

EMMANUEL 2022  
REVIEW





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The still life on the cover of the *Review* was set up in the space that's soon to become the new bar. David Hobbs, the buildings manager, helped collect props: Portland stone, concrete and bricks from the site, and a discarded masonry plug. The acorn theme continues from previous editions, and the bark is from the oriental plane tree. The branch with lichen comes from the gardens. The blackbird's sweet song bolstered Marcus (photographer) and Binney (designer) during the photography sessions held outside during the pandemic. Emmanuel's coming alive again.

*Emmanuel College would like to thank all those who have assisted in the production of the Review. We are particularly grateful to the staff at the department of Plant Sciences and at Emmanuel, in particular our gardeners and buildings manager*

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## VIEW FROM THE LODGE



**I write this as my first year, as your twenty-eighth Master, nears its end. And what a year it has been.**

As every day passes my understanding of how fortunate I have been to take over from Fiona, to have *Emma enables* as our compass and to have started my Mastership as the COVID-19 regulations eased, only grows. To use a maritime analogy, the ship has come out of a storm but is stable and tidy so it's the perfect time to walk the decks and get to know the crew. I have seized every opportunity to do so and spent time listening to and learning from our students, staff, Fellows and global membership. These conversations have taken place all around college and at all hours: having the temporary bar beside the Lodge has proven useful! In my conversations I have gained a much more nuanced understanding of our community, which has only deepened my sense of service to it. The other thing

IN MY CONVERSATIONS I HAVE GAINED A MUCH MORE NUANCED UNDERSTANDING OF OUR COMMUNITY, WHICH HAS ONLY DEEPENED MY SENSE OF SERVICE TO IT

that Helen and I do every morning, as we look out of the Lodge at the chapel, is pinch each other to remind ourselves how lucky we are to be here. It is a magical place.

But COVID-19 did affect our community and its spirit. It made us more segregated and distant from each other. And with that, many relationships felt more transactional and less respectful. The good news is that, although the impact on individuals will take longer fully to understand, we have re-found our sense of empathy, tolerance and inclusion. Those that know tell me that it almost feels normal as we head into May week! But I think it is even more than that: as I watch everyone reaching out to strengthen the connections that bind us, I see that we are taking the opportunity to grow back better and to soften, but not remove, some of the traditions and habits that segregated us. Things such as the opening of *Fiona's*, a place for all to meet, are helping us make the most of the opportunities that this post-pandemic period offers us to bring us closer to each other.

*Fiona's* is the first of our new spaces to open. From its first day it has been busy. It has been wonderful to observe the hustle of revision activity and chance conversations between the years as well as between staff, students and Fellows.

The other building works are advancing rapidly. The drawings that we had all become accustomed to looking at are being transformed into buildings that are visibly recognisable. We remain on track to open these new and refurbished spaces during Lent term next year. This is remarkable, given the complexity of the project and a pandemic! Mike Gross, our Bursar, has been the reason why. His judgement and supervision have been nothing but exceptional. An observation underlined when one notes the level to which he has kept his eye on the long term by worrying about insulation, thermal mass and alternative energy sources such as a ground-source heat pump. In doing so Mike has ensured that improvements to the sustainability of our site are real, not rhetoric.

But, as you all know better than I, *Emma enables* is a human project not a building one. One focused on ensuring that our people build the knowledge and experience to thrive in life. And we are starting to make tangible steps in this direction as well. We have just recruited the director for our *Emma*

*experience* programme and have developed a plan to grow our post-doc community over several years. These two initiatives are exciting, and we know they will add much to our community and the magic of research-led teaching. But we don't exactly know how they will work just yet. We don't want to rush that detail and are avoiding being overly prescriptive at this stage, as we know that both will adjust as we start learning by doing. In the pages that follow, you will be able to read more about our progress.

So, this time next year will see our new spaces occupied and being used in ways that are always hard to predict. I just know that we have the right minds to make the most of them. We will also be further along the *Emma experience* journey and developing our post-doc community. I have no doubt that the direction of travel that we are on will keep us in the vanguard of an ever-changing Cambridge, both nationally and globally.

**Douglas Chalmers**  
Master



THE OPENING OF *FIONA'S* WAS A TIME TO CELEBRATE WITH MEMBERS OF THE MASTER'S CIRCLE AND THANK THEM FOR ALL THEY HAVE HELPED US ACHIEVE

*EMMA ENABLES* IS A HUMAN PROJECT NOT A BUILDING ONE. ONE FOCUSED ON ENSURING THAT OUR PEOPLE BUILD THE KNOWLEDGE AND EXPERIENCE TO THRIVE IN LIFE

# (EUR)ASIA BEFORE THE WEST

AYŞE ZARAKOL, FELLOW

**There is a prevailing assumption, in and outside academia, that Asia has always been a fragmented continent. This stems from the notion that the various regions as currently conceived – East Asia, Central Asia, South Asia, Southeast Asia, West Asia (the Middle East) and North Asia (the post-Soviet realm or Eurasia) – are natural, self-contained spheres of human political, economic and social activity, and that the connection beyond them takes special effort. Perhaps because the continent is so large, and also because these areas are not as well connected as they could be even with today's technologies, it is imagined that they must always have been so and that it was only expansion by European great powers into Asia that connected the local actors to others beyond their regions.**

Such relatively unexamined beliefs about the natural fragmentation of Asia as a political space has some significant implications for our understanding of contemporary developments. When different parts of Asia join up in a common endeavour it is perceived as a new tie, without much historical precedent.

Such assumptions are built on an erasure of (Eur)Asia's real history. In *Before the West* I argue first that the geographical space we call Asia today has a connected history that goes back almost a millennium, if not longer. What the Roman Empire is to European history, the Mongol Empire is to Asian history. In

the thirteenth century Genghis Khan created an empire with a universal vision, with institutions and norms diffusing down the ages, giving shape to seemingly disparate geographies. The successor states to the Mongol Empire modified, reproduced and further disseminated many of these institutions and norms for centuries to come. They created political world orders, trade networks and socio-cultural connections that traversed the continent.

Genghis Khan's empire spanned almost the entire continent, from the shores of the Pacific Ocean to the Black Sea. At the end of the thirteenth century, the empire broke up into four competing khanates: the Golden Horde/Jochid Khanate ('Russia'), Ilkhanate ('Persia'), Chagatai Khanate (Inner/ Central Asia) and the Yuan Dynasty of Kublai Khan ('China'). Over the course of the fourteenth century, these khanates eventually gave way to other ruling dynasties of Asia, some of which were directly (eg the Timurids, the Mughals) or ethno-linguistically (eg the Ottomans, the Safavids) related to the Chinggisid ruling dynasty, and some of which were not (eg the Rurik, the Ming), but all of which exhibited degrees of influence from the earlier periods of Mongol rule in their approach to sovereignty. We can thus observe both increased degrees of political centralisation and also claims of universal empire in these successor polities well into the seventeenth century and beyond.

THE GEOGRAPHICAL SPACE WE CALL ASIA TODAY HAS A  
CONNECTED HISTORY THAT GOES BACK ALMOST A MILLENNIUM,  
IF NOT LONGER. WHAT THE ROMAN EMPIRE IS TO EUROPEAN  
HISTORY, THE MONGOL EMPIRE IS TO ASIAN HISTORY

*Ayşe is Professor of International Relations in the Department of Politics and International Studies, and has been a teaching Fellow at Emmanuel since 2013. She published Before the West: The Rise and Fall of Eastern World Orders with Cambridge University Press in 2022*

Along with Chinggisid sovereignty, several supporting institutions associated with the Chinggisid model diffused across Asia. The story of Genghis Khan as a world-conqueror and law-giver lived on for centuries, legitimising a certain type of political rule throughout Asia and strengthening the hands of rulers desiring to claim centralising political authority. Different corners of (Eur)Asia were thus connected to each other for centuries, not only through trade networks but also politically, socially and culturally. In other words, there is a continental narrative that covers centuries of shared practices, institutions, ideas and norms





across Asia. Some of these ideas also influenced Europe, via the Habsburgs.

To recover that history is important for academic scholarship, but there are also policy implications. To begin with, there is a real shared 'Asian' legacy for China (or any other 'Asian' power, including Russia) to draw upon, a narrative of commonality to be used in present-day discourses. At the moment it is not used, but that doesn't mean it will not be in the future. Therefore, it is worth having an account of shared (Eur)Asian history that is not also an apology for autocracy. Secondly, and perhaps

LEARNING THE HISTORY OF THESE EASTERN WORLD ORDERS AND HOW THEY DECLINED DRAWS OUR ATTENTION TO ISSUES THAT INTERNATIONAL RELATIONS HAS LONG IGNORED: CLIMATE CHANGE AND OTHER SIMILARLY STRUCTURAL PRESSURES

even more significantly, learning the history of these Eastern world orders and how they declined draws our attention to issues that the study of international relations has long ignored: climate change and other similarly structural pressures. Reviewing the trajectory of Eastern world orders, for example, it is hard to overlook the fact that major crises punctuate

the end of each order, even if the exact chain of causality is hard to ascertain. The fragmentation of each Eastern world order seems to correlate with a 'general crisis' that affected large areas of the northern hemisphere. What seems to destroy world orders, at least in history, is not great power rivalry but structural pressures that fray connective tissues.



# JOINT VENTURE

MATT SEAH, FELLOW

**For centuries, stiff and painful joints were seen as a mark of mortality, hence Caravaggio's depictions of the elderly with their crooked digits and knobby knees. I first became aware of all this when growing up in Singapore, not through the greats of Western art, but by seeing my grandmother's daily attempts to overcome her arthritis and the early onset of my mother's knee arthritis, which has caused her years of discomfort. These are just the sort of knees that I see week after week in clinic at Addenbrooke's Hospital, where for seven years I've been an orthopaedic surgeon.**

My family and my experience of managing patients with degenerating joints intensified my interest in what's become my research passion: can arthritis be managed better, or even reversed? I began pursuing this as an academic fellow at the hospital, which led to a PhD at Cambridge and now to research at Emmanuel alongside my clinical work at Addenbrooke's.

Arthritis lessens the quality of life for millions of people and results in considerable costs to the NHS. Surprisingly, however, what initiates it and causes it to progress is poorly understood. A result of damaged cartilage in the joints, we lack an effective intervention capable of regenerating the damaged tissue: the mainstay of treatment remains joint replacement at an advanced stage of the disease. Treatment options for the early stages are limited, despite the significant impact that arthritis has on patients' quality of life.

ARTHRITIS LESSENS THE QUALITY OF LIFE FOR MILLIONS OF PEOPLE AND RESULTS IN CONSIDERABLE COSTS TO THE NHS. SURPRISINGLY, HOWEVER, WHAT INITIATES IT AND CAUSES IT TO PROGRESS IS POORLY UNDERSTOOD

Over a decade ago, when I delivered a paper on challenges in orthopaedics, I talked about the difficulties of joint replacement in younger patients. Artificial joints have a finite lifespan and when implanted last for approximately 15 years. For younger patients this period is even shorter and inevitably means repeat surgery in the future, causing reluctance in offering joint replacements and adversely affecting quality of life. This has meant that all too often I've found myself having conversations with patients about the lack of treatments for their early arthritis, and in younger patients with established arthritis, the prospect of multiple surgeries in the years ahead.

With instances of arthritis ever on the rise, this approach is unsustainable. We need to develop interventions that can either prevent or significantly reduce the risk of developing the disease. We need a radical shift in healthcare strategy to manage early-stage arthritis, which is likely to include stem-cell-based regenerative therapies; these are the subject of my research.

Amongst the many cells that adults possess are a type called mesenchymal stromal cells (MSCs). In contrast to the specialised cells of our bodies – those found, for instance, in our skin, heart or brain – these are undifferentiated cells, meaning they do not yet have a specific function. They can, however, mature into other stem cells or into cells that go on to become specialist cells in the body, and can be obtained from adult tissues such as fat and bone marrow. Their relative accessibility has meant that researchers and clinicians have sought to give them to patients following all kinds of tissue damage: after a heart attack, for instance, or to regenerate cartilage in the case of arthritis. But early enthusiasm for such therapies has not been matched by an evidence base strong enough to demonstrate how these cells function or how

they might be deployed more precisely as a treatment for disease.

I'm developing new techniques to track and monitor MSCs after they are introduced into the body, trying to find out where they go and what they do, in both healthy and diseased conditions. I'm aiming to answer the question, 'How do we ensure that they become cartilage-producing cells when introduced into the disease environment?'

One of the ways I'm approaching this problem is by using multi-modal imaging techniques that allow both whole-body imaging and also high-resolution imaging at a cellular level. If we can determine the tissue-specific location of the injected cells, or the migration of MSCs, we might be better able to understand, and subsequently manipulate, their behaviour in the context of cartilage regeneration.

My hope, as a clinically based research and teaching Fellow, is that I'll be able to say that it was work done at Emmanuel that transformed the treatment of arthritis, and enabled us to make a positive impact on the health of millions of people.

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*Matt joined us as a teaching and research Fellow in 2021. In the spirit of encouraging Fellows to keep fit and mobile, he's revived a Fellows' and staff boat and they're hoping to race in bumps before too long*



# MACHINING A GREENER FUTURE

GEMMA SWAN  
POSTGRADUATE STUDENT



In October 2021, there were nearly 300 postgraduate students in residence and 462 undergraduates. Of the postgraduates, over one-third are studying for PhDs, with the others taking Master's or clinical courses. Gemma Swan is in the first year of her PhD, and she describes her research below.

Like many, I was transfixed by the extraordinary scientific feats that underpinned the development of COVID-19 vaccines, less than a year after the sequencing of the viral genome. While the incredible nature of this achievement will be recognised for years to come, the global vaccine rollout also highlighted socio-economic disparities at play in access to vaccines. Today, over 5.17 billion people, 67.4 per cent of the global population, have received a vaccination, and this distribution is strongly skewed in favour of high-income countries. This trend is reflected more generally in access to basic vaccines, clinical diagnostics and biopharmaceuticals. There is a distinct need to establish a low-cost, flexible protein expression platform that could lower economic barriers and facilitate increased global access to vaccines and diagnostic reagents.



Traditional large-scale pharmaceutical production is energy- and resource-intensive, often incurring high operating costs. Exploiting plants as bio-factories, also referred to as molecular farming, has been identified as a viable method for large-scale protein production, with the capacity to deliver economically accessible vaccines and clinical diagnostics. Chloroplast engineering has the capacity for rapid expression of the target protein in early divergent plants under simple horticultural conditions commonly seen in vertical farming-style systems.

My PhD sits at the interdisciplinary intersection between synthetic plant biology, engineering, photonics and optics. The overarching goal of the project is to develop a novel, low cost, nano electroporation device to express photonic

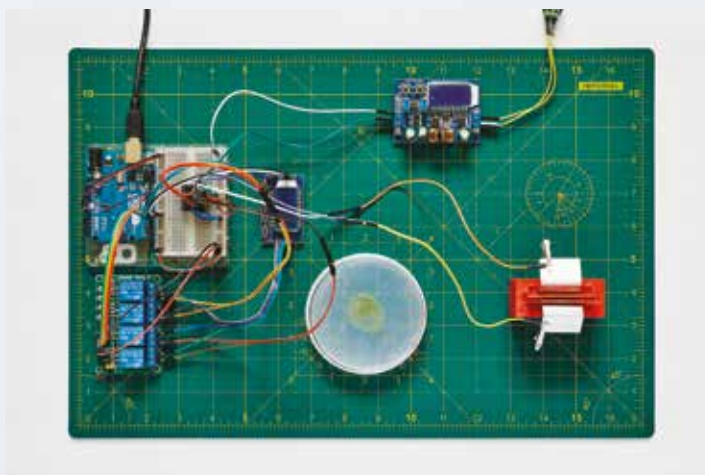
MARCHANTIA POLYMORPHA IS A COMMON WEED AND CAN OFTEN BE FOUND ON THE SIDES OF THE BUILDINGS AROUND CAMBRIDGE. ITS FLAT, SHEET-LIKE STRUCTURE LENDS ITSELF TO DIRECT OBSERVATION WHILST ITS SMALL GENOME AND LOW GENETIC REDUNDANCY MEAN IT HAS SIGNIFICANT APPLICATIONS IN SYNTHETIC BIOLOGY

nanobodies in the chloroplast and integrate them into low-cost diagnostic devices. In short, to showcase plants as bio-factories capable of faster, greener synthesis of clinical diagnostic reagents and vaccines.

The focus for my first year has been to develop a nano electroporation device utilising low-cost, readily available components, making the technology accessible to all. This device should help increase protein expression rates in the chloroplast, by facilitating efficient transfection of the genetic material into the chloroplast, one of the major bottlenecks in the field.

Taking on an interdisciplinary project has been uncomfortable at times. Nevertheless, it has pushed me to be more creative than ever before, culminating in the successful marrying of engineering, nanotechnology and synthetic biology that has led to the development of something truly novel. Whilst rooting yourself in an interdisciplinary space can initially feel daunting, the opportunity to learn from others and exercise resilience in the face of the unknown has proven invaluable.

THERE IS A DISTINCT NEED TO ESTABLISH A LOW-COST, FLEXIBLE PROTEIN EXPRESSION PLATFORM THAT COULD LOWER ECONOMIC BARRIERS AND FACILITATE INCREASED GLOBAL ACCESS TO VACCINES AND DIAGNOSTIC REAGENTS





## POST-DOCS

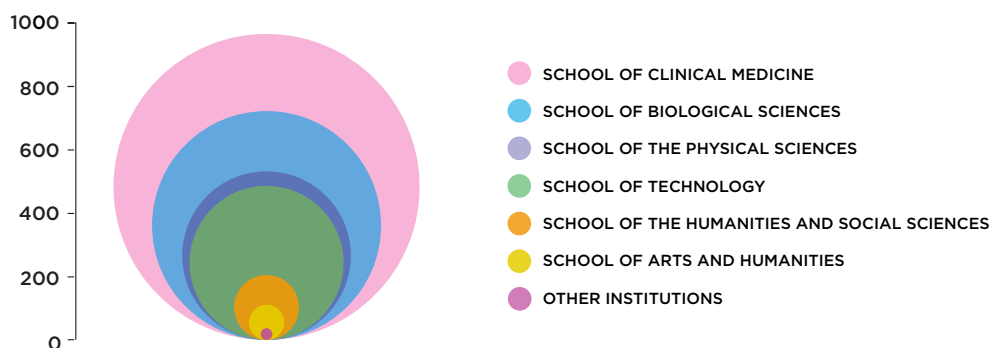
SARAH BENDALL  
DEVELOPMENT DIRECTOR

As part of *Emma enables* we will increase the number of Emma post-docs – early career researchers – from 12 to 100 over the next few years. Making up 35 per cent of the university's staff, only 20 per cent of the 4000 or so have a college affiliation. They thus miss out on the networks, opportunities and resources that students and academics enjoy.

Post-docs are scattered across Cambridge and are found in all academic schools. We are keen for them to be an interdisciplinary community, able to play a full part in college life. They will be supported by the *Emma experience* director and some might teach for us. For some, their subjects will reflect the interests of donors.

As the map shows, many work close enough to the college to come into lunch.

We are looking forward to the arrival of the first cohort in October 2023.



**ADDENBROOKE'S SITE | 1045**  
SCHOOL OF CLINICAL MEDICINE  
SCHOOL OF THE BIOLOGICAL SCIENCES

**CENTRAL CAMBRIDGE | 1314**  
BATEMAN STREET  
SCHOOL OF THE BIOLOGICAL SCIENCES

**DOWNING SITE**  
SCHOOL OF THE BIOLOGICAL SCIENCES  
SCHOOL OF THE HUMANITIES AND SOCIAL SCIENCES  
SCHOOL OF THE PHYSICAL SCIENCES

**LENSFIELD ROAD**  
SCHOOL OF THE PHYSICAL SCIENCES

**MILL LANE**  
SCHOOL OF ARTS AND HUMANITIES  
SCHOOL OF THE HUMANITIES AND SOCIAL SCIENCES

**NEW MUSEUMS SITE**  
SCHOOL OF THE BIOLOGICAL SCIENCES  
SCHOOL OF THE HUMANITIES AND SOCIAL SCIENCES

**TRUMPINGTON STREET**  
SCHOOL OF ARTS AND HUMANITIES  
SCHOOL OF TECHNOLOGY  
SCHOOL OF THE BIOLOGICAL SCIENCES  
OTHER INSTITUTIONS

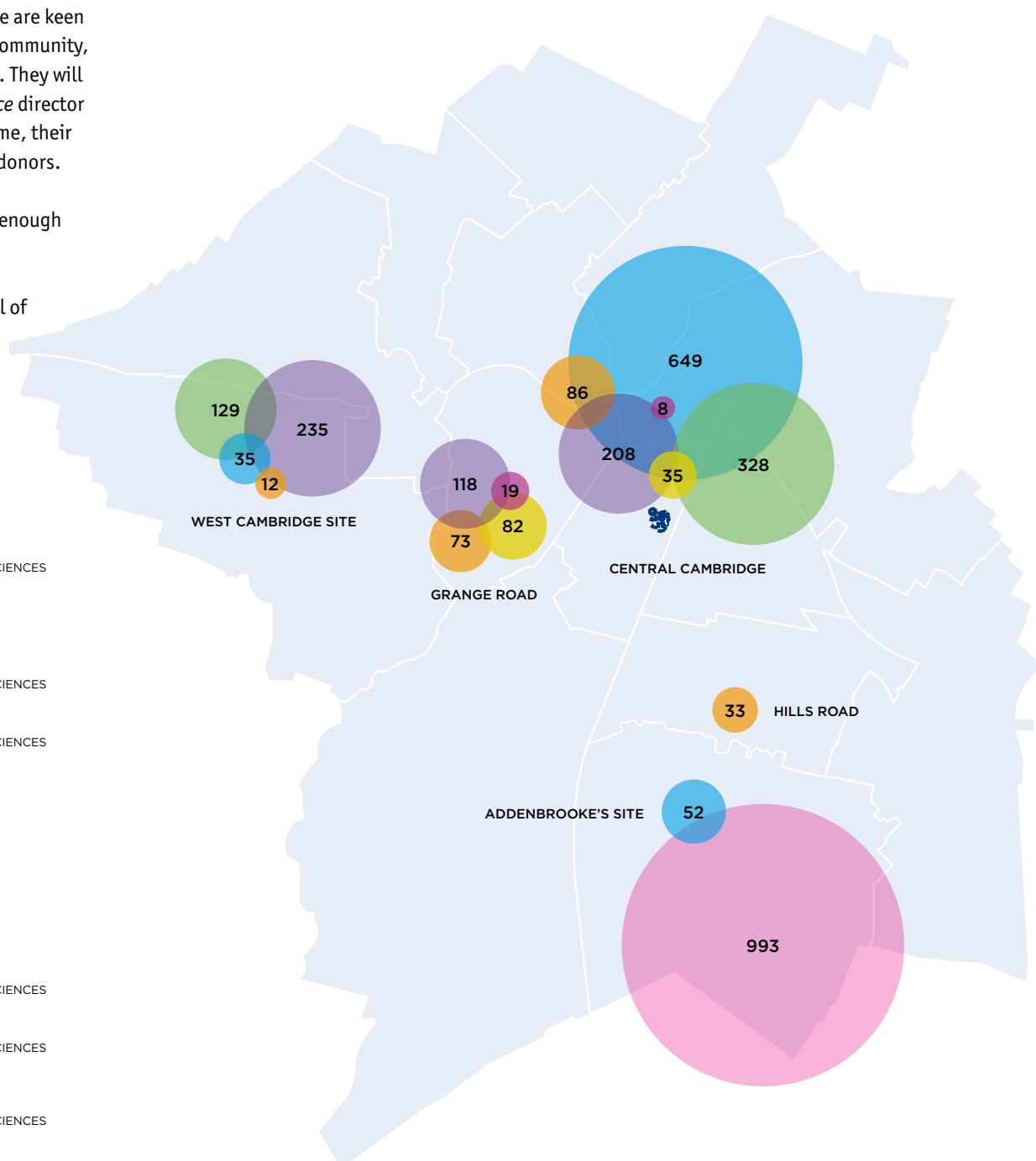
**GRANGE ROAD | 292**  
GRANGE ROAD  
OTHER INSTITUTIONS

**WILBERFORCE ROAD**  
SCHOOL OF THE PHYSICAL SCIENCES

**SIDGWICK SITE**  
SCHOOL OF ARTS AND HUMANITIES  
SCHOOL OF THE HUMANITIES AND SOCIAL SCIENCES  
OTHER INSTITUTIONS

**HILLS ROAD | 33**  
SCHOOL OF THE HUMANITIES AND SOCIAL SCIENCES

**WEST CAMBRIDGE SITE | 411**  
SCHOOL OF TECHNOLOGY  
SCHOOL OF THE BIOLOGICAL SCIENCES  
SCHOOL OF THE HUMANITIES AND SOCIAL SCIENCES  
SCHOOL OF THE PHYSICAL SCIENCES



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## STUDENTS

HOLLY DAVIES  
POSTGRADUATE STUDENT

**Donors have enabled seven students to study for MPhils at Emmanuel this year. Holly Davies is supported by a combination of three such gifts and by the Sheikh Zayed studentship at the Faculty of Divinity.**

I am an MPhil candidate reading theology, religion and the philosophy of religion. More specifically, I study religion and conflict. My research is focused on the relationship between Hamas' strategy of suicide bombings and its religious ideology.

I was raised in a former coal mining village in South Wales, as were my parents and their parents before them. I had always pondered why the literature of my academic discipline did not sufficiently direct policy decisions and I longed to learn more, but undertaking an MPhil was construed as a luxury. Unfortunate occurrences served only to bolster this belief: in February 2020, a storm caused my hometown to flood and my father's business was inundated; in January 2021, he suffered a heart attack.

In this photograph, I can be seen wearing a Welsh kilt ('cilt' in Welsh), which was worn by my mother almost 30 years ago, before it was given to me. She was the first and only other person in my family to attend university. I am incredibly proud to stand in Emmanuel wearing this cilt, as a reminder of my heritage and the journey that the college has furthered.

I am truly grateful for the altruism of the Emmanuel community and, in the future, I would like to help somebody to attend the college, just as the goodwill of strangers has helped me. Discovering that donors decided to support somebody from Wales fills my heart with unmeasurable pride. Next year, I will be joining the Civil Service Fast Stream programme to take forward what I have learned here.



DISCOVERING THAT DONORS DECIDED TO SUPPORT SOMEBODY FROM WALES FILLS MY HEART WITH UNMEASURABLE PRIDE. NEXT YEAR, I WILL BE JOINING THE CIVIL SERVICE FAST STREAM PROGRAMME TO TAKE FORWARD WHAT I HAVE LEARNED HERE



BROD HALDANE-UNWIN  
POSTGRADUATE STUDENT

**Brod Haldane-Unwin read history at Emmanuel 2018–21. Income from a legacy left by Nicholas Henshall (1964) has enabled him to stay to study for an MPhil in medieval history.**

In both 793 and 806 we hear about the ransom of Christian monks by Charles the Great, the first emperor in Western Europe since the fall of Rome. Charlemagne is today remembered as 'the Father of Europe' and a prize is awarded annually in his name for work that furthers the cause of European unification. At the start of the ninth century, however, Charles was far less concerned with uniting Europe than with projecting an image of himself as the rightful ruler of the imperium Christianum, in the tradition of the Christian Roman emperor Constantine.

My research seeks to reinterpret these two ransom cases in this context of Charles's self projection, enabling us to appreciate properly the novelty of his actions. I track his legacy through ransom practices through to the deposition of the last Carolingian emperor in 888. This continues my previous work on the mechanics of ransom negotiation in early medieval Europe and will inform my broader research interests, which focus on the exchange of information and practices across borders, both political and cultural.

It is only now, having been here at Emma for four years and soon to leave, that I have really come to appreciate how central the college community has been in facilitating such exchanges in my own life. In this time, despite the best efforts of COVID-19, I have developed greatly, not only academically but also more generally as a person, and I have made a number of life-long connections. Easter term is truly magical at Emma and the chance to experience another one through the generosity of a legacy is something I will never forget.

IT IS ONLY NOW, HAVING BEEN HERE AT EMMA FOR FOUR YEARS AND SOON TO LEAVE, THAT I HAVE REALLY COME TO APPRECIATE HOW CENTRAL THE COLLEGE COMMUNITY HAS BEEN IN FACILITATING SUCH EXCHANGES IN MY OWN LIFE







EMMA'S SWIMMING  
POOL TURNED INTO  
A LABORATORY FOR  
JOEL'S PROJECT

WE ARE ALWAYS KEEN TO HELP STUDENTS MEET EXTRAORDINARY EXPENSES THAT THEY MIGHT INCUR IN RELATION TO THEIR STUDIES, SO THAT THEY CAN FOLLOW THEIR PASSION AND CURIOSITY. THE MARRIOTT FUND HELPS STUDENTS READING ENGINEERING, INCLUDING JOEL MAYER'S PROJECT THAT HE WRITES ABOUT HERE.



# IN AT THE DEEP END

JOEL MAYER  
UNDERGRADUATE

**I began diving almost nine years ago and I knew instantly that it would play a significant part in my life.**

During my second year at Emmanuel I decided to focus on working towards a career in the commercial diving industry upon graduating. Therefore, I elected to undertake my Master's project in underwater engineering surveys, to improve current onshore methods in the industry. This project saw me take existing land-based and offshore methods, modernise them and apply them in the vastly more constrained onshore environment, where most offshore methods are not suitable because of smaller lengths and challenges with visibility, duration and budget.

The final apparatus I devised resembles a conventional total survey station, but operates with taut wire instead of lasers and uses an acoustic modem for telemetry. A complex post-processing algorithm was also created to manage data from the new system. The project culminated in several hours of testing in the college pool, in water at a temperature of seven degrees, the data from which showed significant improvement over methods currently used onshore in accuracy and practicality. Skills learned from this project and knowledge accumulated along the way will no doubt help me when I begin my job in South Wales this summer as a graduate engineer diver.



## EMMA EXPERIENCE

DOROTTYA FRICSKA

The college's charities committee distributes grants to students to enable them to undertake voluntary work during the vacations. We are intending to increase such activity as part of the *Emma experience* programme. Below, Dorottya Fricska, an undergraduate reading natural sciences, writes about her help on the COVID-19 vaccination programme in the Long and Christmas vacations of 2021.

Volunteering for St John Ambulance to deliver the COVID-19 vaccine has been a hugely challenging and satisfying experience. As a naturally shy person, I would never have thought that I would enjoy working with so many people. Pushing myself beyond my comfort zone has made me a more confident person in my everyday life.

As a volunteer I performed two roles. First, I assessed patients' medical records, ensuring the chance of adverse effects was minimised prior to vaccination. I worked together with a supervisor, a registered health care professional, who advised patients on any potentially contraindicated conditions. The role was very challenging as I balanced recording vaccinations alongside administering the vaccine. Initially I was anxious about causing pain to patients, but most vaccinations were completed without incident.

My other role was to look after patients for 15 minutes following their vaccination. This observation period was critical for detecting and treating potential anaphylactic reactions caused by certain ingredients in the Pfizer or Moderna vaccines. Adverse reactions are extremely rare, so most of my time was spent tending to needs of patients such as providing a glass of water on a hot day or some biscuits for small children accompanying their parents.

I worked with a large number of enthusiastic and diligent doctors and nurses, who taught me the importance of good, personalised clinical care in delivering potentially life-saving treatments.

I would like to thank the charities committee for making all this possible.



I WORKED WITH A LARGE NUMBER OF ENTHUSIASTIC AND DILIGENT DOCTORS AND NURSES, WHO TAUGHT ME THE IMPORTANCE OF GOOD, PERSONALISED CLINICAL CARE IN DELIVERING POTENTIALLY LIFE-SAVING TREATMENTS



## EMMANUEL COLLEGE MUSIC SOCIETY

GEORGE MADDISON &amp; ISABEL MAY



Arranging a recital to be performed in the Master's Lodge was the perfect start for us in our first term as presidents of the Emmanuel College Music Society. Between members of the society and talented friends around college, we managed to bring together a mix of musical styles including jazz, classical and even an *a capella* arrangement of African songs, all of which served as an excellent display of the range of styles and skills within our society. It was a lovely supportive environment in which both to perform and watch, and we're looking forward to creating and performing more music in the year ahead.

**PROGRAMME**

GEORGE MADDISON - PIANO  
SCHUBERT: IMPROMPTU IN G flat  
RACHMANINOV: MOMENTS MUSICAUX NOS 3 & 5

JAKE MOLL  
JAZZ PIANO IMPROVISATIONS

NIK BROWN  
CLASSICAL PIANO IMPROVISATIONS

RAFAEL MORTER - VIOLIN  
CARLOS GARDEL: POR UNA CABENZA  
IMPROVISATIONS ON FOLK SONGS

ISABEL MAY, LUCY MARTIN, DOM DAKIN  
& GRÉGOIRE DENJEAN  
A CAPELLA VOCAL ARRANGEMENTS:  
HENRY MANCINI: MOON RIVER  
HAROLD ARLE: OVER THE RAINBOW  
TOTO: AFRICA

## THE *EMMA EXPERIENCE* JOURNEY



CONNOR



AADI

In preparation for the launch of *Emma experience* in 2022–23, Doug Chalmers sat down with Natasha Usselmann, vice-president of ECSU, Aadi Sharma, MCR president and recent graduate Connor MacDonald (2015) to chat about the programme.

**DC:** It's great to have a chance to chat with you all about *Emma experience* as we kick off with it. We've recruited the director, who will be working, among other things, on a programme about life skills; health, wealth and wellbeing; and global citizenship. One of the big things about *Emma experience* is that it's for the whole community. There are parts that will really matter to undergraduates; you, Natasha, don't quite know yet what you might need but Connor's a few years further on and between the two of you, it will be a great conversation. And for Aadi the postgraduate world isn't uniform, so what MPhils and PhDs want is different. The other bit of *Emma enables* is that we're going to grow our post-docs from about 8–12 to 100. That's a big change and they're hungry for a place to belong. There's quite a lot in *Emma experience* to help them, about how to approach research, run a research team and innovate. I spend quite a lot of time talking to employers as well, about what they're looking for.

I'm going to kick off with health, wealth and wellbeing: what would you find useful?

**NU:** Cambridge is very, very stressful. Finding the mindset that things are not black and white is a

challenge. Sometimes just talking can make you realise where problems come from. It would also be a real achievement if everyone who comes out of Emma is trained in basic first aid, and also to get some lifeguard training around the pool.

**DC:** It's old-fashioned, but diet, sleep and exercise are central. If you get those balanced, your physical and mental health potentially gets better.

**NU:** To be honest, the number of people that have problems with these three things is quite high.

**CM:** At Cambridge you also have people who think they're invincible. You can try to cultivate good habits, but these are often individual realisations. Speaking as someone who probably didn't get enough sleep and didn't have a good enough diet when I was here, I regret those things now.

**DC:** Turning to wealth, you probably don't need to be told how to run a bank account, but maybe we can help explain what questions to ask once you start to earn.

**CM:** Even though I did economics, I would have really appreciated that. When you start work, what

PUTTING HEALTHY EXPECTATIONS ON MYSELF ABOUT WORK IS SOMETHING THAT CAMBRIDGE NEVER REALLY TAUGHT ME **CONNOR**

SOMETIMES POSTGRADS HAVE TROUBLE WITH ASKING FOR HELP, A LOT OF THE TIME, PEOPLE DON'T KNOW WHERE TO GO **AADI**

does it mean to contribute to a pension, how do tax and NICs work, what are the options for saving?

**NU:** Guide booklets would be really helpful, because it's information you want to hold on to.

**DC:** With wellbeing, if we get that right, we should be able to prevent so many people getting into mental health issues.

**CM:** Where the college could add value is in how to maintain a balanced life. Putting healthy expectations on myself about work is something that Cambridge never really taught me.

**NU:** Sometimes you think you figured it out, and then you have one day when you feel you didn't do enough. Rationally, you know that is too much to put on yourself. But at the same time, it bothers you: where do you draw that line?

**DC:** Aadi, the life skills will apply to postgrads as well, but we're also interested in supporting the PhD to post-doc journey. Through *Emma enables*, numbers of post-docs will grow to 100, which will be something unique to Emma. But there's also the ways PhDs move from academia into enterprise. How do you think we can best support postgrads as part of this journey?





DOUG



NATASHA

**AS:** The postgrad community is international and diverse, and some are a bit older and have more experience, so the programme would have to be flexible. Some people get a lot of life skills support through their departments, particularly in the sciences; but in others you turn up, write your thesis and that's it.

**DC:** The director will help signpost people to places and sources to go to.

**AS:** Outreach could make a big difference, as sometimes postgrads have trouble with asking for help, for anything from accommodation to wellbeing resources. A lot of the time, people don't know where to go.

**DC:** The director is finishing his PhD so will have great affinity to the MCR, and I'm hoping that this will open up a bridge between the communities.

The next area is life skills. From surveys, we got the idea of cooking lessons. It's a skill that's going to stay with you and our chefs would be keen to help.

**NU:** And kitchens are the best places to meet people. All the spontaneous fun is there!

**DC:** The other suggestion that came out from the surveys was how to deal with difficult landlords.

ONE OF THE BIG THINGS ABOUT *EMMA EXPERIENCE* IS THAT IT'S FOR THE WHOLE COMMUNITY **DOUG**

**CM:** That's a really good one. My first apartment after leaving Emmanuel was probably the worst renting experience of my life. I had no idea what I was doing in terms of my rights.

**DC:** These are not your typical skills that career counselling would focus on. And that's why I'm pleased we've used the word 'life' rather than 'work'. Because thriving in the world outside is more than just about work.

**CM:** There's something incredibly valuable about people who are one to four years in a profession, because they can give up-to-date advice. In politics people who are on the bottom rung or have just left it could say a lot about how you succeed.

**DC:** I had a four- to seven-year thing in mind because then some people have gone into something else. That's okay and a big lesson to learn. Then there are those 14 to 20 years out, because they're now the employers who can explain what they're looking for. We have the MA, and we should join up those coming back for it with current students.

**CM:** I'd have done that if you'd asked me.

**NU:** I think it's nice to speak to people who are closer to your age. It feels a lot more friendly. The advice is often very genuine.

SOMETIMES YOU THINK YOU FIGURED IT OUT, AND THEN YOU HAVE ONE DAY WHEN YOU FEEL YOU DIDN'T DO ENOUGH **NATASHA**

**DC:** I really like it. There's a phrase I'm playing with, 'engineering serendipity'.

**AS:** There's connecting the MCR with the JCR. Their rhythms of life are different. I'd like to bring the committees closer.

**DC:** I'm keen to help with this, maybe with something informal in the Master's Lodge.

We haven't yet talked about global citizenship.

**NU:** There are such simple things that college can do around food and composting. But sustainability is complicated.

**DC:** We should explain quite a few things that we are doing that are sustainable, and they range from the building site to how Brendon [head gardener] is approaching the challenge. It's a constant battle, trying to find balance. But there are tricks we should teach. One of the ways to get there is by using it as one of the topics for group discussions, because everyone is feeling this.

This has been a wonderful conversation; thank you for thinking about it and sparking ideas. We won't get it all right the first time, but we're going to keep evolving as *Emma experience* develops.



# SUSTAINABLE BUILDINGS

MIKE GROSS  
BURSAR

**The college site is beautiful and we all have an emotional attachment to the courts and buildings. Front Court, Old Court and Park Terrace are obvious examples where historical and architectural significance combine with beauty and our collective sense of place. I've come to see North Court as distinguished; I even have a soft spot for South Court! Each is of its period and now has many generations of college life ground into its fabric.**

There is a danger that in these times when the catastrophe of global warming must dominate our thinking, that our relationship to these buildings will change. That in place of their beauty we start to see a leaky, poorly insulated, energy-inefficient inheritance that is a burden and constraint. But we mustn't curse the buildings left to us by Mildmay, Sancroft, Wren and their successors for falling so far short of modern Passivhaus standards. Despite the inherent challenges, we need to continue to respect and value what has been passed on to us. Greening the college estate doesn't negate our duty to protect and conserve what we have.

DESPITE THE INHERENT CHALLENGES, WE NEED TO CONTINUE TO RESPECT AND VALUE WHAT HAS BEEN PASSED ON TO US. GREENING THE COLLEGE ESTATE DOESN'T NEGATE OUR DUTY TO PROTECT AND CONSERVE WHAT WE HAVE

In important ways conservation and the imperative to reduce our carbon footprint are in harmony. As a rule, the college doesn't demolish buildings and waste the energy embodied in their construction: our instincts are always to repair, maintain and improve. When considering embodied carbon there is much to say for frugality – not to waste or throw away – and maintaining an estate that dates back four centuries, and with some materials recycled from the earlier Dominican priory, is a pretty good measure of frugality.

However old and however beautiful, all our buildings now need to perform much better in terms of the energy required to operate them. There is a tendency to think of new technologies

HOWEVER OLD AND HOWEVER BEAUTIFUL, ALL OUR BUILDINGS NOW NEED TO PERFORM MUCH BETTER IN TERMS OF THE ENERGY REQUIRED TO OPERATE THEM

and new ways of heating spaces. But in practice a more significant step is simply to reduce each building's heating load. This is our current, and in some cases rather challenging, project. We need to establish a model that can be rolled out every time a house or staircase is refurbished. We have started by taking a house in Park Terrace as a test. These houses have high ceilings and a large total volume, leaky sash windows and cavity-free walls.

We need to end our reliance on gas for heating, but with houses such as these the current heating load makes swapping a gas boiler for any form of heat pump, however clever that technology, simply impractical. So we are developing a scheme for internal insulation throughout a house while retaining the original features such as cornices and window surrounds. We're refurbishing the windows and installing new wooden secondary glazing manufactured in-house. We will need the approval of the city conservation officer, and we are working carefully to achieve that. At the same time we must avoid creating new problems in old buildings by, for example, introducing damp and condensation.

Once we have done all we can to improve the building fabric we will know the heating load that we'll need to meet. Certainly in Park Terrace closed-loop ground-source heat pumps will be an option. But appearance and, most critically, noise will be considerations. While the listed building regime is starting to show signs of recognising the critical importance of improving building performance, I suspect we are still some way off being allowed solar photovoltaics (PV) or thermal panels on buildings such as those in Park Terrace. These are all challenges, but we have to find workable solutions.

We will develop a programme of refurbishments to bring our stock of accommodation up to a good, gas-free, standard. Cost and logistics are important factors. The cost to modernise all our accommodation immediately would be eye-

watering. Equally, we can't give our students nowhere to live while we empty large blocks of rooms for lengthy refurbishments. But integrating our energy efficiency works into our planned refurbishment programme provides us with an opportunity to be cost-effective as well as more energy-efficient.

In planning these works our current new building works provide us with an exemplar. When the project was conceived we set sustainability and energy performance as key objectives for the architects and engineers. The orientation of the buildings, the choice of structural elements, the thickness of walls and the window design are all intended to minimise the heating and cooling required. We have modelled how these buildings will perform as temperatures rise in the second half of the century and these models suggest that the passive cooling inherent in the design will be sufficient. An extensive array of solar PV panels and a large open-loop ground-source heat pump (with sufficient capacity also to service the original South Court buildings) are essential to the scheme. Efficient glazing, heat recovery, brown roofs and rainwater harvesting are also critical sustainability measures. Our service engineers are reporting against a bespoke version of the BREEAM standard (Building Research Establishment Environmental Assessment Method) and we are confident of exceeding the score for 'outstanding'.

I hesitate to say so before the project is complete and we see these new green systems work in practice but, in terms of energy efficiency and sustainability, new building projects are very much the easy bit. Park Terrace and all the buildings passed on by our predecessors are a great deal more challenging.

IN IMPORTANT WAYS CONSERVATION AND THE IMPERATIVE TO REDUCE OUR CARBON FOOTPRINT ARE IN HARMONY



## 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 occasion 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
- are invited to join the Frankland Society

### 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



## EMMAENABLES

Since we launched *Emma enables* in June 2021, we've made significant progress thanks to donations from thousands of members. In April we opened our new informal meeting space/café *Fiona's*. Work on the remaining developments – including accommodation for undergraduates, a new bar and teaching spaces – will be ready for use in early 2023. The director of the *Emma experience* programme joins us in October; post-docs will start arriving in 2023–24. And many students have been helped with life-enhancing bursaries and hardship grants, awarded for everything from covering unexpected rents, to the purchase of a new laptop.

To say thank you, names will be incorporated into the decoration of the new facilities. There are recognition opportunities for gifts of all levels. They must be made by the end of 2022 to be eligible, so if you've been considering making a gift to *Emma enables*, now is the time.

Please get in touch with the Development Office if you would like to discuss any aspect of helping with *Emma enables*.

[www.emma.cam.ac.uk/emmaenables/thankyou](http://www.emma.cam.ac.uk/emmaenables/thankyou)

## EMMA GIVES

GIVING DAY 2022

Our third Giving Day was held from noon to noon on 15–16 March, raising funds for the new *Emma experience* programme, a key aspect of *Emma enables* through which we aim to equip all in Emma with the skills they will need to flourish in their lives and careers. Built around three areas – the workplace, global citizenship, and personal health, wealth and wellbeing – gifts will help with everything from grants for students volunteering with NGOs, to enhancing wellbeing support in college.

## WE HAVE WELCOMED THIS YEAR

BENEFACTOR FELLOWS

**Rakesh Patel (1992)**

**Derek (1952) & Fiona Finlay (2022)**

BENEFACTOR BYE-FELLOWS

**David Land (1985) & Christina Becker (2021)**

**Shazad Ghaffar (1982) & Syeda Mohsin (2022)**

**Anthony Bladon (1962) &**

**Elizabeth Cholawsky (2022)**

**Hugo Darlington (1991)**

**Simon Yates (1989) & Kevin Roon (2022)**

## Securing Emmanuel's Future



## LEGACIES

From the earliest years of the college, legacies have played an important part in building it up as a place of outstanding research and education. There are several ways to include Emmanuel in your Will. Please ask the Development Office for a brochure for further information about suggested wordings, different types of bequest, and how a legacy could reduce inheritance tax liability, or see [www.emma.cam.ac.uk/legacies](http://www.emma.cam.ac.uk/legacies). We also suggest you consult your solicitor.

## THE FRANKLAND SOCIETY



Named after one of our earliest benefactors, Joyce Frankland, membership of the Frankland Society is our way of thanking legators for their commitment to supporting the future of the college. The society currently has around 250 members, and in June we held its first in-person meeting. PhD student and legacy beneficiary Alice McKimm, and Herchel Smith Fellow Matt Seah, spoke about their research, and this was followed by lunch in Hall. We look forward to inviting members to future events.

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

## LATE EIGHTIES FUND UPDATE

*The Late Eighties Fund, established by Emma members who matriculated between 1984 and 1990, helps students suffering from financial hardship. In 2021–22 £35 000 has been disbursed as follows:*

**£15 600** – college's share of Cambridge bursaries

**£5650** – visits by schools liaison officer and students to schools in Essex and Sheffield, and visits by schools to Emmanuel

**£5000** – funding for an MPhil in English for an Emmanuel graduate

**£5000** – funding for a PhD student in earth sciences

**£3750** – support for two students in financial hardship

## FUNDS RAISED DONATIONS 1 JUNE 2021 TO 31 MAY 2022

DONATIONS RECEIVED AND RECEIVABLE	£9 935 924
GIFTS IN KIND <sup>1</sup>	£177 772
LEGACIES PLEDGED	£1 010 000

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

## HARDSHIP FUNDS AND RENT BURSARIES 2020-21

168 GRANTS
£206 062 AWARDED
£124 336 FROM HARDSHIP FUNDS, BALANCE FROM ENDOWMENT

## GRADUATE FUNDING 2020-21

£288 460 ENABLED 10 GRADUATE STUDENTS TO COME TO EMMANUEL
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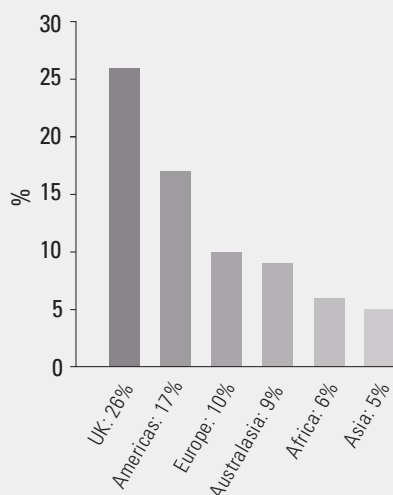
## FUNDS RECEIVED 1 JUNE 2021 TO 31 MAY 2022

BUILDINGS, FACILITIES & GROUNDS	£8 530
EMMA ENABLES	£8 263 147
LIBRARY	£7 584
STUDENT ACTIVITIES <sup>1</sup>	£48 423
STUDENT SUPPORT, HARDSHIP & ACCESS	£661 954
STUDENTSIPS & SCHOLARSHIPS <sup>2</sup>	£20 625
TEACHING & RESEARCH	£8 588
WHEREVER THE NEED IS GREATEST	£849 806
<b>TOTAL</b>	<b>£9 868 657</b>

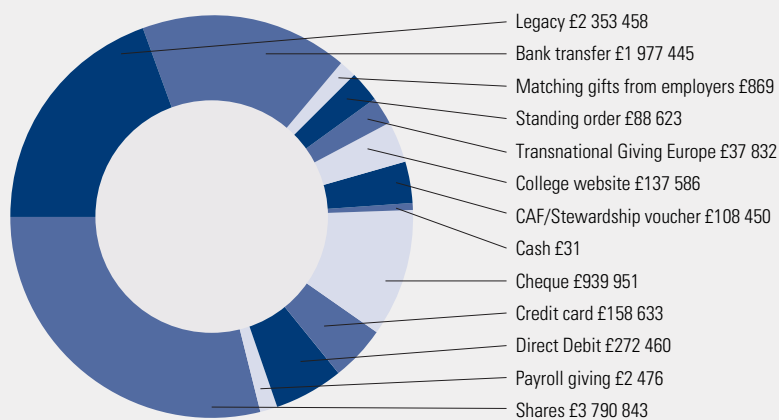
<sup>1</sup> Includes donations towards sports facilities

<sup>2</sup> Includes a donation to research mental health

## PARTICIPATION RATE BY REGION



## SOURCES OF FUNDS RECEIVED 1 JUNE 2021 TO 31 MAY 2022



## NUMBER OF GIFTS RECEIVED

(average donation for gifts under £10 000 is £531)

Up to £99	397
£100-£249	532
£250-£499	386
£500-£999	185
£1 000-£4 999	170
£5 000-£9 999	43
£10 000-£49 999	41
£50 000-£99 000	9
£100 000-£999 999	12
£1 000 000 and above	2

## SUMMARY FIGURES 2021-22

- 21%** of Emma members asked made a gift to the college
- 74%** of gifts were under £500
- 57%** of donors asked the college to allocate their gift to wherever the need is greatest
- 35%** of living members have made a donation to Emmanuel
- 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

## EMMA GIVES

**306** donors gave £103 068  
**33** first-time donors

## 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'



## EMMANUEL SOCIETY

Every member of Emmanuel is also a member of the Emmanuel Society, which joins up the community: students, Fellows and the wider membership. The society organises a wide range of events in the UK and overseas. It also helps current students with advice about careers and job applications.

The society's programme is publicised in the *Emmanuel Newsletter*, which is published three times a year, in the *Emma connects* e-news, and on the website [www.emma.cam.ac.uk/members/events](http://www.emma.cam.ac.uk/members/events). Please come to whatever interests you and let us have any suggestions for other events. Offers to help are very welcome.

In the past year we've managed to hold events in person again, and a highlight was a dinner in the Royal Armouries in Leeds. A demonstration by knights in armour was a fascinating aperitif.



## INSIDE EMMA OUTSIDE

BRENDON SIMS  
HEAD GARDENER

**Beneath a skyline peppered with cranes and new developments, an ecological consciousness is simmering in and around Emmanuel.**

I have seen gardening trends alter over the last 30 years: the biggest impact has been on climate change. The garden industry fell out of love with plants and wildlife as people adapted to the modern way of life and disconnected from the outdoors. Front gardens were changed to driveways, hedges replaced by fences, lawns ripped up for AstroTurf.

During my studies I became interested in ecology and landscape management. I learned the benefits of working with the urban environment and creating biodiversity within challenging areas. Emmanuel's green spaces would have been rich with biodiversity before modern methods took control over nature.

I'VE SEEN AN OPPORTUNITY FOR CHANGE. THERE WERE GOOD THINGS HAPPENING ALREADY; BEEHIVES AND POLLINATING PLANTS. BUT WHAT MORE COULD WE DO? WHAT COULD WE ACHIEVE BY WORKING TOGETHER WITH OUR LOCAL SURROUNDINGS?

As head gardener, I've seen an opportunity for change. There were good things happening already; beehives and pollinating plants. But what more could we do? What could we achieve by working together with our local surroundings?

Christ's Pieces and Parker's Piece had wildflower meadows. Emmanuel had a meadow around the paddock. By creating what is known as an urban corridor, we could bring these areas together to encourage pollinators to flourish: a superhighway for insects to travel, interest for birds, bees and butterflies. So we incorporated wildflower meadows in the sunken garden in North Court, linking with the meadows on Christ's Pieces. It has been a huge success. You can see bees, birds and butterflies coming over from the city park into Emmanuel.



Those same insects fly over Emmanuel Street to the paddock.

We then changed the management habits of the front gardens of Park Terrace, creating a ribbon to link with the meadows of Parker's Piece by planting wildflower plugs, adding yellow rattle and only mowing a couple of times a year. In the first year we already had bee orchids growing. Sometimes, just a change of use is enough.

Pockets of urban wild land, wetlands and community gardens are appearing among concentrated grey areas, breathing biodiversity back into the college one ecosystem at a time. Rewilding a city might seem impossible, and perhaps that is the case. Full rewilding of an urban landscape would require decades of commitment and a radical change in thought. But we have to start somewhere and to think locally, personally and creatively. What if we shifted our mindset to embrace a sense of undoing? What if we reflected on our city green spaces beyond the mainstream direction and asked ourselves what we can individually contribute towards deep environmental change?

Urban areas are often fragmented, with habitats split into small areas. This means that fewer species can live in each space, as there is less access to food, water and mates. We can and must change the way we create and manage green spaces, and encourage ecological corridors to facilitate migrations and provide overall species persistence, connect habitats, encourage genetic interchange and avoid predators.



I am immensely proud of what the garden department have achieved in the last year. We have increased propagation in the glasshouses and will continue our quest to make the Emmanuel community happy, be it humans or others. We aim to reduce pollution, through cleaner battery equipment which in turn reduces noise, and to increase biodiversity through new green roofs and rainwater harvesting on the new buildings. These are exciting times for the college and I for one am proud to be a part of them.

We have a clear plan going forward, to educate through practice and example. None of this would be possible without the hard work of the gardeners, who are a superb team of talented, driven individuals with a common goal. We were delighted when Jonathan Strauss came third in the national Young Horticulturalist of the Year competition. We aim to deliver the highest level of horticulture whilst reflecting on the educational connections of science through flora and fauna.






I AM IMMENSELY PROUD OF WHAT THE GARDEN DEPARTMENT HAVE ACHIEVED IN THE LAST YEAR. WE HAVE INCREASED PROPAGATION IN THE GLASSHOUSES AND WILL CONTINUE OUR QUEST TO MAKE THE EMMANUEL COMMUNITY HAPPY, BE IT HUMANS OR OTHERS



WILDFLOWERS AT EMMANUEL

## EMMA ONLINE

*We send regular e-news, 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

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 330476

## VISIT EMMA

- Dine at High Table (matric 2015 and earlier):  
[www.emma.cam.ac.uk/dining](https://www.emma.cam.ac.uk/dining)  
0044 1223 330476  
(free for members, payment for a guest)
- Student guest rooms with shared facilities:  
[www.emma.cam.ac.uk/guestrooms](https://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



