

# EMMANUEL 2020 REVIEW



*Beauty* CAN STOP US IN OUR TRACKS IN  
WONDER, CREATE ENDURING MEMORIES AND  
RAISE OUR EXPECTATIONS OF OURSELVES  
AND EACH OTHER • DAME FIONA REYNOLDS



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Our photographer faced a new challenge this year: COVID-19 and keeping a distance. The cover reflects themes and shapes from this issue: our role in addressing global challenges of health (a COVID-shaped sphere), community & society (a cube, where each tiny part has a role to play) and climate & the environment (a mountain-shaped pyramid)

Emmanuel College would like to thank all those who have assisted in the production of the *Review*

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## VIEW FROM THE LODGE



AT HOME WITH THE HENS IN THE COTSWOLDS

**None of us will ever forget 2020. I'm writing this from home, in the Cotswolds, where I was when the Prime Minister announced the start of the lockdown back in March. And here I am still, working away on my laptop, Zooming for hours each day, 'seeing' people but not seeing them, as we all do all we can to make sure that Emma's open for business and our usual welcoming self in October.**

Of course, it won't be 'usual' in October, or anything like it. Sadly we don't think many sporting or social events will be possible, and dinners, if they can happen, will be rather different. But we are determined to offer as good an experience as we can, and as much face-to-face teaching as the practicalities of the college allow.

And I'm looking forward so much to coming back! I've missed college, though we have tried to keep everyone in touch, for example by holding regular Zoom chats with undergraduate and graduate students, through all our college meetings, now virtual, and through *Emma connects* and the online events for Emma members. It has been lovely to see how we've brought members from all over the world together. We've had two online graduate seminars, a virtual Burnaby concert, we've streamed talks live on YouTube, and much more. All our teaching was virtual, exams were taken in our students' homes, and – of course – there were no May Balls, bumps or graduation ceremonies. Instead we held a Zoom celebration, marking the first occasion in modern times that our graduands haven't processed to the Senate House for graduation, and the first time since the plague of 1666 that the university has closed.

And in the meantime the college is quiet, though not empty, as there are some graduate students in residence, and a core of staff providing take-away food, and looking after the gardens and buildings to make sure they are ready to welcome us back in the autumn. I'm really grateful to all the staff, Fellows and students who have helped to keep the Emma flag flying during this really strange time.

**Our work goes on! We are not just focused on the post-COVID-19 future, but on ensuring the first phase of our wonderful *Emma enables* project gets off the ground, with digging starting in the late autumn, working on the wider vision that the building work makes possible**

And of course our work goes on! We are not just focused on the post-COVID-19 future, but on ensuring the first phase of our wonderful *Emma enables* project gets off the ground, with digging starting in the late autumn, working on the wider vision that the building work makes possible, and continuing to support the academic ambitions of our community. There's more information about *Emma enables* later in the *Review*.

**There's been much talk about the need for a green recovery: for us to learn the lessons of COVID-19 (good and bad) and to ensure we think about a more sustainable future. This focus, of addressing the global challenges we face, shapes this edition of the *Emmanuel Review***

There's been much talk over the summer about the need for a green recovery: for us to learn the lessons of COVID-19 (good and bad) and to ensure we think about a more sustainable future. This focus, of addressing the global challenges we face, shapes this edition of the *Emmanuel Review*. In it, Fellows, students and Emma members working on global health, social policy and climate change describe their work and how it can contribute to a better future. Their thoughts are inspiring, and have certainly made me think about how their messages can be translated into policies and actions on the ground.

**Emma is a college where community is our middle name**

And as we reflect on the external challenges our society faces, we must think too about how we can rebuild and care for our community in an environment where we can't gather everyone together, where mass lectures and events are impossible, where we can't travel to visit our members or see you all other than through a screen, and where everyone will need to be careful in every aspect of daily life. We believe we're in a strong position to do this. Emma is a college where community is our middle name, and in every decision we take we are thinking not only of the job that has to be done, but also of the atmosphere we want to engender. I'm sure it will be a challenge, but I'm equally sure we can make the next academic year one everyone will remember for all the right reasons, where the whole Emma family has pulled together. The fact that it will, sadly, be my last year as Master simply strengthens my resolve in this challenge, but it's one where I know I can, as always, count on your support.

**Fiona Reynolds**  
**Master**



# THE ANSWER LIES IN THE SOIL

BILL BROADHURST, FELLOW

**Writing this article in the middle of the COVID-19 crisis, it might seem churlish to ask readers to focus their attention on another impending healthcare apocalypse. However, my academic research has applications in one such area: the growing worldwide problem of antibiotic-resistant bacteria.**

Bacteria are the secret masters of our planet. They predate multicellular eukaryotes such as ourselves by two billion years, and are more numerous and diverse. Bacteria are master innovators because they reproduce rapidly and mutate frequently; when they learned how to convert sunlight into energy for growth by splitting water, the waste product, oxygen, transformed forever Earth's atmosphere, oceans and geology.

The discovery of antibiotic drugs that could keep bacterial pathogens in check had a similarly dramatic effect on human life expectancy in the second half of the twentieth century. Today, the prospect of returning to an antibiotic-free world in which routine operations result in life-threatening infections seems unbearable. Caesarean sections and hip replacements could become too risky to attempt. Treatments that rely on antibiotics to offset suppression of the immune system, such as cancer chemotherapy or organ transplants, could also be lost. In addition, multi-drug-resistant infectious diseases, from tuberculosis to gonorrhoea, are already challenging healthcare providers.

Market forces are not able to resolve this problem. Since the golden age of antibiotic discovery, 1940–60, pharmaceutical companies have gradually withdrawn investment from the field. Bacteria acquire resistance so rapidly that the therapeutic window for a widely used new antibiotic to be effective and a company to recoup its investment is less than a year. What clinicians need most is a novel drug that will hardly be used at all, to hold in reserve for otherwise intractable infections.

The key to understanding and tackling antibiotic resistance lies in remembering where these drugs come from. More than two-thirds of the antibiotics in clinical use are derived from natural products, the most abundant source being soil bacteria. Thousands of biologically active molecules have been isolated from these microbes, including antibacterial, antifungal, anticancer and immunosuppressant agents. Apart from a suspicion that they must confer a competitive advantage over their neighbours, we have little idea why soil bacteria go to the trouble of synthesising such complex molecules.

## More than two-thirds of the antibiotics in clinical use are derived from natural products, the most abundant source being soil bacteria

Bacteria that produce antibiotics must evolve a mechanism of genetically encoded resistance to avoid committing suicide. This could involve a decoy version of a drug's target, so the antibiotic will not incapacitate the producer cell, or overproducing efflux pumps to flush away dangerous molecules as soon as they are made. Innovations of this sort are spread by cells of the same species sharing fragments of their DNA, but this genetic information can also be taken up by different types of microbe, opening a route for antibiotic resistance to spread from producer strains to pathogens. Soil bacteria have been making antibiotics for billions of years, so DNA fragments that encode protective genes are ubiquitous in the environment. This is why resistance to a newly developed antibacterial agent will inevitably occur.

Thankfully, the advent of cheap and rapid technologies for reading bacterial genome sequences has opened up new fronts in the arms

race against multi-drug-resistant pathogens. One crucial discovery was that the blueprints required for assembling each natural product tend to group together, creating 'biosynthetic gene clusters'. A second finding was that, based on the number of known bioactive molecules, the genomes of well-known producer strains contain more clusters than expected. If we work out how to activate them, these 'silent' biosynthetic gene clusters could yield new drug candidates. Thirdly, it is possible to sequence the genomes of bugs that do not thrive in laboratories and so have remained uncharacterised, such as marine bacteria, revealing novel gene clusters that make antibiotic agents that have not previously been used above sea level. Finally, synthetic biology permits us to tinker with existing gene clusters, persuading them to produce 'unnatural' natural products that access previously unexplored regions of chemical space.

Following this last option, my research group has performed precision surgery on genes that encode polyketide synthases, a class of biosynthetic factory enzymes that produce the respiratory system antibiotic erythromycin and other commercial drugs. We succeeded in broadening the chemical variety of extender molecules that can be stitched together by the synthase, which could breathe new life into old drugs. We are using the tools of structural biology to reveal how polyketide synthases really work. We have uncovered rules that explain how one small component acts like a conveyor belt to shuttle substrate molecules around the factory, swinging on molecular bungee cords to make brief contacts with multiple enzymatic active sites. My hope is that as we learn more, it will become possible to reprogram natural polyketide synthases to produce huge quantities of new compounds that can then feed into drug discovery trials.

*Bill Broadhurst (2005) is Director of Studies for biological natural sciences*





## HEALTH

The current pandemic demonstrates the urgency of addressing global health issues. Emma members and students explain how they are helping to meet these challenges

### ELISE FRENCH

My research interests centre on the immune system and ageing, with a particular focus on B cells. These are the subset of white blood cells that develop in bone marrow to produce antibodies, the molecules that neutralise infectious agents known as pathogens. Within bone marrow, there is a loss of B cell numbers through ageing, leading to a decline in their function and resulting antibody repertoire. This translates to a diminished antibody-mediated response to infection, demonstrated by reduced success of vaccination in the elderly and resulting in an increased vulnerability to infection. The process of B cell development in bone marrow occurs in response to a plethora of cellular signals, one of which has been found to be diminished with age. My PhD project seeks to



HEALTHY AGEING CAN PRODUCE BEAUTY, AS IN THE BARK OF THIS SILVER BIRCH IN THE MASTER'S GARDEN

investigate the mechanisms of this signal in the process of B cell development. Findings are key to uncovering potential therapeutic approaches for healthy ageing; a pertinent issue today.

Aside from my research studies, I take great pleasure in being involved in all aspects of college life, both in my role as MCR President, and also as a keen rower with the Boat Club.



JOHN AT HOME, ENJOYING THE COMPANY OF HIS NEIGHBOUR JOY'S DOG, BUSBY

## MEDICAL DETECTION DOGS

### JOHN CHURCH

**John Church (1949) read medicine at Emmanuel. He then took over his father's hospital in East Africa until 1973, when he returned to the UK as an academic and orthopaedic surgeon. In 1991 he retired to pursue his research interests.**

On 1 April 1989 *The Lancet* reported a patient whose dog was paying a lot of attention to a discoloured 'mole' on her leg. A biopsy showed it was a malignant melanoma, a skin cancer which, if left untreated, can be fatal. She has remained well ever since. Her dog saved her life.

I became involved in January 2001, when I met a man who had a 'patch of eczema' on his thigh, but whose dog kept trying to get at it, even through

his trousers. This led to diagnosing another skin cancer and to discovering other similar stories.

Meanwhile Claire Guest, who trained dogs to assist the hard of hearing, had also wondered whether dogs could be trained to recognise cancer. We met in June 2002 and set up a highly successful pilot study that was published in the *British Medical Journal* in September 2004.

'MEDICAL DETECTION DOGS' TRAINS DOGS NOT ONLY TO RECOGNISE A WIDE RANGE OF MEDICAL AND SURGICAL CONDITIONS, BUT ALSO TO ALERT PATIENTS, SUCH AS THOSE WITH UNSTABLE DIABETES, TO IMPENDING UNTOWARD ATTACKS

We founded a charity, Medical Detection Dogs, which trains dogs not only to recognise a wide range of medical and surgical conditions, but also to alert patients, such as those with unstable diabetes, to impending untoward attacks, and supporting the belief that diseases have their own unique odour. We are now investigating whether our dogs can be trained to detect COVID-19, including in those who are asymptomatic. If the dog detects the COVID-19 virus, this will be confirmed by a medical test. Screening would be fast, effective and non-invasive, and make sure NHS testing resources are only used where needed.

With our collaborators at the London School of Hygiene & Tropical Medicine and Durham University, we have backing from the UK government and public donations to begin work. [www.medicaldetectiondogs.org.uk](http://www.medicaldetectiondogs.org.uk)





WE WERE HONOURED THAT THE FIRST TIME FREYA WORE HER NEW SCRUBS WAS FOR THIS PHOTOGRAPH IN EMMA

#### FREYA SMITH

I started working as an Interim Foundation Year Doctor, known as FiY1, on 27 April at Bedford Hospital, with the General Surgery team. Luckily, I had been placed with them in January so I knew the ropes a little, but the hospital had changed considerably during the pandemic and for the first few weeks I was on a steep learning curve. Since only emergency surgeries were taking place, the surgical wards were fairly quiet and well-staffed, but as COVID-19 cases declined and more patients were admitted, I was able to take on much more responsibility for patient care: performing minor ward procedures, making referrals, assessing those who were acutely unwell, and contacting relatives. My confidence has soared, and I truly feel that this has been an invaluable introduction to life as a doctor.

I have felt well protected at the hospital. I haven't experienced any significant PPE shortages, and senior members of the team have always been on hand to give advice and guidance. I have lost count of the number of doctors who've told me how grateful they are to all the FiY1s for stepping up to the plate earlier than expected, and I'm so glad to have been in a position to offer a positive contribution to the NHS during this time.

MY CONFIDENCE HAS SOARED, AND I TRULY FEEL THAT THIS HAS BEEN AN INVALUABLE INTRODUCTION TO LIFE AS A DOCTOR

#### STAN DALE & GEORGE MILNER

Our podcast 'Pager' was born after a chance conversation in the summer of 2019 whilst we were both funded by Emma to attend PRISE, a research programme at Harvard. Looking back we could invent all sorts of reasons for why we started it, from a gap in the science podcast arena to the allure of pretending we were Joe Rogan, but the truth is that we thought we could have some great conversations about really interesting things.

The podcast is broadly themed around medicine and biology, with an eye towards the future. The majority of the episodes are interviews with a guest in a particular field. Some are deeper dives into subjects, such as ageing and high-altitude physiology, whereas others are broader discussions, often about aspects of public health and medical practice.

WE HAVE MAINLY SPOKEN TO DOCTORS AND SCIENTISTS; THEIR GENEROSITY WITH TIME HAS BEEN HUMBLING AND MADE THE PODCAST POSSIBLE

We have mainly spoken to doctors and scientists; their generosity with time has been humbling and made the podcast possible. Beyond the rich array of research being done on its doorstep, Emma has been supportive in many ways. We are grateful for a grant from the Pozzi Fund, to support the costs of equipment and podcast hosting. One of our early episodes was with our Director of Studies, Dr Stephen Barclay, on deepening understanding of palliative care.

The interviews have taken us from the university's recording studio, to being lost in Addenbrooke's, to cycling off-road in search of an elusive medical robotics facility in the Cambridge outskirts. Throughout, having a co-host off whom to bounce ideas, and with whom to share in successes, has made it all the more rewarding.

What next for the podcast? We finished series one 39 episodes in and are excited to start recording more this summer, with the aim of starting series two in the autumn. Using what we've learned so far, we are looking forward to discussing new topics and revisiting old ones.



STAN (LEFT) AND GEORGE (RIGHT) STAY CONNECTED WITH EACH OTHER, AND THEIR AUDIENCE, THROUGH TECHNOLOGY

RESEARCH BY EMMA FELLOWS AND BYE-FELLOWS RELATING TO COVID-19 INCLUDES:

STEPHEN BARCLAY (BYE-FELLOW) COVID-19 AND PALLIATIVE CARE

GEOFFREY SMITH (FELLOW) PROTEINS MADE BY COVID-19 AND DEVELOPMENT OF A VACCINE

TOBIAS WAUER (BYE-FELLOW) THE MILTON KEYNES TESTING CENTRE: SEE THE SPOTLIGHT SECTION OF THE EMMA WEBSITE



# DIGITAL CONNECTION

AMY ORBEN, FELLOW

**Technologies have become a staple component of twenty-first-century social life. Social media platforms connect people around the globe, modern video games stream live events to millions of users and video calls help those experiencing 'social distancing' to keep in touch with friends and family.**

The speed with which these digital modes of connection have become embedded in society is astonishing. Yet it is unsurprising. Humans are an inherently social species, driven by the need to connect, communicate and learn from others. The digital revolution, which has already affected many global processes, is now reforming one of the most central components of human life.

Yet the consequences of these rapid changes in how we communicate and connect remain elusive. How are we affected by technologies such as social media? How do social interactions via screens compare to their face-to-face counterparts? How can digital technologies be designed and regulated? These are all questions that remain unanswered. Scientific inquiry in this area is therefore important, as it will provide crucial information to policy-makers, parents and the general population. Yet academic disciplines like psychology, in which I work, have responded slowly to this challenge.

I investigate how social media and digital technology use affects teenagers, both in the UK and internationally. This is an area fraught with concern and hype

Amy is a keen cyclist; in recent months she's been enjoying the lavender fields near her home

I have spent the last six years conducting research to help address the widespread lack of scientific evidence in this area. In particular, I investigate how social media and use of digital technology affects teenagers, both in the UK and internationally. This is an area fraught with concern and hype. Media articles routinely compare the use of social media to that of hard drugs, or blame large decreases in adolescent mental health on the widespread use of digital technologies. Yet my work has shown that the story is a lot more complicated.

First, it is not the amount of time that teenagers spend using screens that is important. Instead it is the content or activities with which they are interacting, and the motivations they have for doing so, that probably determine how they are affected. Furthermore, not every teenager reacts in the same way to the same digital content; individual differences are very influential. Lastly, there is still no clear causal link between using technologies such as social media and changes in well-being or mental health. Indeed, the paths go both ways. In one of my most recent studies I found that teenagers who increase their social media use in one year show on average a very small drop in life satisfaction the following year. But the opposite is also the case: a drop in life satisfaction in one year predicts a small

increase in social media use the next year. The link between digital technology use and mental health is therefore complicated, bi-directional and governed by many individual factors that have not yet been rigorously studied.

Even though my work often raises more questions than answers, it has informed policy decisions that aim to improve the way we deal with teenage technology use. For example, some of my studies were used as evidence by the UK chief medical officers to establish UK screen-time guidelines: in short, it's not the time on digital devices that







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matters but what children and teenagers do with them. This guidance was echoed by the Royal Society for Paediatrics & Child Health and the House of Commons Science and Technology Select Committee, to which I gave oral and written evidence during their investigation.

Yet much more needs to be done. Our lack of understanding about the most basic aspects of digital social life is especially pertinent in light of the global COVID-19 pandemic, which has made us more reliant on digital connection than ever before. It is clear that the importance of

It is not the amount of time that teenagers spend using screens that is important. Instead it is the content or activities with which they are interacting, and the motivations they have for doing so

this will only increase in the future. My Research Fellowship at Emmanuel is therefore supporting me to continue my investigations into the value and risks of a digitally mediated social life. If successful, my work will inform technology policy that could shape how we connect with others for decades to come.

*One of the ways Emma supports research is by funding research fellowships and we welcomed five in October 2019. Amy joined us from The Queen's College Oxford, where she obtained her DPhil after having read natural sciences in Cambridge at Magdalene College*





## COMMUNITY & SOCIETY

Events this year have demonstrated the importance of thinking about the complexity of relationships and the challenges they bring. Several current students are looking into these issues, and some describe their research and experiences below

### DAVID BAGNALL

My research examines the problems caused by miscommunication across the Anglican Communion. More specifically, it interrogates moments of what I term 'hermeneutical impasse', when words used to describe sexual identities and practices are misunderstood in debates between separate provinces of the Communion. Because a hermeneutical impasse constitutes a far greater breakdown in communication than simple misunderstanding, my research also explores the ways in which disparate communities can be equipped with the resources to overcome such difficulties. I believe such research is important because it reveals the ways in which communication between communities can break down even when they are using what appears, on the surface, to be a common language. My work aims to identify these moments of misunderstanding, and through analysing them to suggest means by which our words might be used to build up global community.



DAVID WILL BE ORDAINED ON 27 SEPTEMBER IN ELY CATHEDRAL



ADELINE GRADUATED 'VIRTUALLY' FROM BELGIUM AND RETURNED TO CAMBRIDGE IN JULY TO COLLECT HER BELONGINGS FROM HER ROOM IN THE HOSTEL

### ADELINE BRODE-ROGER

As a fresher, I often felt uncomfortable going back to my room in South Court knowing that someone was sleeping rough nearby, or eating in the beautiful light-blue Hall while others outside did not have access to decent food.

Three years later, while I am still upset about the situation, the education I received has enabled me to move beyond this. The independence of thinking that is core to the Cambridge system has allowed me to tailor my sociology studies to explore homelessness, its complexities and its potential solutions. This culminated in my third-year dissertation, which focused on the political economy of heightened stigmatisation of homelessness under austerity. I argued that stigma shapes local policies by not only affecting their design, but also their reception by homeless individuals who, to minimise their own stigma, align themselves with policies that negatively affect them.

The vibrant student community also led me to activism, and I had roles with the Cambridge Homeless Outreach Programme. This involved organising events to raise awareness, promoting volunteering opportunities, fundraising, and participating in city-wide workgroups with service providers, homeless individuals, the local council, businesses and university representatives.

As I reflect on my time at Emma and look towards the future, I realise how the college has provided a stimulating environment in which I grew both intellectually and personally, equipping me with the tools and confidence to help me contribute to positive social change.

### BEN SCHAFER

Growing up in the American rustbelt, I was always captivated by the large empty mills that dotted the shoreline of my hometown, and that fascination gave rise to my academic interest in late-twentieth-century industrial collapse and its meanings for, and effects on, communities that experienced it. I came to Emma for my MPhil in economic and social history to study and understand better deindustrialisation in the British context, focusing originally on community response and activism in Sheffield as the city's mighty steel industry collapsed. Unfortunately, COVID-19 has prevented me from seeing that project through to completion and I have shifted my focus, thanks to the availability of digitised archives, to Sheffield's American sister city, Pittsburgh, Pennsylvania.

At the heart of this new project are the same basic questions I hoped to ask of Sheffield: what happens to communities when their primary economic engine collapses? What futures do everyday people imagine at such a period of flux? How might telling the story of deindustrialisation from the ground up, rather than from the perspective of planners, politicians or business leaders, better inform our understanding of our recent past and present? Answering these questions will, I hope, offer insights for communities and decision-makers navigating economic transformation today and in the future.

WHAT HAPPENS TO COMMUNITIES WHEN THEIR PRIMARY ECONOMIC ENGINE COLLAPSES?



PHOTOGRAPHING BEN IN SHEFFIELD WOULD HAVE BEEN STRAIGHTFORWARD; THIS SHOT IN PITTSBURGH WAS TAKEN BY BEN'S FRIEND, DIRECTED BY OUR PHOTOGRAPHER OVER ZOOM



## AN IMMIGRANT ACCOUNT OF LOCKDOWN IN CAMBRIDGE: LESSONS FROM COVID-19

### CALLISTA REGIS

**Callista is in her first year at Emma, studying for a PhD in education. When flights were cancelled in March she was one of several students who couldn't return home, and she describes how she's learned to manage while far away from her family.**

For the first time I heard tiny footsteps, children chattering and the neighbour's door banging. I was often confused and wondered whether someone was inside my apartment. In case you are wondering why I had not heard my neighbours before, it is because I never paid attention to them and I was alone during the period of mandatory COVID-19 lockdown, so everything around me gained new relevance. During this time I realised and appreciated the important things in life. What is important was suddenly prioritised.

I never expected that I would feel so lonely and so I was utterly unprepared to deal with the effects. I had never lived alone before so it was particularly challenging, especially being away from family and close friends. Here I was, living by myself for the first time, with my family in the epicentre of the pandemic in the US. I had planned to return to them in March; however, travel restrictions and government guidelines meant that I had to remain in Cambridge.

As I monitored the situation in New York, it was difficult to process the number of daily deaths from COVID-19. Not only was it depressing to see so many, but also I had an overwhelming sense of hopelessness. I was surprised by how quickly I became sucked into despair. I was worried and apprehensive about my children and how they were coping, even though I was constantly in contact with them. I found it difficult to focus on anything because of the barrage of information and, in some cases, miscommunication about the virus and its potential harm. For a while, it felt as if I was under a dark cloud of hopelessness.

I knew I could not thrive in this emotional state so I tried to find ways to cope. Every day, I found something hopeful to listen to. I paid close attention to the glimpses of hope that were scattered through the clouds of despair. I started with scriptural affirmations, then I found



testimonials of people who had battled COVID-19 successfully. Of course, I listened to music, all kinds, and sometimes I sang, almost at the top of my voice, as if to fight off the frustrations of being alone. I found that I had an insatiable desire to talk so I did so, all day long.

My best friend, Pomkanel and I spoke all day, and I am deeply indebted to her for caring so much and ensuring that I was doing well. Chrissy and I watched movies together, even though I was asleep most of the time because of the time difference. Across the seas, I found that I was growing closer to my children, who did not fail to entertain me with their latest dance moves, their cooking, basketball in the house and games. They made me feel at home and it was comforting, as was all the support I received from my spouse. I also spoke to my parents daily, who kept my mind rested by feeding me the latest St Lucian gossip. They know I thrive on good gossip.

### WE WRESTLED WITH CONFUSIONS AND CONCERNS TOGETHER, AND FOUND SOLUTIONS

I also attended Zoom sessions relevant to my research. It was refreshing to see familiar faces and listen to the experiences of my peers. Oh, I cannot forget our vibrant WhatsApp group. We posted frequently and kept ourselves occupied. We wrestled with confusions and concerns together, and found solutions.

BE CAREFUL WITH WHAT YOU FEED  
YOUR MIND; BALANCE IS ESSENTIAL  
TO HOW WE SURVIVE A PANDEMIC.  
STAY UPDATED WITH THE LATEST  
INFORMATION, BUT ALSO FIND STORIES  
THAT INSPIRE HOPE

I must make special mention of Governor Cuomo, whose daily briefings were comforting and inspiring. I marvelled at how he broke down information and 'kept it real'. He provided both scientific facts and next steps, and was honest in his briefings. Most of all, I appreciated his vulnerability in addressing his brother's illness as he battled COVID-19. It made me feel that I was not alone in being afraid.

I must mention my supervisor, who was understanding and encouraged me so much, communicating care and concern for my well-being as an immigrant, parent and graduate student. At the end of each meeting, I was motivated and more focused to continue work on my pilot study in preparation for my registration report.

In the end, what did I learn? First, that strong relationships are invaluable to every aspect of our health. Even though you find yourself alone, companionship, laughter and care are important for our well-being. For virtual relationships to be effective, they must be authentic, such as doing some normal activities together.

Secondly, during a pandemic people look to strong leadership for guidance and reassurance. It is empowering and simultaneously inspiring, often resonating deeply with those who are suffering. It is then that people are more compliant in following the necessary steps towards recovery.

You must also ensure that you keep yourself well occupied. Rediscover old hobbies or learn something new. You will be surprised by how fulfilling it is.

Finally, be careful with what you feed your mind; balance is essential to how we survive a pandemic. Stay updated with the latest information, but also find stories that inspire hope, otherwise you may end up in a dark hole of despair.

So, when you ask why I heard my neighbour's children only when I was lonely, it is simple: I started to pay attention. What you listen to is what shapes your thinking.





**Alexander** respects the environment by researching how we are damaging it, telling others about this and acting on it





# CHANGE IS IN THE AIR

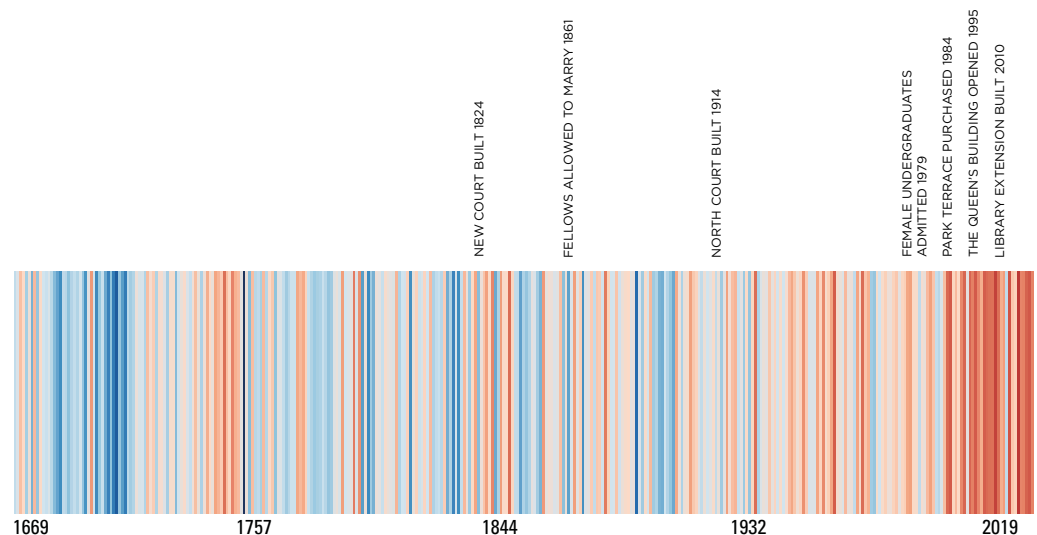
ALEXANDER ARCHIBALD, FELLOW

**The future is uncertain. But we know that if we don't think now about the legacy of our actions we won't enjoy the prosperous future we deserve.**

My research focuses on trying to understand what drives alterations in the composition of the atmosphere and how they affect the habitability of our planet, in relation to air pollution and climate change. The air around us is mainly made up of nitrogen and oxygen, but what really fascinate me are the gases and aerosols that many of us don't know about because they are so small in size or number. Some of the gases present in tiny amounts, less than one molecule in a trillion, have an enormous effect on the quality of the air we breathe and the climate; relatively minor changes in the composition of the atmosphere have huge impacts.

Air pollution is by no means a new problem. Hippocrates, in his book *Airs, Waters and Places*, realised the relationship between air and health is important as early as 400 BCE. By the eighteenth century, Percival Pott found a link between the exposure of chimney sweeps to soot and increased incidences of cancer, ultimately paving the way for future laws on occupational exposure. It is a shame, then, to think that we are still having global, and local, problems with air pollution.

Those passing the back of Emma in the last few years may have noticed a small grey box in Parker Street, with an odd-looking glass jar on top. This instrument has been measuring two of the most important air pollutants, nitrogen dioxide ( $\text{NO}_2$ ) and particulate matter less than 10 microns in diameter ( $\text{PM}_{10}$ ), and provides a direct means of assessing the quality of the air in the vicinity.  $\text{NO}_2$  is a gaseous pollutant produced mainly from combustion of fossil fuels, whereas  $\text{PM}_{10}$  can come from sources as diverse as spray from waves breaking at sea, to



CLIMATE WARMING STRIPES FOR CENTRAL ENGLAND 1669-2019, SHOWING ANNUAL TEMPERATURES WITH A RANGE FROM 7.6°C (DARK BLUE) TO 10.8°C (DARK RED)

dust produced from wear-and-tear of brakes and tyres on roads. Recent analysis of these data shows striking features, offering hope and raising questions. During the COVID-19 lockdowns, levels of  $\text{NO}_2$  dropped by around 70 per cent. This is a very significant and positive outcome of what has otherwise been, and continues to be, a tragedy. But in Cambridge the levels of  $\text{PM}_{10}$ , and those of finer-sized particles,  $\text{PM}_{2.5}$ , did not decrease during that time. COVID-19 has thus allowed atmospheric scientists like myself to get a glimpse at what future policies may do to the quality of the air we breathe.

These changes in air pollution have not only been witnessed at street level but have also been captured by satellite sensors, which show that world-wide levels of  $\text{NO}_2$  and other air pollutants have fallen. But what about levels of greenhouse gases? These molecules, which

**Air pollution is by no means a new problem. Hippocrates, in his book *Airs, Waters and Places* developed the relationship between air and health as an important one as early as 400 BCE**

include carbon dioxide ( $\text{CO}_2$ ) and methane ( $\text{CH}_4$ ), have been shown to drive recent changes in climate. The climate warming stripes shown here for central England for the last 350 years highlight that whilst there has been variation over the centuries, the last few decades have all been considerably warmer than average. COVID-19 has not resulted in significant changes in abundance of the gases that cause climate warming, but it has highlighted that turning the tide on this global problem is slow. Recent analysis of the effects have shown that emissions of greenhouse gases reduced by 17 per cent and whilst this is a huge figure, it highlights the scale of the problem.

I wonder what lessons we have learned from our experience of the COVID-19 lockdowns? I have realised that only changing how frequently and how far I travel is unlikely to result in the clean air and safe climate I hope generations of Emmanuel students will inherit in years to come. We have an opportunity to shape a future that is completely different and only time will tell if we succeed.

*Alexander Archibald (2015) is Fellow and Director of Studies in chemistry. He read chemistry and completed his PhD in atmospheric chemistry at the University of Bristol*



## CLIMATE & ENVIRONMENT

Global climate and environmental issues are more prevalent today than ever before. In Emma, a place of education, learning and research, we are keen to further knowledge in this area and several students are taking up the challenge

### TOM SPENCER

When I arrived in Cambridge to study natural sciences in 2016, the Paris Agreement on climate change was not yet one year old. This seminal agreement introduced the commitment to limit global warming to 2°C and ushered in a rare feeling of hope around the world. As a first-year undergraduate, I was just finding my feet in this disconcerting political landscape.

Fast-forward three years and I was a full-time Earth Scientist looking towards a future in which I hoped to play a part. The past summer had seen the school strikes inspired by Greta Thunberg and the Extinction Rebellion protests grow; meanwhile, the UK government amended the Climate Change Act to include the law that CO<sub>2</sub> emissions must be net-zero by 2050, making it the first major industrialised nation to do so.

The location of Cambridge means there are endless opportunities for students interested in policy design to learn from nation-leading experts. For me, the most exciting example was listening to Simon Sharpe, head of international climate change strategy at BEIS, talk about the UK's strategy for the COP26 UN climate change conference in Glasgow next year. After an eye-opening talk, shouts echoed around the lecture theatre and a large, colourful banner was unveiled on stage reading 'STOP GREENWASHING COME CLEAN'. Extinction Rebellion (XR) Youth were protesting about a controversy surrounding Cambridge Zero, the university's newest initiative for climate-change research. Watching Simon Sharpe so deftly navigate a highly charged confrontation and transform it into a productive and engaging discussion was both an affirmation of his negotiation skills and also a reminder that all groups of people have a stake in the post-climate-change world.



IN THE FELLOWS' GARDEN, TOM REFLECTS ON HIS HOPES FOR THE PLANET

Moving forward, I take these invaluable lessons with me. ETH Zürich have awarded me a scholarship to study for a Master's degree in climate policy. Confronting the challenges humanity faces in the twenty-first century is a daunting task for all of us and I am grateful to have a Cambridge education under my belt as I proceed.

CONFRONTING THE CHALLENGES  
HUMANITY FACES IN THE TWENTY-  
FIRST CENTURY IS A DAUNTING TASK  
FOR ALL OF US AND I AM GRATEFUL  
TO HAVE A CAMBRIDGE EDUCATION  
UNDER MY BELT AS I PROCEED

### MILO HARRIES

2020 is an interesting year to be writing about theatre. In January, I started a PhD about theatrical participation in the context of the climate crisis, congratulating myself on the neatness of my terms: 'theatrical participation', not 'participatory theatre', because all theatre is participatory in some way; 'in the context of', not 'about' the climate crisis, because it is not a separable theme but an inescapable condition.

Six months later, very little is neat. Many theatres will not reopen, and most will only do so under strange and straitened circumstances, victims of a crisis with ecological origins.

Theatre in the UK has suffered and continues to live through a profound and systemic change.

Fundamentally, however, my research remains the same. It has always been about entanglement: the matted, knotty webs of life and capital that surround and sustain theatrical practice, and the interrelations and interdependences that the theatre might be able to explore. To write about theatre now is still to write about that mesh, those relationships, and to recognise even more explicitly that ecological crisis is not a potential future, but a vector that determines the direction of the present.

WE SET UP A 'STAGE' NEAR MILO'S HOME IN LONDON FOR HIS PHOTOGRAPH







ALAN PLAYED IN THE FINAL CONCERT IN WEST ROAD CONCERT HALL BEFORE THE COVID-19 CLOSURE. IT WAS A STRANGE AND MOVING EXPERIENCE: ATTENDANCE WAS OPTIONAL FOR THE PERFORMERS AND THEY ONLY KNEW AT THE LAST MINUTE THAT IT WAS GOING AHEAD

### ALAN BOWMAN

My PhD focuses on understanding light-absorbing materials for use in solar panels. Most current solar panels' efficiency – the ratio of energy out compared to the sun's energy on the panel – is limited to less than 30 per cent. Increasing the number and variety of light-absorbing materials in solar panels could significantly overcome this limit.

A group of materials collectively known as halide perovskites is a promising candidate for additional light-absorbing layers. These materials were first used in laboratory-built solar panels ten years ago and subsequently efficiencies have increased dramatically. However, we still have a poor comprehension of halide perovskites' fundamental physical properties and so I have been using a mix of chemistry, lasers and computer models to improve our understanding. In a recent study, I found that adding a fraction of zinc iodide to halide perovskites improved their stability and increased the lifetime of electrical charges. Using chemical characterisation methods, we were able to show that the zinc removes detrimental regions on the surface of the material, allowing charges to live for longer. I am now exploring the role of re-emitted light in these materials.

Outside my PhD I regularly perform solo double bass recitals around Cambridge and play in the Cambridge Philharmonic orchestra. I am also a keen hiker.

### JABIN ALI

This Lent term I spent time writing on the Anthropocene, a topic I was keen to engage with in view of the current climate crisis and the wealth of writing emerging from it. Working with my Director of Studies, Dr Robert Macfarlane, my research explored the relevance and position of contemporary poetry, particularly Juliana Spahr's collection *Well Then There Now* (2011), regarding the Anthropocene, ecocide and deep time. Human actions have had such an impact on the world around us that their effects are far-reaching, implicated in, and by, deep pasts and deep futures. Because of this, Anthropocenic time is knotted and multitemporal in nature, and we are all of us – human and non-human – bound together within its folds. This thinking is largely influenced by, among other things, David Farrier's *Anthropocene Poetics* (2019), but I used Spahr's writing to unpick the ways in which poetic language, form and structure can draw attention to the complex positioning of human Anthropocenic presence, moulding via inscription a frame, that is at times ambiguous, through which to investigate environmental collapse. This was an incredibly pertinent and rewarding topic to explore.

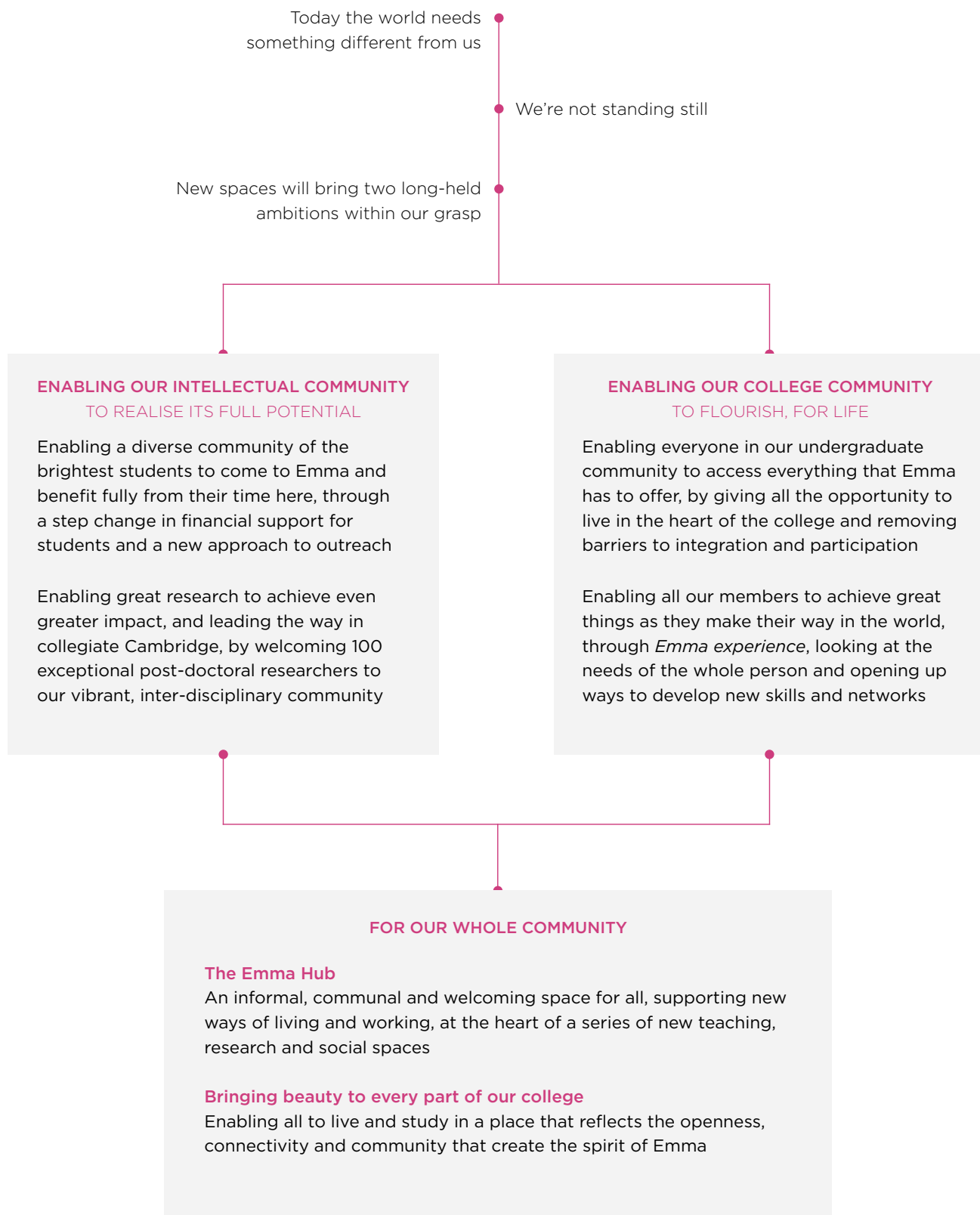
ANTHROPOCENIC TIME IS KNOTTED AND MULTITEMPORAL IN NATURE, AND WE ARE ALL OF US – HUMAN AND NON-HUMAN – BOUND TOGETHER WITHIN ITS FOLDS



THE RIVER THAMES FLOWS NEAR JABIN'S HOME

# EMMA ENABLES

THE MOST TALENTED PEOPLE  
TO MAKE GREAT CONTRIBUTIONS  
TO THE WORLD AROUND US



THE IMPACT WILL BE FELT FAR BEYOND OUR BOUNDARIES



**OUR VISION**

*Emma enables the most talented people to make great contributions to the world around us:* this is our vision for the future, which focuses on the entire Emma community. We've always been forward-looking and today the world needs something different from us. Finding answers to complex global challenges depends on being able to bring people together across subjects, disciplines and backgrounds, with a growing demand for informal places to meet and work.

Finding answers to complex global challenges depends on being able to bring people together across subjects, disciplines and backgrounds, with a growing demand for informal places to meet and work

Now we've secured the land between South Court and Park Terrace, along with Furness Lodge, we have the space and freedom to provide the facilities and programmes to realise our dreams. With our architects Stanton Williams we've



Emmanuel is an extraordinary place.

It captures learning, humanity, sport, beauty... everything that matters. When I look back objectively at my career, I realise that my time at Emma has been hugely helpful in my life. But that's not the only reason I give to the college. Emmanuel does everything that's right for the good of society

**Andrew Fane (1968)**  
Honorary Fellow & President, Emmanuel Society

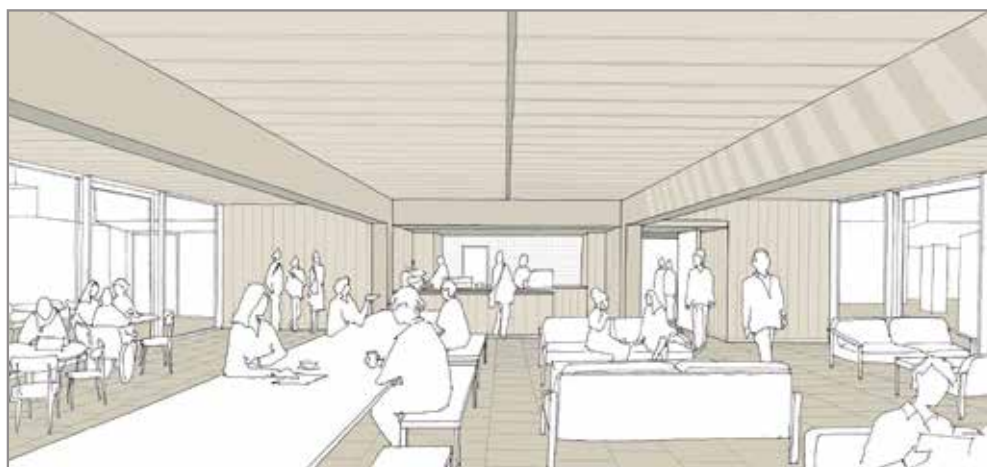
made very significant progress in the past year, with planning permission granted, firm costs agreed, and digging starting in the late autumn. A 'fly-through' on our website [www.emma.cam.ac.uk/supporting/emmaenables](http://www.emma.cam.ac.uk/supporting/emmaenables) gives an impression of the key elements.

To bring *Emma enables* to fruition, we need to invest £50 million in the project. Many Emma members are being extremely generous and we've already raised £23 million along with £12 million from the college itself. So we need £15 million to close the gap. There are many wonderful opportunities to become involved; we'll be telling you all about them in the coming year, as we plan our launch and celebration in June 2021. If you are interested to hear more in the meantime, please do not hesitate to contact us.



Courtesy of Stanton Williams

- THE NEW DEVELOPMENT WILL COMPRISE
- 50 new student rooms and a set for a Fellow
- The Emma hub: a non-hierarchical space for 70-150
- The Furness Lodge education centre
- A new MCR
- A new bar, lounge bar and event space for 300 or more
- Beautiful landscapes and gardens



ABOVE VIEW OF RESIDENTIAL COURT, LOOKING NORTH

LEFT SKETCH OF INTERIOR OF THE SOCIAL HUB, LOOKING WEST

Courtesy of Stanton Williams

# COLLEGE FINANCES

## AND THE IMPACT OF COVID-19

MIKE GROSS, BURSAR

When the university closed in March we had to act quickly to assist students going out of residence and to put in place arrangements to support the much smaller number who had to remain here throughout the lockdown. Our immediate thoughts were not about the financial implications of the current crisis.

However, the impact on college finances has been significant. We have sought to limit the financial impact on Junior Members – for example, by not charging room rents once a student has gone out of residence – and in doing so we have borne these losses in full. In Easter term 90 per cent of rooms were empty and so 90 per cent of our income from room rents was lost. For the summer, when only research students would normally have been resident, we expect to lose two-thirds of our normal room rents and almost all of the income that would have been received from students spending some of the summer in Cambridge for internships, lab placements, or the like.

We have sought to limit the financial impact on Junior Members – for example, by not charging room rents once a student has gone out of residence – and in so doing so we have borne these losses in full

With the college closed and few students remaining in residence, our catering operation all but stopped. We have offered a take-away lunch service for staff still working on site and those students who need it. For a long period we served something in the region of 30 meals a day, compared with the 600 or so that might be provided in a typical Easter term.

While we are not a college that has a separate conference business, with facilities and staff



We have served something in the region of 30 meals a day, compared with the 600 or so that might be provided in a typical Easter term

dedicated solely to those functions, our income from conferences, summer schools, dinners and functions is still very important to us. These external bookings allow us to make use of facilities and staff during periods when most students are out of residence, they generate income against fixed costs, and that income is then available to support our general educational activities. Since March all our external business has been cancelled and all of that income has been lost. We are assuming that Easter 2021 is now likely to be the earliest time when we will see any significant resumption of these external bookings.

So in the current financial year our 'hotel function' has lost some £1.5 million income in total. Our costs primarily relate to staff wages, coming to some £6.8 million annually, and they have remained fixed throughout the COVID-19 crisis. We rely on the commitment and skill of our staff – something that will be even more important as we prepare for a socially distanced Michaelmas term – and it would be a great mistake to lose that now, so redundancies or cutting rates of pay haven't ever been considered. However, we have

made use of the government's furlough scheme – we will probably receive more than £300,000 in the current year – and that income has helped to mitigate our losses.

We rely on the commitment and skill of our staff – something that will be even more important as we prepare for a socially distanced Michaelmas term – and it would be a great mistake to lose that now, so redundancies or cutting rates of pay haven't ever been considered

We have continued to provide undergraduate teaching and welfare support throughout Easter term, albeit remotely. Fellows and the staff who provide and administer our education and tutorial support have worked from home. We have continued to receive fee income at the expected level and we have also maintained the activities, and the expenditure, funded from fee income as for a normal year.

We are now planning for Michaelmas term. It is going to be one unlike any other, and we will have special arrangements to manage the risk from COVID-19 and to help keep our community safe. We're assuming that our accommodation will be



THE PADDOCK WAS BEAUTIFUL BUT EERILY QUIET THIS EASTER TERM. IT NEEDED STUDENTS MEETING, WORKING, RELAXING AND ENJOYING THE SUNSHINE, OR PLAYING TENNIS OR CROQUET, TO BRING IT TO LIFE

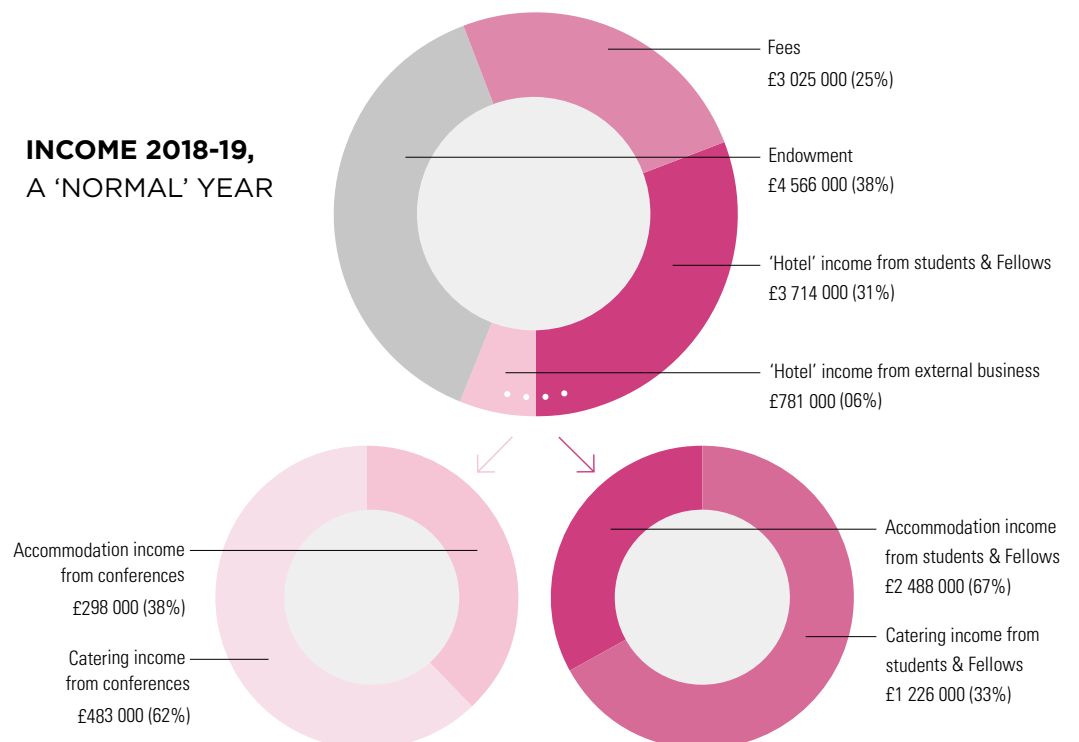


occupied and room rents will return to a much more normal level, but precise forecasts remain difficult at this stage. There is a risk that some students may be unable to travel to Cambridge, or may have health vulnerabilities that make it unwise to do so. Equally, some graduate students in particular may change their plans for 2020–21. We are therefore budgeting for fee income for the coming year to be at some 80 per cent of its normal level.

Under optimistic assumptions about the progression of the COVID-19 virus, the financial outlook for 2020–21 looks a great deal more positive than our experience since March. But a second lockdown or an additional period in which the university is closed would change that very quickly. We are therefore currently exposed to very real financial risk and uncertainty.

We entered the current crisis with good levels of general uncommitted reserves and of cash within our investment portfolio. We have therefore been able to meet the immediate shortfall in our income and can face the current uncertainties with cautious confidence

### INCOME 2018-19, A 'NORMAL' YEAR



However, we entered the current crisis with good levels of general uncommitted reserves and of cash within our investment portfolio. We have therefore been able to meet the immediate shortfall in our income and can face the current uncertainties with cautious confidence. We have been building up our reserves over a number of years for good reasons. We have needed to protect the college against future risk and uncertainty

– for example, changes to fee arrangements or volatility in investment markets – and although a global pandemic was not explicitly part of our planning it has demonstrated that need rather well. But more specifically, in recent years we have been preparing for construction on our new site, and our reserves ensure that we are well placed to proceed with such a major project with a good degree of confidence, even in times such as these.



## THANKING DONORS

Support from our members means a great deal to the college and we say thank you in various ways:

### All benefactors

- are listed in the *Emmanuel Review*
- receive invitations to occasional events in college, including garden parties for donors
- are invited to an annual party in London for all donors in the previous year

### All who pledge legacies to Emmanuel

- receive invitations to occasional events in college, including garden parties for donors

### Loyal Donor Circle

*Donors for past 10 years*

- are able to dine at High Table for a third time each year
- are listed as such in the *Emmanuel Review* with a [\*]

### Master's Circle

*£10 000 or more received*

- are offered membership of the Master's Circle and invited to an annual dinner in college
- *£50 000 or more received*
- are offered membership of the Master's Circle and invited to an annual dinner in college
- are invited to the annual Gomes lecture and dinner
- *£100 000 or more received*
- are offered membership of the Master's Circle and invited to an annual dinner in college
- are invited to the annual Gomes lecture and dinner
- are invited to a Fellows' Guest Night in May or December

### Benefactor Bye-Fellows

*£250 000 or more received*

- receive invitations to a number of college events
- are able to dine at High Table on a number of occasions each year
- are listed in the *College Magazine* and the *Cambridge University Reporter*
- are admitted at a ceremony in the Parlour
- have their names recorded on a board in the Old Library

### Benefactor Fellows

*£1 000 000 or more received*

- receive invitations to many college events
- are able to dine at High Table on several occasions each year
- are listed in the *College Magazine* and the *Cambridge University Reporter*
- are admitted at a ceremony in the Parlour
- have their names recorded on a board in the Old Library



## GIVING DAY 2020

Emmanuel's first Giving Day, *Emma gives*, took place on 10–11 March between 12 noon and 12 noon (GMT). The focus of the day was on raising funds via an online platform for our student support fund, broken down into four main areas: student hardship, graduate support, student experience, and access and outreach.

In total, Emma members, staff, students, Fellows and friends raised an incredible £146 171 from 522 donors and 530 gifts. These donations are already being used to help students who have had financial difficulties caused by the current COVID-19 crisis.

- Our initial target of 200 donors was reached in six hours
- Around 19% of our total donors were new donors
- Around 10% of our current regular donors made an additional single gift
- 133 gifts were received in the post before the Giving Day took place
- We had a range of successful matching and challenge funds, including a £25,000 overall 1:1 match

## We have welcomed this year

### Benefactor Fellows

**Dhruv & Rati Sawhney**

(1962 and 2020)

**Colin Tyler** (1952)

### Benefactor Bye-Fellows

**Annabel & Gerald Malton**

(both 1979)

**Daniela & Gilberto Pozzi**

## LATE EIGHTIES FUND UPDATE

The Late Eighties Fund was established in 2011 by Emma members who matriculated between 1984 and 1990, to help students suffering from financial hardship. In 2019–20 £35 000 has been disbursed as follows:

**£12 500** towards the college's annual payment to Villiers Park for 19 students to take part in Inspire2INVOLVE (see *Emmanuel Review* 2018)

**£8911** towards the college's share of Cambridge bursaries for the 48 students who qualify for the maximum support of £3500/year

**£5000** towards the funding of an MPhil in political thought in 2019–20 for an Emmanuel graduate

**£5000** towards the funding for a PhD student in English, who is working with Dr Robert Macfarlane

**£3589** to five students suffering from financial hardship because of family circumstances or health problems

## Securing Emmanuel's Future



## LEGACIES

There are several ways to include Emmanuel in your Will. Please ask the Development Office for a brochure giving suggested wordings and explaining about different types of bequest, and for information about how a legacy could reduce inheritance tax liability. We also suggest you consult your solicitor. We are very grateful to those who have already remembered the college in this way.

I HAVE SET AN *Acorn*, WHICH  
WHEN IT BECOMES AN *Oake*,  
GOD ALONE KNOWS WHAT WILL BE  
THE FRUIT THEREOF • SIR WALTER MILDMA



## FUNDS RAISED DONATIONS 1 JUNE 2019 TO 31 MAY 2020

|                                   |            |
|-----------------------------------|------------|
| Donations received and receivable | £9 458 329 |
| Gifts in kind <sup>1</sup>        | £99 304    |
| Legacies pledged                  | £115 000   |

<sup>1</sup> Fees not charged for managing part of the College's investment portfolio and for consultancy regarding fundraising

## HARDSHIP FUNDS & RENT BURSARIES 2018-19

|  |
|--|
| 144 grants   |
| £217 629 awarded                                     |
| £154 338 from hardship funds, balance from endowment |

## GRADUATE FUNDING 2018-19

|  |
|--|
| £146 931 to enable seven graduate students to come to Emmanuel |
|--|

## FUNDS RECEIVED 1 JUNE 2019 TO 31 MAY 2020

|  |                   |
|--|-------------------|
| Buildings, facilities & grounds <sup>1</sup> | £18 643           |
| College future development                   | £7 565 105        |
| Library <sup>2</sup>                         | £9 486            |
| Student activities <sup>3</sup>              | £44 575           |
| Student support, hardship & access           | £364 825          |
| Studentships & scholarships <sup>4</sup>     | £16 340           |
| Teaching & research                          | £11 005           |
| <b>Total</b>                                 | <b>£8 029 979</b> |

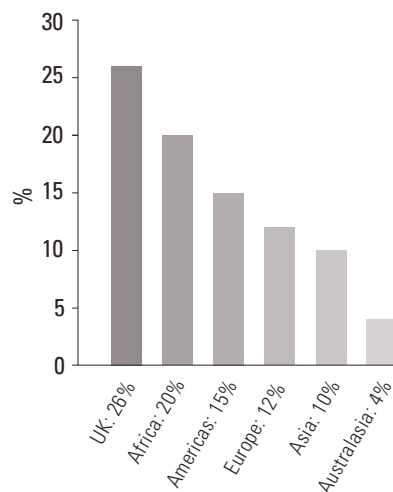
<sup>1</sup> Includes donations towards the college gardens

<sup>2</sup> Includes a donation for preservation boxes for rare books and manuscripts

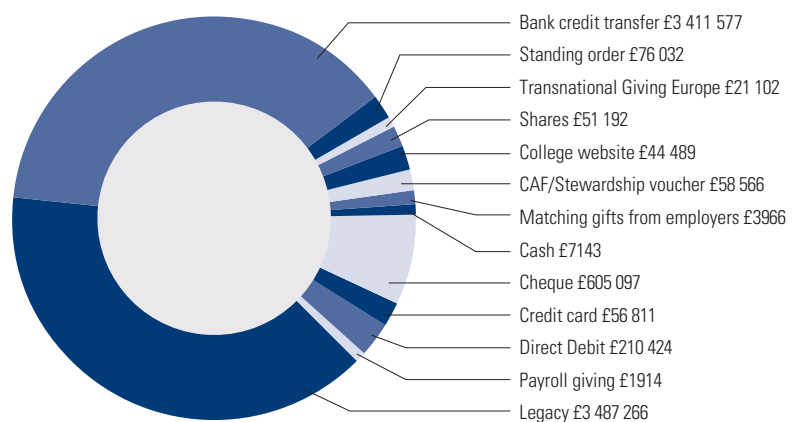
<sup>3</sup> Includes donations towards the Emmanuel College Boat Club Association

<sup>4</sup> Includes donations towards access initiatives

## PARTICIPATION RATE BY REGION



## SOURCES OF FUNDS RECEIVED 1 JUNE 2019 TO 31 MAY 2020



## NUMBER OF GIFTS RECEIVED

(average donation for gifts under £10 000 is £298)

|                       |     |
|-----------------------|-----|
| Up to £99             | 406 |
| £100–£249             | 200 |
| £250–£499             | 71  |
| £500–£999             | 50  |
| £1 000–£4 999         | 58  |
| £5 000–£9 999         | 5   |
| £10 000–£49 999       | 7   |
| £50 000–£99 000       | 1   |
| £100 000–£499 999     | 3   |
| £500 000–£999 999     | 1   |
| £1 000 000–£4 999 999 | 1   |

## SUMMARY FIGURES 2019-20

- 21%** of Emma members asked made a gift to the college
- 80%** of gifts were under £500
- 57%** of donors asked the college to allocate their gift to wherever the need is greatest
- 23%** of living members have made a donation to Emmanuel in the last five years
- 29%** of living members have made a donation to Emmanuel in the last ten years
- 34%** of living members have made a donation to Emmanuel

## TAX

Emmanuel College is a registered charity, number 1137456

The Development Office can advise on tax-deductible giving through, for example, Gift Aid, charity cheques, gifts of shares, payroll giving, legacies and charity beneficiaries on death from 'alternatively secured pensions'

## LOCKDOWN DIARY

### HARRIET HARDS UNDERGRADUATE

Easter term was not normal this year. It mostly took place in my bedroom, a long way from the whispered conversations and calming pink ceiling of the library's Fane Room. Instead of filing into the Corn Exchange to write my exam script by hand on a tiny desk, I was typing away at my laptop alone. I have really missed the normal features of my life in Cambridge: dinner in Hall with my friends, sociable evenings pouring pints at Emma bar and the walk back across Parker's Piece to Warkworth Street after a long evening in the library. While we wait to return to college, I've tried to adapt to these new circumstances, particularly in my role as President of the Emmanuel College Student Union.

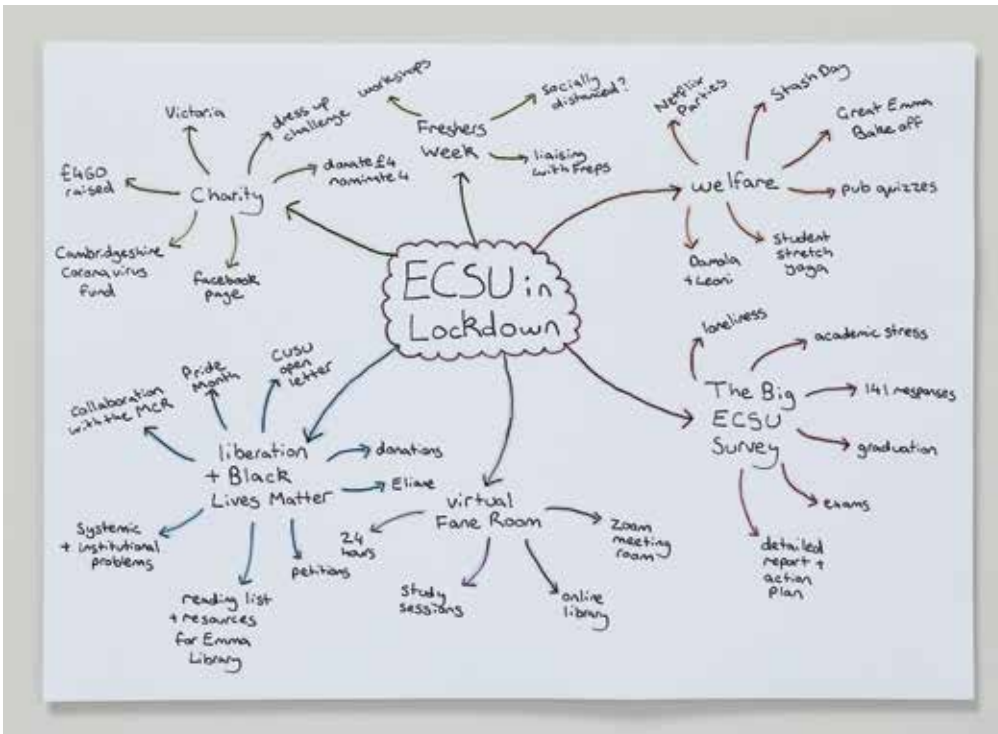
INSTEAD OF FILING INTO THE CORN EXCHANGE TO WRITE MY EXAM SCRIPT BY HAND ON A TINY DESK, I WAS TYPING AWAY AT MY LAPTOP ALONE

We worked very hard to maintain a sense of community among undergraduates while we were all miles apart. Our welfare officers, Leoni Boyle and Damola Odeyemi, organised online pub quizzes, Netflix parties and yoga lessons to provide some light relief in an intense term. The normal welfare timetable of Week 5 pidge [pigeon-hole] sweets and a bouncy castle on the Paddock was sadly impossible but Leoni and Damola still put in an enormous amount of effort and care into events to bring us together. Victoria Kyriacou, ECSU's Charities Officer, succeeded in raising £460 in three days for the Cambridgeshire coronavirus fund by starting a social media challenge where students uploaded a picture of themselves in fancy dress, donated £4 and nominated four friends to do the same. As President, I met college staff regularly to discuss



WE'VE WORKED VERY HARD TO MAINTAIN A SENSE OF COMMUNITY AMONG UNDERGRADUATES WHILE WE'RE MILES APART





LEFT PLANNING FOR ECSU IN LOCKDOWN

BELOW ECSU ENCOURAGED STUDENTS TO SEND IN PICTURES OF THEMSELVES DRESSED IN COLLEGE 'STASH' (EMMA-BRANDED CLOTHING)

topics such as exam arrangements, plans for a socially distanced Michaelmas term and ways we can support the Black Lives Matter movement. I also started a series on the ECSU Instagram called 'Em-memories', spotlighting students and their favourite college memories.

Studying at home has been a lonely experience for many of us. While it is lovely to have this time with my family, there is something to be said for that exam-term solidarity you have with friends going through the same thing. Supervisions conducted through webcams have been useful but the quality of discussion certainly takes a hit when you have to make a special effort not to interrupt each other, and it has been sad to miss those laughs you have with your supervision partner before and afterwards. Social media makes it easier to keep in contact with those I'd normally see every day and some of my lockdown highlights have been the times when Jerry Chen, the ECSU Vice-President, has made me cry with laughter.

I've used the time at home to get back into running as it is such a simple way to escape my desk and burn off the stress of the day. Finnian

Robinson has set up a group on the app Strava for the runners at Emma where we can support each other. He's even coordinated Saturday morning 'parkruns' where we all run 5K and Zoom over coffee afterwards. I'm very much an amateur runner, but it has been wonderful to see progress as I run further and further over the Cotswold hills where I live. These little things matter a lot when otherwise consumed by exam preparation and will keep me going until I can run along the River Cam again in October.



Graphics: Leon Boyle, ECSU Welfare Officer

## EMMA ONLINE

Regular e-newsletters and *Emma Connects* (we need your email address)

Emmanuel College Members (private group):

[www.facebook.com/groups/554901871328458](https://www.facebook.com/groups/554901871328458)

Emmanuel in America:

[www.facebook.com/groups/emmausa](https://www.facebook.com/groups/emmausa)

[Alumni of Emmanuel College](#)

[Follow EmmaCambridge](#)

[Follow EmmanuelCambridge](#)

## VISIT EMMA

*During the COVID-19 pandemic we have sadly had to close the college to visitors. We look forward to welcoming Emma members to dine, stay or hold private events as soon as we can reopen*

- Dine at High Table (matric 2013 and earlier):  
[www.emma.cam.ac.uk/dining](http://www.emma.cam.ac.uk/dining)  
0044 1223 762792  
(free for members, payment for a guest)
- Student guest rooms with shared facilities:  
[www.emma.cam.ac.uk/guestrooms](http://www.emma.cam.ac.uk/guestrooms)  
0044 1223 334255
- Private meetings, meals and conferences:  
[conferences@emma.cam.ac.uk](mailto:conferences@emma.cam.ac.uk)  
0044 1223 331978

The Emmanuel Society and Development Offices share staff and rooms on D staircase, Front Court:  
[emmanuel-society@emma.cam.ac.uk](mailto:emmanuel-society@emma.cam.ac.uk)  
0044 1223 762792