



VIETNAMESE ART

SPOTLIGHT ON
HÉLÈNE JEANTY-RAVEN

TAKE 2:
CHRIST'S SCIENTISTS



Pieces

ISSUE 40 • LENT TERM 2021

welcome

FROM THE MASTER



Welcome to this issue of *Pieces*.

When I wrote for the Easter term edition of *Pieces* that we were in “unprecedented and uncertain times”, little did I realise that this would still be the case as we start 2021. The College community has rallied round superbly to ensure that, as far as possible, it has been business as

normal, albeit in inventive and creative ways. Thanks to the sensitive behaviour of the students, and the University asymptomatic testing programme, we were able to control the virus in the Michaelmas term, and were Covid-free for the last three weeks of term. We will see what the Lent term brings for the College and the world.

Many members of the College community have been involved in efforts to address the pandemic, and you can read about some of them in this issue of *Pieces*. In ‘Take Two’ you can hear from Professor Dame Theresa Marteau (Fellow) who is a participant in SAGE, and Professor Sarah Walker (m. 1990) who is the academic lead for the Oxford/ONS prevalence study. They both give an insight into the huge amount of work taking place as the UK battles with Covid-19. On the arts side, Professor Susan Bayly writes about her work with the Vietnamese Fine Arts Museum, while we also hear about the Choir’s activities since March.

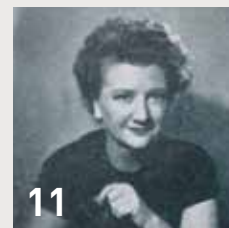
On a personal note, I have greatly missed in-person meetings and events with alumni, but have been grateful that so many of you have been able to join us for virtual reunions, and other events. Our Development Office has also been running monthly webinars, giving you an opportunity to hear about the research work of our Fellows. In fact, one of the positive outcomes of the pandemic and the move to the virtual world has been the opportunity for alumni around the world to re-connect, and I am sure this will become standard fare amongst our alumni relations programme – although not as a replacement for the chance to meet in person that we are all craving. I hope this becomes possible again before too long.

Professor Jane Stapleton

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FRONT COVER IMAGE: Claire McGuinness

EDITOR: publications@christs.cam.ac.uk

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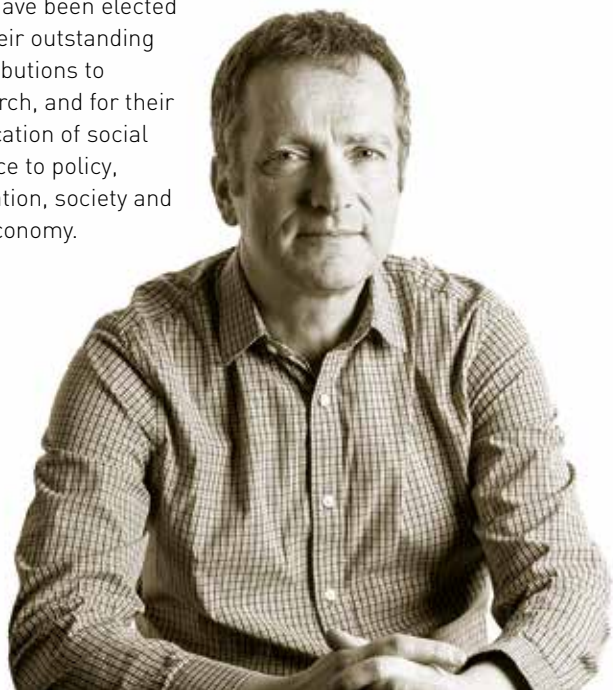


IN MEMORIAM



The College is very sad to announce that **Professor Chris Abell** (Fellow), died suddenly on Monday 26 October. He was regarded in great admiration and respect by all in Christ's, and will be enormously missed. A full obituary will be published in the College Magazine.

Professor Michael Kenny (m. 1983), Director of the Bennett Institute for Public Policy at Cambridge, has been elected a Fellow of the Academy of Social Sciences. He joins 72 other leading UK social scientists who have been elected for their outstanding contributions to research, and for their application of social science to policy, education, society and the economy.



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Mr Michael Liebreich (m. 1981), a global expert on clean energy and transportation, smart infrastructure, technology, climate finance and sustainable development, has been appointed Advisor to the UK's Board of Trade.



QUEEN'S BIRTHDAY HONOURS

Four alumni were recognised in the 2020 Queen's Birthday Honours. **Dr Vaughan Southgate** (m. 1965) was awarded an OBE for services to the community in Bedfordshire, **Mr Martin Frost** (m. 1982) received a CBE for services to robotics, **Dr Ganesh Suntharalingam** (m. 1985) is President of the Intensive Care

Society, and was awarded an OBE for services to the NHS during COVID-19, and **Professor Sarah Walker** (m. 1990), who is the Chief Investigator and Academic Lead for the National COVID-19 Infection Survey, was awarded an OBE for services to Academia and the COVID-19 response.



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Top left to right: Dr Vaughan Southgate OBE, Mr Martin Frost CBE, Dr Ganesh Suntharalingam OBE and Professor Sarah Walker OBE.



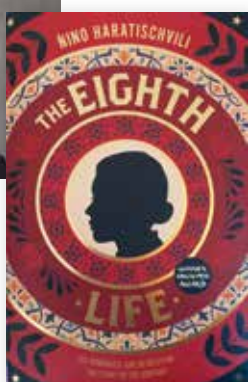
The Hon Justice Neil Calver.

Congratulations to Christ's College alumnus The Honourable **Mr Justice Calver** (m. 1983), who was knighted and formally made a High Court Judge at a ceremony presided over by the Lord Chief Justice and the Master of the Rolls on 27 October. His appointment as High Court Judge, assigned to the Queen's Bench Division, took effect on 1 October. Neil read Law at Christ's, was called to the Bar in 1987, and took Silk in 2006.

Congratulations to alumnus **Mr Gary Blaker QC** (m. 1988), who has been appointed as a Recorder by HM The Queen.



© ROLAND GLASSER



Alumna **Ms Charlotte Collins** (m. 1986) has won the Warwick Prize for Women in Translation for her joint translation of the novel 'The Eighth Life' by Nino Haratischvili.



We're delighted to report that alumnus **Mr Paul Monroe** (m. 2013) features on the Forbes 30 Under 30 Manufacturing & Industry list. Paul is a co-founder of tech start-up SMAP Energy, which provides a software platform that analyses data from smart meters all over the world, to help energy providers become more efficient and profitable, as well as to increase customer satisfaction. SMAP is now venturing into the world of 'Energy AI' with applications that will enhance its product offerings.

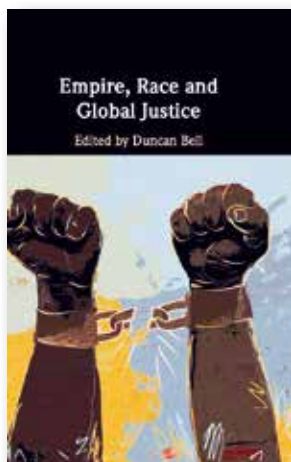
Paul co-founded SMAP, then the privately-sponsored Cambridge Energy Data Lab, in 2014 while studying at Cambridge. He now leads the London office of SMAP Energy and is responsible for its European operations and lines of business.



Congratulations to organ scholar **James Tett** (m. 2019), who was shortlisted in the Northern Ireland International Organ Competition. Due to COVID-19, the competition was held virtually this year, with James and 13 other finalists submitting video recordings of themselves playing their planned competition programmes.



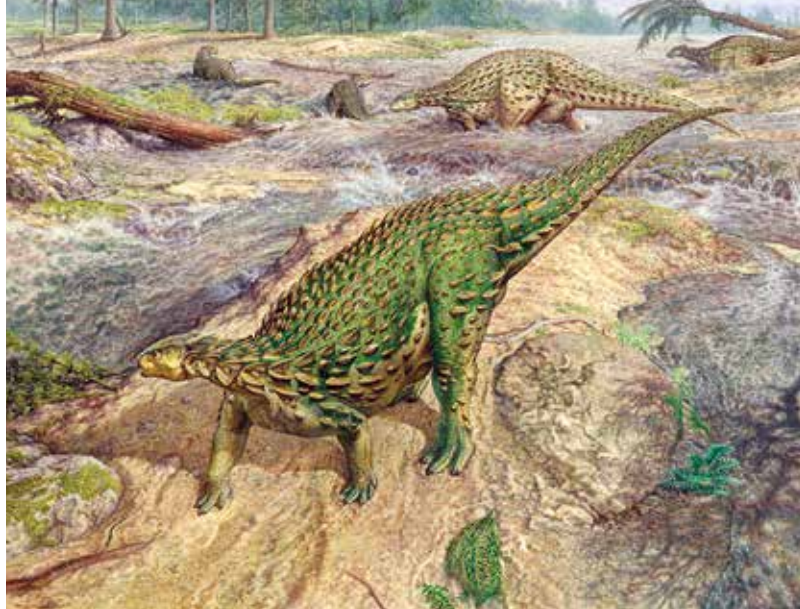
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Empire, Race and Global Justice
– edited by Duncan Bell.

Congratulations to Fellow **Dr Duncan Bell**, whose book 'Empire, Race and Global Justice' (CUP) won the ISA Fletcher book prize for the Best Edited Book in Historical International Relations.

Following a generous benefaction from the Yusuf and Farida Hamied Foundation, the Department of Chemistry will be named the **Yusuf Hamied** Department of Chemistry until 2050. His transformational gift ensures that chemistry at Cambridge will continue to be world-leading in both teaching and research. We are delighted that our alumnus and Honorary Fellow has been recognised in this way.



Scelidosaurus Sibbick.

Dr David Norman (Fellow) has completed a detailed study of the first complete dinosaur ever identified; finishing a project that began more than a century and a half ago. The skeleton of the Scelidosaurus was originally found in Dorset 160 years ago but limited

analysis was conducted on it at the time and it was largely forgotten. Dr Norman has spent the last three years working on the skeleton and has revealed many firsts, now published in four studies in the Zoological Journal of the Linnean Society of London.

Read more about his discoveries at <https://www.esc.cam.ac.uk/about-us/news/scelidosaurus-makes-way-into-dinosaur-family-tree>

NEW FELLOWS



Dr Chiara Giorio.



Dr Hrvoje Jasak.

Christ's is delighted to welcome two new Fellows – **Dr Chiara Giorio** and **Dr Hrvoje Jasak**. Dr Chiara Giorio is a lecturer and group leader of the Atmospheric Chemistry Research Group at the Yusuf Hamied Department of Chemistry. Dr Hrvoje Jasak is the Gianna Angelopoulos Lecturer in Scientific Computing at the Department of Physics.

THE CHOIR OF CHRIST'S COLLEGE CAMBRIDGE during the Coronavirus Pandemic

Tough restrictions brought in to deal with the coronavirus pandemic have been difficult for all of the community at Christ's College, but they heralded specific challenges for the Christ's College Choir that had never before been imagined, never mind faced. As the seriousness of the pandemic became clear, and with safety of students and staff an absolute priority, all Choir activities were immediately suspended in March.

As our understanding of how the virus is transmitted between people developed, debates raged for months about how musicians and singers could rehearse safely. Research shows that the virus may be carried in droplets in our breath, which travel farther when coughing, sneezing, and shouting. Meanwhile, research carried out on musicians showed that potentially infectious virus particles carried in breath could be projected further when playing instruments. There was initially a dearth of research specifically on singing, but, following a spate of infections occurring in choirs in the USA and Germany, a more recent study conducted by Bavarian Broadcasting in conjunction with LMU University Hospital Munich and Universitätsklinikum Erlangen (FAU) on the members of the Bavarian Radio Choir showed that, similarly to when coughing or shouting, droplets released in breath are denser and travel farther when singing. It also showed that aerosols emitted by singers travel longer distances in front of a singer than to the sides. Masks worn over the nose and mouth are believed to reduce this form of transmission, but this would muffle the voice and detrimentally affect the quality of sound.

Determined not to be defeated by the pandemic, directors of music and chaplains from across Cambridge Colleges worked together to come up with solutions that would allow lessons, practice sessions, and performances to go ahead, while keeping choir members safe and well.

This included our own College Choir Director, David Rowland. 'In 36 years of conducting Christ's College Choir I've faced and overcome many challenges, but nothing quite like this.' Nevertheless, he rose to the challenge by setting in place new procedures for the Choir which, after seven months of suspension, finally allowed activities to resume in October.

Singing lessons for Choir members were moved to Zoom rather than in-person, as had been usual pre-pandemic. Despite the shortcomings of this technology, many students found this convenient and preferable to in-person lessons; however, others found it difficult to manage them in their busy home environments. Indeed, there is no replacement for in-person choir rehearsals, an important hurdle that David had to overcome.





The College Choir at a Covid-secure service.

It was established, based on the available research, that in-person Choir sessions could still take place, as long as Choir members stood 2.5 – 3m apart, unless they were from the same household, in which case social distancing was not necessary. As established in the Bavarian Broadcasting study, more forward space is necessary to deal with projection of potentially infectious droplets when singing, so David has made sure he is always 5m away from the Choir while conducting.

Following national recommendations, practice sessions were reduced from 90 minutes to 45 minutes, reducing any potential coronavirus exposure risk for members. Indeed, since more time needed to be left between rehearsals and performances in the same space, to allow for full ventilation and air change, reducing the length of rehearsals aided this. However, this had a knock-on impact on the repertoire in turn; with less time to practice and fewer rehearsals, it needed to be simplified.

This wasn't the only problem that was encountered by adapting to new procedures. Christ's College Chapel is relatively small, so with the increased spacing between members required, the Choir was forced to spread out from the stalls. This didn't leave enough room for the whole Choir to practice together, never mind leave room for anyone to attend. This meant that the Choir needed to be split in half, creating groups A and B with a maximum of 12–13 people in each group, to ensure they could fit.

An unfortunate, and somewhat surprising, side-effect of splitting the Choir was an impact on the confidence of many singers. With more space between singers, and fewer singers at any one time, inexperienced choir members felt less able to trust their own musical abilities and to sing out as strongly as necessary. This was particularly the case with the sopranos and altos, most of whom are new to the Choir this year and many of whom are first-year students. However, as

term went on the new members became more confident and the blend of the choir improved enormously. The speed with which new repertoire was learned also increased significantly, although the choir is still not able to learn music as quickly as it would in a normal year.

Despite these challenges and restrictions, the joy of singing makes it worthwhile for all involved. David says it is 'wonderful to be back singing after a long hiatus – albeit in a new, adapted way.' Indeed, Christ's College Chaplain, Bob Evans, also rose to the challenges of the pandemic through introducing recording and streaming of closed services from Christ's Chapel, such as Evensong. Thus, everyone from the Christ's College community, and even beyond, is still able to virtually attend and enjoy the services, as well as the Choir's accompanying performances. If you would like to see these, go to www.tiny.cc/ChristsCollegeChapel, and subscribe to get updates whenever a new video is uploaded.



THE VOICE OF A NATIONAL MUSEUM: (THE VIETNAM MUSEUM OF FINE ARTS, HANOI)

PRESENTING VIETNAMESE ART TO A GLOBAL AUDIENCE

There are wonderful things to discover on a visit to Vietnam's premier cultural institution, the National Museum of Fine Arts in the country's vibrant capital, Hanoi.¹

- Vietnamese Cubism, as exemplified by the artist Ta Ty's 1951 oil 'The Topper', a playful borrowing of the Cubist's ability to fragment our sense of visual reality to produce a vivid little take on the fractured perceptions of the drunk on a spree.
- Easel paintings in lacquer that may become actual living things when masters of this painfully difficult art use a palette derived from the beautiful but dangerously toxic sap of the Vietnamese lac tree.
- Socialist Realism warmed and humanised into a mode of representation far removed from the stiff conventions of Soviet-style propaganda painting.

None of these are artforms that outsiders are likely to have encountered if they have never visited Vietnam. Yet they are all part of a story of dialogue and connection with the artworlds of other countries and cultures, a process celebrated in Vietnam as the means by which its artists have nourished the nation's spirit both during and since the country's epic years of war and revolution.

The National Fine Arts Museum was established at the height of the 1962-73 US-Vietnam war with a mission to inspire an embattled citizenry with an appreciation of their homeland's unquenchable creative genius. So what to do in today's very different world to explain its collections to the many international visitors who now tour its handsome galleries? What do outsiders need to be told so they can appreciate the works of Vietnam's celebrated lacquerists, deploying a skill their compatriots hail as their homeland's greatest contribution to the fine arts? What do foreigners need to know about a work like Luu Cong Nhan's 1960 oil 'Ploughing Time', to which a Vietnamese viewer will bring a very specific knowledge of the country's revolutionary past? And what should outsiders be told about art produced in the brutally subjugating conditions of colonial rule, such as Le Pho's 1935 'Portrait of a Young Woman', much admired in Vietnam as a confidently undeferential negotiation between the artist's command of the techniques of European impressionism and the art of traditional Vietnamese brush-painting?

1. This is the Museum that honoured us in 2013 by allowing the College to co-host an exciting first for Vietnam: the display in Cambridge of one of the greatest treasures in their collection of historic artworks, the 20th-century painting entitled Giong by one of the most revered of Vietnam's modern artists, Nguyen Tu Nghiem.



*'Portrait of a Young Woman' 1935.
Artist: Le Pho.
Collection of the
Vietnam Fine
Arts Museum.*

*Opposite left to right:
Giong, 1990.
A painting in lacquer
by the celebrated
Hanoi artist Nguyen
Tu Nghiem, whose
remarkable image
of the national saint
and protector-hero
Giong ascending to
the heavens on his
miraculous iron horse
is one of Vietnam's most
celebrated artworks.
Collection of the
Vietnam Fine
Arts Museum.*

*'The toper', 1951.
A painting in oil by Ta Ty.
Collection of the
Vietnam Fine Arts
Museum.*

These were the challenges of communication and translation that my friends at the Fine Arts Museum were already energetically addressing when they invited me last spring to help them achieve their goal of producing the museum's first ever multilingual visitors' audio guide. Of course I said yes, very glad I could contribute to their work by drawing on what I have learned over the years as an anthropologist seeking to understand the experiences of Hanoi citizens as they navigate the ups and downs of the fast-growth consumerism that the Communist party-state calls 'market-oriented socialism'.

What became clear to us was that our French and English commentaries could not just be word for word translations of the team's excellent Vietnamese texts. But what contextualising information did foreigners actually need? For lacquer painting, we agreed that newcomers to Vietnam would need to hear about the lacquerist's capacity to combine the goals of naturalistic representation with something extra, a kind of vital life force that comes into being from the use of a material derived from living nature, and from the energies of the lacquerists themselves, projected into their works through the enormous effort required to practice their perilously demanding art.

For other items, it was the subject matter that needed to be spelled out. It was clear that Luu Cong Nhan's 1960 painting 'Ploughing Time' would appear to outsiders as it did to me when I first saw it. Like me, they would think of it as a marvelous depiction of the dawn breaking over flooded rice paddies, with villagers hard at work with their draught animals in a scene of traditional Vietnamese life, eternal and unchanging in its timeless rhythms of rustic toil.

But this is not at all what the work portrays. The foreigner needs to know that Luu Cong Nhan was a committed revolutionary, and that his picture's elegiac beauty is the product of an injection of distinctively Vietnamese sensibility into the conventions of Soviet-derived Socialist Realism. What it is intended to show, but without recourse to Soviet-style flag-waving or straining muscularity, is the new dawn of revolutionary Vietnam, its subject being the new system of cooperativised rural production giving rise to a new life of sharing and coordinated management of work and resources.

We therefore agreed that our English and French versions needed to say that the painter had found a very Vietnamese way of signalling that the golden light reflected in the gleaming surface of the water is far more than an image of ordinary daybreak. It is the dawning of the nation's new life, with a sense of unstoppable forward momentum conveyed by the solid energy of the farmers and their beasts united in harmonious solidarity. Important too is the placing of the right-hand farmer, whose animal has already moved half beyond the painting's edge, assuring the newly independent citizenry that the march of Vietnam's onward progress is certain and sure.

So this was the cheerfully collaborative process that gave rise to the English guide texts as we have now recorded them, with the French versions to follow soon. Our discussions about the female portraits were particularly enjoyable. We agreed that our account of Le Pho's 1935 'Portrait of a Young Woman' should highlight the sitter's dress style. For Vietnamese viewers, it is evident that the subject of this striking work is a young woman of rank and refinement, probably the wife of a pre-independence official, a mandarin. Le Pho was active in this period's debates about how to make both the high arts and the aesthetics of everyday tastes and practices contribute to the development of national identity in the new Vietnam.

So our text for foreigners makes the point that the pensive young woman in the painting wears the kind of dress that had recently become definitive of the ideal of a modern yet truly national costume for the women who would one day become co-equal citizens of an independent Vietnam. But what she is wearing is the version of this dress that Le Pho preferred as the garb of a properly modest young woman with cultivated tastes; her tunic softly draped rather than figure-hugging, and her hair parted centrally rather than at the side, which was widely said at the time to be a more traditionally Vietnamese way to dress the hair.

As soon as the pandemic restrictions are lifted, I hope to return to Vietnam to reconnect with the museum, and to conduct further fieldwork. In the meantime, albeit by virtual means, I am eager to carry on doing whatever I can to be a helpful supporter and friend to the National Fine Arts Museum and its energetic staff teams.

Professor Susan Bayly
Fellow and Tutor

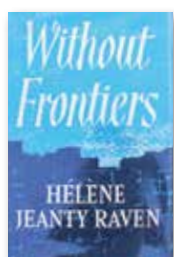


*'Ploughing time'. 1960.
Artist: Luu Cong Nhan.
Collection of the Vietnam
Fine Arts Museum.*

SPOTLIGHT ON HÉLÈNE JEANTY-RAVEN

For this Legacy spotlight, we wanted to take the opportunity to look at the life of a Legator, and the way that her gift continues to shape the Christ's community today: Hélène Jeanty-Raven.

A Belgian Resistance worker during the Second World War, she and her husband Paul Jeanty were arrested by the Gestapo for taking in an RAF airman. To try to save her husband, and avoid execution, she feigned madness and claimed she had brought the airman to the house without her husband's permission, and was imprisoned in a German asylum following her trial. It was not until the end of the War that she was released and repatriated; however, on her return she sadly discovered that her husband Paul had been shot by the Nazis. She would later return to Germany, on the request of the Judge Advocate-General in London, to give evidence on Nazi war crimes, and testified on behalf of those who had supported her during incarceration.



DURING HER LIFETIME SHE BEGAN A JEANTY RAVEN FUND AT CAMBRIDGE, MAKING GRANTS TO STUDENTS IN NEED OF FINANCIAL ASSISTANCE

Despite her husband's execution, she still believed in the importance of reconciliation, and in 1947 she was asked to represent the World Council of Churches' refugee work in Germany, helping displaced Jews, Eastern German farmers, and intellectuals. These values led her to France, where she advocated for the fair treatment of imprisoned SS soldiers, due to her belief that 'neither revenge nor bitterness could heal the wounds inflicted by Nazi domination in Europe', (words taken from her obituary in the 1991 College Magazine). During her time with the World Council of Churches she met Canon Charles Raven, Master of Christ's from 1939–1950 and Regius Professor of Divinity, who she



would later go on to marry in 1956. She remained an activist for reconciliation for the rest of her life, until her death on 9 October 1990; most notable is a series of letters between herself and Albert Speer, Minister of Armaments and War Production in Nazi Germany, and a close ally of Hitler, which was sold in 2007.

Beyond this, both her and her husband's philanthropic interests lay in the 'mission of reconciliation between students of different races', and in letters she wrote that 'I have written a book, and as it tells of my husband, I have never kept a penny for myself but with the money I invite destitute students to stay at my expense'. In fact, she wrote two books – 'Without Frontiers' and 'La Peine de Vivre', both autobiographies – and the royalties from these, alongside those from 'Science, Religion and the Future' (a compilation of eight lectures given by Canon Raven), were used to support this goal. Indeed, during her lifetime she began a Jeanty Raven Fund at Cambridge, making grants to students in need of financial assistance, and Hélène left a £150,000 Legacy to the College to fund students from overseas to read Medicine at Christ's.

The impact of her gift continues to this day, and is currently used to fund the Christ's College EU Award for Medicine. With the increase of EU student fees from 2021 entry, due to the Government's stance that they are to be treated as international students, the support that she gave the College will remain more important than ever.

Here are two reports from students, who have benefitted from her enduring generosity during their time at Christ's.

"The award inspires me to work harder at University, in order to reach my goal of becoming a doctor and help people like Hélène did back in WW2. Last, but not least, the financial aid provided by the award means that the amount of loans I need to take to complete higher education will be reduced, and I am grateful for that."

Andreas Eleftheriou (m. 2019)

"I would personally like to thank Hélène Jeanty-Raven for her generosity for the award I received at Christ College. It helped me reduce my costs of studying medicine throughout my time here and is greatly appreciated. Her admirable qualities of kindness and boldness throughout her life will be remembered and valued."

Despina Nicolaou (m. 2018)

Mihai Ilas.



Andrew Wang.

COVID news

Many of Christ's College's students, Fellows and alumni have joined the fight against COVID-19 in a number of different ways. Here are just some of the initiatives they have been involved in.



The Head Porter in his College facemask.

FELLOWS, STUDENTS & ALUMNI

Professor Chris Abell (Fellow), who has sadly died, was the University lead for the AstraZeneca, GlaxoSmithKline and University of Cambridge collaboration to establish and run a national COVID-19 testing centre. The collaboration aims to boost the UK's testing capabilities through innovation and cutting-edge technology, and Chris was instrumental in getting this established.

Dame Theresa Marteau (Fellow) is a participant in SAGE and also Co-Chair of The Lancet-Chatham House Commission on Improving Population Health post COVID-19. The Commission, funded by Wellcome, aims to find common drivers and actions for reducing the global threat of pandemics, non-communicable diseases and environmental

degradation to population health, and increase the chances of effective action to achieve the UN Sustainable Development Goals by 2030. (<https://www.healthpostcovid-19.org/>) You can read more about her work on page 14.

Professor Frank Kelly (Fellow) is a member of the Royal Society's DELVE (Data Evaluation and Learning for Viral Epidemics) Working Group which is a multi-disciplinary group convened to support a data-driven approach to learning from the different approaches countries are taking to managing the pandemic. He is also a member of the Royal Society's SET-C group (Science in Emergencies Tasking – COVID).

DELVE and SET-C are providing input to the UK Government through SAGE.

Professor Mark Girolami (Fellow) is heading up a Data Centric Engineering team at the Turing Institute, supporting the London response to COVID-19. Project Odysseus involves two Christ's Engineering students, **Andrew Wang** (m. 2018) and **Mihai Ilas** (m. 2018), and is providing mathematical modelling and statistical analysis for data to be used in the fight against COVID-19: particularly in relation to transport and air quality.

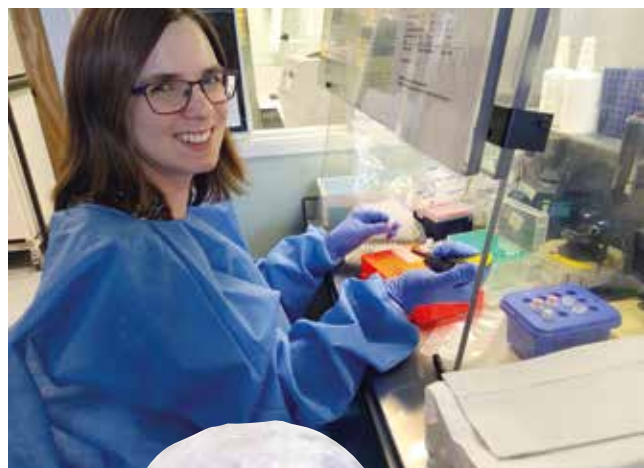
Dr Charlotte Houldcroft (Postdoctoral Research Associate) is a virus evolution researcher, and she is volunteering for COG-UK, a national initiative to sequence the genetics of COVID-19 in order to provide data that can help map its spread and detect mutations.

Dr Julian Tang (m. 1986), Honorary Associate Professor (Respiratory



Professor Frank Kelly.

Dr Charlotte Houldcroft.



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Dame Theresa Marteau.



Dr Julian Tang.



Dr Tony Jewell.



Sciences, University of Leicester) and Consultant Virologist (Leicester Royal Infirmary), has worked in Hong Kong, Singapore and Canada as a clinical virologist, on the transmission and control of respiratory viruses. During the COVID-19 pandemic, he has been working with local and international teams to highlight the risks of airborne SARS-CoV-2 transmission and ways to reduce this.

Dr Tian Zhao (m. 2003) is a BHF Clinical Lecturer in Cardiovascular Medicine at the University of Cambridge. He was recently awarded a British Heart Foundation research grant to look at how, in some patients, COVID-19 affects the heart and why in these patients the prognosis is worse. By understanding the mechanism underlying this COVID-19 induced heart damage, it is hoped that specific treatments for this group of vulnerable patients can be developed.

Dr Cath Green (Former Fellow) and her team were involved in the manufacture of the first batch of the ChAdOx1 nCoV-19 vaccine for the Oxford Vaccine.

Dr David Halpern (m. 1984), Chief Executive of the Behavioural Insights Team, is a participant in SAGE and **Dr Petra Klepac** (former Fellow), Assistant Professor of Infectious Disease Modelling at the London School of Hygiene and Tropical Medicine, is a participant in two of the SAGE working groups.

Two of our alumni are leading important COVID-19 programmes.

Professor Paul Elliott (m. 1972), Professor of Epidemiology and Public Health Medicine at Imperial College London, is director of the REACT (Real-time Assessment of Community Transmission) Programme, a series of studies that seek to improve

understanding of how the COVID-19 pandemic is progressing across England. To do this, the programme is carrying out two studies (REACT-1 and REACT-2). REACT-1 is rolling out antigen (swab) tests to 100,000 randomly selected people across England to examine how widely the virus has spread. REACT-2 is assessing several different antibody tests to see how accurate they are and how easily people can use them at home. **Professor Sarah Walker** (m. 1990) is Academic Lead and Chief Investigator for the National COVID-19 Infection Survey. You can read an interview with her on page 15.

Many of our Medics have been involved in the COVID-19 efforts, some coming out of retirement to re-join the NHS.

Dr Tony Jewell (m. 1969) was Chief Medical Officer for Wales from 2006 to 2012, and is now working as a Public Health Consultant for the Cambridge and Peterborough Public Health team.

THERESA MARTEAU & SARAH WALKER

CHRIST'S SCIENTISTS

Theresa Marteau has been a Fellow of Christ's since 2015, having been a Bye Fellow for two years before that, and is the Director of the Behaviour and Health Research Unit at Cambridge University.

© PAUL MUSSO, HAY FESTIVAL



Her research focuses on the development and evaluation of interventions to change behaviour (principally food, tobacco and alcohol consumption) to improve population health and reduce health inequalities, with a particular focus on targeting non-conscious processes, known as "nudge".

Theresa was appointed a Dame Commander in the Queen's Birthday Honours in 2017 in recognition of her work. Since March, she has been a participant in the UK Government's Scientific Advisory Group for Emergencies (SAGE).

You were invited to participate in a sub-group of SAGE back in March. How did that come about and how have you found it?

I was contacted towards the end of March 2020 by SPI-B – Scientific Influenza Group on Behaviour – a sub-group of SAGE – to contribute expertise on how people might respond to antibody testing for COVID-19. This led to an invitation to participate on a regular basis, contributing expertise more widely and taking part in various "Task and Finish" groups that work across SAGE. I've worked on a range of papers covering the design of public spaces and large venues to enable behaviours that reduce transmission of the virus

– including physical distancing and wearing face-coverings – as well as mass population testing for the virus.

It has been an extraordinary experience to be part of probably the largest peace-time deployments of science in the UK. It feels to be both an honour and a duty to contribute to this emergency – however little. It's been fascinating to work with experts in such different disciplines – engineering, architecture, epidemiology, history, toxicology, virology, social psychology – to name but a few. The collaborative spirit has been amazing with many working all hours, including a highly skilled secretariat from the Government Office for Science that supports us all.

There has been some criticism of SAGE. What would you say to the critics?

There have been criticisms – some justified, many not. Greater transparency of SAGE – publication of the names of those participating and more rapid publication of key SAGE papers – have been important responses to some of these criticisms.

"Following the science" has become a mantra for the UK Government. Is that helpful to the scientists of SAGE?

There is no one science. Similarly, there is no one view of the scientists on SAGE.

I think it has been unhelpful in two ways.

First, it suggests that "the science" leads to one policy decision. It doesn't. Any one set of scientific observations could lead to several policy decisions – and that's before other important outcomes are considered that are not part of SAGE, such as the economy.

Second, it suggests a certainty that misrepresents science, which is characterised by uncertainty. This means that any set of observations is subject to change as observations accrue.

Some SAGE participants have regularly appeared in the media, but you were very clear from the outset that you did not want to be a spokesperson. Why did you make this decision?

Participants in SAGE are free to talk to the media, making it clear that they are speaking in a personal capacity. When I accepted the invitation to contribute to SAGE I decided to decline all media invitations unless they concerned a scientific paper of mine or I had something to say about behavioural science that was important and wasn't already being said. I have two priorities: to contribute my expertise to the huge national scientific effort in this pandemic, and second, not to undermine this effort being admirably led by Sir Patrick Vallance – Government Chief Scientific Adviser, and Professor Chris Whitty – Chief Medical Officer for England and UK Government Chief Medical Adviser. It seems too easy to be lured beyond one's expertise to opine to a media often hungry for division between scientists and policy-makers.

[More recently, you have become Co-Chair of the Lancet–Chatham House Commission on improving population health post COVID-19. What does this aim to do?](#)

We started from the observation that some of the key drivers of pandemics – including COVID-19 – are shared with non-communicable diseases – including many cancers and type 2

diabetes – and environmental degradation. These include elements of food and energy systems that increase all three of these threats to human and planetary health. Building on this, the Commission will identify key actions that could help prevent pandemics and non-communicable diseases, and protect natural environments. We have an excellent international team of Commissioners bringing expertise from a wide range of disciplines. Working with Rob Doubleday (Bye Fellow) and Charlie Kennel (former Distinguished Visiting Scholar), this year's Christ's Climate Seminar series will develop some of the themes from this Commission.

[How optimistic do you feel for the future?](#)

I'm cautiously optimistic that some of the major global challenges highlighted and exacerbated by the pandemic – poor population health, inequalities and environmental degradation – will receive more attention than seemed likely in 2019. Hopefully this will lead to greater investment in research and more effective policy-making. Many initiatives are underway reflecting a strong impulse – felt by many – to "build back better". This is one of the few positive legacies of COVID-19 that hopefully we won't squander.

Sarah Walker matriculated at Christ's in 1990 and read Maths, graduating with a First. She went on to an MSc at Southampton University, followed by a PhD at University College London. She is currently Professor of Medical Statistics and Epidemiology at both the University of Oxford at the Nuffield Department of Medicine, and at University College London at the MRC Clinical Trials Unit.

Since April, Sarah has been the Chief Investigator and Academic Lead for the national COVID-19 Infection Survey, a collaboration between the University of Oxford and the Office for National Statistics, investigating prevalence and incidence of current and past infection with SARS-CoV-2. She was awarded an OBE in the Queen's Birthday Honours 2020 for this work.

[You read Maths at Christ's. How did you end up specialising in Medical Statistics and Epidemiology?](#)

I never wanted to be an accountant or an actuary! In fact, my mother was one of the first medical statisticians in the country, working with Sir Austin Bradford Hill on some of the earliest randomised trials of antibiotics for tuberculosis in the 1960s. So I was incredibly fortunate to have a window into a world where you could use Maths to work out how to improve the treatment and management of disease. And once I started, I got hooked by medicine. I actually thought about going back to study medicine whilst finishing my PhD, but a great friend and colleague convinced me I could do more with Maths than I could working clinically.

Continued overleaf



TAKE 2

What is the national COVID-19 Infection Survey?

Technically it is a “repeated cross-sectional study with nested serial sampling” – what that means is that we continuously recruit “waves” of new participants from households selected to be representative of private residential households across all four nations of the UK. Everyone in the household over 2 years who agrees gets tested for SARS-CoV-2 using a nose and throat swab – and then, if they agree, we come back and test them again every week for a month, then every month for a year. This allows us to estimate both how many people across the UK have the virus at any point in time (prevalence) and also how many people newly acquire the virus (incidence), as well as looking at household transmission. We also measure antibody levels in a subset of ~20% of households. We have been testing between 180-210,000 people every fortnight, with >2 million swabs to date.

What does your role as Chief Investigator and Academic Lead entail?

A bit of everything! I am ultimately responsible for the protocol, which defines how the survey is run and the scientific questions we are aiming to answer, and all the research ethics committee approvals. But I am also heavily involved in how the protocol is

operationalised on the ground, down to precisely what questions we ask participants. I’ve also done a lot of the data management, particularly around data quality, and hands-on analysis, and I still play a large day-to-day role in working out what analysis we need to be doing to answer the new questions that always keep arising – we are continuously revising and improving our methods. In my spare time, I try to write some academic papers!

How does your work feed into SAGE and Government decision-making?

We produce a report for Government every week – it was twice a week from May through September – the key findings from these reports are summarised every week in Office for National Statistics bulletins (summarised on <https://www.ndm.ox.ac.uk/covid-19/covid-19-infection-survey/results>) but these reports are much longer. We also respond continuously to adhoc requests from both Government and SAGE on more specific pieces of work, including recent questions around school age children and teachers. Our data are used to inform many of the key decisions – including the November national lockdown. Anything from the “ONS survey” is our study!

What has been the most surprising outcome of your work?

The fact that when you test people at

random, rather than relying on people to come forward for testing because they have symptoms or know someone who has already tested positive, you find that a far larger percentage are positive for SARS-CoV-2 than you might expect. This “asymptomatic” infection is likely to be a key feature in how the epidemic has sustained itself and spread so widely – behaviours that affect onward transmission are likely to be different if you don’t have any symptoms and don’t think you could have the infection.

How optimistic do you feel for the future?

Very. Mass testing with the new lateral flow devices – like pregnancy tests on a stick – provides a real opportunity to find the large percentage of people who are infected with SARS-CoV-2 but don’t have symptoms and can therefore unwittingly pass it on – and stop these chains of transmission. And the vaccines are an incredibly promising development which should change everything. But, most of all, because of the sheer creativity, enormous generosity and indomitable spirit of all the many hundreds of people, not just at Oxford and ONS, but also Public Health England, Department of Health and Social Care and numerous other institutions who have come together to fight the virus, and make one realise that there is a huge amount to celebrate in the world, even as it is now.

Stay connected

DATES FOR YOUR DIARY

2021	25 FEBRUARY Webinar by Dr Julia Shvets	25 MARCH Webinar by Dr Alexandre Loktionov	17 JUNE Alumni Evensong	19 JUNE May Bumps Picnic	26 JUNE Reunion Garden Party for matriculation years 1963– 1974 inc.	3 JULY College Association Dinner

Due to the pandemic, our in-person events are subject to cancellation, but we are looking forward to warmly welcoming you back to College when we can.