as by far the most useful and important work I have been called upon to do."

Osler left a fourfold legacy to medicine: his life exemplified that of a caring physician who thought about the patients in holistic terms; he brought medicine into the scientific age; his attitude towards his patients and colleagues was exemplary; and he left many quotes, most of which are as true today as when he uttered them. In the words of Professor Sir John Bell: "The momentum that has led to the growth of biomedical sciences in Oxford can be traced back to the very substantial effect Osler had in drawing attention to Oxford as a place where outstanding clinical practice and clinical science could occur together."

And perhaps during this Covid pandemic, with advice being given from many quarters, it is good to finish with two of his quotes:

"Medicine is a science of uncertainty and an art of probability."

&

"The best disinfectants are soap and water."

Abridged from William Osler and his Legacy to Medicine *by David Cranston. Published by "Words by Design" 2017*

Green College's Legacy, *or* What have the Romans ever done for us?

Dr Laurence Leaver, *Green Templeton College (1988-1991). Senior Joan and Richard Doll Clinical Tutorial Fellow GTC 2004-date*

2019 saw the 40th anniversary of the founding of Green College. When thinking on the College's impact on Medicine in Oxford, I am reminded of Monty Python's *Life of Brian*, with Reg and his band of activists discussing their hatred of the Romans. Eventually Reg says: "All right, all right…but apart from better sanitation and medicine and education and irrigation and public health and roads and a freshwater system and baths and public order…what have the Romans done for us?"

Green College may have been unpopular with some at its formation (without carrying out any Roman atrocities as far as I know!). However, its legacy was to improve college support for medics across the whole university, including: college-based clinical teaching; membership of the common room and fellowships for faculty; an increased collaboration between medics and those in medical science, human sciences, social policy, management, government and environmental sciences; and more besides.

In 1979, both Oxford and the medical world were very different, with far fewer graduate students, a lower ratio of research to teaching, and a much smaller Division of Medical Sciences. Sir Richard Doll envisioned increasing numbers of clinical students and medical researchers, and he also saw the increasing numbers of NHS clinicians - crucial to education and research, but with little or no connection to the University. His vision was to found a college with a special interest in medicine, to serve the medical community better, and improve clinicians' links with the University.

This was quite controversial, with accusations of creating a ghetto, and that the loss of "multidisciplinarity" would diminish the life and humanity of medics. Some might argue that the "opposition" were more afraid of losing their medics - but I wasn't there to know for sure. The controversy was perhaps inflamed by the perception that Green College was "taking away" the common room in Observer's house (now the Principal's Office), until they purchased what is now Osler House at the JR. The idea of students being "poached" turned into the idea of competing to attract students, becoming more serious as the influx of Cambridge students reduced to a trickle in the 2000s and then stopped in 2016.

Competition for medics has been almost like an "arms race", with colleges continuously trying to out-compete each other to keep and attract students. Green College has been at the leading edge of this, and all clinical students have benefitted from the iterative improvements, as have senior clinicians recruited to provide student support; medical fellowship (and other senior category) posts have increased across colleges.

> *"Interdisciplinarity has increased by focusing related subjects in one place - the very opposite of the ghetto that was once feared*

One of the main improvements was college-based clinical teaching, fairly rare in most colleges prior to 2000. By 2004, Green College had established a teaching programme of an evening class (with free sandwiches) every week, all year round, on key course-related topics, and a system of bedside teaching in small groups for those in Y4 and in Y6. Students and tutors appreciated the continuity and camaraderie of these groups. It was so popular that standard course applicants far exceeded the 28 places. Green also became, and remains, the most popular choice by far with Graduate Entry Medicine applicants.

The success of college-based clinical teaching led to a voluntary agreement across all colleges to provide at least two tutorials per term for clinical students. Nowadays most colleges exceed that, and employ tutorial fellows or college lecturers to provide regular teaching, including bedside clinical skills.

Green College did not have the wealth of other colleges, and was never able to compete by offering generous scholarships or splendid historic rooms at low rents, but what money it did have it spent on the students, and as efficiently as possible. Green did not offer equipment or book grants, but all new students could get a 'top of the range' stethoscope - bought in bulk by the college with a good discount, and zero VAT. Similarly, the College has a stock of instruments (e.g. ophthlamoscopes) available on loan from the library like textbooks; students can have whatever they need, and items are re-used and replacement costs are lower than annual equipment grants.

The number of medics in College also allows extensive networking with senior members and alumni, to the extent that students can usually be matched to a mentor if they wish to pursue a project, or can ask for a taster session or careers advice in their choice of specialty. Complementing the medical school's excellent support, we're large enough to cover many bases with economies of scale, but still small enough to help on a personal level.

Contrary to some perceptions, the College has never been exclusively medical - or even majority-medical. Subjects relating to human welfare more generally have always been welcome - including, in the early days, those studying MSc Applied Social Studies, a vocational qualification for social workers. In 1991 the College helped establish The Environmental Change Unit (now Institute) "to organize and promote interdisciplinary research on the nature, causes and impact of environmental change and to contribute to the development of management strategies for coping with future environmental change". It was a pioneering, interdisciplinary example at the time. Similarly, Green hosted the Reuters Institute of Journalism in Osler's old residence (13 Norham Gardens), which is also home to the College's archive. Of course, the College also fostered the development of Oxford Health Experience Institute, which has become a major source of research in primary care and a resource for patients (Healthtalk.org).

When Green College merged with Templeton College, there was finally a little more money, and the College was able to increase elective grants and funding for students to take part in conferences or extracurricular courses. Importantly, the College was able to establish the Management in Medicine programme (MiM), where medics, trainee doctors and others learn management skills not just in seminars, but also through shadowing senior managers, and working on real service improvement projects. Nominated for a national BMA leadership award and leading to several publications. MiM has gleaned funding from the Oxford Deanery for postgraduate medical training, and continues to develop.

Of course, the College always offered a number of formal lectures, symposia and conferences on topics of interest, including the Literature in Medicine series and Medical Humanities summer schools. There are many student-organised events, such as the multidisciplinary, annual Human Welfare Conference, and study days with the Richard Doll Society – e.g. on global mental health or antibiotic stewardship. These events are typically open to all and attract a wide-ranging audience from all subject areas in College and outside. Interdisciplinarity has increased by focusing related subjects in one place - the very opposite of the ghetto that was once feared.

The buildings, gardens and facilities have improved (although students always need more and better accommodation), and all are welcome at various events. If any OMA members would like a personal tour, please get in touch: laurence.leaver@gtc.ox.ac.uk

Read more on how Green Templeton Fellows are addressing challenges of COVID-19:
https://www.gtc.ox.ac.uk/news-and-events/news/fellows-covid-19/

Drawing by Chris Mason, for Oxford Medical Gazette Summer 1979 (see overleaf)

40 Years ago - the students protest

Dr James Heffer
General Practitioner
St Peter's College
1973 -1981

I had a phone call from Lyn ten minutes ago. I waited. "Well there is just one thing, Jim. Can you write something for me?" I waited a little longer. "OK, it's reflections on moving to the JR and I need it by the weekend." I don't know what it is about her that makes people say yes, but there we go. So...

Reflections on moving to the JR

Old Radcliffe, loved it, post medical take ward round with Dr Truelove. "Why do I listen to his chest with my stethoscope?" Pause. "Because it makes him feel better." And it so obviously did.

Back to St Peter's for lunch: beans served in a pint pot, you could either have a swift half or go for the full experience.

Tingewick: actors grouped round the door looking down the hall at how the show was going. "Chris, aren't you in this bit?" A white faced Mason runs off round the outside while someone nobly ad libs.

Nice bar in Osler House. Andy Millar making a noise and optimistically chatting up a tall blonde.

Old Radcliffe, loved it.

The White Thing on the Hill

"They say there's going to be no bar and no Osler House, just a room up there. And there is a new college taking over here."

"Noooo, there must be something up there for the students, otherwise it won't feel the same and anyway I've got a perfectly good college down here'.

The nadir of the affair: the Burl Ives fundraising concert in the Sheldonian. Never has the Ugly Bug Ball sounded more apposite.

A meeting. Prof Doll in the chair and at least Nine Worthies in tow and Alistair Buchan (bad cop) letting little drops of acid fall on the sore places and me (good cop) applying the emollient. Nice renal chap from Merton (can't remember his name) picked up on it, winked and made pat-a-ball movements with his hands. Alistair, as ever, got his way, and concessions were made. Bent Juel-Jensen caught the mood in his letter, as did Chris Mason's cartoon (above).

Whether students expressing opinions alters much is uncertain. But things gradually settled down. I was 27th in line to listen to Miss Oxford's aortic murmur. Osler's Hut became upgraded and then the Dower House project came into view. The 1979 Osler House crew bumped four boats and were given blades, mine is in the loo at home. A crew got enthusiastic and scaled the new clocktower and altered the weathervane. Things could have got tricky but Lady Doll saved the day, stumped up the cost, soothed authority and said "we were all medical students once". Good on her Ladyship.

It's still a shockingly ugly set of buildings.

40 years on, the students seem to be having fun, Rita tramples merrily and so perhaps all is well in the little world of Oxford medical training.

Laughter is the Best Medicine...

Whilst studying clinical medicine I was fortunate enough to be befriended by the editor of this learned organ and her entourage. I've always drawn a bit and contributed a few cartoons to the *Oxford Medical School Gazette*, not to mention posters and programme illustrations for Ptyngewyckkke and numerous party invitations.

Growing up (!!!), having a family and a career curtailed my artistic activities, however following a dose of tinnitus I took up watercolor painting as therapy, and the current pandemic and ensuing lockdown has reawakened the dormant cartoonist in me, hence the offerings you see printed here... Enjoy!

Chris Mason *(Worcester College 1977-1980)*
Consultant Histopathology in Exeter

Dear Vice-Chancellor...

3rd May 1979

Dear Vice-Chancellor,

You will have seen from the letter from Alastair Buchan, President of Osler House Club, that the acquisition of the Dower House now seems to be receding into the distance. You may also have heard, although this has not reached me officially, that the Area Health Authority, after the Area Management Team had initially granted the students permission to have a bar in their common room in John Radcliffe Phase II, now have refused it. (The same has happened, I gather, to the resident doctors). This means that the students are left with nothing in the way of social facilities at their main point of work. The consequences of this are disastrous.

We have built up an enviable reputation of having the best clinical school in the country. The total lack of social facilities will now be a strong disincentive for the best students to come here. It is not just a question of their being able to have a drink, the educational value of students discussing what they are learning over a glass cannot be underestimated. All the leading London teaching hospitals have such facilities provided by London University. It may be that Green College is in no position to provide social facilities for the students. But if Green College is unable to, then I feel, as Senior Member of Osler House Club, that it must be incumbent upon the University to take action. Will you, Vice-Chancellor, please put extreme pressure on Lady McCarthy, the chairman of the Area Health Authority, who probably is the main opponent to the students and young doctors on weirdly distorted ideological grounds, to reverse the decision.

There are, then, two urgent matters: (1) that the students should have some social facilities immediately, and (2) that in the foreseeable future they must have permanent accommodation on the new hospital site.

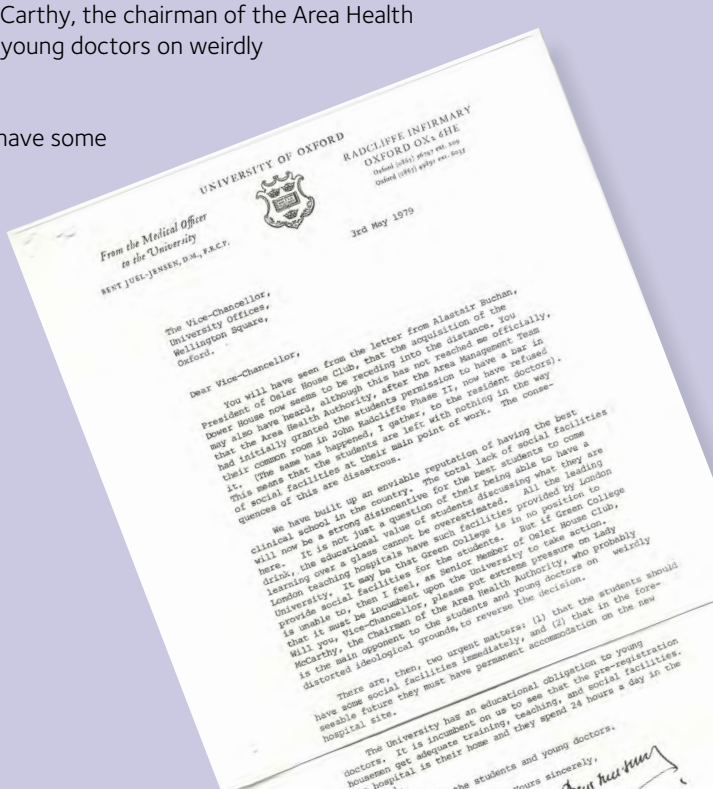
The University has an educational obligation to young doctors. It is incumbent on us to see that the pre-registration housemen get adequate training, teaching, and social facilities. The hospital is their home and they spend 24 hours a day in the hospital.

Please help the students and young doctors.

Yours sincerely.

Bert Juel-Jensen

Senior Member of Osler House Club


UNIVERSITY OF OXFORD

RADCLIFFE INFIRMARY
OXFORD OX2 6HE

From the Medical Officer to the University
BERT JUEL-JENSEN, D.M., F.R.C.P.

3rd May 1979

The Vice-Chancellor,
University Offices,
Wellington Square,
Oxford.

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Please help the students and young doctors.

Yours sincerely,

Congratulations, Professor Bee Wee CBE

Professor Bee Wee CBE, who is Clinical Lead for the Palliative Care Services in Oxford, based at Sobell House, was awarded a CBE in the most recent New Year Honours List for Services to Palliative and End of Life Care. Bee has a national role with NHS England and NHS Improvement as the National Clinical Director for Palliative and End of Life Care, and academic posts as Associate Professor and Fellow of Harris Manchester College at the University of Oxford and Honorary Professor of Sichuan University, China.

You were awarded a CBE in the New Year's Honours this year. How did that come about?

I have absolutely no idea, but I suppose everyone says that! When the letter arrived, my first thought was: "It must be a mistake." I'm still stunned – it's only the second CBE in my specialty in over 50 years. That my 'day at the Palace' had to be postponed (maybe even cancelled) because of COVID-19 adds to that sense of unreality.

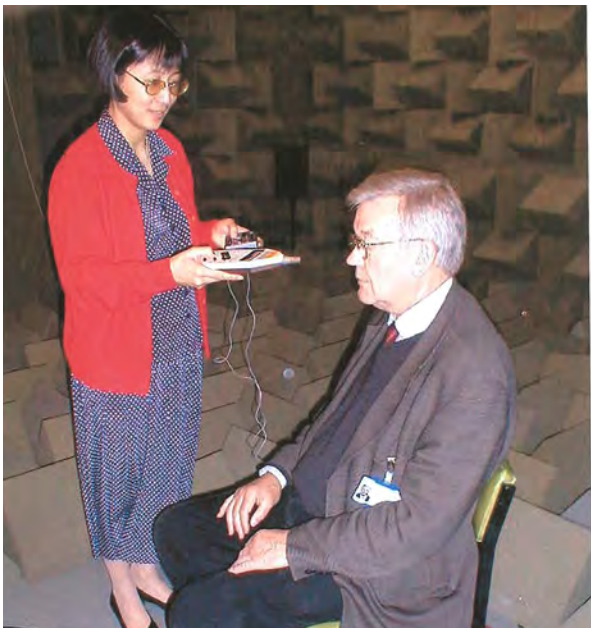
Can you describe your career path?

It has been a bit unconventional. Ever since childhood, I had wanted to become a doctor. Being Chinese in Malaysia, my parents and I knew that my chances of being able to study medicine at the time were limited. So, aged 15, I travelled to Dublin to finish my school education. I come from a lower middle-income family, so we couldn't afford boarding school, which is a path most younger foreign students take. Instead, I found a day comprehensive school which offered free education. I didn't know at the time that I would be their only foreign student, and that nobody had ever gone on to higher education. Money was incredibly tight, so I went to Dublin on my own by Aeroflot, the cheapest flight available. In Dublin, I found 'digs', where I was the only one not a construction worker, and took on a variety of after-school jobs to pay my way – my first job being babysitting, then newspaper rounds in a local hospital, more childminding, cleaning, ironing, weeding – and, for one whole summer, cooking for a family of 10. My headmaster and teachers were wonderful and helped me with a variety of jobs, hand-me-down school books, and huge encouragement. Then I went to Trinity College in Dublin – but the need for me to continue paying my way continued. I could only afford to get home once every two years, with one phone call a year. The rest of the communication with my family was through weekly letter writing – no internet then.

Throughout my medical school days, my career aspirations varied, often influenced by those teams that inspired me the most. When I qualified in 1988, I was encouraged by my mentors, Greg Shanik and Dermot Moore, to follow a career in vascular surgery, but decided to pursue general practice which appealed more to my instincts. My first placement on the training scheme was at Our Lady's Hospice for the Dying, where I turned out to be the first Senior House Officer in palliative medicine in Ireland. My interest in palliative medicine was sparked then, and continued throughout my GP training, which I also loved. I was my GP trainer's first trainee – and he was single-handed – so my practice year started with me putting up curtains in the room he had created for my surgery and being left in charge for 3 weeks while he went on his summer holidays. Thereafter the wise and generous George taught me so much – about medicine, problem solving, looking after the whole person, and the messy but fascinating world of life outside hospitals.

> *"I had the power to influence, inspire and motivate…but never to 'direct'*

At the end of that time, I was offered the opportunity to help establish palliative medicine in Hong Kong. Naively, I thought that would give me a taste of what it would be like to work in a 'place like home' – having no idea that Hong Kong and Penang (my hometown in Malaysia) would be like chalk and cheese. I spent almost 3 years there, virtually as a single handed consultant. It was a heady time – escorting British VIPs, royalty and even Margaret Thatcher on tours of the hospice! But I was homesick for this part of the world. So I came back, applying for a senior registrar post in Southampton. Though appointed, the Chairman of the panel sent word asking why on earth I was not applying for a consultant



Death rattle research - anechoic chamber testing

post after my experience in Hong Kong. So I did, and three months later I was appointed consultant, working alongside one of the pioneers of the hospice movement, Richard Hillier, who had himself worked with Dame Cecily Saunders.

It was there that I developed my interest in education and research. I did my PhD in my spare time, under Prof Stephen Holgate, looking into death rattle. Amazingly, death rattle is said to be caused by, and treated as, excessive respiratory secretions when a person is close to dying – and yet all the evidence refers back to opinion pieces unsupported by any research. Nor was the 'need to treat' backed up by any research into the effect on patients themselves or their families. Was this something about our need to treat, to try to eliminate a sound we found disturbing?

During that time, I became involved with the Southampton Medical School, later becoming their Deputy Director of Education. I was privileged to be part of the six-member Dean of School's Advisory Group. This gave me huge insights into the practical, financial and political challenges in education and research that face any medical school anywhere. During this period, I was honoured to be elected to the Honorary Membership, and later Fellowship, of both the Royal College of Physicians and Royal College of General Practice, cunningly avoiding any exams!

Then, almost 18 years ago now, Tim Lancaster encouraged me to come here as Associate Director of Clinical Studies, as part of a Senior Lecturer appointment to Sobell House, and as Fellow of Harris Manchester College under the wonderfully supportive Sir Ralph Waller. At various points over the years, I supported the electives programmes, the Churchill Firm and clinical pharmacology for the medical school, along with palliative medicine education and research at Sobell House.

Fast forward to now – how did you get involved in national work?

Not long after I came to Oxford, I was elected Chair of the Science Committee for the Association for Palliative Medicine of Great Britain and Ireland (the APM), and subsequently President of the Association. In 2013, I had just finished my term of office as President, and started to chair a National Institute for Health and Care Guidance (NICE) Standing Committee, when the Health and Social Care Act came into effect. NHS England, local Clinical Commissioning Groups and other Arm's Length Bodies took responsibility for health care. I was appointed as one of the National Clinical Directors for NHS England – my responsibility being for palliative and end of life care across England. This was more challenging than any of us had envisaged – because, following the Health and Social Care Act, the 'command and control' system for the NHS had changed. Local decisions would take precedence and as a National Clinical Director (NCD), I had the power to 'influence, inspire and motivate', as the saying goes, but never to 'direct'.

> *"...27 national organisations, all with different agendas, culture, language and views were able to share a 'vision'*

This became stark three months later, when the independent review of the Liverpool Care Pathway (LCP) was published, with 44 recommendations to be adopted immediately, including one on the Pathway to be discontinued in less than a year - a baptism of fire for any NCD.

Interestingly, we had never adopted the LCP, either in Oxford or Southampton. But because of the review, I had to work out how to gather all the stakeholders very quickly to work out a collective response, even though I had no formal authority over any of them. That habit of working closely together became something that we all valued, so in 2015, we co-published

the Ambitions for Palliative and End of Life Care as a national framework for England. This involved 27 national organisations including Royal Colleges, the General Medical Council, the Care Quality Commission, major charities, social care and the Patients' Association – as you can imagine, all with different agendas, culture, language and views – but we were able to coalesce around a shared vision of what we all wanted to achieve. It was an enormous tribute to their generosity, patience and willingness to compromise. This deceptively simple Framework continues to provide leadership and national direction for local strategies and improvement programmes.

> *"Death and dying is something that western society finds difficult to talk about. COVID-19 challenged this...for a while'*

What happened with COVID-19?

The relationships we built then, and have nurtured since, stood us in good stead when COVID-19 struck. We already had a clear view of what was important to hold on to during this crisis. The field of palliative and end of life care is an unusually broad one, compared to many clinical specialties. It involves different specialties and disciplines, ambulance and emergency services, all care settings where a patient might be (hospital, home, hospice, care homes, homeless shelters, prisons), and many organisations across the NHS, Royal Colleges, social care and charitable sector. Clinical leadership in this context was, and is, both complex and exciting. We needed to be able to communicate clearly and cooperate quickly – the relationships and mutual respect and trust my colleagues had established allowed us to do that. Even so, the scale of individual and organisational effort has been awe-inspiring.

One of the hardest things we've had to cope with during the COVID-19 pandemic has been the challenge to the way we work with, and support, dying people and their families – our 'social contract' if you like. The inability to allow unlimited visiting in hospital and care homes, the barriers created by the necessary use of PPE, the need to communicate unwelcome news with families over the telephone or video calls, the emotional burden of looking after dying people without those important to them at their bedside, the challenge of managing symptoms in the context of uncertain recovery...these are not unique to palliative care clinicians, of course. All front line health and social care staff, and their managers, have been central to this too. What I hope we have been able to bring has been the direct care as well as support for colleagues in delivering palliative and end of life care. Rarely has palliative care been so much a part of acute medicine, critical care, infectious diseases, respiratory, renal and cardiac medicine, and rehabilitation services.

Death and dying is something that western society finds difficult to talk about. COVID-19 challenged this and, for a while at least, I found people willing to talk about dying and to plan and prepare for it properly within our hospitals and health care systems to the benefit of patients, families and clinical staff everywhere. Yet, as the number of COVID-19 deaths decline, this openness is noticeably diminishing as government - and society – shift their focus to recovery, and back to the hope for prevention and cure. Yet we are all going to die of something someday.

At the allotment in Oxford

What advice would you give young doctors?

I have never planned the journey that my career has taken – the most exciting and fulfilling things have always happened unexpectedly. If you want to become a Prime Minister or head of the NHS or a University, maybe you'll need to plot your career carefully, but otherwise, follow your heart and stay open to opportunities. Yes, it does mean taking risks but that's half the fun of it.

Last thoughts...

Finally, Oxford has been very good to me – welcoming this 'blow in' and making me feel really at home, even providing me with an allotment to enjoy with my husband! I am so grateful for the generosity of the Medical School, the Trust, and my colleagues at Sobell House, in encouraging and allowing me to undertake my national leadership roles. And my own College, Harris Manchester, has always been more than supportive, providing me with an academic home that is so uniquely Oxford.

Oxford research in the time of Covid-19

Professor Chris Conlon
(New College, 1974-77)

The emergence of Covid-19 at the end of 2019 has altered our lives in extraordinary ways. Personal lives have been disrupted, healthcare has changed in ways not experienced by any of us before and the economy has all but stalled. However, as with any crisis, there are challenges and opportunities. Researchers in Oxford have risen to the challenge in a variety of ways, some of which are excellently discussed in the Conversations highlighted in this edition of *Oxford Medicine*. This article aims to give an overview of the breadth of activity that started in January to try to understand this new virus, SARS-CoV-2, and the clinical consequences of infection – Covid-19 disease. The efforts range from basic science of the virus and the immune response to it, to epidemiology, diagnostics, clinical trials and behavioural science.

Structural Biology

The Structural Biology group (STRUBI) led by Dave Stuart and others has helped to define the spike protein of SARS-CoV-2, the main protein that binds to cells and that is also the target for neutralising antibodies. In addition, they have also defined the structure of the main protease, enabling the screening of drugs. Work on drug screening is done by Nicole Zitzmann's group at the Dunn School, where William James and others are also trying to understand the basic biology of the virus and how it interacts with host cells to cause infection.

Immune Response

Understanding immune response to SARS-CoV-2 is key to controlling the infection, but also because uncontrolled immune responses might be responsible for some late complications of infection. The Kennedy Institute, led by Fiona Powrie is looking at early aspects of inflammation, along with the molecular haematology group at the WIMM. There is significant dysregulation of coagulation in patients, which is probably important in many of the systemic complications seen. Gavin Screaton is leading research into the humoral response to the virus, has developed antibody tests, and is looking at the possibility of developing monoclonal antibodies that might be used therapeutically. Paul Klenerman and the group at the Medawar and Graham Ogg and Tao Dong at the WIMM, and others, are looking at T cell responses to the virus and how these might vary at different stages of infection. They have also done work on neutralising antibodies along with others in the Dunn School and elsewhere. In addition, it is important to understand if previous coronavirus infections have an influence on the subsequent responses to SARS-CoV-2. Julian Knight and Alex Mentzer at the Wellcome Gene Centre are investigating the genomics aspect of those infected with the virus, collaborating with intensive care units around the country.

Diagnostic Testing

Oxford has been leading the development of reliable diagnostic tests in the UK. Through the University owned UK Biocentre in Milton Keynes, high throughput PCR based antigen testing has been done for the NHS. Derrick Crook and his team have done valuable work assessing the various antibody tests that are being developed, including one developed by Gavin Screaton's group. With the ELISA developed in Oxford, testing has been scaled up using the high throughput technology, including robotics, at the Target Discovery Institute (TDI) at the Old Road Campus.

Disease Mapping

Many people have contributed to the mapping of the disease but of particular note is Sarah Walker who, in a matter of a few days, designed a huge community study of disease prevalence in conjunction with the Office of National Statistic (ONS). You will have heard the data from this study on the regular press conferences and through the media. Such data help to calculate the 'R' number and to give some idea as to when the lockdown can be eased. Christopher Fraser and David Bonsall in the Big Data Institute (BDI) have helped to develop the contact tracing app that is now being taken up by the government and trialled on the Isle of Wight. In the Oxford hospitals we have done a study, led by Katie Jeffery, Tim Walker, David Eyre and myself, that involved testing over 9000 hospital staff by PCR for antigen and for antibodies and this will provide important information about the risks to staff, the utility of PPE and the durability of antibodies. This study would not have been possible without the amazing help of scores of clinical students who, having had their studies suspended, rolled up their sleeves and learned how to take swabs, take blood and master the NHS booking systems.

Vaccine trials

The work of the Jenner Institute and, in particular, that of Sarah Gilbert's group has rarely been out of the headlines. Because of her previous work on a vaccine for MERS-CoV, it was a natural move to work on SARS-CoV-2, and this allowed a very rapid response to the pandemic. Within three months of the sequence of SARS-CoV-2 being published, the

Icons by Eucalyp

Jenner was able to design a vaccine, test it in animal studies and move on to human studies. There have now been more than 1000 volunteers immunised in the UK in a clinical trial run by Andy Pollard, and, important for vaccine production, the University has signed an agreement with Astra-Zeneca to manufacture the vaccine at scale. In addition to the UK study, the Oxford group in Kenya at the KEMRI-Wellcome research programme is about to recruit volunteers there to this vaccine study.

> *"Diseases that harm require treatments that harm less*
>
> **William Osler**

Therapy and Recovery

Oxford researchers have also led the way in clinical trials of therapy. The RECOVERY trial, led by Peter Horby and Martin Landray, has recruited over 10,000 patients hospitalised with Covid-19 into a study of various treatments in a randomised trial. The adaptive nature of this study means that drugs that don't work can be eliminated early, and novel treatments added to the trial if they look promising. They have already shown that hydroxychloroquine is not effective and, more importantly (and perhaps surprisingly), that low-dose dexamethasone saves lives in those with Covid-19 who require oxygen therapy or mechanical ventilation. This has already been adopted in the NHS, and this sort of study is the only way to be sure what does and doesn't work in a new disease. Chris Butler and Richard Hobbs are leading the PRINCIPLE study, looking at treatments in the community for less severe disease. In addition, Oxford patients have been recruited into a national study of remdesivir, one of the more promising antivirals. The Oxford unit in Thailand has initiated a large multinational study, led by Nick White, to investigate chloroquine and hydroxychloroquine as prophylactic drugs in at risk populations.

Wellbeing, society and the environment

Covid-19 has already caused stress to patients, families and healthcare workers. Researchers at Oxford have initiated studies of mental health in healthcare workers, and others in Neurosciences, led by Colin Espie, are looking at how this disease has affected sleep patterns. Outside of the Medical Sciences Division many other groups are looking at the societal and economic impacts of the pandemic, as well as the environmental effects of lockdown and its easing.

To conclude...

What this pandemic has shown is the remarkable resilience of people in the University and the extraordinary amount of talent, dedication and enthusiasm for trying to solve problems, advance knowledge and improve society.

Chris left Oxford in 1977 to go to clinical school at the London Hospital Medical College. After junior posts in medicine, and a spell as a visiting lecturer in Zimbabwe, he spent almost 3 years in Zambia doing HIV research with an MRC grant, based at St. Mary's Hospital in London. He returned to Oxford in 1989 and has been a consultant in infectious diseases and general medicine for over 30 years. Currently he is Professor of Infectious Diseases in the NDM and Chair of the Centre for Tropical Medicine and Global Health.

Drawing by Dr Chris Mason

COVID-19: following the science

Dr Sarah Ball
(Somerville 1974)

Sarah went to London for clinical training at St Thomas', returned to Oxford as a medical SHO in 1981, and again in 1985 on an MRC training fellowship in the NDM. She worked as paediatric haematologist at St George's in London until jumping ship in 2007 for family reasons. Now reinvented as conservation geneticist, working at the Zoological Society of London.

We are Following The Science. This is just one of the sound-bites resounding through the COVID-19 daily briefings (amongst On The Front Line, Ramping Up Testing, Working Round The Clock, Protect Our NHS, Fantastic Work, to name but a few). Science may still know best, but no longer seems to be perceived as the new nanny, with many Top Scientists now overtly critical of political decisions ostensibly made in their name. Things are falling apart, with mere anarchy waiting just around the corner to point the finger of blame.

My viewpoint may of course be somewhat jaded, not least because the NHS did not seem to want my help in protecting it, despite my years of experience as a clinical academic, returner GMC re-registration and shiny new DBS certificate. I was told that, if I filled in a (third) online survey, I may be eligible to apply for a job to take blood samples and site drips in a new Nightingale Hospital, perhaps not the safest occupation for an over-60 would-be returner.

But back to the science. This week I was blown away by a vision of science as it could and should be, carried out in a spirit of multidisciplinary cooperation and openness, sharing rather than competing. This epiphany was brought about by watching COVID Conversations, a series, still ongoing, of weekly online talks by Oxford scientists. Do not be put off by the rather dry title. What really comes across is the evidence of multidisciplinary cross-fertilisation of projects, of scientists and clinicians (labels that are not mutually exclusive) swinging into action across a network of pre-existing core facilities, with different groups working on different angles of interaction between virus and host to answer fundamental questions. Also, if it is not heretical to say so, the scientists seemed to be having fun, a commodity in short supply during lockdown. This science is genuinely exciting.

Having had the central importance of pathophysiology drummed into me at a tender age, I was drawn to three impressive talks on viral pathogenesis, drug discovery and immunology (gosh, immunology in particular really has moved on since 1974-1977). I will not attempt to summarise them; the talks themselves are summaries of the Fantastic Work going on. I particularly loved Nicole Zitzmann's vision of hordes of biochemists rotating 3-D images of macromolecules on their home computers in a new lockdown game of virtual Lego for grown-ups. And Paul Klenerman's summary slide of the different groups working on different arms of the immune response.

It clearly is time for Science to Take Back Control.

Watch Covid Conversations and see upcoming talks at:
https://www.research.ox.ac.uk/Article/2020-04-30-covid-conversations

Covid Conversations So Far

How Oxford is tackling COVID-19, with Professor Gavin Screaton

Broadcast Wednesday 6 May

Researchers across the University of Oxford are at the forefront of global efforts to understand the coronavirus (COVID-19) and protect our communities. In this talk, Professor Gavin Screaton, Head of Oxford's Medical Sciences Division, gives an update on the latest achievements across a range of areas, from serology, to drug discovery, to clinical trials and vaccine creation.

https://youtu.be/9KoHy3RcNH4

Viral pathogenesis, with Professor William James and Professor Richard Cornall

Broadcast Wednesday 13 May

Professor William James and Professor Richard Cornall talk about the University's research into how the COVID-19 virus behaves in humans, as well as the focus on building the Oxford SARS-CoV-2 virus facility, which is supporting a number of projects across the University.

https://youtu.be/mm7JCfhiptE

Drug discovery, with Professor Nicole Zitzmann

Broadcast Thursday 21 May

Professor Nicole Zitzmann talks about how her team are working with other groups across the globe to apply chemical principles and techniques to address the important biological questions around COVID-19, and what they've already learnt through the development and testing of existing drugs.

https://youtu.be/beb0nsXHr4Y

Immunology, with Professor Paul Klenerman

Broadcast Wednesday 27 May

Professor Paul Klenerman talks about research into the immune response to COVID-19, including what they've learned so far about the detection of neutralising antibodies, antiviral T cells and innate immune responses.

https://youtu.be/-hjQNyCyKSA

COVID-19: misinformation and inequality, with Gina Neff and Rasmus Nielsen

Broadcast Wednesday 3 June

According to the International Fact-checking Network, COVID-19 is the biggest challenge fact-checkers have ever faced, with journalists debunking both claims spread anonymously on social media and statements from leading politicians. The pandemic has also exacerbated many social inequalities, including gender inequalities in childcare and housework. Join Professors Gina Neff and Rasmus Nielsen to hear more.

https://youtu.be/1Wv0VtkEpxM

The UK's COVID-19 digital contact tracing app, with Christophe Fraser and Michael Parker

Broadcast Wednesday 10 June

Professor Christophe Fraser and Professor Michael Parker explain the epidemiology and ethics that have underpinned the development of the NHS mobile contact tracing app. They will summarise the science behind the epidemiological model city of 1 million inhabitants devised to inform the app's configuration, and the ethical considerations needed to foster well-founded public trust and confidence when deploying an app-based approach.

https://youtu.be/NIHUlp9DPQI

Post-COVID economy and a green recovery, with Peter Drobac and Aoife Haney

Broadcast Friday 12 June

Peter Drobac and Dr Aoife Haney discuss the economic and environmental impacts of the COVID-19 pandemic, and how policymakers can adapt to its effects. They'll explore the potential for strong alignment between the economy and the environment, and highlight policies which could stimulate economic growth while decreasing greenhouse gas emissions.

https://youtu.be/Q2pazGEaOLE

Vaccines, with Professor Sarah Gilbert

Broadcast Wednesday 17th June

Professor Sarah Gilbert has spent the past decade and a half working on novel influenza vaccinations. Now, she's working on a version to counteract COVID-19. Thanks to previous work and the efforts of Oxford colleagues, her team have been able to reduce a timeline of about five years in normal conditions to three months. This vaccine is already entering into human trials, and will rapidly progress through its Phase II/III studies throughout the spring and summer months of 2020, with a potential candidate ready to go by the autumn.

https://youtu.be/MKNavonhXyk

Stories from the Frontline

Illustration by Kevin Kobsic

"We are here to add what we can to life, not to get what we can from it" **(William Osler).**

Friends, family and colleagues have given themselves selflessly to the challenges of working through this pandemic. Here are a few of their reflections:

Dr Bernard Bukala

Accelerated Change: The Interim Foundation Doctor Experience

Revising for finals in January, I had a plan. After the long years of medical school, I would concentrate all the knowledge I possibly could into this last hurdle. Then, after a few short rotations, I would jet off on my elective to new and exciting places. I could never have expected the global upheaval that ensued, disrupting everything from flight schedules to baking supplies to national economies. Once I found out my family – scattered across several countries – was safe and sound, I counted my blessings and joined everyone in anxiously awaiting news as to what next.

When I was offered the opportunity to graduate early and join the NHS as an Interim Foundation Doctor, I had a plan as well. I would pack up, move, and take up the job. It would be emotionally challenging, putting my newly-minted clinical abilities to the test, and involve a large dose of chaos – unavoidable in unprecedented circumstances.

All this was true, but I did not expect the warmth with which the Trust would welcome their new doctors, or the outpouring of support from tutors, colleagues, and families. As soon as we arrived we underwent thorough training and induction, after which we joined our teams. I was initially concerned about becoming stuck in a curious limbo between medical student and junior doctor, but the reality turned out to be the best of both – the clinical responsibilities of a doctor, coupled with the sort of support usually only available to students. While this was our experience, the interim posts have been varied, and I have heard of friends being either thrown in at the deep end, or without a useful role. In general though, the interim foundation seems to provide a perfectly placed, if unusual, stepping stone.

I found that no amount of lectures, seminars, or even clinical placements could have introduced me to the job as rapidly and efficiently as actually getting stuck in.

> *"I have learned to expect the unexpected*

After a prolonged period of media frenzy, and having gotten a sense of how rapidly the NHS was scrambling to mobilise personnel and resources, I very much expected a hospital overwhelmed with patients and short on staff. What we found instead was a highly efficient, if at times ad-hoc effort to ensure all patients' needs were met. In fact, total inpatient numbers remained low, due to quicker discharges and lack of elective surgeries. This greatly contributed to a feeling of a protected environment in which to find our feet, handy for the new doctors, concerned about having missed out on the last months of clinical school.

Most importantly, I did not anticipate the profound satisfaction that came from being able to help and contribute in this direct, tangible way. It is rapidly becoming clear to me why being a doctor is at times such a struggle, but also why it remains such a privilege. I still, of course, have a plan, but going forward I have learned to expect the unexpected.

Dr Bernard Bukala

Interim Foundation Doctor at Buckinghamshire Healthcare NHS Trust
Worcester College 2014-2020

An SHO Stops to Draw Breath

Dr Hannah Thould

I think most people on the 'frontline' (for want of a better phrase) have been emotionally impacted to some degree or another by coronavirus. Despite considering myself fairly resilient I have suffered broken sleep, labile emotions and loss of motivation.

I have a few standout memories of the past few weeks: hearing the radio announcing lockdown as I drove in for my night shift, thinking "this is it"; the first Clap for Carers bringing tears to my eyes; sitting in anticipation and fear at the unknown on our abnormally quiet shifts that first week. Time seemed to drag like never before. We'd all seen the images and the stories from Italy, and so were reading up on all the data we could get our hands on, revising unfamiliar techniques with no idea of what we were about to experience.

One of most difficult ethical and emotional aspects for me was right at the beginning: admitting patients with suspected coronavirus onto cohorted isolated wards, waiting for up to a week for the tests to come back, knowing that many of these vulnerable, co-morbid patients likely did not have Covid but were being exposed every day they stayed. It was immensely frustrating.

We have tried to keep families updated regularly, but you can hear their pain and worry as they are unable to see or support loved ones, especially those who cannot communicate easily by phone or who are confused. Giving bad news over the phone and forcing people to make a choice between risking their own health and seeing their dying loved ones for the last time; sitting in full PPE holding a dying patients hand, watching them take their last breaths as we take them off CPAP, are memories that will stay with me for a long time. Many patients were incredibly lucid despite severe hypoxia, so we had to have conversations about how they were unlikely to survive, despite them proclaiming: "I feel fine".

My worst memory is ringing a patient's husband at 3am to inform him his wife was dying, and being greeted with: "This is a prank call, I don't believe you." And on handing the phone to his wife, him saying: "That's not you [wife's name], you don't sound like my wife at all, I'm hanging up now." The nurses and I desperately tried to persuade him it was real, and thankfully we managed to contact his son, who persuaded him to come into hospital. But I was horrified that a long marriage might end on those words.

Now working on CCU and about to start a placement in oncology, I am concerned with the long-term effects of a slimmed-down system. I see patients who have sat at home with chest pain for weeks, not wanting to burden the NHS, and now have terrible heart damage. We have diagnosed a not-insignificant number of patients with new cancers, knowing that the treatment they can receive now is not the same as that offered only a few months back. Trying to explain to patients that some 'gold standard' investigations are now not available, due to the risk they place to staff, is very difficult, particularly as our training ingrains into us that the patient comes first. Likewise, we are now not allowed to perform CPR until we are wearing full PPE, going directly against the "every minute counts" mantra our normal training rightly drums into us, and many have found this very distressing.

Working in full PPE is quite the experience: unbelievably hot, sweaty, and surprisingly tiring. It constricts your movements and impairs your communication. I have had to comfort more than one nurse who was not able to reach a confused patient climbing out of bed before they fell, due to PPE constraints. Additionally, for those patients or staff who lip-read, being cared for or working with staff in masks can be profoundly disabling. The constantly changing PPE guidance was also immensely frustrating and quite frightening. I myself contracted coronavirus on the respiratory HDU. Whilst I was thankfully only mildly affected, it was still a frightening experience: waiting for the various symptomatic time points to pass, trying to distract myself from the constant news of healthcare workers dying, whilst also trying to comfort my very worried parents via Facetime!

> *"We have tried to keep families updated regularly, but you can hear the pain and worry*

Guilt has also been a frequent companion – I work in the South West and we have had relatively few cases, though the hospital I work has been more affected than most in the region. My workload is getting lighter, I have more time off than I have ever had and we have the best staffing I have ever experienced. However, the clap continues and we receive food and kind gifts at work and the guilt has worsened. I feel immensely privileged – I have a stable job and income, good amounts of rest and am in good health. There are many who have greater need of the food and generous assistance than me. Simultaneously, I also want to shout – it was much much worse than this in the winter!

Academically, it has been both stimulating and frustrating. In

February I completed a diploma that touched on many aspects of public health and outbreak management, even the WHO warning concerning the pandemic risk of novel coronaviridae. Watching the development of a knowledge base, treating a new disease, and sharing lessons learnt with colleagues, has been an interesting experience. There have been unprecedented opportunities to help with clinical trials and research, which is exciting. However, I have also had worries about the impact on my future training, and much of my teaching and all of my exams have been cancelled. We still do not know what the long term impacts will be, though some training times will doubtless be extended.

Coronavirus has forced us to work in novel and unprecedented ways, and presents an interesting opportunity for service redesign. It has smashed previous barriers put up against virtual meetings and clinics, and allowed many people to work much more flexibly. We have shown that many more conditions can be treated in the community or via ambulatory care. Many people have been forced to work in areas out of their comfort zone, and have developed a new respect for their new colleagues when they appreciate the challenges of different jobs; additonally the new friendships and flattened hierarchy have often made systems work more smoothly. It was certainly easier for me to discuss requests for radiological investigations when my ward had a resident radiologist! I think it has emphasised the importance of flexibility, which perhaps flies against the trend of an increasingly specialised system. My own hospital is completely redesigning its medical admissions service, and combining separate teams to try to reduce duplicated work. I'm really interested to see how our future clinics and GP appointments look, though I suspect we will initially revert to the status quo before developing on any lessons learnt.

Coronavirus will have many long lasting effects, many of which I think we are yet to predict. I hope however that we are able to draw some good out of the hard-won lessons, so that next time we are more prepared.

Dr Hannah Thould

CT1 Internal Medicine Trainee, Great Western Hospital, Swindon. Exeter College (2009-2012), Green Templeton College (2012-2015)

A Night in the Life of an Intensive Care Registrar, peak-pandemic

5pm – Watch the daily Government briefing, hanging off ministers' every word

6pm – Cook dinner and prepare a midnight snack

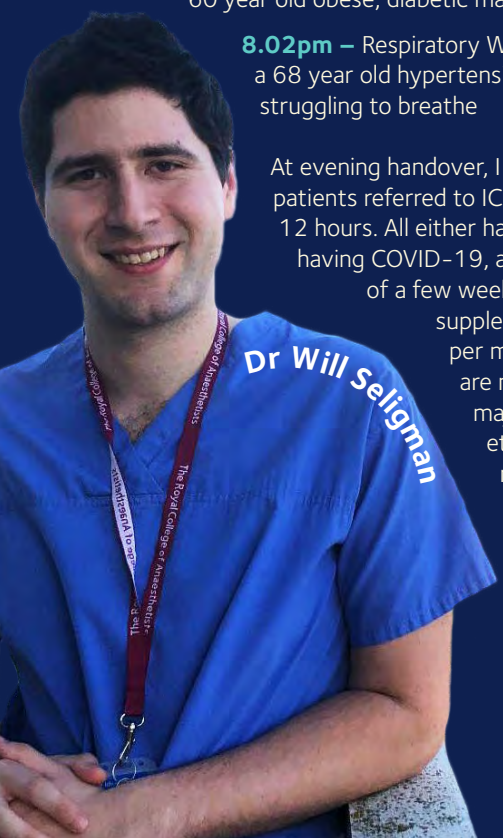
7pm – Eat dinner with housemates – try to talk about anything other than coronavirus. Fail.

7.25pm – Cycle to work, enjoying the deserted roads

8pm – Attend handover, pick up referrals bleep

8.01pm – Emergency Department calls me to review a 60 year old obese, diabetic man struggling to breathe

8.02pm – Respiratory Ward calls me to review a 68 year old hypertensive overweight woman struggling to breathe



At evening handover, I inherit a list of 15 patients referred to ICU during the preceding 12 hours. All either have or are suspected of having COVID-19, a disease I hadn't heard of a few weeks ago. All are receiving supplemental oxygen at 15 litres per minute. The vast majority are men over 50; the vast majority are black or minority-ethnic (BME); and the vast majority are overweight, diabetic, or hypertensive.

Glancing at the list, I think: "This patient might do well, their only problem is respiratory failure, and they were healthy up until 10 days ago when they started coughing.' I wonder what's happened to all of the patients who are normally referred to ICU – those with heart attacks, strokes, or COPD, who have lots of pre-existing health complaints. And then I realise that the Emergency Department and medical teams are simply not referring anyone with significant medical comorbidities to ICU; they know the outcomes are likely dire, and that we simply don't have the capacity to admit everybody.

I'm struck by one referral in particular. There's nothing remarkably different about her illness compared to the other 14 on my list. And actually this is something that caught me by surprise during the pandemic. We are taught to deliver patient-centred care – but how do we do that when there are just so many patients who, on paper at least, all appear identical? All needing 15L of oxygen. All with high blood pressure. All needing help. There's nothing especially different about this lady's age, ethnic background, or comorbidities. What's different, though, is that she is a member of staff who may or may not have caught the virus looking after patients. As I approach the ward where she is being cared for, I see the utter panic on the faces of the staff there. I will never forget that look; their concern and despair. Both for their colleague, but also for themselves. "Will I be next?" The staff member needs to be admitted to ICU to be put onto a ventilator. As I go back to the ward where she was being looked after to review the next patient on my list, the teams are in shock. Not long after, management are drafted in to reassure them as best they can, but I can't help but feel there's little they can do.

And so the night continues; a combination of reviewing referrals, liasing with the nurse- and consultant-in charge

about the availability of beds for new ICU patients, and troubleshooting problems with the team for patients already admitted.

This shift was fairly typical of many undertaken by ICU Registrars across the country during the height of the pandemic. It's a curious feeling having our friends and family seeing what we do on the evening news. For the doctors, the job has not changed: it's just busier, and sweatier having to wear PPE.

> *"It's our collective responsibility to make sure that the suffering of coronavirus can spur on something [...] transformative*

ICU nursing has taken the brunt of the workload. The hallmark of ICU is the 1:1 nursing care that patients receive. ICU-training is necessary to work the ventilators, and so, although a whole tranche of nurses and allied health professionals had volunteered to help out, the ratio of ICU-trained nurses to patients remained scarily low: 1:6 at times. And you don't become an ICU nurse if you have a happy-go-lucky attitude. Not being able to provide the level of care that they wanted to was a major source of anxiety for many nurses. Add onto that: the heat and exhaustion of PPE for hours on end; the seemingly disproportionate effect on BME people (a large part of the nursing workforce); and the worry of catching the virus or bringing it home to families, and you can see that the nurses had it worst.

As the ICUs have emptied out over the past few weeks, we breathed a sigh of relief. I remain concerned, however. Concerned about how we will cope with a second peak. About how little we still know about this disease and how best to treat it (remember that 60% of those who required mechanical ventilation in the ICU died). And about the morbidity for these "first-peak" survivors: long-term neuro-cognitive dysfunction, respiratory symptoms, and the psychosocial consequences of going home to a job or a life that bears little resemblance to what they left behind. That said, I am optimistic that some of the positive changes we have seen as a consequence of the pandemic – the increase in physical exercise, the decrease in carbon emissions, or the slowing down of the pace of life – will outlive the virus itself.

The NHS wouldn't have come about were it not for the suffering of World War II. It's our collective responsibility to make sure that the suffering of coronavirus can spur on something equally transformative – perhaps the quest for social justice?

Dr Will Seligman
Specialist Registrar in Anaesthetics and Intensive Care Medicine, London. Magdalen College 2008 - 2014

Nightshift in Newham - the Pandemic Unfolds

Every Monday night I work in the GP out-of-hours unit, talking to those passed on for clinical assessment by NHS 111. At the end of my shift on 16th March, I recorded the impact of Covid-19 unfolding.

The patients' main anxieties were:

1. *Why is the fever so high?*
2. *Why is the fever not settling after four days?*
3. *Why is the cough not settling after two weeks?*
4. *Why am I breathless and when will I need to go to hospital?*
5. *Can I have a swab to be sure it is coronavirus?*
6. *Can I come to the hospital for treatment?*

I answered in simple English to the best of my knowledge at the time.

People felt very anxious, and wanted to come to the hospital for reassurance. I tried to reassure them that it was safer to stay at home unless the breathlessness became severe, and the other symptoms could be managed well in their own home. I focused on the importance of helping their own immune system with rest, fluids, fruit and nourishing foods, keeping warm and avoiding stress.

> ***"Video consultations are here to stay. I hope there is still a place for human contact.***

Six weeks on, the most notable change was that most people were now too afraid to come to the hospital. My patients were worried that Newham was the borough with the highest Covid-19 death rate, at 55 per 100,000.

After 10 weeks, sentiment is split: many patients and staff remain anxious; a small, but growing number, eager to get back to normal. Most consultations are virtual, less than 10% are face to face. Covid-19 has changed general practice; video consultations are here to stay. I hope there is still a place for human contact.

Dr Jim Lawrie
Working at Newham GP out of hours unit
Pembroke College (1977-1980)

Respiratory Reflections from the Frontline

Covid-19 has had far-reaching effects on healthcare and society. One could argue that Respiratory Medicine has been uniquely affected. Our patients are particularly vulnerable, and many have had to shield, with likely downstream consequences. As a respiratory virus, we have treated many unwell patients, and as we understand viral transmission, the phenomenon of the "aerosol generating procedure" (AGP) has significant effects on how Respiratory Medicine is delivered. A major workload includes AGPs such as bronchoscopy, non-invasive ventilation and chest physiotherapy, and there is an ongoing debate as to the "aerosol status" of pleural drainage procedures. In the current environment, prioritising safety for patients and staff is key, and this requires careful consideration in the short and medium term.

During the last three months, our department set up and staffed a High Dependency Unit (HDU) to treat those with Covid-19 requiring additional respiratory support (beyond simple facemask oxygen, and, by definition, requiring AGPs). As our understanding of the respiratory pathology of Covid-19 improves, the treatment of the profound hypoxia associated has shifted towards prioritising non-invasive respiratory support, and avoiding mechanical ventilation. On the HDU, we have treated 13% of all Covid-19 admissions, in comparison to 10% who have been treated on the ICU. To create a unit which is side-room based, fully staffed, and Level 2 PPE capable has been a significant challenge. This required leadership and commitment from a range of healthcare professionals. Consultant colleagues have stepped up to 100% clinical work from part-time or academic commitments, with the support of our Trust and University. Nursing colleagues arguably face the highest burden, spending long shifts in Level 2 PPE with all its discomfort. Physiotherapy colleagues have been instrumental in skilled, non-invasive respiratory support, and in delivering awake proning which appears to mitigate some respiratory failure. Our Specialist Trainees (STs) and Core Medical Trainees have been exemplary, accommodating a significant increase in workload and a reduction in tertiary training opportunities without complaint; without doubt, delivery of HDU care would not have been possible without them. Liaison with colleagues in critical care has been essential, and a wonderful model of inter-speciality working.

While the HDU has allowed us to treat the sickest patients with Covid-19, it has come with its own challenges. Providing holistic care in Level 2 PPE has not been straightforward, with key issues being communication and good quality symptom control. The high mortality of this condition is well recognised, especially in those ill enough to require HDU-level care, and thus particular focus on providing palliative interventions was often needed in parallel to active treatment. Our STs made daily phone calls to families of patients on the HDU, after local guidance rightly restricted visits. One highlight has been our final-year student medics, who in the uncertainty of FIY1 transition have been instrumental in providing tablet-based video communication for patients and families. On several occasions, they enabled the last communication between a dying patient and their loved ones; this is surely the definition of compassionate care. For those concerned about the "snowflake generation", it might be worth reflecting on the resilience shown here. In the midst of this appalling global crisis, there is hope for the future of medicine.

> *"How to provide effective, essential care to thousands of patients with complex, life-threatening respiratory diseases in social distancing remains an enormous challenge*

In parallel to the above clinical workload, there has been significant academic activity, both to maintain existing research, but also targeted at Covid-19. Patients admitted under our care are offered a number of studies (including Phase 3 and experimental medicine studies). Our academic department has broad links with other specialities seeking to improve understanding and treatment of this virus: including radiology, where the interaction between lung parenchymal disease and pulmonary vascular disease is becoming clearer; physiology, where we will address an intervention to improve the hypoxic vasoconstriction response; big data studies to derive accurate outcome-prediction models; and an imaging and behavioural study assessing the unknown long term effects of Covid-19, which will inter-digitate with our planned clinical follow up.

As we (perhaps) move away from the peak of this disease, we are now lifting our eyes to the horizon of re-starting clinical services, while maintaining the Covid-19 facing capabilities we have necessarily acquired. One area of profound concern is the huge burden of other respiratory diseases which have lain apparently dormant during the pandemic. How best to provide effective and essential care to the thousands of patients with lung cancer, interstitial lung disease, airways disease and chronic respiratory infections in the brave new world of social distancing remains an enormous challenge.

Finally, there is no doubt that the substantial increase in work and responsibilities has left the workforce weary, with a desire to "return to normal". However, it is likely that this is the new normal. In facing the enormous challenges ahead, we must continue to prioritise patients and their care in both the clinical and academic spheres.

Najib M Rahman BM BCh MA (Oxon) FRCP MSc DPhil

(University College 1994-2000)
Professor of Respiratory Medicine, Consultant Respiratory Physician, Lead for Pleural Disease, Oxford.Director, Oxford Respiratory Trials Unit, University of Oxford

Reflections of a Radiation Oncologist in Singapore

As a teenager when SARS hit Singapore, I remember it as a scary time for my parents, both doctors. Our dinnertable talk was about split teams in hospitals, N95 masks, quarantine restrictions, and ultimately the eventual fatalities: 33 in total in 2003. 17 years later, I recognise the huge steps taken by our country to prepare for another outbreak – the establishment of the National Centre for Infectious Diseases, creation of an infectious disease task-force, ensuring adequate supplies of PPE. On 23 January 2020, the first COVID-19 case was confirmed in the country, and the various wheels were set in motion; with contact-tracing and quarantine procedures, Singapore was able to keep case numbers relatively low for about a month. However, by mid-March, we faced an influx of imported cases as the pandemic raced across the globe, and the virus spread quickly within dormitories housing foreign workers, mostly young males from the Indian subcontinent working in construction.

Eventually, Singapore went into 'circuit-breaker' mode from 7 April to 1 June. Schools and most workplaces were closed, and residents couldn't leave home except for essential activities or exercise. Incoming foreign visitors were temporarily banned from entering, and returning residents quarantined. Mask-wearing was also made compulsory in public. Meanwhile, we ramped up COVID-19 testing capacity from a few hundred to thousands of swabs a day. Large venues such as exhibition centres were turned into community isolation facilities, and a contact tracing app was made available. Recognising the vulnerability of certain populations, swabs were done for all residents and staff of nursing homes, as well as preschool staff. As of 5 June, the numbers stand at 37,183 cases, 303 currently hospitalised, and 24 deaths (Singapore population: 5.7 million).

Like many others worldwide, Singapore's healthcare system found itself under strain, with leave and overseas travel for staff curtailed, cross-institutional movement stopped, and graduating medical students starting internships early. I currently practice as a Radiation Oncologist at the National Cancer Centre, which is affiliated to the Singapore General Hospital (SGH), the country's largest. With 9 linear accelerators, we have a treatment capacity of around 300 patients a day, accepting referrals from SGH as well as other hospitals. We work closely with our colleagues from other oncology specialties, though in recent months our meetings have shifted to Zoom! Due to the increased vulnerability of cancer patients to complications of COVID-19 infection, we have had to make several workflow changes. First, the screening process: before patients enter the centre, they answer a questionnaire on travel history, fever/flu-like symptoms, or contact with known COVID-19 positive patients; those who answer affirmatively are seen at a Fever Clinic area (where I worked from April-May). Patients assessed to be at risk of COVID-19 infection are seen by staff wearing full PPE, with swabs done and instructions given to self-isolate at home until results return. Separately, we have made efforts to shorten radiotherapy treatment schedules: for instance selected breast cancer patients can be treated with 5# instead of 15#, while single-fraction treatments are encouraged for palliative cases. By and large, patients have been understanding of schedule changes, or delays of their non-urgent follow-ups.

> *"There has been a heightened awareness of others in society*

I wrote about my parents, and the challenges they faced, at the start of this article. Today, I myself am a parent to two young children - I face corresponding difficulty in explaining the upheaval in their lives, not to mention navigating online learning activities! Fortunately, with the fall in the number of community COVID-19 cases, Singapore is reopening its schools and workplaces in phases. There is a sense of cautious relief and a semblance of normality as more people are out and about. Much has been made of phrases like 'social distancing' and 'the new normal'; but more importantly, there has been a heightened awareness of others in society – the previously overlooked cramped conditions in dormitories; the plight of the elderly who live alone. I am especially heartened by the support for healthcare workers as we press on in our roles. May we emerge from this better and stronger, for our patients, families and friends!

Dr Gail Chua, *Associate Consultant at the National Cancer Centre, Singapore. Lincoln College, 2010-2013*

Coronavirus Hits the Kidney

Professor Neil Turner

Yes, we'd heard the warnings of the probability of future SARS-plus pandemics, and rolled our eyes at Trump closing down the unit set up to plan and prepare for one in the USA. But the reality and speed of the global pandemic were astonishing. Medically, mostly only the East Asian countries that had experienced SARS were better prepared. Other countries were lucky enough to encounter few cases.

The UK seems to have been neither of those. But it is striking that our awful position in the world mortality league was not accompanied by such horrifying tales of overwhelmed health services as were heard from New York, New Orleans, and some locations in Italy and Spain. Scotland was lucky in having a lower and later peak, but the effects were still profound. Many nephrologists became heavily involved in general medical care for those with COVID-19, as well as continuing their specialty practice. But in the hardest hit centres, suddenly there was unexpected pressure on provision of acute kidney support.

Not just lung failure

Reports from China, and later Italy and Spain, led to recognition of an urgent need for ventilators, but the impact on kidneys was appreciated only later. In some centres over half of patients admitted to intensive care were reported also to have developed kidney failure. Although this isn't a rare complication of serious illnesses in intensive care units at usual times, this was extreme. It also occurred at a time when the number of intensive care beds had been tripled or more, and capacity was severely challenged. A shortage of dialysis machines, disposables (tubing, filters), and trained staff quickly became apparent. The mortality of patients with kidney as well as lung failure was chilling.

The science

The unexpected incidence and severity of kidney failure in severe COVID-19 infection led to series of hypotheses, and some premature publications, about whether there were risks around exposure to particular drugs, direct infection of kidneys by coronavirus, or thrombosis occluding blood vessels in the kidneys. The better, but still emerging publications around this, suggest not. It seems to be typical acute renal failure as seen in severe pneumonias. Patients become hot and dehydrated on top of other stresses.

The challenge of scale

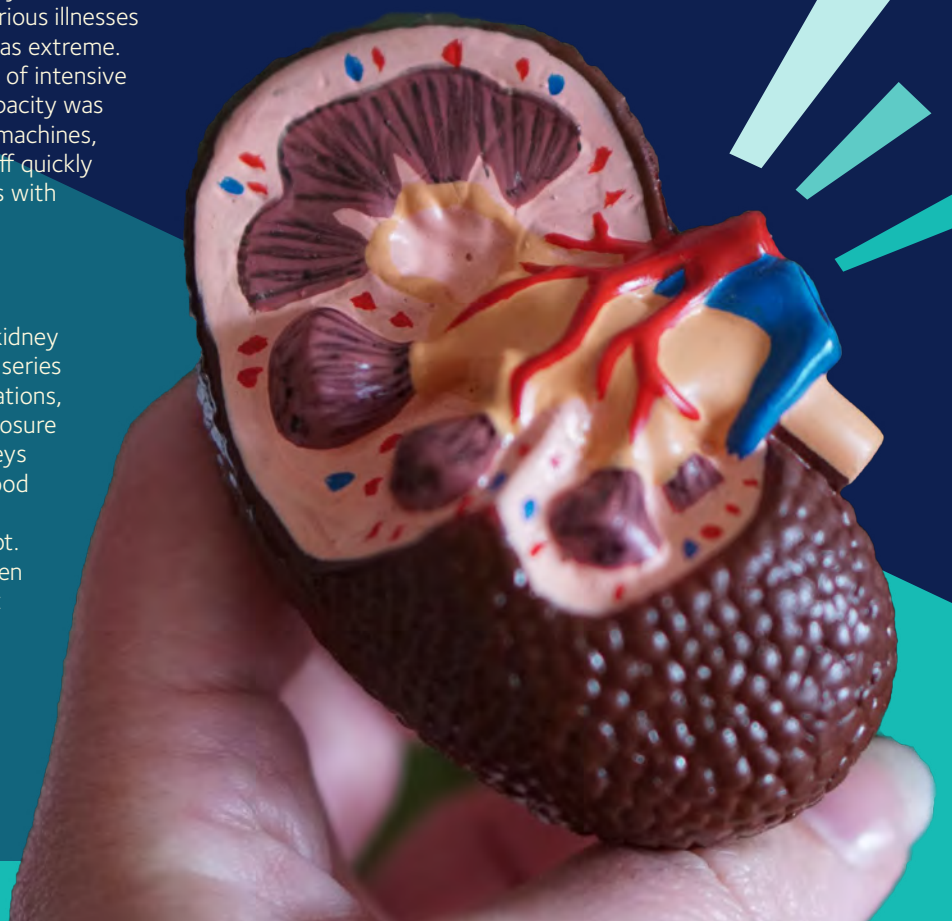
As in every other stressed area in this crisis, the ability and willingness of staff to work differently, take personal risks, and be imaginative in finding solutions, was striking and truly impressive.

A response in several of the most severely stressed centres was to revert to using acute peritoneal dialysis, a technique hardly used in intensive care settings for 30-40 years in the developed world. It is widely used in some long-term outpatients with kidney failure, but generally on a small scale. Scaling it up and implementing it in intensive care required engaging and training a new cohort of staff very quickly. Experience was almost uniformly strongly positive. After that, maybe its use will be reconsidered in other circumstances.

> *"There genuinely had been a strong feeling that the NHS is the right system to rise to the challenge*

Long-term dialysis and transplant patients – and increased vulnerability

One of the privileges of being a nephrologist is that not only do you get involved in intensive care-level medicine, plus some fascinating and challenging less acute diseases, but you also have a large cohort of patients that you look after life-long. These include the nearly 70,000 patients in the UK who are kept alive by dialysis or kidney transplantation, an average of about 1,000 associated with each main Renal Unit. Then there is a cohort of maybe two to three times as many with lesser chronic kidney disease under nephrological follow-up. We know them and their families over decades.



Many of these are at increased risk of more serious COVID-19 infection. Although few transplant patients have died from it, they have probably been particularly assiduous about self-isolation. Long-term haemodialysis patients have fared less well, with very sad figures reported from some local units. However patients on haemodialysis are on average older, more likely to be frail, have a high rate of other conditions apart from kidney disease, and most have to travel to a dialysis unit three times a week for treatment, raising the risk of exposure to the virus. Many patients with less severe kidney disease are at intermediate risk.

Renal patients are generally a very realistic group. Many older or sicker patients were clear that they didn't want intensive treatment if they got COVID-19.

> *"Patients with chronic conditions consistently rate 'seeing a practitioner who knows you' amongst their highest priorities*

Working during the peak

Early on, everything was unfamiliar, uncertain, and quite scary. There were suspicions that protective equipment was inadequate, but even with it, staff were afraid both of catching the infection themselves, and of taking it back to their families. These fears lessened with time, and it is fascinating that many found that working actually reduced their anxiety levels. The diversion of work, but in particular a strong feeling of camaraderie, with all healthcare professions working together with common purpose, seemed powerful factors. There genuinely has been a strong feeling that the NHS is the right system to rise to the challenge.

Teaching is upended

Suddenly teaching is all remote, and much of it planned to be that way if necessary from August/September also. On the plus side, much of it has gone really well. It isn't clear that the level of input to achieve it is sustainable though, and all agree we need to produce good, reusable materials wherever we can. It is also widely agreed that medical students need to be back for clinical experience as soon as possible, and we need to work out how that fits new working arrangements too.

We're painfully aware that not all our students have access to peaceful study zones, or good internet connectivity. Edinburgh has loaned out hundreds of laptops to students in all subjects, but that isn't enough.

Around the world...

...the problem is even greater. In developing countries many students are suddenly at home with only a smartphone, with weak data connections or data payment plans. Video and Zoom are not realistic for them, and low-bandwidth teaching materials are urgently needed. We're trying to link to as many good resources as we can. Please contact me if you have materials to help.

How can we can help with educational support where there's little scope to help with COVID-19 clinically? (Malawi roadside advert)

What next

Academic and research colleagues, and surgeons whose work had stopped, who stepped up to prop up medical services during the acute crisis, will need to go back. Clinical services need to return to doing their routine tasks efficiently in new, distanced and protected ways of working. These are not built into the system at the moment – every encounter and virtual encounter takes much longer. This is a huge challenge if we are to prevent a long slow wave of illness and mortality from reduced recognition and care of other diseases.

Lasting benefits?

Will there be lasting benefits from some of the things that have been rapidly implemented for the crisis? We must hope so. Much more use of electronic media to communicate with patients and with each other. Rapid routes to mounting important research studies. Remote ways to manage consultations. Better any-time teaching resources; less need for there to be separately prepared presentations on acute kidney trouble for Year 4 in 40 different medical schools?

Continuity of care

Remote consultations can reduce attendances, but take as long or longer for staff, and don't work nearly as well if you don't know the patient. Consistency of practitioner looks superficially expensive to managers, but longitudinal studies suggest the opposite, and patients with chronic conditions consistently rate 'seeing a practitioner who knows you' amongst their highest priorities.

Discussing individual risks and compromises with patients has been an important element of the pandemic – most conducted by phone and messaging. That's much harder if you don't know the person you're talking to. Let's be optimistic about how all this will go.

Professor Neil Turner

Professor of Nephrology, The University of Edinburgh
Lincoln College (1977-1980)

In Conversation with Dr William Frankland, Oldest Oxford Medical Alumnus

By Dr Will Seligman

Bill Frankland at The Queen's College in 1933

Sandwiched between Dr Frankland's BBC interviews, an upcoming ITV interview, and a social engagement in two hours' time, I had the privilege of meeting with him, aged 107, in early March 2020.

Frankland's career can be charted chronologically, but to do so would miss its richness, spanning great advances in medical science. He qualified from The Queen's College, Oxford, and St Mary's Hospital Medical School in 1938, before joining the Royal Army Medical Corps when war broke out in 1939. He served overseas, and in Singapore was detained as a prisoner of war (POW). After the war he returned to St Mary's, initially in dermatology, but spending increasing amounts of time in the allergy clinic. This experience piqued his interest in the subject that he would go on to pioneer: popularising the pollen count, as well as introducing double blind randomised controlled trials to this field in 1954. He continued working at St Mary's until his 'retirement' at 65, however he continued to work at Guy's Hospital for the next 20 years.

Frankland reminisces fondly about his Oxford years. Unfortunately, his experience was tainted by his sister being unwell, regular trips home, and even attending her funeral the week before Finals. He came close to not sitting them, but recognises that things worked out 'quite well' in the end, as he was offered a scholarship for medical school in London.

Frankland had access to 'extraordinary' people in London, including Leonard Colebrook, a contemporary of Nobel Prize winner Sir Alexander Fleming, and the first to use Prontosil rubrum (a sulfonamide antibiotic) as a cure for puerperal sepsis. He took a young Frankland to the ward and showed him the temperature charts of mothers being treated for sepsis. On these charts, Colebrook drew a red line at the time the drug was first given. Frankland reports that 'without fail' the temperatures plummeted. Frankland recalls later treating patients with sulfonamides and always marking the new drug on the chart with red ink, to take him back to that pivotal moment and 'remind him that the treatment they were on was highly effective.'

At 107, Frankland is no stranger to questions about his longevity. Without batting an eyelid, he explains it by 'luck, and by escaping death!' Frankland goes on to explain his many close shaves with death, starting when he was born as a twin weighing three pounds. He endured 'three and a half years of hell' at the hands of the Japanese as a POW. His colonel was decapitated in front of him. When the British in Singapore surrendered, his camp became a holding camp for soldiers, before they were sent to work the railways. Frankland recalls being beaten repeatedly. After being knocked out one time, he remembers coming round, confused, and stumbling towards a Japanese officer with clenched fists. Just as one of the guards raised his bayonet to kill him, a senior Japanese officer intervened, saying they needed all the doctors they could get.

Frankland returned to London where he soon collaborated with Fleming, recalling that 'Fleming was not in the least bit interested in patients.' Fleming repeatedly told Frankland that 'bacteria are like us – they want to live,' and hypothesised that as soon as penicillin was freely available, it would be over-used and lead to resistance. These conversations are some of the first documented about antimicrobial resistance.

What tips does Frankland have for the next generation? 'Always listen to the patient' he insists, before regaling, with characteristic humour, how he gave a patient (who had told him he was allergic to fish) his Friday fish before watching him rapidly develop anaphylaxis! As Sir William Osler said: 'Listen to the patient; for he is telling you the diagnosis.'

As I get up to leave, Dr Frankland shows me a letter he'd received that day from a patient who said he had treated her in 1974, asking for advice. He then shows me a scientific paper he is in the process of writing, which he says will be 'his last.'

It is with great sadness that we learned of the death of Dr Frankland on 2nd April 2020 at the age of 108 due to COVID-19. On the occasion of his 108th birthday party just a few weeks before his death, asked about the virus, Frankland commented 'I must confess that I'm not a virus man...however I've been following the news and it's worrying.' Oxford Medical Alumni extends its deepest sympathies to Dr Frankland's family and friends. For those wanting to learn more about his quite incredible life, his biography - From Hell Island to Hay Fever: The Life of Dr Bill Frankland *by Paul Watkins - is widely available.*

Obituaries

Lionel Cartwright (died May 5th 2020)

Worcester College 1974-1980. *Taken from the 40th Anniversary Reunion yearbook in 2020*

One's student years are often said to be the best of one's life. I certainly thrived on the sailing opportunities as an undergraduate, captaining the Blues team, sailing for British Universities and being elected to the Oxford and Cambridge Sailing Society (an organisation that holds its assets in vintage port and, at the time, required a fee equivalent to a guinea a year). Osler House life was full on with rugby, mixed hockey, and making up the numbers in the soccer and cricket teams as needed, bridge sessions and, of course, Tyngewick. Strangely it was house jobs and life in the doctors' mess that I found most addictive, despite the extreme hours and conditions.

After Tibbs Lee and Fellows (with 'Huge Balls up', Andy Northeast etc.), I went to Brighton and was surprised to learn, subsequently, that both my Worcester contemporaries Ian Caldwell and Martin Dyer did junior jobs there. Martin was best man when I married Mandy. He is now a Prof at Leicester. After many years distance we resumed a closer friendship by chance when we discovered that we have properties only 10 miles apart on the Southern Brittany coast.

After a hugely enjoyable A+E job in Shrewsbury (Bishop's Castle rugby clubhouse was based at the Three Tuns which brews its own beer) I joined the Oxford GP training scheme, then run by Peter Tate from Abingdon. Subsequently as a GP in Broadstone, Dorset, I did hospital practitioner jobs in Poole Hospital as a bronchoscopist as well as A+E and Resp Medicine. After spells as a GP Trainer and Audit Assessor I served on the LMC for two separate periods.

In retrospect I have wasted far too much time in committee rooms struggling to overcome the enormous inertia and self-protective conservatism of NHS management. I have been closely involved trying to make the best of 'Fundholding' and the numerous other experiments, disasters and innovations foisted on primary care. Various roles in PCGs, PCTs etc. led to me being PEC Chair and leading a shadow CCG that amalgamated to become Dorset CCG. For several years I was clinical lead for cancer commissioning in Dorset, part of Wessex Cancer Alliance and a member of Wessex Clinical Senate Council (quite ironic given my current circumstances).

Latterly I was asked to develop and chair Castleman Healthcare Ltd, a 'not for profit' GP group providing support services to local practices, three Primary Care networks and a population of about 120,000 based around the community hospital in Wimborne. It was a relief, rewarding and quite unusual to be able to repay our set up loans within a couple of years.

Unfortunately the unexpected diagnosis of AML has meant that I have not been to work since treatment started a year ago. My stem cell transplant appears to have been effective but I have had multiple complications. I am currently an inpatient at Southampton General with intransigent haemolytic anaemia.

Throughout all this I have been wonderfully supported by our children Natasha (SR in A+E) and Isabelle (data analyst in media and advertising) and, of course, Mandy (who became a community matron and nurse practitioner). Our hopes have been to enjoy retirement in France and UK with motorhome, sailing our Cornish Shrimper, gardening, playing bowls and working our way through an extensive cellar of vintage wines.

Addition from Mandy Cartwright (spouse)

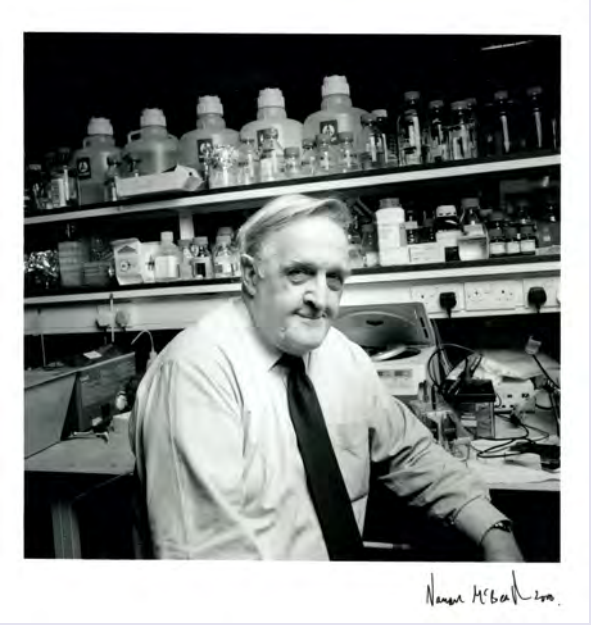
Lionel wrote his submission whilst in hospital during the later stages of his treatment - when feeling very unwell. In the 36 hours following hospital discharge, to come home to die which was his wish, he had the courage and energy to be wheeled around his garden which we had created over the past 30 years. He was able to sit with friends and enjoy a glass of 1997 Bollinger (the first alcohol he had drunk since the stem cell transplant back in January 2020) and say goodbye to his brother Nigel, sisters Joy and Stephanie as he wished. He died peacefully at home surrounded by his family - myself, Natasha, Isabelle and Natasha's partner Matt.

Saying goodbye with the Covid restrictions - we are only allowed 10 people at his funeral - our aim as a family is to organise a celebration of his life at some point in the future. If there is anyone in his group who would like to be made aware of the celebration of his life event, I can coordinate this via OMA or my contact details are below. There is so much to do and arrange at this time. I will do my best to stay in touch. Take care and hugs, Mandy

Contact: ajc11@hotmail.co.uk
8 Moor Road, Broadstone, Dorset. BH18 8BB

Eulogy for Professor Sir David Weatherall

Delivered 15th July 2019 at his Service of Commemoration Christ Church Cathedral, Oxford



It is a great honour to be asked to speak at this memorial. There are many others here who could have spoken about David Weatherall, and I am sure would have liked to. So I do feel truly privileged. I have been asked to talk about David as a mentor and as a doctor.

I remember the first time I worked out who Professor Weatherall actually was. I was a clinical student at the John Radcliffe Hospital in Oxford in the late 1980s. I was used to the consultants hurrying self-importantly along the corridors on ward rounds, followed by a huge entourage of junior doctors and medical students. However, I had also noticed several times a short, slightly podgy man, ambling along the edge of the corridors on his own. He wore a mildly grubby white coat, with his hands usually tucked in his trouser pockets. He often looked preoccupied with something or other, but he always gave you a smile. I presumed he was a janitor or porter or biochemist or something. I was astonished when I discovered that this was actually Professor Sir David Weatherall. He seemed so... ordinary. But of course, this summed him up in many ways. He was an ordinary man who did extraordinary things. He had no airs or graces, and didn't like pomposity, but was remarkably humble, despite his many incredible achievements.

I became President of Osler House Club, the Medical Student's Union, and so got to know him better, especially when I sat on the review of the medical school curriculum, which he chaired. It met every couple of weeks, and I remember a few occasions when a couple of the senior consultants on the group, who clearly did not get on, were at loggerheads, and things were becoming very heated. Prof Weatherall would decide there was something else more pressing on the agenda that we needed to discuss, and set the difficult question aside. And somehow, when the committee met again two weeks later, the critical issue would seem to have been magically resolved, and everybody would appear to be happy. What he did, or said to them, I will never know - but it obviously worked.

For my medical student elective, I did some research on malaria in Mozambique. I became bitten by the bug for clinical research in the tropics. So much so, that I decided I was going to turn down David Weatherall's house job, the Professorial house job at the Nuffield Department of Medicine, and go straight back to Mozambique after finals. The under-five mortality rate was 1 in 3, and it seemed to me that was much more important than looking after the elderly and infirm of Oxfordshire. I went to see Weatherall in his office to tell him my plans. Many seniors would have laughed at me for being so naïve, or shouted at me for being such an idiot, withdrawn the job offer, and refused to have anything to do with me. But Prof Weatherall listened carefully. He smiled to himself as he took a few moments to reload and light his pipe, and through clouds of smoke gently explained that I should probably do a bit more clinical medicine in the UK first; I might actually learn something doing his house-job, and I should get the Membership before heading off overseas again.

I have often reflected on how stupid I had been; and how lucky I was that he responded so well to my crazy idea. I didn't know it at the time, but David had a bit of a rebellious streak himself. As a junior doctor, he famously got into trouble with the British Army over his first BMJ Publication: the child of a Nepalese Gurkha who had Thalassaemia. He was told it was "bad form" to tell the enemy that there were defective genes in the "pukka Gurkha regiments".

He also loved to cause mischief with the University powers. So perhaps this explains why he handled me so sympathetically. Over the years I found that whenever I had big career decisions, I could talk them through with him. He gave similar mentorship and support to many others, many of whom are here today. But for me it wasn't just career advice. He was supportive in many other ways. When my brother was dying of cancer, in his forties, and I needed someone sensible to talk to, David was there for me.

I was one of David's last housemen, and saw how wonderful he was with his patients. Despite his many achievements and accolades, Prof Weatherall always saw himself first and foremost as a clinician. He had great clinical "nouse"; somehow having a feel for what might be wrong, whatever the tests said. On ward rounds he would entertain us with the latest shenanigans from the university authorities. This always felt strange, because to us he *was* the university authorities.

I remember he was incredibly gentle with a young Muslim man who had just received a bad diagnosis, explaining things patiently to him and his family.

The patient I best remember him looking after was the author Roald Dahl, who was admitted under Weatherall with myelofibrosis - a pre-cancerous blood disorder of the bone marrow. I wrote about their relationship in my book, *Roald Dahl's Marvellous Medicine*.

They enjoyed each other's company. Weatherall would visit the ward at the end of the day and they would discuss literature and music, arguing about who was the greatest - Beethoven, in Dahl's opinion, or Mozart in Weatherall's. Professor Wolfgang Amadeus was one of several nicknames Dahl had for Weatherall.

Professor Sir David Weatherall outside the MRC Weatherall Institute of Molecular Medicine in 2016

"He's an alchemist," Dahl said to me one evening on the ward. "That's what he is – a flipping alchemist!' (actually, that wasn't the exact word he used, but given the occasion, and the location, I thought I'd better modify slightly). Dahl had suffered a marked deterioration in the morning, but Weatherall had seen him at lunchtime, and made some changes, and Dahl had rallied in the afternoon.

"He mixed the potions," Dahl continued, "juggled with them, and here I still am! I think I almost bought it, you know."

I had seen Weatherall do this before, when someone was deteriorating, and the junior staff were getting panicky. He would come along and gently examine the patient with two slightly podgy hands on the abdomen, breaking all the rules we had learned as medical students. He would offer an encouraging word or two. Suggest a minor change in the medication. And everything would get better. At least for a while.

For Dahl the remission did not last too long. He had an incurable form of leukaemia, and even the alchemist couldn't save him. I was on call one night in late November 1990, and Dahl became critically unwell. I called Prof Weatherall into the ward, during the early hours of the morning, but he did not seem to mind at all. In fact he said he could not remember the last time he had been called in at night. He examined the patient, and made a decision to start palliative care, and sadly by lunchtime it was all over. I found the whole thing a bit distressing, as you can imagine. I was slightly anxious when I got a call at the end of the day to go across and see Prof Weatherall in his office. I need not have worried. David just wanted to see that I was OK; he made me a coffee himself, and we talked it all through. I don't remember many other professors in Oxford making me a coffee like that.

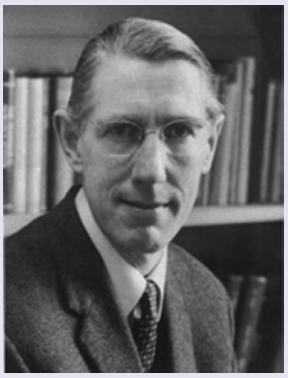
After Dahl died his wife Liccy set up a medical charity, and Prof Weatherall became one of its advisors. Today Roald Dahl's Marvellous Children's Charity provides young people who have an incurable illness with the complex care they and their families so desperately need, through specialist nurses – more than 75 across the country. This includes 12 nurses supporting children with blood disorders such as sickle cell and thalassaemia, conditions that David was especially interested in. And it was because of David's involvement in this charity that his wife Stella and son Mark have asked that any donations today be made to that charity.

Like many people here today I miss David. I miss him a lot. I was fortunate to have lunch with David and Stella at their home, just before his last hospital admission. He was in good form. He'd been working on a manuscript that morning, and spent lunchtime teasing me about the mediocre performance, the night before, of our beloved Liverpool Football Team. I was collecting a picture that Stella had painted for me, and they'd bought a rather lovely frame for it. I tried to repay them. It was quite expensive. But David would have none of it. "Spend the money on a present for your daughter," he said. She was 15 and had recently come out of hospital herself. Just as I was leaving I made one last attempt to give him the cash, but he thrust it back at me. "Go on, now. Bugger off!" he said, as he closed the door in my face. I still don't know whether to laugh or cry that these were the last words he said to me.

Tom Solomon,
Chair, Neurological Science and Director, NIHR Health Protection Research Unit in Emerging and Zoonotic Infections, University of Liverpool; Hon Consultant Neurologist, Walton Centre NHS Foundation Trust

This Eulogy complements the many tributes written about Professor Sir David Weatherall, including those from his colleagues in our previous edition of Oxford Medicine. *Click on the 'Download May 2019 Oxford Medicine' link on this page.*

https://www.medsci.ox.ac.uk/get-involved/alumni/publications



Credit: Experimental Physiology

Peter Matthews (1928–2020)

Peter Bryan Conrad Matthews was born in Cambridge, and first studied Natural Sciences at Cambridge, before completing his medical studies in Oxford. In 1957, he came to Christ Church Oxford as a Lecturer; during this time he initiated his lifelong work on muscle receptors and motor control. He received his DM in Clinical Medicine in 1959. From 1961-1977, he was appointed University Lecturer at the Laboratory of Physiology.

Peter demonstrated quantitatively that the primary endings of muscle spindles measure length and rate of lengthening muscle, and the secondary endings measure length only. He designed and personally built two essential bits of equipment: a feedback-controlled electromagnetic muscle stretcher, and a frequency meter that displayed the rapidity of nerve firing graphically on a screen. This display enabled him to uncover the existence of two types of fusimotor fibre. In 1964, he detailed his full findings in Muscle Spindles and Their Motor Control, which continues to have wide influence today.

Later with Guy Goodwin and Ian McCloskey, Peter showed that muscle spindles actually affect consciousness, for example, providing us with some of the information needed to know where our limbs are. His monograph for The Physiological Society, Muscle Receptors and their Central Actions, published in 1972, remains a model of scientific writing and insight.

In 1973, Peter was elected a Fellow of The Royal Society. In 1987 he was appointed Professor of Sensorimotor Physiology, one of the first ad hominem professorships normally reserved for Heads of Departments, in recognition of his pioneering scientific distinction.

Outside of his research, Peter was renowned for running a Morris Minor, cycling everywhere he went in Oxford with a homemade helmet, and for being an innate recycler, having accumulated a large collection of rescued items converted into practical household goods.

He is survived by his wife, Dr Margaret R Matthews, Emeritus Fellow at Lady Margaret Hall, whom he met while reading Medicine at Oxford, and their two children, Hugh (Reader in Sensory Physiology at Cambridge), and Clare, a consultant physician.

Professor David J. Paterson

The following are a few reminiscences from former colleagues – for a full collection, please see Peter's original obituary (linked below):

"I first met Peter Matthews at a meeting of the Physiological Society in Oxford. He was doing a 'Demonstration' during the meeting, carrying out an experiment on cat muscles spindles. This was a seriously demanding live experiment, carried out on his own. He was perfectly happy to have streams of visitors coming in and out of his lab, and positively fizzed with almost school boy enthusiasm as he explained what he was finding. Later, when I was a postdoc in the Department he was unfailingly kind and supportive and I was a subject for at least one of Peter's human experiments!" (Stuart Judge, Emeritus Reader)

"He was very kind to me as a new member of the Laboratory and he gave me much appreciated advice on a wide range of academic topics. For my part, in an age of mega-research groups, it was so impressive to read the world-leading papers Peter had produced in his "mini lab" and see his productivity go relatively undiminished with time. He always had time to discuss his data with colleagues like myself who were relatively ignorant of the subtle details and had a great ability to illustrate his superb work in the context of human neurophysiological function. Indeed, he was a great example of how timeless top class research in Physiology is for Medical practice." (Trevor Powell, Emeritus Professor).

"Peter was characterised by his great intelligence, excitability, enthusiasm and a liking for intellectual challenges. His manner was forceful perhaps because he was impatient to get to the point, something that he with his quick mind could do much faster than other people. He was an excellent teacher and many will remember the clarity of his live demonstrations of spinal reflexes for the undergraduates [...] Peter was indeed an exceptional person; Hilary and I were privileged to know him". (Michael Brown, Emeritus Fellow).

A fellow clinical student of Peter's and long-term friend writes: "We were on a ward round with the Professor of Medicine. There was a patient with a neurological problem, and the Professor turned to Peter and said 'Here, Peter, you report this case, you know more about this than I do,' whereupon Peter did just that! My respect for Peter's knowledge went up, as did my respect for the Professor's honesty and modesty (who was probably Prof Witts)".

The full obituary can be found on the DPAG website: **https://www.dpag.ox.ac.uk/news/peter-b-c-matthews-frs-obituary**

Simon Frostick (1955-2020)

Simon Frostick, who died on the 8th February after a long illness, had served the University of Liverpool as Professor of Orthopaedics since 1995. He was born in Chatham, and graduated in Medicine from Oxford in 1978. Training in trauma and orthopaedics at Nottingham and Oxford, he developed an interest in shoulder and elbow surgery, a field in which he went on to earn an international reputation, specialising in arthroscopic surgery, oncology reconstruction and peripheral nerve repair. A number of university colleagues have benefited both from his clinical advice along with his surgical expertise.

At Liverpool he was Head of the Department of Orthopaedic and Accident Surgery, subsequently the Department of Musculoskeletal Science, before moving with his research group into the Department of Molecular and Clinical Cancer Medicine.

Simon was awarded many professional honours and titles, including election to a number of international orthopaedic societies. He was an early advocate of the multidisciplinary team in upper limb surgery. His research covered many aspects of orthopaedic practice and its underpinning basic science, from molecular biology to neuroimaging.

As the founding chair of the Research Ethics Committee for Physical Interventions, as it was first known, Simon made a substantial contribution to the governance of human research in the University.

Simon had a lifelong interest in orthopaedic education and training. He served as the Orthopaedics Training Programme Director for Merseyside, Programme Director of the Liverpool Master of Surgery (Orthopaedics), and Chair of the British Orthopaedic Association Training Standards Committee and the Trauma & Orthopaedic Certificate of Eligibility for Specialist Registration (CESR) Committee, among many other roles. He regularly ran advanced upper limb surgery courses in Liverpool and internationally. Simon had many international collaborations, most recently with the University of Malaya in Kuala Lumpur, where he was working to design a programme of orthopaedic training. A large network of his former trainees practice orthopaedics across the world.

He and his wife Margaret (his long-time research collaborator at the University) met as students, becoming parents to four daughters, and in recent years proud grandparents.

Simon's work is remembered and continued by the Frostick Foundation (**www.thefrostickfoundation.org**), established last year to support research, education and training in orthopaedics at Liverpool.

Simon's family have set up a tribute page: **https://simon-frostick.muchloved.com/**

Words by Professor Graham Kemp and Professor Peter Clegg (kindly reproduced from University of Liverpool website): **https://news.liverpool.ac.uk/2020/02/14/obituary-professor-simon-frostick/**)

Sir James Gowans, KBE, FRS, FMedSci, FRCP (1924-2020)

Sir James Gowans, known universally as Jim, has died shortly before his 96th birthday, peacefully at his family home in Cumnor on 1st April. His death was not due to Covid. Professionally, he was a colossus in two major spheres. He established the fundamental role of the small lymphocyte as first-responder in specific adaptive immunity, and he made a sizeable impact as a top director and policy-former of medical research in the UK and internationally. Throughout his working life and then right through the later days in his first-floor eyrie at home in retirement, he notably sought out bright scientists of all ages and stages. He made opportunities to discuss their science with them – and to grill them on it, and support them. In the more personal realm, he was a much cherished and cherishing husband, father and grandfather, always up for a bit of tomfoolery with a youngster on his knee. We extend to Moyra, his widow following nearly 64 years of marriage, and to his family, our heartfelt condolences.

How did he win for himself such a respected scientific stature? After his medical training and qualification, of which more below, he selected medical research as the bedrock of his intellectual interest and career. He arrived at the Dunn School of Pathology in Oxford in 1947 to undertake a DPhil with Sir Howard Florey. Before starting his lab work, Florey insisted he become "house-trained" by taking the undergraduate Honours course in Animal Physiology. He duly obtained a First, having matriculated at Lincoln College. For his DPhil he studied whether in mice the action of the polycyclic peptide broad-spectrum antibiotic nisin is enhanced by concomitant inflammation. "Competent but just handle-

cranking" was Jim's own understated description of his own research. After a post-doctoral year away at the Pasteur Institute, which may have sparked an interest in immunology, he returned to the Dunn School. According to the (probably apocryphal) story, Florey in 1953 allocated the macrophage to George Mackaness, the neutrophil to Henry Harris and the lymphocyte to Jim Gowans. By cannulating the thoracic lymph duct of rats, applying a careful balance-sheet to the lymphocyte flux there, and adapting the then-new technique of radio-isotope labelling to track cells in vivo, Jim incontestably demonstrated the continuous recirculation of small, non-dividing lymphocytes between blood and lymph. He demonstrated their function in initiating antibody, graft-versus-host and immune memory responses, and showed that Medawar-type transplantation tolerance in the whole animal is reflected in the tolerance properties of the body's lymphocyte pool. Jim enjoyed a warm and admiring friendship with Peter and Jean Medawar, who had both also done DPhils at the Dunn School, though earlier than him. His scientific reputation soon went international and stratospheric. Having earlier held the Staines Medical Research Fellowship at Exeter College, he now received secure research funding by landing a Royal Society Henry Dale research professorship, associated with St Catherine's College. He was invited to set up the MRC Cellular Immunology Unit (Director: 1963-1977) which prospered and became a magnet both for distinguished senior visitors and for newbies – including myself! This trivially brief sketch of his lab science period will have to suffice here. Much better and fuller accounts have been written by Jim himself, and by Weissman. A Biographical Memoir will be duly prepared for him as a Fellow of the Royal Society: he was elected in 1963.

Let us revert to his training and his experiences as a medic. Why did he go in for it initially; and then why quit soon out, at least as a practitioner? The interviews with him that Dr Max Blythe recorded in the mid 1990s are very engaging and revealing but leave much room for speculation. Here is mine. Medicine had not been in the family. His father, John, an only child just as Jim was, had been a hospital path lab technician, with wide-ranging and very experienced skills first in the London Hospital, then in Sheffield, and from 1928 in South London (Croydon). Jim knew all about the smells of a path lab and of the associated rabbit colony as they were wont to strike the nose in the pre-Health and Safety era. Large diphtheria and typhoid outbreaks in Croydon in the 1930s had affected many locally, including his family. At his school, Whitgift, his interest in biology was ignited when a young lady teacher, Frances Allen, appeared as a refreshing stand-in while the regular male teachers went off to World War Two. Not until then did a medico-scientific career beckon. Following unsuccessful attempts elsewhere, he gained a place at Kings College medical school in 1942, commuting daily to The Strand, dodging the V1 doodlebug bombs and fire-watching from the parapets. He found the medical education there, under its strained circumstances, at best ordinary. But he was intellectually fired up by the Friday Evening Discourses of the Royal Institution, into which he managed to wangle his way. There was one on penicillin, by then already transforming clinical treatment of bacterial infections, which was delivered by Florey, his future supervisor and lymphocyte-allocator.

Group of medical student volunteers from Kings College London – Jim Gowans front row right

Then came the following potent experience in war-stricken Europe: "...overall my most vivid memory remains to this day [51 years later], the time I spent on medical relief in the concentration camp at Bergen-Belsen (April/May 1945)". Just eight months into his clinical attachments he volunteered, along with 97 other medical students, to attempt to deal with the appalling, famine-stricken, typhus-ridden, diarrhoea-soaked, stench-filled huts stacked with thousands of unburied dead. The scale of the deliberate human degradation was unimaginable. They tried treating the starved skeletal patients with protein hydrolysate or with rice-and-sugar Bengal Famine Mixture. Many nevertheless still died from pulmonary oedema.

Five days after arrival, Jim spent his 21st birthday at Belsen. He reflected, half a century later: "The story is left hanging in the air for me. I've never come to terms with Belsen as a bit of history." Later, thinking over the three weeks he spent there, he could not assure himself that his medical interventions had made all that much difference. Something of the same flavour of dissatisfaction emerges during his next two years completing his clinical training, and again when, as a patient himself, the boot was on the other foot. He somehow contracted tuberculosis in 1949, which was treated with bed-rest and plenty of time to read, at the Slade and Churchill hospitals with convalescence thereafter in Cornwall. Might he have left medicine because he was ambitious to make a distinctive and big difference? He put his money on making a success of research, which he hoped might satisfy him better. Good bet!

In 1977, 30 years after arrival at the Dunn School, he put the tiller hard over and tacked to a new career course, surprising many. He had a very long list of other job offers, including in 1963 the Chair of Pathology at the Dunn School, prestigious posts in the USA and

In Snowdonia – photo by Bent RolstadCollege

the headships of several Oxford colleges. Instead he chose the Secretaryship (chief executive) of the MRC, in an office then at Park Crescent. One weekend, he tipped tray after tray containing thousands of his microscope slides into big black plastic dustbins in the corridor outside his Dunn School lab. "I began to wonder if I would ever do anything so distinctive again". He also destroyed his lab notebooks: no turning back. His new mission included fighting the MRC's corner in overturning the "ludicrous Rothschild proposals" , and thereby maintaining the MRC's independence and its budget. During his ten years as Secretary he did successfully accomplish this, countering very powerful political pressure pro-Rothschild. Prominent amongst his many other initiatives were (i) the double-blind trial, directed by Prof Nicholas Wald, on prenatal supplementation with folate to prevent neural tube defects in the developing foetus; (ii) setting up in 1985 the Voluntary Licensing Authority after the Warnock Report on in-vitro fertilisation and human embryology research. Both faced very strong public opposition, sometimes with personal abuse that he had to endure.

Space does not permit a more systematic account of his leadership of the MRC and of the Human Frontiers Scientific Programme, of which he became the first Secretary-General (1988 to 1993, in Strasbourg). His papers in the Bodleian archive contain fuller details, with autobiographical insights. Nor is there room for more than a too-tangential reference to his many honours, trusteeships and work for charities, nor the very wide range of his pastimes, interests, and enthusiasms beyond the workplace. He was a bibliophile, especially collecting Darwiniana and books ornithological; he loved opera, requesting "O Mio Babbino Caro" for his funeral service. In his earlier years he was an accomplished athlete, sportsman and climber. His very considerable height gave him a natural advantage in the high jump and at cricket as a fast bowler. The accompanying photo shows him on a hill-walk up Snowdon, to which he hospitably invited his lab group in 1972.

I owe Jim far more than mere words can convey. For a life well lived, I can think of no better role-model than that of Jim Gowans.

Simon Hunt

Emeritus Lecturer in Immunology at the Dunn School of Pathology, Oxford University, and Emeritus Fellow of Keble College.

simon.hunt@path.ox.ac.uk

In Memoriam

Dr Brian Gardner *died November 2019 (Queens College 1967-73):* https://spirit-charity.co.uk/remembering-brian-gardner-consultant-in-spinal-cord-injury/

Dr Gilbert Lewis *died January 2020 (St Johns 1956-1962):* https://www.socanth.cam.ac.uk/about-us/news/dr-gilbert-lewis-1939-2020

Dr Jason Victory *died May 2020 (Merton 1988-91)*: www.pioneermedicalgroup.co.uk and www.justgiving.com/fundraising/jason-victory

Mr John C Clothier *died January 2020 (Magdalen College 1962-70)*

Dr Leonora Helen Goulty *died January 2020 (Somerville College 1944 -51):* https://www.familynotices24.co.uk/low/view/4732174/dr-leonora-helen-goulty-frcgp

Dr Martin Claridge *died December 2019 (New College 1945-51)*

Dr Rosalind Bearcroft *died January 2019 (Somerville College 1946-49)*

Dr Rosemary Millard *died December 2019 (Somerville College 1950-55)*

Prof Thomas (Tom) Arie *died May 2020 (Balliol College 1952 – 60):* https://cambridgeoapconf2010.wordpress.com/speakers/prof-tom-arie/

Please contact the OMA team (oma@medsci.ox.ac.uk) regarding any obituaries of friends or colleagues you would like to be considered for entry into the next edition of *Oxford Medicine* (Dec 2020).

News from Osler House

Whilst our namesake, William Osler, lived and died in the era of the Spanish flu, Osler House is now in the midst of another pandemic. As a result, the physical activities of both the building and the committee have been dramatically reduced, but the contributions of Osler House to the hospital and the community are more deeply felt than ever.

Our sixth year cohort have accepted accelerated graduation, with many acting in the newly-created 'interim FY1' position to facilitate patient care. Alex Mafi, sixth year and former President of Osler House, sees the position as a fresh challenge: "For us, it has been a time of great uncertainty and at times worry, but overwhelmingly a time of excitement and fresh challenge. While a large proportion of us have missed out on our medical electives as a result of the pandemic, we have relished the opportunity to finally put the skills and knowledge we've gained over the last six years to good use, at such a defining moment in the NHS's existence."

Meanwhile, our more junior medical students are involved in a number of initiatives that aim to meet the increased demand for healthcare professionals, while abiding by the British Medical Association's directive to avoid patient-facing roles. This includes assisting ICU staff with donning and doffing personal protection equipment, remote drug preparation for ICU patients, and triaging of Accident and Emergency arrivals into 'respiratory' and 'non-respiratory'.

The pandemic has demanded the implementation of remote communication systems to combat visiting restrictions. Our fourth years have helped to facilitate video calls between our youngest patients in neonatal ICU and their parents, while I and a number of my fifth year colleagues have been acting as part of the ICU family liaison team - a daily update service for relatives of patients admitted to ICU with COVID-19.

> *"I have been humbled by the resilience and creativity of my fellow students*

However, the impact of COVID-19 spreads far beyond the hospital site. Our students have also participated in a number of community initiatives which aim to provide help and telephone check-ins to vulnerable adults, while others have been acting as administrative assistants attached to primary care practices.

Research is another crucial prong of the COVID-19 response: a number of Osler House members have facilitated the delivery of the ChAdOx1-nCov19 clinical trial, and we look forward to reviewing the outcomes of the multitude of personal research projects and healthcare start-ups which have been initiated by Osler members in response to the crisis. In these uncertain times, it is just as important for us to look after our own wellbeing in order to better facilitate our efforts towards others. Many of our students have taken the opportunity to spend time with family. The Osler House Committee has set up the Osler House Student Network in order to virtually connect self-isolating medical students in Oxford with others willing to lend a helping hand. Meanwhile, Tingewick Firm have been looking after their physical wellbeing and raising money for charity by cycling for NHS charities, with a target of £14,400, which you can read about in the next article.

Although it is difficult to imagine what the immediate future of Osler House will look like, I have been humbled by the resilience and creativity of my fellow students and our wider NHS community in these unprecedented circumstances. I would like to thank the current Osler Committee for all of their hard work over the last year, and am assured in the knowledge that the future leadership of Osler House will confidently handle these strange circumstances.

Dervla Carroll
Osler House President, 2019-20
(St Anne's College 2015-Current)

Clever Rita created 30 face masks to raise money for Tingewick Charities

Tingewick Firm Cycle Challenge and Charity Single

As a group of 21 medical students from Tingewick Firm 2020, we wanted to do our bit to support our NHS in this crisis.

We set ourselves the challenge of cycling 100km for each of the 72 years that the NHS has been around - 7200km. Our plan was to approach the challenge in small chunks, within the allowance of our daily exercise, and abiding by social distancing guidelines. We started on April 13th and managed to complete it within a month, having collectively cycled 7,223.4km; as the crow flies, that's further than from Oxford to Cuba.

We aimed to raise £14,400, to represent £100 per year of the NHS so far, and £100 for each of the next 72 years. We were thrilled to have raised £14,479 in total, and cannot be more grateful for the kindness of individuals that have supported us. Over the course of the year, all the money that we raise will be going to the Oxford Hospitals Charity, which supports both patients and staff, and SeeSaw, an essential local charity offering grief support to children and young people in Oxfordshire.

Continuing our efforts to raise money for these two incredible causes, we've recently put together a charity single. We had a lot of fun making it so we hope that people enjoy the music, and that it makes them smile. You can find the single on YouTube here: **https://bit.ly/2Ym1sAW**

If you enjoyed the music, then please do consider donating! **https://donate.tingewick.org/t/charity-single**

Rita (Bradley Johnson)
Brasenose College
2016 – Current

To find out more about us as Tingewick Firm, and what we're up to this year, visit: **www.tingewick.org**

Instagram: **rita_tingewick**

and Twitter: **@RitaTingewick**

The strangest of times – reflections on Covid from the Medical School

I'm not sure when I first heard the word 'Covid'. I remember vaguely talking about it in our half term holidays, but just thinking "those poor people in Wuhan", without a notion of where we were heading. I'm not sure when my penny dropped – or maybe it never really dropped, but just slid inexorably over the next few weeks and months...and continues to slide as the scale and duration of the crisis fully emerges.

We are in the strangest of times. It is rare indeed that we realise that we are living through history, and many of our students, faculty, NHS and University colleagues have kept Covid-diaries – as Philip Larkin said: "Where can we live but days?".

At some point, I too will look back over our weekly student update: the first one that explained the closure of clinical placements; the 'treading water' ones as we held our nerve, waiting for the first surge to hit and pass; the change in tone as we started to think of returning to the wards, clinics and GP practices; and then more recently, detailing the logistics of making that return real, meaningful, and safe.

> *"....students see themselves as part of something greater than before...*

I suspect Covid will dominate my time as DCS, but what will endure more than the upheaval, worry and risk management is the response of our students. I suspect each of them have been through all the range of reactions - and sometimes some of them several times over. Certainly, my own cycle of responses has been part of the exhaustion of living through it – but their resilience, good humour, courage and selflessness has been extraordinary to witness.

It was gratifying to receive emails from external examiners praising our students' finals performance, or GMC data speaking to their career trajectories - but nothing compares to the unsolicited and sometimes very unguarded emails from colleagues across the Trust and county, writing to thank the Medical School for the help that our students have provided. Across the piece – from the Emergency Department to ITU, to swabbing and driving, to babysitting and delivering food packages, they've rolled up their sleeves and dug in. And for the many who couldn't volunteer in that way, for whatever reason, they had their own burdens to bear – and being the medic in the family (even a vestigial one) can come with its own expectations and pressures. They bore them so well, supporting those around them and fielding innumerable questions, to which no-one has the answers. I am so proud of them all.

> *"....we have learned so much and all grown closer these last few months...*

And so to the return. We are re-opening to clinical placements at the beginning of July and (risk assessment paperwork aside) I can't wait. Yes, it will be a different world of training – social distancing, PPE, lack of access to certain high-risk areas but greater reliance on virtual learning and simulation - the list is endless and the change unprecedented, but a school is nothing without its students, and our eyes are fixed on a new normal. There are things that we will miss for a little while, but there have been great positives from this too: the national effort of the Medical Schools Council and all its members, and the camaraderie, sharing, wisdom and support has been such a joy. "We few, we happy few, we band of brothers" has rung true these last few months (gendered terms aside...), and that new normal is very welcome indeed. The team effort from our faculty and NHS colleagues has been phenomenal; we have learned so much and all grown closer these last few months. And all our hospitals see our students very differently now – as invaluable members of the team - and crucially the students also see themselves as part of something greater than before. The new normal brings with it a new culture to be celebrated and developed, and there is something very exciting about the turning of a tide.

I wonder what my next piece for *Oxford Medicine* will say. How much through it all we will be, what I will be able to report on as already past, and what we will be looking forward to next – because we will always be looking forward. No matter what's happening or what defines the concentrated focus of the here-and-now, there is also, and always, a horizon. Beckoning and somewhat uncertain, but one full of promise – and full of our bright, kind, and committed students. We'll see you there.

Dr Catherine Swales,

Director of Clinical Studies, Oxford Wadham College (1997-2000)

Personalised Medicine: Beyond Borders

The Centre for Personalised Medicine expands its wings

You are probably aware of the Centre for Personalised Medicine, which is a partnership between St. Anne's College and the Wellcome Trust for Human Genetics. What you probably don't know is that, by securing a second round of funding, it's now further expanding its wings internationally.

At its core is the communication and engagement between students, academics, clinicians and the public to explore the benefits and challenges of personalised medicine. To this end, it runs regular events throughout the year ranging from small college-based lectures to conference series, public lectures and international symposia, most of which are open to everyone. Founded in 2013, it quickly expanded its events and its impact on the Oxford community. Amongst its strengths lie its external advisory board and steering group, which includes world-renowned names such as Dame Mary Archer DBE, Professor Sir John Bell, Professor John Todd - director of the Wellcome Trust for Human Genetics - and Professor Julia Hippisley-Cox.

> *"It is much more important to know what sort of patient has a disease than what sort of a disease a patient has*
>
> **William Osler**

Building even stronger international ties, in June 2019, the Centre for Personalised Medicine organised a summer school in Padua, Italy entitled "Translational and personalised medicine: From bench to bedside". It also established the Dr Stanley Ho Scholarship programme welcoming young medical science investigators from the University of Macau and the Chinese University of Hong Kong to the University of Oxford to learn new techniques and establish international collaborations.

So what shall we expect next?

During these difficult times with Covid-19 it's organising its events virtually. There are some interesting talks on the pandemic, such as by Professor KARI Nadeau on "Covid-19 – Immunity in Progress" and by Dr Saad Omer "Consequentialist research in a pandemic: the case of Covid-19". In addition, there is an online library of Oxford Covid-19 talks featuring the development of the Oxford Covid-19 vaccine in a talk by Professor Adrian Hill entitled "A rapid vaccine response to Covid-19: Progress and prospects". All this is accessible via the CPM website at https://cpm.well.ox.ac.uk. Notably, its annual Lecture 2021 is going to be an event not to miss, featuring Professor Jennifer Doudna, leading the CRISPR field of genomic engineering. Save the date for 25th February!

There is no doubt that the field of personalised medicine is very promising. However, translating personalised medicine from concept to the clinic requires further scientific, clinical and policy-based research and concurrent exploration of the ethical, legal and societal implications, which the CPM focuses on. Stay tuned in its next events!

Dr Zoi Alexopoulou,

Lecturer in Medical Sciences
(St. Anne's College, 2006-2012)

Oxford in Berlin 2020

40 years on from our post-finals dinner at Studley Priory, Stanton St. John - where they had filmed *A Man for All Seasons* - who would have believed that in 2020 we would be meeting virtually, and with no dinner! I have "zoomed" in from Berlin, where I am currently living. In my role as the University's Pro-Vice-Chancellor for Brexit Strategy, I took steps to mitigate the impact of Brexit, because of the very serious risk that it posed to academic freedom (namely the movement of people, scholars and students), the risks to funding, and the risks to collaboration with EU colleagues .

For decades we took the four freedoms of the EU for granted. Academic freedom, going all the way back to the Charter of Bologna, is based on the free movement of scholars, students, ideas, and access to resources, in order to collaborate and work together. By being strong in Europe, Oxford and many other UK universities could reach out around the world. Brexit risks all of that by putting up a wall. In response, I created an Oxford Backstop, a subsidiary company of the University that gave it a legal presence in the heart of Europe - Oxford in Berlin GmbH. In some ways it is almost a reverse of what took place in the 1930s, when scholars and students moved from Berlin to Oxford to escape the Nazi regime. This has created a centre for Oxford to work inside Europe, one that will continue to access all that is good about the UK's membership of the EU.

The initial step was forming a research partnership with the four institutions within what is now the Berlin University Alliance (BUA). The University signed a memorandum of understanding in December 2017 with the Freie Universität Berlin, Humboldt-Universität zu Berlin, Technische Universität Berlin, and the Charité – Universitätsmedizin Berlin, to develop a strategic research partnership. This was the culmination of discussions throughout 2016, in response to a letter of invitation by the Berlin institutions, supported by the Mayor of Berlin, for Oxford to establish a research centre there.

A second MoU was signed in Summer 2018 between Oxford's Gardens, Libraries and Museums and the Stiftung Preußischer Kulturbesitz. The five partners have since taken forward over 40 research workshops, and funded in excess of 65 seed-grants, for researchers and students

from at least one of the Berlin partners working with colleagues at Oxford. In total, so far, we have disbursed in excess of 1.1M euros. A number of the awards have been used to apply successfully for larger project grants to European foundations, UK and German research councils, and European framework programmes. The Berlin Senate, which provides around 75% of the funding for the city's higher education institutions, has been extremely encouraging of the partnership and of the BUA's programme of internationalizing its research. The German federal government's exercise of identifying centres or consortia of excellence within its universities awarded the BUA around 200M euros, to which was added further funding from the Senate. That money is beginning to flow towards BUA programmes in Social Cohesion and Global Health, in which Oxford can partner.

> *"The centre...will continue to access all that is good about the UK's membership of the EU*

Oxford has looked more broadly at the Berlin research ecosystem, and has also developed links with the Berlin Museum für Naturkunde (which hosts Oxford's Berlin office), the Wissenscaftszentrum Berlin für Sozialforschung (or WZB), which is the leading centre for social sciences in Europe, and the Universität der Künste, the largest and best university in Europe specifically for the cultural and performing arts. In addition, we are developing programmes with the Einstein Foundation, including the transformation of one of Brandenburg's most celebrated palaces, Schloss Glienicke, near Potsdam, into an international academic centre for visitors to Berlin. But of course, of prime interest for a meeting of Oxford medics is our work with the Charité, which is the largest and arguably the best teaching hospital in Europe. Charité was home to Rudolf Virchow and Robert Koch, and now with the possible use of Schloss Glienicke an...Oxford in Berlin House so now an Osler House in Berlin!

Professor Alastair Buchan

Professor of Stroke Research, University of Oxford and Director, Oxford In Berlin, University College (1977-1980)

40th Reunion Zoom – a Virtual Gathering

Oxford in May, my favourite time of year. Blossom in full bloom, Cherwell willows burgeoning, the river fresh and clear. Reminiscing with old friends, wandering around the labs, punting in the sunshine, and a sumptuous dinner. A reunion not to be missed. Too good to be true? Well, like a lot of things, due to Covid-19, indeed it was.

Thanks to the valiant efforts of Lyn Williamson, this reunion was going to be the best, with record contacting of graduates. We were the Baby Boomer alumni, with memories of another world – the hot summer of '76, Thatcher, the winter of discontent, cassette recorders, and Dire Straits. We transitioned from the Radcliffe Infirmary site to the brand new JR2, from elegant old Osler House to 'Osler Cubicle'. Laparoscopy was in its infancy, AIDS was yet to appear, smallpox had not been eradicated, and pandemics were just subjects of epidemiology papers.

Postponement to October or even next year was too much to bear. So with Zoom already modifying our social interactions, Lyn suggested bringing us together virtually - in part for Lionel Cartwright, who was very enthusiastic but was never going to be able to attend, having only just undergone a stem cell transplant. He relished the idea of the Zoom reunion, but tragically died from complications just a few weeks beforehand.

Apart from the impressive contact-tracing (better than HM Government's efforts for Covid-19), Lyn and Colleen Devine organised a very memorable reunion. A total of about 50 alumni 'popped up' like magic on the screen. After an initial welcome by Lyn, we moved into a number of smaller 'rooms', facilitating easier exchanges. Newly-gained lockdown beards and lockdown pounds did not impair familiarity with old faces.

A special welcome was given to some of our 'international' friends, from Canada, Cape Town, and Iceland. Arnab Banerji regaled us of his switch to life in The City, and as Senior Financial Adviser to Tony Blair. He finds the global economic impact of Covid-19 extremely worrying. Helen Allott described climbing the equivalent of Kilimanjaro (up her drive at home) to raise funds for hospitals in Uganda.

We were called to order by Julian Britton - Director of Clinical Studies in the day - in his usual avuncular manner, albeit disappointed not to see more surgeons amongst us. Next, Alastair Buchan, ex-President of Osler House, told us how Oxford is changing, especially post-Brexit, with a great threat to the proportion of foreign graduates. He is proud to be involved in the Oxford-Berlin Partnership, and invited anyone visiting the city to take a look.

Lyn asked me to follow on, representing those spanning both preclinical and clinical years. And what a privilege and joy it was, to have experienced both 'Town and Gown' in the city of dreaming spires. After several years in our relatively small, close-knit community we felt we knew each other well, daring to predict where we might end up. I cited a few whose career paths had taken a surprising turn.

Sadly, over the years, five people have passed away prematurely and could not be with us – Lionel, as mentioned above, Dick Nineham, Rosa Beddington, Bob Surtees and Carl Pearson. I said that I had found Lionel's Surgery Facebook page full of personal tributes which revealed what a kind, caring and compassionate doctor he was – many of the attributes we all aspired to on starting out those 40 years ago. One touching comment came from a patient who had known Lionel as her family doctor – "The most wonderful doctor. He looked after me and my children for well over 30 years, we missed him so much when he retired and feel so sad. His family must be very proud of such a wonderful man. God Bless 'Dr Cartwheel'!" Let's hope many of us will be remembered with such affection for our contribution to the caring profession.

After a final room session, Lyn played out the reunion with 'Auld Lang Syne' on her bassoon. Friends and old colleagues had been reacquainted, with a hope that a less socially-distanced event will follow.

Dr Neil Gibbons

General practitioner (retired),
(University College, 1974-80)

Oxford Medical Alumni Update

Oxford Medical Alumni (OMA) promotes good fellowship amongst Oxford Medical Sciences alumni, bringing together those who share a common interest in medicine. OMA supports regular meetings in Oxford, and elsewhere, for continued learning, exchange of ideas, networking and socialising.

Events and Reunions in 2020/2021

Due to the Coronavirus pandemic restrictions, all 2020 events and reunions are postponed to 2021, and 2020 and 2021 reunion groups will combine. We will update the website when we have new dates confirmed.

The BM BCh graduation celebration has also been postponed until next year. Meeting Minds Oxford 2020 will now take place virtually, for more details please look at their website: **https://www.alumni.ox.ac.uk/meeting-minds**

2021 Reunions

- Decade Reunions in 2021 are planned for those who qualified in 1970/1971, 1980/1981, 1990/1991, 2000/2001 and 2010/2011.
- 5th Anniversary Reunion for those doctors that qualified in 2016 (new)
- 60+ Reunion for those who matriculated prior to 1960 (new)
- Preclinical Oxford Students - we aim to invite both preclinical & clinical students to reunions

If you qualified in one of these years and would like join a small group of Year Ambassadors to help us trace friends and colleagues, please email us (oma@medsci.ox.ac.uk).

The latest up to date information about reunions is on the events page of our website: **https://www.medsci.ox.ac.uk/get-involved/alumni/events-and-reunions/oxford-medical-school-reunions**

Oxford Medical Lecture Club

The Oxford Medical Lecture Club, normally held at Osler House (John Radcliffe site), has been running for many years, welcoming distinguished, entertaining, and interesting speakers to talk about their speciality and the latest developments in clinical and scientific research. This year's lectures series have been suspended due to the pandemic, and we are currently considering moving to online lectures. If you are interested to receive notifications of the meetings, please do contact OMA by phone or email.

Mentoring

OMA helped the Medical school recruit a pastoral support network of 50 OMA alumni for the new FiY1 graduates. We hope that it will prove successful and continue to subsequent years. Oxford University has recognised the particular difficulties and dilemmas facing medical doctors, and is upgrading the Oxford Alumni Community professional networking platform. The networking platform is self-run, and alumni choose whether to sign up as mentors or use it to network and re-connect. You can sign up by entering your details and alumni number (either email or LinkedIn profile if you have one). There is now an Oxford Medical Alumni group set up within the platform which already has around 60 members. If you feel you are able to mentor fellow medical alumni, particularly graduating students and young doctors with issues such as career choice or career progression, please have a look at the website **https://oxfordalumnicommunity.org/** to sign up or contact OMA for more information.

Reconnecting with friends and colleagues

OMA is here to help bring people together. If you would like to reconnect with friends and colleagues you have lost contact with over the years, please email us at oma@medsci.ox.ac.uk and we will try our best to help.

Contact Preferences

Many of you may have out of date contact preferences, contact emails and addresses on our database. Please let us know if any personal details have changed or go to the website to update yourself. **https://www.alumniweb.ox.ac.uk/oxford-medical-alumni/login**

Contributions to Oxford Medicine

We welcome your contributions to future editions of *Oxford Medicine* and look forward to including letters, reviews, recollections, and reflections from our Alumni, new and old, near and far. We hope to feature reports from the different Oxford Medical Societies. This edition we are pleased to include Dr Zoi Alexopoulou's report from the Oxford Centre for Personalised Medicine.

Members of OMA Advisory Board (OMAAB)

Dr Lyn Williamson – President of OMA
Dr Roger Bodley – Honorary Treasurer

Board members: Professor John Morris, Professor Sir John Bell, Professor Gavin Screaton, Dr Catherine Swales, Dr David McCartney, Ms Christine Fairchild, Dr Eric Sidebottom, Professor John Stein, Professor Denise Lievesley, Dr Kevin Windebank, Dr Tim Littlewood, Dr William Seligman, Dr Shing (Tom) Law, Dr Zoi Alexopoulou, Ms Nicki Choules-Rowe and Ms Dervla Carroll

For more information about OMAAB members, please go to our website: **https://www.medsci.ox.ac.uk/get-involved/alumni/about-us/omaab**

Contacting OMA

The OMA team are Nicki Choules-Rowe (Alumni Relations Manager) and Colleen Devine (Alumni Engagement Officer)

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A Chronicle of Covid

T'was two thousand and nineteen and early December-
A date that the world will be sure to remember-
From Wuhan in China, a virus appeared,
Infecting the people who were not then prepared.

It started in bats in the markets we're told,
And from there this pandemic began to unfold.
No-one could stop it-it rapidly spread
And hundreds of thousands of people are dead.

With Europe affected, we started to worry
And by March it was clear that we'd now have to hurry
We'd hoped we could stop it and not cause alarm
And by gradual measures we'd come to no harm.

So we cough in a tissue or even your sleeve
Two metres between us we carefully leave.
We don't touch our faces, make hand washing fun
Happy birthday the song that is joyfully sung.

As the virus marched on and caused ever more damage
It was feared that the NHS could not now manage
Its spread in the UK would have to be stalled
And on March twenty-third the great lockdown was called.

Arguably Britain was slow to respond
But quicker than Trump who, from over the pond,
As Europe was struggling, he was tweeting his views
That reports of the deaths there were simply fake news.

All factories, offices, schools were shut down,
The countryside empty and so was the town
The economy stalled and the stock market crashed,
Workers were furloughed and bank rates were slashed.

We queued for our shopping 2 metres apart
And then loaded up loo rolls and tins in our cart
It was hard to get flour, tinned tomatoes or yeast
To practice home baking or knock up a feast.

We ordered online and did crafts on our own,
Watched TV and gardened if we could from our home.
And on Thursdays at Eight we clapped outside for carers
To thank them so loudly we hoped they could hear us.

Sport then was cancelled, the Olympics postponed
No one could gather - we all must stay home.
But for one hour each day we could get some fresh air
So cyclists and walkers were seen everywhere

The briefings held daily were there to inform
And high numbers of cases and deaths were the norm.
Each day there were more, and it soon became clear
That those at the front line had not enough gear.

So we had to act fast to get more PPE,
Quickly from Britain and from over the sea,
But care homes were now getting many more cases
And more masks were needed to cover their faces.

Boris, it seems, did not take enough care
And got the infection from those who were near.
But after a week he was struggling and blue
So admitted to hospital and then ITU.

Soon he was home looking slimmer and worn
He'd had 2 weeks of rest but then Wilfred was born.
His team tried to manage but needed their boss
But when he returned, he seemed at a loss.

As lockdown starts easing and the R number falls
We start to play games that need rackets and balls,
We dream of past times and hope that one day
We could all have our hair done and cover the grey.

We want to see friends in a café or pub,
Have a beer or a coffee and maybe some grub
We need human contact, to see family together
Hug those we love and then talk of the weather.

Zoom is no substitute, emails so tame
Texting and tweeting are never the same.
What is important for our human race
Is chatting and laughing as we meet face to face.

A vaccine may help us be as we were
But there are some changes that some may prefer -
Less traffic, pollution, fumes and less planes
More birdlife, less asthma and more cycle lanes.

With crowds on the beaches and traffic returning
The risk of resurgence becomes much more concerning.
The government now has to pass the next test
But it may still take decades to pay off our debts.

Dr Lesley Starr

St Anne's (1976-1979).
General Practitioner
(retired) Bath

Cumulus Covidus