

THA Secretary's Report

In November 2020 the Alumni & Development Office organised 'GiveTogeTHer', the College's first giving day to mark its 670th anniversary and to raise funds to support students.



The THA offered a £5,000 challenge gift if 167 alumni made a donation. This challenge was met within the fi st 30 hours. The funds have been used to help students whose financial circumstances have been affected by the pandemic, relieving their financial worries and helping them with resources to facilitate remote study. THA President Roger McKinlay commented: "GiveTogeTHer was the obvious opportunity for the THA to support students at a very difficult time. The THA has been unable to run its usual events to keep alumni in touch with each other and the College, but we know that the thoughts of many of our alumni have been with the students. Thanks to Dennis Avery's generous endowment we have been able to turn thoughts into action".

It is not often that the THA has donated to College projects to this level.

However, our THA Voluntary Awards are an important ongoing part of our engagement with, and encouragement of, our student community. They support students undertaking projects of a humanitarian or community-enhancing nature. Access and scope are now widened to include postgraduate students and UK-based projects, which is important in the face of the uncertainties and restrictions imposed by the pandemic.

The committee has held all of its scheduled meetings online. These have been concise and efficien in dealing with signifi ant issues. Although time and costs have been saved, we look forward to the time when we can enjoy live encounters once more.

Live THA events have not been possible. Our last event, in September 2020, was the AGM plus our fi st webinar, an excellent talk by alumnus Alan Griffiths (1974) on 'Reinventing television', which was very well supported. The format of the AGM in September 2021 is not yet settled. It may again be online and a webinar could be offered. Feedback reassures us that the organisation of events and the participation of alumni and their guests remain much appreciated. The postponed event at Riddle's Court in Edinburgh is rescheduled tentatively to Saturday 13 November 2021. We all look forward to meeting other alumni, College staff and guests again, formally or informally, whatever the context.

Dr David Billett (1968) THA Secretary



About Front Court

Front Court keeps members and friends up-to-date with College and alumni news.

Front Court is produced twice a year. If you have any suggestions or articles for the next issue (Autumn 2021), please contact the Editors.

All our publications are available on our website: www.trinhall.cam.ac.uk/alumni/publications

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Message from the Development Director

Last year, I wrote about how much I enjoyed working with all members of the College community. This year, I would like to express my heartfelt gratitude for all the support members of the Trinity Hall community have shown to each other – whether through donations, speaking at online events, chatting with our students during our virtual Telephone Campaign, or offering careers advice to other members. Thank you.

Your donations truly make a difference to students whose finances have been affected by the pandemic and ensure that we can provide the necessary resources for everyone to study remotely.

Many alumni have asked after the students. There has been a lot of disruption for them this year and student welfare has been a focus, with our wellbeing team available to help those affected.

Life in College was very different: no dining, no sport and remote teaching. However, the student body has shown great resilience and adaptability. The Law Society replaced their annual dinner with an online panel discussion followed by virtual networking, the Boat Club switched their training to 'Zoom circuits', and there was an online scavenger hunt at the end of term. Your donations helped provide IT equipment for students, we developed guidance for studying from home and the JCR established a welfare fund to help with costs of non-academic items to improve wellbeing. Students also joined the College kitchens in donating unwanted food items to local food banks.

We have had all constituencies of the College community join us at events, including over 500 alumni, across seven decades, from 30 different countries. Thank you for supporting our online quizzes, webinars and panel discussions. It has been wonderful to reach out to such a wide audience and we will continue to offer webinars as part of our events



programme. We are pleased that alumni are keen to return to College and we will let you know when we are able to host in person events and dinners again.

Our online community has also gone from strength to strength. We have developed LinkHall to offer additional benefits to our community including a new web app, an improved mentoring scheme, a business directory and more interest groups. You can sign up via www.linkhall.org.

Over the past year when I have called into the office, I have seen the development of the WongAvery Music Gallery from my window. Last term the hoarding was taken down in Avery Court to reveal a fantastic building that will provide a high-spec music practice and recital space. We very much look forward to an official opening later this year, restrictions permitting.

However, it is with great sadness that we announce the deaths of Jonathan Steinberg, Graham Howes and John Polkinghorne, former Fellows who are held in deep regard by many alumni. We have been touched by the tributes that have been sent in for us to pass on to their families.

On behalf of the staff, Fellows and students, a huge thank you for all the ways you have shown your support throughout the past year.

Dr Rachelle Stretch

Development Director

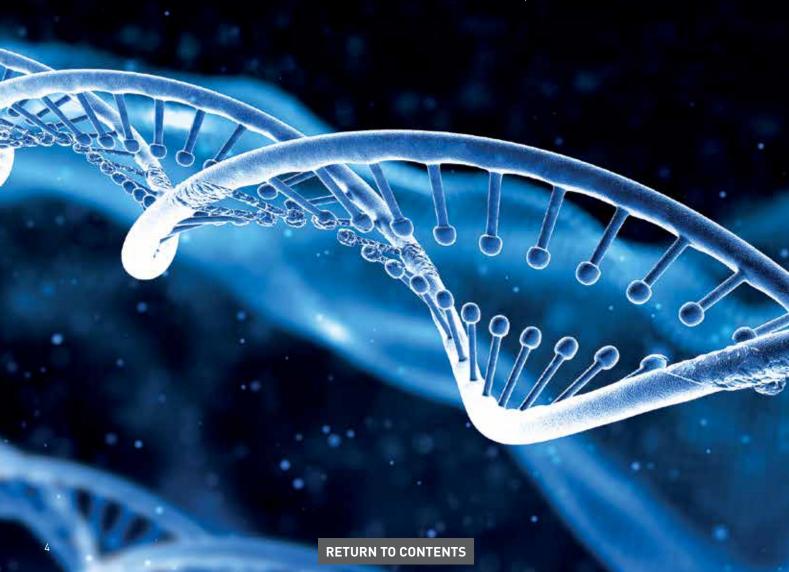
MEET THE PhD ALUMNI

What do a biotech entrepreneur, biochemist, social impact investor, renewable energy specialist and infectious disease researcher have in common?

They are, of course, five Trinity Hall PhD graduates. Five people who spoke to us about memories of College, the importance of collaboration and using their expertise to adapt to the evolving needs of society.



My story is an improbable one. I was born into a poor family in the East End of London, where my father was a builder and my mother a meals-on-wheels lady. I was told at age 13 that I was not good enough to study chemistry at O-Level and so went on to leave school at 16 with no formal qualifications to pursue a career in professional football.



The path less travelled:

From East Ender to footballer to Trinity Hall to biotech entrepreneur

Finding only moderate success with this, I went back to further education by balancing a three-year apprenticeship as a Science Laboratory Technician, playing semi-professional football, and studying for an ONC in Science at Paddington College. In my final year of study, an inspirational former schoolteacher named Brian Carline convinced me to apply to the University of Salford to study Chemistry. Luck and coincidence then led to me arriving at Trinity Hall in 1991 to read for a PhD in Biotechnology under one of the UK's most entrepreneurial scientists: Professor Christopher R Lowe.

My journey of self-discovery started at the Hall. Here I developed a new level of confiden e that came from a realisation that I could succeed academically and in sports and hold my own on a social level with students from backgrounds that I had previously considered to be superior to my own.

From a research perspective I also identified that intellectual breadth rather than depth could be a strength instead of a weakness, as it helped me to see how technology could be applied to deliver commercial and societal impact. This, along with an aptitude for bringing those smarter than me together to solve big problems, combined into a platform for building a career in the commercialisation of technology.

I have gone on to start-up, grow and invest in over 40 business ventures and social enterprises, securing over \$600 million business financing from grant, angel, corporate, venture capital and public market sources as well as closing over \$700 million of product, service, licensing, and M&A deals. For this work I have been recognised with numerous regional, national, and international awards but the two proudest moments came when I was conferred the Lifetime Queen's Award for Enterprise Promotion and made an OBE by the Queen, both times nominated by peers at the University and in the broader business ecosystem.

Commercial success has afforded me the opportunity to remain in Cambridge for 30 years and work with many brilliant and passionate young scientists and business students as they take their fi st steps beyond the lab or classroom and into the commercial world. Through a 10-year endowment of the Christopher R Lowe Carpe Diem Enterprise Fund, I have been able to award over 35 needsbased bursaries and hardship grants, and fund student entrepreneurship societies (CUE, CUTEC) while providing early business support to more than 20 emerging start-up companies.

I made friends and built a network in Cambridge that will last a lifetime and I can state without hesitation that my time at Trinity Hall changed my life and, in turn, that of many others in my family and in my network of friends and student entrepreneurs.

Dr Darrin M Disley (1991)

DSc, OBE, Entrepreneur, Angel Investor and Enterprise Champion



"Who could be so lucky? Who comes to a lake for water and sees the reflectio of the moon" – Rumi

When I came to Cambridge in 2012 for my doctoral studies in Biological Sciences, I had no idea that I was going to find a forever home at Trinity Hall, the place where I met my best friends and made amazing memories.

It is because of Trinity Hall that my book of life is now full of cozy MCR conversations, formal dinners, movie nights, tea sessions at Wychfield and a strong network of extraordinary individuals from all around the world.

I chose Trinity Hall because my PhD supervisor, Professor Edmund Kunji, was (and still is) a College Staff Fellow. It was a fortuitous decision. My love for biochemistry drew me to Professor Kunji's laboratory, where I studied how the metabolic pathways of different parts of the cell are connected. Specifically, I developed screening methods to characterize the biological function of a group of proteins, called membrane transporters, that translocate a variety of molecules across biological membranes. Professor Kunji showed me how a rigorous scientist and a critical thinker can be a kind and wholehearted human being.

After graduating, my interest in cell metabolism brought me to Dr Faranak Fattahi's lab at the University of California, San Francisco, where I use human pluripotent stem cell (hPSC) technology to model and study human metabolic diseases for therapeutic interventions. hPSCs are fascinating as they have the unique potential to generate any cell type of interest. During the first months of the COVID-19 pandemic, we shifted our focus to investigating COVID-19 pathology. We used human stem cells to generate heart and lung cells and then identified drugs that significantly reduce SARS-CoV-2 viral infection in these models. Our results revealed the role of male hormone signaling in increasing the susceptibility and the severity of the disease, which could explain why men are disproportionately affected by COVID-19. You can learn more about this work online (https:// pubmed.ncbi.nlm.nih.gov/33232663/) or contact me directly at homa.majd@ucsf.edu.

The past year has reminded me of the importance of our networks. Professionally, doing research as part of a passionate and motivated team of scientists was a safe harbor for me during such an uncertain and challenging time. Personally, the most amazing network of thoughtful friends and family helped me to stay balanced and mindful. Now more than ever, I am thankful to Trinity Hall for giving me the opportunity to meet my best friends who continue to support me from thousands of miles away, lift my spirits and bring me joy in this challenging time. Now more than ever, I dream of visiting Trinity Hall, sitting on the river wall, and smiling at the memories of the younger me in the same beautiful, old and magical place.

Dr Homa Majd (2012)



Left: Homa on the River Terrace wall. Right: Homa in the lab at the University of California.



SUPPORTING INNOVATION to shape the future

My life has been varied, yet always guided by the same interlocking imperatives: a desire to serve public interest, a passion for industry, science, technology and the arts, and a drive to see the world more clearly so as to help shape the future.



Having studied Economics and Finance for my Bachelor's and Master's degrees, my PhD was on the optimisation of an uncertain

economic and monetary union, at the Department of Engineering. The Department had some of the world's finest thinkers in applied mathematics and signal processing, and was also pioneering work in artificial intelligence.

Trinity Hall, the Department and the whole PhD experience proved to me that most of the creative work in which we engage is not done individually but rather, collaboratively. Furthermore, that providing individuals and teams with the right resources and the freedom to explore without fear of failure are essential for advancing social good.

The Department of Engineering, and the College's vibrant community also exposed me to work and conversations that foretold some of the incredible paradigm-shifting, game-changing breakthroughs that have emerged in recent years and which we'll see continue to unfold in years to come. Those breakthroughs – and learning how to harness them – is forcing the re-imagination of every major industry on the planet at warp speed.

Following my research, I did what some other Cambridge PhDs with an interest in quants and finance had done: I got enthused by capital markets, asset prices and forecasting. I soon became the head of a remarkable team of physicists and mathematicians devising optimal portfolios and arbitrage-like opportunities for the European stock markets at an investment bank in London.

I enjoyed public markets, and still do. The work was stimulating, but I sensed a different calling.

Private markets, innovation, competitive strategy, corporate and industrial transformation seemed even more enthralling. I took a risk and joined the global management consulting firm McKinsey & Company. There I learned



the alchemy of business excellence, and how courageous corporate cultures can galvanise the genius of the many. My consulting work led to my appointment as Head of Global Private Equity Investments at McKinsey Investment Office, scouting and investing the partnership's own capital in private equity and venture capital opportunities.

I wanted to manage more than one firm's capital and start my own firm, so I left McKinsey's Investment Office for a partnership with four others in Silicon Valley. Together we built a global private equity and venture capital house, managing capital for private and public institutions from across the world. On leaving McKinsey, I agreed to continue as a Senior Advisor to the firm, and to manage McKinsey's PE and VC capital from my new company. Over the years, my travels to the world's power centres, have proved to me that technology, courage and cooperation provide most of what's needed by humanity to deal with the planet's biggest challenges.

Incidentally, two years into my McKinsey career, I helped co-found unLTD to finance some of the UK's finest entrepreneurs in their quest to solve come of the most difficult social issues. We established it after winning £100 million in a national competition. I'm proud of unLTD, not least because it is proving every day that human brilliance and leadership capacity exists in all corners and levels of society; and that appreciation of others is the *sine qua non* of morality and fairness.

In 2017 I sold the last of my shares in my private equity and venture capital firm headquartered in Silicon Valley. I now only invest my personal investment office's capital, supporting innovations in artificial intelligence, environmental sustainability and technological simplification. I have also become a trustee of the Brookings Institution in Washington DC, the world's oldest and highest ranked non-partisan think tank; a trustee of the UK Productivity Leadership Group's charity, Be the

Business, financed by the government and key UK companies, to help transform the performance of UK's small and medium-sized companies; and a trustee of the Royal Albert Hall Trust. Furthermore, I continue as a member of the investment committee of unLTD, the UK's largest charity devoted to social entrepreneurship, which I had helped cofound in 2000. And though I left McKinsey & Company 17 years ago, I have remained a Senior Advisor to the firm on growth, innovation and transformation.

Today my hopes for the future are threefold: better multilateral cooperation; the rapid transition of enterprises into the new technology-enabled operating systems of the Fourth Industrial Revolution; and for our economies to begin affording a way of life that allows each person to shine like a diamond and celebrate life to the fullest.

Dr Hosein Khajeh-Hosseiny (1990)

"Over the years, my travels to the world's power centres, have proved to me that technology, courage and cooperation provide most of what's needed by humanity to deal with the planet's biggest challenges."



SMART TECHNOLOGY for environmental monitoring

My experience at Cambridge gave me the confidence and curiosity to solve problems using technology, which continues to this day.

After graduating from University College Dublin with a BSc Honours in Physics & Mathematics in 1991, I joined Trinity Hall to do an MPhil in Microelectronic Engineering & Semiconductor Physics at the Cavendish Laboratory.

I followed this by joining the Interdisciplinary Research Centre in Superconductivity and started my PhD in the very exciting area of fabrication of high temperature superconducting Josephson Junctions under the supervision of Dr Mark Blamire in the Department of Materials Science at the New Museums Site. This technology forms the basis for quantum computers and Al. It was a really wonderful experience doing cutting-edge research and development and working with great scientists from all over the world. Combined with the Trinity Hall experience these were truly some of my best years.

After completing my PhD in 1996, I spent two years at the Physics Department at the University of Birmingham working on spin electronic devices. I returned to Dublin and spent the next eight years at the Physics Department in Trinity College Dublin. Between 2001 and 2006, I was the Program Manager of the Science





Foundation Ireland-funded program "Conception & Implementation of Nanoscale Spin Electronics" where I led the activity to build the infrastructure for a nanolithography and thin film deposition faculty. We published more than 100 papers over five years.

I then made the decision to leave academia to become an entrepreneur and set up SolarPrint to develop and manufacture novel printable solar cells for artificial light harvesting to power IoT devices (2008–2013) based on IP I developed in my own labs.

I then moved into technology consulting which led me to Riyadh in 2015 where I was a renewable energy consultant at King Abdullah City for Atomic and Renewable Energy until 2018. Here I led the effort to design the Technology Localisation & Commercialisation Program which is currently being rolled out in the Kingdom.

I am now the Senior Vice President Technology & Innovation at Siemens Saudi Arabia, developing technologies to address four grand challenges: sustainable urban living, food security, a net zero carbon future and space exploration.

We are planning to build a wind-to-hydrogen demonstration project in the Red Sea, and a hybrid photovoltaic cooling and hot water pilot project. We are also scaling a novel smart site-safety solution and environmental monitoring system using Internet of Things devices and video analytics and developing Vertical Farming 4.0 and the MindSphere IoT platform for smart cities applications.

Recently, I started to explore different technologies that can destroy and inactivate viruses such as COVID-19 using air treatment.

Cold atmospheric plasma technology is one very promising approach that could be a game changer and make buildings and public transport safer for everyone.

Dr Mazhar Ali Bari (1992)

THE SKELETONS helping us understand infectious disease

I still remember quite vividly my first time on an archaeological excavation during my undergraduate studies. Mid-July in southern Italy, after weeks of hard work removing wheelbarrow after wheelbarrow of soil from our trench with the sun beating down on us, we finally hit the top of the first Roman burial I would excavate, not realizing that this would be how I spent my summers for the next decade.



Marissa on an archaeological excavation.

Over the next few days, as we carefully removed the heavy ceramic roofing tiles that covered the burial, I remember the constant excitement of uncovering the skeletal remains of the individual buried in that grave and each of the items that were put inside the burial, including a ceramic lamp, a bronze coin with the faint image of an emperor visible and glass vessels. It was amazing that each of these items and the skeletal remains could help us understand what life was like in this rural Roman community almost 2,000 years ago.

Medicine and biological anthropology have always seemed complementary to me and after starting medical school I decided to do a PhD in biological anthropology alongside my medical training. In 2016 I started my PhD in the Department of Archaeology. My research was focused on finding evidence for parasitic infections during the Roman period and comparing differences in infections across the Empire. Numerous collaborations with excavation teams from different countries allowed me to collect soil samples containing faecal material from Roman sites in Austria, Belgium, Britain, Cyprus, Italy, Serbia and Turkey. From

these different excavations we collected preserved faeces, or coprolites, soil from latrines and sewers and soil from the pelvic area of skeletal remains where the individual's intestines decomposed leaving behind eggs from intestinal worms. Using diagnostic methods such as microscopy and enzyme-linked immunosorbent assay, I identified preserved eggs from intestinal worms and proteins from smaller single-celled parasites called protozoa.

Analysis of these samples revealed new evidence for parasitic infection in the Roman Empire, especially in the Mediterranean region of the Empire. Intestinal worms spread by the faecaloral route, such as roundworm and whipworm, were found at most sites. Thus despite the presence of sanitation infrastructure such as latrines, sewer systems and baths in many Roman cities, gastrointestinal pathogens were likely commonplace in these communities. In the Mediterranean region especially, these faecal-oral parasites predominate whereas worms acquired from eating raw or undercooked beef, pork and fish were not found at any sites. In contrast, these parasites have been found at Roman sites in Northern Europe. This suggests that dietary preferences and approaches to cooking meat and fish varied across the Empire. These results were recently published in the American Journal of Archaeology as an open access article (https://doi.org/10.3764/aja.124.4.0631).

Since graduating from my PhD in the summer, I have returned to Canada to complete my medical training and have had the opportunity to continue my

research at the same time. It has been both very challenging and rewarding to return to clinical work during the pandemic. At the same time, it has reinforced the value of studying infectious diseases throughout human history. The emergence and re-emergence of infectious diseases have occurred throughout our history and we can learn from the approaches and outcomes of previous pandemic responses. We can gain insight into infectious disease transmission by tracking how humans have adapted to and responded to various infectious diseases and how human activities have changed the prevalence of different diseases. I hope to continue this research alongside my clinical practice in the future. The research I undertook while at Trinity Hall led to many ongoing collaborations and projects that I am very excited to continue to work on and expand over the next few years while I finish my medical training.



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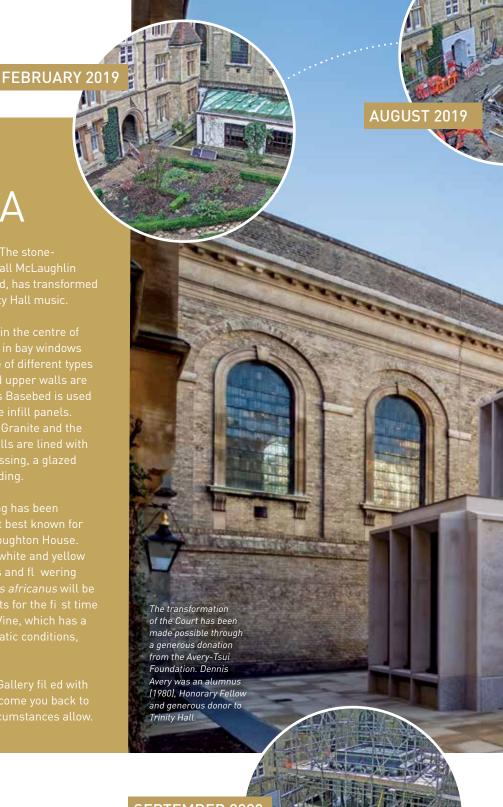
A NEW MUSICAL ERA

A new home of Trinity Hall music is complete. The stonebuilt WongAvery Music Gallery, designed by Níall McLaughlin Architects and built by Barnes Construction Ltd, has transformed Avery Court and ushered in a new era for Trinity Hall music.

Performances and rehearsals will take place in the centre of the Greek cross shape, with audience seating in bay windows at the ends of each arm. The building is made of different types of stone, all sourced in the UK. The frame and upper walls are made of Portland Limestone, smooth Jordans Basebed is used for the frame and shelly Grove Whitbed for the infill panels. The plinth details at ground level are Cornish Granite and the floor internally is Purbeck Limestone. The walls are lined with shelves to store sheet music and over the crossing, a glazed lantern brings light into the centre of the building.

The garden that will surround the new building has been designed by Kim Wilkie, a landscape architect best known for his striking land forms such as Orpheus at Boughton House. The pallet will be subtle with shades of blue, white and yellow and an evergreen backdrop of climbing plants and fl wering shrubs. On the sunny, chapel side *Agapanthus africanus* will be dominant. We will also be growing some plants for the fi st time here, such as *Holboellia latifolia* or Sausage Vine, which has a wonderful fragrance and, given the right climatic conditions, edible, sausage-shaped fruit.

We are excited to hear the WongAvery Music Gallery fil ed with music and applause, and we can't wait to welcome you back to College to experience it for yourself when circumstances allow









"THE COMPLETION OF THE WONGAVERY MUSIC GALLERY MARKS A HUGELY SIGNIFICANT MOMENT IN THE MUSICAL LIFE OF TRINITY HALL, PROVIDING A SPACE OF ARCHITECTURAL BEAUTY AND ACOUSTIC DISTINCTION IN WHICH TO EFFECT MUSICAL TRAINING AT THE HIGHEST LEVEL, AND TO ENCOURAGE GENERATIONS OF STUDENTS TO EXCEL IN THEIR VARIED MUSICAL ENDEAVOURS!"

Andrew Arthur, Director of Music



SAFEGUARDING FUTURES DURING THE PANDEMIC

MAKE A DIFFERENCE

The title of this article is particularly poignant this year. In a year that has been unlike any other, collegiate Cambridge and our students had to adjust rapidly to changing circumstances and guidance. For our students who found it particularly challenging, you have made, and continue to make, an important, positive difference to their lives.



The challenges imposed by the pandemic are being overcome with the support of donations from alumni across the globe. Your generosity has helped bring security to members of our community who have been affected by an unexpected change of circumstances.

We were touched by your staggering response to our appeal for donations to help students. Your support has meant that those affected by the pandemic have not had to worry about their financial situation. There

has also been extra provision to help the wellbeing of our undergraduate and postgraduate communities. The Fellows have been able to continue to deliver an excellent level of teaching in different circumstances, and College resources have been enhanced to improve the learning experience for students. The loyalty and support from our alumni and friends in recent years has meant that at this challenging time, we have been able to be resilient as a College, enabling us to focus on providing the best support for our students.

"I am grateful to every donor as their support is pivotal to the learning experience of so many students. I genuinely benefit ed a lot in so many aspects and this made my time at Cambridge memorable! During the coronavirus crisis and being unable to go home, the funds available for students were key to us as international students."

One (2019, African Studies)

Give TogeTHer

Our Giving Day in November was a first for us. Give TogeTHer was the first time we ran a digital fundraising and engagement event, and we were overwhelmed by your response.

Over the 67 hour event you exceeded all expectations: 568 households donated a staggering £343,012 to support Trinity Hall students.

These funds are helping current undergraduates and postgraduates across the College in a variety of ways. Donations have enabled us to offer support to students whose household finances have changed completely as a



result of the pandemic and thereby alleviate financial concerns students may have. We have been able to offer additional funding for postgraduates whose research is lasting longer than they budgeted for. We have helped students with the unexpected travel, quarantine and self-isolation costs that have resulted from the pandemic. Donations have also enabled us to improve our resources including: additional texts for the library, purchasing new small boats for the boatclub and ensuring we have technology in seminar rooms to allow for hybrid teaching. But your impact doesn't stop there. Your generous donations will enable us to set up the Rowan Williams Studentship to help a student from an area of conflict to study at Trinity Hall next academic year.

DEDICATION TO DIGITAL LEARNING

Due to the new technological demands in the current academic year, the University of Cambridge created the 'Digital Gateway Grants' scheme through the money released by the Harding Challenge. The scheme was designed to help freshers from disadvantaged backgrounds buy the necessary equipment for remote studying for Michaelmas term and beyond. First-year undergraduates who were formerly on free school meals are eligible for Digital Gateway Grants of up to £1,000. These grants can then be used for the purchase of laptops, webcams and/or noise-cancelling headphones.

A Trinity Hall undergraduate who benefitted from the Digital Gateway Grant said: "The Digital Gateway Grant was enormously beneficial in allowing me to purchase a laptop for university. It has meant I have not had to worry about both a slow processor and a lack of storage, which would have otherwise added additional unnecessary stress during a busy Cambridge year. I am forever grateful for this, as I am now one step closer to achieving my goals."

Donors to Give TogeTHer enabled more than £82,000 to be unlocked from the Harding Challenge and transferred into an intercollegiate fund to support those students in greatest need.

The eligibility criteria for the Harding Challenge has been expanded such that anyone giving to student support who has not made a donation to collegiate Cambridge in the past two financial years is eligible. Your donation to College student support will benefit not only students at Trinity Hall but also undergraduates in greatest need across Cambridge, enabling us to do more for them than ever before.

A donation from the David & Claudia Harding Foundation aims to support students in greatest financial need at Cambridge whilst also encouraging others to offer their support. In its first year £3.4M was unlocked from the Harding Challenge across collegiate Cambridge.

From the generosity of Bishop Bateman 670 years ago, through to the kind donations we receive today, philanthropy plays such an important role in enabling the Trinity Hall community to remain strong in difficult times. On behalf of all of the undergraduates, postgraduates, Fellows and staff here in College – thank you for your generosity. We are incredibly grateful for your support and the difference it has made.



NEWS IN BRIEF

Keep up-to-date with all the latest news on the website: www.trinhall.cam.ac.uk/news

'Make a Wish' wins Trinity Hall's life during a pandemic photo competition



To celebrate our community's creativity and verve, the College ran a photo competition with the aim of capturing 'life at Trinity Hall during a pandemic'.

Staff, Fellows and students of the College submitted more than 80 entries to the competition and in the end three students picked up the winner and runner-up prizes.

The winner was Irina Ferapontova, a fourth year Biochemist at Trinity Hall, living in the College's Wychfield site. Her photo (above), titled 'Make a Wish: looking out on a double rainbow over Launcelot Fleming from the Boulton House window seat,' really captured the imagination of the judges.

'Formal Hall at Home'

Trinity Hall launched a lockdownfriendly 'Formal Hall at Home' takeaway dinner initiative during November 2020 to offer students a taste of normality amid the pandemic.

The delicious three-course takeaway dinner was sold-out, proving popular and well worth the students donning their gowns for.

Postgraduate Aime said: "It was really wonderful to have a special formal meal during lockdown and a great excuse to get our glad rags on. My hat goes off to the Trinity Hall kitchen staff – the food was absolutely delicious!"



Ambitious divestment commitment

In November 2020, Trinity Hall approved a revised investment policy. As part of this revision, the College has committed to divest within six months from direct investments in companies whose primary activity is in fossil fuel exploration or extraction.

The revised policy also prohibits direct investments in certain other industries whose activities are deemed to be at odds with the College's fulfilment of its charitable mission.

The College will seek to work with those managers with whom it invests in pooled funds so as to substantially reduce its indirect holdings in those sectors over the next five years. It will conduct this work both individually and in co-operation with other investors.



Supporting Cambridge's foodbanks

As part of a community effort to make sure people don't go hungry in Cambridge, the Trinity Hall kitchens provided food for a local food bank based at Cambridge Regional College in King's Hedges.

During the first UK lockdown, the catering team at Trinity Hall donated a great variety of useful products including tins of beans, crisps, flour, cereal, fruit juice, jam and biscuits. They are continuing to donate items to good causes.

In the run up to Christmas, students also donated unwanted food to foodbanks. Trinity Hall Christian Union (THCU) encouraged College students to donate to local food banks by joining many other colleges across Cambridge and Oxford in a food donations drive called 'BOGOF' (Buy One Give One Free).



Trinity Hall Fellow helps take on search engine giants using GDPR



A recent ruling made against Google and its search engine shows European nations are taking preparation for a

legal challenge seriously. Dr David Erdos, WYNG Fellow in Law at Trinity Hall, has been assisting them through his research into the company's notification practices when deindexing material under the 'right to be forgotten'.

Dr Erdos' work analysing how Google's practices undermined an individual's right to deindexing was cited in submissions the Swedish Data Protection Authority made to the Swedish Administrative Court.

This sought to ensure that Google was prevented from continuing with its non-confidential disclosures to websites.



Fellow wins Young Chemical Biologist award

Dr Gonçalo Bernardes, Staff Fellow and Director of Studies in Chemistry at Trinity Hall, was been selected to receive the 2020 International Chemical Biology Society (ICBS) Young Chemical Biologist award.

He leads a research program at the interface of chemistry and biology focusing on the development of new reactions for the construction of new antibody-drug conjugates for the treatment of cancer.

The award cites Dr Bernardes' groundbreaking research in the "design of new chemistry for site-selective bioconjugation of therapeutic antibodies and diseaseassociated proteins in cells", which has been highly impactful.



The Hawks' Club are reaching out to members. If you don't receive their quarterly newsletter and would like to be added to their mailing list please contact president@hawksclub.co.uk

You can find further information and their data protection policy on: www.hawksclub.co.uk

New Fellows

This academic year we welcome eight new Fellows to Trinity Hall. Alongside our four new research and teaching Fellows, we are delighted to welcome Sarah Bates (1977), Janet Legrand, QC (Hon) (1977), Dr Cornelia Parker, OBE and Professor Sir John Pethica (1971) as Honorary Fellows.

Research and teaching Fellows



Dr Anya Burgon (2009) studied History of Art at Trinity

Hall as an undergraduate and postgraduate. She returns to College as the Schulman Research Fellow. Her research explores the role of imagination, aesthetic experience, and the 'poetic' in the intellectual culture of the high and later Middle Ages in northern Europe.



Dr Simon Corkery is our Walter Grant Scott Research Fellow.

Hailing from New Zealand, Simon has been working as an aerodynamicist for the Emirates Team New Zealand sailing team, the current America's Cup defenders. At Trinity Hall, Simon's Engineering research will focus on aerodynamics, including flow separation and sensor systems.



Dr Anton Enright joins Trinity Hall as Staff Fellow in Pathology and Director

of Studies in Natural Sciences (Biological). His research interests encompass detecting, predicting and describing the functions of genes, proteins and regulatory non-coding RNAs, as well as their interactions in living organisms and their implications for disease. Hear from Anton on the opposite page.



Dr Emma Kast, Research Fellow in Geography, Geology and

Geophysics, is researching the relationship between ocean biogeochemistry and Earth's surface environment, including climate variability, over Earth's history. Hear from Emma on our website at www.trinhall.cam.ac.uk/about/people/meet-the-trinity-hall-community

Honorary Fellows



Sarah Bates (1977, Law) has a distinguished career in the financial

sector and the voluntary sector. She is currently Chair of the John Lewis Partnership Trust for Pensions, and Polar Capital Technology Trust and co-founder of The Diversity Project Charity, which seeks to improve diversity and inclusion on many measures across the savings sector. She was an investment manager and then CEO of an institutional asset management business. She has also been a director and Chair of organisations ranging from a small youth project in south Islington to a FTSE 100 company.



Janet Legrand (1977) is the former Senior Partner

and Chair of the Board of DLA Piper, a global law firm, where she combined 20 years of senior leadership roles with substantial client mandates, latterly representing governments in international disputes. Janet is Senior Lay Member of Court at the University of Edinburgh and Chair of The Children's Society, a major children's charity. She was appointed Queen's Counsel Honoris Causa, and has acted as a pioneer in enhancing the role of women in the law, promoting social mobility, diversity and inclusion.



Dr Cornelia Parker is well-known for her largescale, often site-specific,

installations. She works in a variety of mediums and has collaborated with numerous high-profile institutions. She was nominated for the Turner Prize in 1997 and was appointed an Officer of the Order of the British Empire (OBE) in 2010.

She was commissioned by Trinity Hall to create a tapestry, depicting a selection of the College's silver pieces to re-establish the tradition of having an arras hung in the Dining Hall.



Professor Sir John Pethica (1971) invented the now widely used

technique of nano-indentation to measure mechanical properties at extremely small scales. He introduced the concepts, which led to the atomic force microscope, used for high resolution surface and atom imaging.

Sir John worked in industry in Switzerland and founded successful technology companies in the USA. He was a professor at Oxford before moving to Trinity College Dublin where he founded the CRANN nanoscience centre and Naughton Institute. He was Chief Science Advisor at the National Physical Laboratory, and Physical Secretary and Vice-President of the Royal Society.



Dr Anton Enright, Fellow and a Director of Studies for Biological Natural Sciences

I distinctly remember the glowing screen of the computer that appeared in our house in suburban Dublin in the late 1970s. My father was an electronics engineer, amateur radio enthusiast and affable nerd. I never showed interest in electronics itself, which seemed to greatly disappoint him. However, the computer mesmerised me. Over the years I taught myself to program. I had a strong interest in biology and medicine. Computing I viewed as a hobby.

I entered Trinity College Dublin to read Natural Sciences and loved it, particularly being taught to program (properly) and finally getting access to the World Wide Web without a dial-up modem. I developed a strong interest in genetics which combined biology with logic and chose this discipline for my specialisation. The Head of Department, Professor McConnell, ran small group supervisions and our cohort of 16 young geneticists formed a close bond.

I managed to get funding to travel to the USA in the summer of my third year. I planned to go to Washington University to work on prions (misfolded proteins) with Stanley Prusiner. However, I was coerced, instead, to travel to Galway to Digital Equipment Corporation (DEC). DEC sold high-end mainframe computers and had noticed a surge in interest in biology. In particular, the Human Genome Projects were in full swing and DEC wanted to optimise biology applications to run faster on their hardware. As a young geneticist (and full-time geek), I worked in a team of high-performance computing engineers. I learned a lot. I decided that my future lay in combining my hobby with my passion and entered the emerging field of genomics.

The centre of the universe for genomics (or so it seemed to me) was the Genome Campus near Cambridge. Hence, I applied for a European Molecular Biology Laboratory PhD fellowship at the European Bioinformatics Institute enrolling at Cambridge. Working closely with colleagues at the Sanger Centre and watching the genome project reach fruition was tremendously exciting for a young scientist. The big surprise was that humans had fewer genes than expected. There was a lot of debate about 'junk' DNA. It was clear the human genome was far more complicated than many naïvely expected.

My research focuses on this 'dark matter' within genomes. In particular, I work on microRNAs. These are tiny genes, overlooked for decades, that produce short RNA molecules. These molecules bind to other genes and regulate their activity in exquisite and subtle ways. They are fine-tuners and noise modulators of gene function. They are expressed in almost every cell of the body in all animals.



Practical applications range from better understanding of development, fertility, to cancer diagnosis and therapy. After 18 years at the Genome Campus, the Pathology Department seemed the ideal place in which to translate our research towards human health. With colleagues we are trying to develop new diagnostic tools for cancer and disease. A current focus is on the use of nanopore devices which seek to detect these tiny RNA molecules as they pass through a pore on a membrane via current changes. For diseases such as paediatric germ cell tumours, where microRNAs are significantly altered, we hope to be able to make diagnoses by detecting microRNAs from blood rather than invasive biopsies.

Lockdown has been difficult for everyone. I am not ideally suited to sitting at home and have volunteered actively. I spent two months at the UK Biocentre in Milton Keynes assisting COVID-19 testing. I worked on automation robotics preparing thousands of samples for PCR. More recently, I've been assisting my partner in the fenlands as part of the vaccination effort. It's hard to complain about lockdown when you've met hundreds of elderly and vulnerable fenlanders for whom vaccination has been their first trip outside for months. Their good-natured enthusiasm was contagious and a recent high point. When time, weather and lockdown permit, I enjoy astrophotography, spending hours with a telescope, camera and laptop in the fields of north Norfolk.

Like many of our first-year students, I have yet to experience 'normal' College life. While frustrating, I am heartened by their dedication and perseverance in this difficult time. Like them, I plan to forge ahead and look forward to normality returning. I am particularly looking forward to finally meeting my colleagues in person, rather than in postage-stamp grids on a screen.

IN MEMORIAM

Graham Howes 1938-2020

Graham led a remarkable life. The barest outline doesn't really give a clue as to how remarkable it was. The Norfolk background and childhood, shared with brother Christopher, remained a tremendous influen e for him, and his local loyalties ran very deep. With the cottage by the coast, in a sense he never really left Norfolk. And the study and professional life spent almost entirely in Cambridge, at Trinity Hall, of which he was, in Jane Austen's words, 'uncommonly fond'.

Cambridge was a kind of launch pad into the widest possible world of intellectual stimulation, contact, network and friendship. There was nothing limited or small-scale in his outlook. Graham's students had a sort of running game they would play, in which they would try to find a part of the world he hadn't been to. Someone would say something like 'I have a Patagonian pen friend', and in a flash Graham would be trying to find out more

about the exact location, and would demonstrate that he had been to some conference or other there, and remembered it well. They couldn't find anywhere he hadn't been.

Graham never seemed to stagnate or fossilise: he remained interested in everything, and retained a progressive outlook that endeared him to successive generations of students.

And likewise, he really did seem to know everyone. The work at Lambeth Palace for Robert Runcie, the work at Madingley Hall, the decades of teaching at Trinity Hall and in the wider University, his passion for art and his work for the charity, Art and Christianity, these and other things put Graham in touch with an astonishingly wide range of people.

But he didn't get to know people just, as it were, to collect the names. And his extraordinary breadth of mind was not superficial. It reflected great curiosity and a genuinely outward and forward-looking mind. Graham never seemed to stagnate or fossilise: he remained interested in everything, and retained a progressive outlook that endeared him to successive generations of students. To sit next to him at dinner was always a treat, because you knew you were in for a stimulating conversation.

His affections were very deep and his loyalty to this College very strong. Graham saw a great deal of change here and took it all in his stride.

Graham did come, on and off, to Chapel. He had that great connection with Robert Runcie and a whole generation of Anglican bishops, many of whom he knew well. But more to the point, he was a person of great kindness and understanding. The network may have been large, but the bonds were stronger and closer the further in. The great happiness he found in his life together with his wife Shirley and his pleasure in the growing circle of her family and in the role of step-grandfather, were signs of that.



Jonathan was born in New York, the son of a prominent rabbi, Milton Steinberg, and his wife Edith. After graduating from Harvard, in 1955 he worked for E W Warburg Bank in New York. In 1961 he came to Cambridge as a PhD student with Sir Harry Hinsley.

Jonathan's thesis was published in 1965 as Yesterday's Deterrent: Tirpitz and the Birth of the German Battle Fleet. In the meantime, he had won a research fellowship at Christ's College and married Jill Meier: they had three sons, Matthew, Daniel and Peter.

In 1966 Jonathan became an assistant lecturer in the History Faculty and moved to Trinity Hall where he served as Fellow and Director of Studies in History until 1999, and Vice-Master from 1990 to 1994. He very much loved and cared for the College and made an extremely important contribution to the improvement of its finances on the Investments Committee. Robert Grant says of him: "He was a man of great principle and intellectual seriousness, which could be mistaken for Severity (which it wasn't)." His 1999 Leslie Stephen Lecture, 'Leslie Stephen and Derivative Immortality', was an intellectual tour de force.

He was a great and inspiring teacher, having in his time supervised, among many others, Professor Peter Clarke (Master, 2000–2004), Professor David Reynolds and Regius Professor of History, Sir Chris Clarke. Jonathan once explained to Chris Clarke the art of supervising: "Phase 1, you learn the History, Phase 2, you learn to teach the History and Phase 3, you learn to teach people." Such was his fame that he supervised Prince Charles for the historical component of his Cambridge degree.



After his retirement in Cambridge, he was appointed to the prestigious Walter Annenberg Chair of Modern European History at the University of Pennsylvania where he also became the chair of the department. He retired from teaching at UPenn in 2018.

Jonathan authored several important historical works, including *Why Switzerland?*, a fascinating explanation of how Swiss society and politics work; *All or Nothing: The Axis and the Holocaust*, which is a comparative analysis of Hitler and Mussolini's attitudes to the Jews, and *Bismarck: A Life*. Henry Kissinger described Bismarck as "the best study of its subject in the English language", and it was short-listed for both the BBC Samuel Johnson nonfiction prize and the Duff Cooper Prize for biography. It has been translated into Chinese, Danish, German, Japanese, Portuguese, Romanian and Russian.

He also served as an expert witness in a war crimes trial and researched the role of the Deutsche Bank in transactions involving gold and other valuables looted from Europe's Jews.

Jonathan is survived by Matthew and Peter, by his second wife Dr Marion Kant and by his step-children Jessica, Deborah and Myron.

We have lost a kind, generous and inspiring teacher, colleague and friend.

Dr John Pollard, Emeritus Fellow

IN MEMORIAM

The Reverend Canon Dr John Polkinghorne 1930–2021

John was a distinguished physicist, theologian and priest. Born in 1930 in Somerset, he was part of the University community for more than six decades, beginning as an undergraduate at Trinity College in 1949, where he became Senior Wrangler in 1952.

He undertook his PhD at the Department of Applied Mathematics and Theoretical Physics under the supervision of the Nobel Laureate Abdus Salam and was elected as a Research Fellow at Trinity in 1955

After a short time in California and Edinburgh he returned to Cambridge. He

was promoted to a Readership in 1965 and became Professor of Mathematical Physics in 1968. His work centred on the theoretical physics of elementary particles and he played an important role in the discovery of the quark.

John was elected a Fellow of the Royal Society in 1974 and worked in theoretical elementary particle physics for 25 years. He had a particular knack of explaining the complexities of particle physics and quantum theory to the layman as much as the specialist and published several books on the subject.

He resigned from his professorship in 1979 to study for the priesthood at Westcott House, becoming an ordained Anglican priest in 1982. He is said to have half-jokingly remarked that most people do their best work in mathematics before the age of 45.

After some years in parish life in Bristol and Kent, he returned to Cambridge and worked on issues in science and theology, a topic on which he wrote more than 30 books. John joined Trinity Hall as Dean in 1986. He served as Director of Studies in Theological and Religious Studies and supervised the Science and Religion paper.

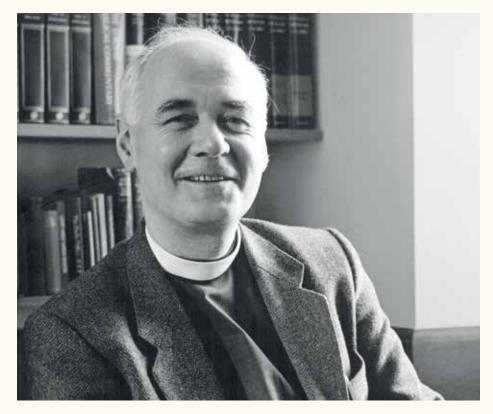
He moved on to Queens' College as President in 1989. He is said to have been an excellent chair of College meetings and helped plant the seeds for the establishment of an Alumni & Development Office. He remained at Queens' for eight years and became an Honorary Fellow at Trinity, Trinity Hall, St Edmund's and Queens'.

John was an influential figure in the relationship between science and religion. Along with colleagues he is credited with creating a new discipline within theology. He saw no incompatibility between science and belief. He was a founding member of the Society of Ordained Scientists and was the first President of the International Society for Science and Religion.

He was knighted in 1997 for distinguished service to science, religion, learning and medical ethics. He served on a number of important national committees on ethics including the Medical Ethics Committee of the British Medical Association and the Human Genetics Advisory Commission.

In 2002, he was awarded the prestigious Templeton Prize for Progress Toward Research or Discoveries About Spiritual Realities. He served as canon theologian of Liverpool Cathedral from 1994 to 2005.

Our condolences go to John's family and friends.



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Terence, Therence en François. Paris: Antoine Vérard, 1499

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