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Lent Term 2021



Inside the NHS with St John's medics
'Life is fragile – the world is just catching up'
Whispers of the past

WELCOMES, GOODBYES AND CONGRATULATIONS



Hello Willow

Helen Woods, Property Administrator (Hostels), with husband Alex and their first baby, daughter Willow Rose, who was born on 27 November at The Rosie Hospital, Addenbrooke's.



Puppy power

Joanne Smith, Superintendent of Housekeeping, and her granddaughters, who she is in a support bubble with, have been kept busy by Olive, their new Labrador puppy, seen here at 13 weeks old – from left, Joanne, Summer, Harmony and Korie.

Painter retires after nearly quarter of a century at St John's

A long-serving member of St John's Maintenance Department has retired after 24 years at the College.

Paul Owen, 59, plans to move to Sedella in Spain with his wife Angela but the pandemic and Brexit have made their arrangements more complicated than they initially expected. They are now hoping to be able to fly out in the spring once they have had their Covid-19 vaccinations.

The painter and decorator said: "The College is like a big family, I will really miss the camaraderie – there was always someone to chat to and have a laugh with. I haven't got any complaints, I've had a very happy time and I much preferred working in a College than constantly working on building sites like I used to!"

The grandfather-of-three and Angela, who is planning to retire from her role as a Bedmaker at Downing College at the end of March, are looking forward to going on lots of mountain walks and visiting the local bars and restaurants.

He added: "I just hope the bars survive the pandemic! We hope to get back to the UK regularly, my daughter is getting married next year so we will definitely fly home for that."



Photo credit: Nordin Catiz

Paul's favourite place to work was in the Master's Lodge and one of his most memorable jobs was sprucing up the Wedding Cake in New Court in preparation for the Queen's visit to St John's to mark the College's quinqucentenary celebrations.

The Covid-19 restrictions have meant that the Maintenance team haven't been able to mark his departure the way they would have liked to.

Tim Waters, Head of College Buildings, said: "Paul, or Nougat to his friends, was a popular member of the team. Over the many years he worked for the College he

must have painted the majority of the rooms and spaces.

"He worked hard alongside his partner in crime Graham Johnson making sure the College was in top condition and always with a smile on his face. He will be very missed by the team and me personally. I wish him and his wife well in their new life in Spain and we do hope we get the opportunity to give him a proper send-off once we are allowed to do so."

Paul, who hasn't learned Spanish yet but says his wife is trying hard to, joked: "I've been a bit lazy on that front but I can order drinks in the pub so I'll get by!"

Welcome to our new staff

Andrea Nagy – Bedmaker

Oliver Neale – Apprentice Gardener

David Austrin – Head Gardener (read our story on page 14)

Erika Csider – Library Cleaner

Goodbye to...

Paul Owen, Painter, who retired on 29 January after 24 years at St John's (read our story above).

Juris Kurdzevics, Gyp, who retired on 29 January after four years at St John's.

Welcome to *Eagle Eye*,
the newsletter for staff,
Fellows and students of
St John's College

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Eagle Eye

This newsletter is produced by:
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Front cover: *St John's clinical medical students (clockwise from front) Ashwin Venkatesh, Lucy Chinnery and Claudia Tam.*

Back cover: *Natural Sciences undergraduate Alex Kingston exercises on the rowing machine beneath The Cripps Building. The Lady Margaret Boat Club rower dyed his hair to mark Pink Week.*

Front and back cover photo credits:
Nordin Ćatić.

NOTE FROM THE MASTER



I write this introduction to the latest edition of *Eagle Eye* wishing for a College crystal ball. I long to know when our enforced separation will end. Perhaps, by the time you read this, we will know. All I can say is: 'It can't come soon enough'.

To keep connected in this Lent Term half-life, I've been enjoying more Zoom get-togethers with staff, students and Fellows. Again and again, I've been heartened by the mutual support that I see being offered across the community of St John's. Everyone feels grateful for the care and thoughtfulness of our friends and colleagues. As these lockdown weeks persist, don't let up on this kindness and understanding. We're all likely to get more bored, frustrated, worried, tired and perhaps a little short with each other every now and then. Each of us might need to be cut a bit of slack.

This got me thinking a lot about community and communication. Both words are about sharing, making something common. We are all lamenting how Covid-19 has diminished our sense of community and shared experience in the College. In times

like these, communications like *Eagle Eye*, the weekly College news email, our website, Instagram and Facebook pages, are so much more than routes to pass essential information. In print and digitally, by sharing our stories and experiences, they reinforce the foundations of our community until we can be back together.

Our Comms team does a brilliant job of keeping us all in touch, with humour and affection. They help to remind us of so much that we can admire and celebrate despite the pandemic, and of how much progress we continue to make. The articles in this edition of *Eagle Eye* will inspire, intrigue, surprise and delight you. Perhaps it will prompt you to share a story too. I hope so. I'm making a commitment to improve my Instagram performance, to do my bit.

We should get back to normal soon – rates are low in Cambridge and as I write there is zero infection in College, and every day I hear of another member of College who has been vaccinated. As we've worked through the challenges of the last 12 months, I have become ever more confident that we will emerge from this crisis with optimism and determination and vigour. There will be lots of new opportunities, lots of learning about what we can do differently, lots to reflect on. But, as we reconnect with normal life, the College Council has committed to one overriding priority. At St John's, recovering and rebuilding our sense of community will come first.

A handwritten signature in black ink that reads "Heather Hancock".

Heather Hancock
Master of St John's College

NEWS ROUND-UP

Neuroscientist is made a CBE

Neuroscientist Professor Usha Goswami, Fellow of St John's, was made a CBE (Commander of the Order of the British Empire) for services to educational research in the Queen's New Year Honours.

Professor Goswami, Director for the Centre for Neuroscience in Education, and Professor of Cognitive Developmental Neuroscience, said: "I am deeply honoured to receive this award. I have been interested in children's development since training as a primary school teacher and it is wonderful to have my research recognised in this way."

This year she has also been elected as a member of the German National Academy of Sciences Leopoldina.

Writing award launches

Talented wordsmiths are invited to apply for the St John's College Harper-Wood Creative Writing and Travel Award for English Poetry and Literature 2021.

The purpose of the one-year award, which was introduced in 1949, is to inspire a project of creative writing by making it possible for the holder to engage in relevant, project-related travel and study. The deadline for online applications is 5 May 2021. Full details at joh.cam.ac.uk/grants-awards-and-prizes

Biologist wins Prize for mother and baby research into improving health



Photo credit: Chris Radburn/Fixed Point Media

A pioneering biologist from St John's College has been awarded a top academic Prize for her ground-breaking research into the causes of complications in pregnancy that lead to poor health for mothers and their children.

Dr Amanda Sferruzzi-Perri has won the 2020 Hans Sigrist Prize, which recognises an academic researcher or scientist who has done exceptional work in an annually selected research field, and who shows promise for more. Awarded by the Hans Sigrist Foundation at the University of Bern in Switzerland, she receives 100,000 Swiss francs (around £82,000) to dedicate to her research in maternal-fetal communication during pregnancy, which is this year's Prize field.

Dr Sferruzzi-Perri, who is a Lecturer in the Department of Physiology, Development and Neuroscience, Lister Institute Research Fellow, and a Fellow at St John's, said: "I feel truly honoured and

grateful that the Hans Sigrist Foundation has recognised the significance of my research field and contribution to it. The Prize money will bolster my lab's capacity to undertake research that explores the causes of pregnancy complications that lead to poor maternal and offspring health. It also opens lots of opportunities for me to collaborate with researchers at the University of Berne in Switzerland, who have complementary expertise and models. I'm absolutely overwhelmed with joy."

More than 15 per cent of women develop complications in pregnancy, such as fetal growth restriction, premature birth, gestational diabetes and high blood pressure (preeclampsia), which can threaten the life of mother and baby and predispose both to disease in later life. Dr Sferruzzi-Perri's lab aims to find ways to prevent these complications and to improve the health and wellbeing of women and their babies.

Vaccination joy for professor who survived Covid-19



Photo credit: Nordin Caric

Professor Peter Johnstone, who nearly died after he contracted Covid-19 last year, was delighted to be vaccinated this term.

The St John's Fellow was the first of 600 patients through the door of Huntingdon Road Surgery, Cambridge, on 24 January and received the Pfizer vaccine from Dr Kevin Webb to protect him against Covid-19.

Professor Johnstone, 72, said: "Everyone who has been vaccinated still has to follow the rules but it is wonderful to know there is now light at the end of the tunnel.

"Like everyone I am very much looking forward to life returning to normal and I'm very grateful to everyone involved in delivering the vaccines."

Stargazer and Fellow of St John's dies at 85



Photo credit: John Kilgour.

The award-winning astronomer Professor Roger Griffin, who spent his career studying starlight, has died.

Professor Roger Francis Griffin, BA, PhD, ScD, Fellow of St John's College 1962-1965 and again from 1972, and Emeritus Professor of Observational Astronomy at the University of Cambridge, died on 12 February 2021, aged 85.

The scientist is credited with developing the method that is now used for measuring black holes and is used to provide evidence for extrasolar planets – planets outside the Solar System. Professor Griffin is survived by his two children, Rupert and Richard.

Heather Hancock, Master of St John's College, said: "Roger Griffin transformed the way that stellar radial velocities were measured and his work is fundamental to the way black holes and extrasolar planets are evidenced to this day. A keen marathon runner, he was known by many in the running club by his nickname Yogi, rather as the distinguished Professor that he was. In usual times, he was a familiar sight at St John's and he will be greatly missed by the College community. Our thoughts and best wishes are with his family."

Green leader skills

St John's 'sustainability star' Jessica Tearney-Pearce has won the Student Leadership Green Impact 2020 National Special Award, made by the Students Organising for Sustainability educational charity. During her PhD studies in History in July, Jessica was a winner in the same category in the Cambridge Green Impact Special awards.

Born on 23 August 1935, Roger Griffin arrived in Cambridge from his family home in Surrey in 1954 to study Natural Sciences as an undergraduate at St John's. He continued to postgraduate study and pursued a PhD in Astronomy. He joined the Fellowship as a Title A Research Fellow in 1962 where he was given the nickname Yogi Bear by his peers. Many other Research Fellows at St John's in the 1960s also adopted nicknames including the word bear in his honour. In 1971 when he had his first child with his then wife, Rita, whose own nickname was Cindy after Yogi Bear's girlfriend, they named their son after a very famous bear.

In an email in 2014, Professor Griffin explained: "He obviously had to be a bear with a name beginning with R to keep it in the family so he could not help being Rupert!"

A keen member of the University Hare and Hounds cross-country club, he competed in the London Marathon 10 times and, aged 69, climbed Mount Kilimanjaro.

Read the full tribute to Professor Griffin at joh.cam.ac.uk/news

Biodiversity review

Professor Sir Partha Dasgupta's landmark economics of biodiversity review recognises that human prosperity relies on ensuring the demands we put on Nature do not exceed supply. The HM Treasury review launched on 2 February at a virtual event held by The Royal Society with Sir Partha, Frank Ramsey Emeritus Professor of Economics and St John's Fellow.

Access project empowers black teens

Black state school students hoping to pursue careers in STEM subjects are being supported through a project launched by St John's College and education charity Generating Genius.

The STEM@Cambridge access programme guides able black students from non-selective secondary schools in London through applications and interviews at Cambridge and other Russell Group universities, to give them a fair opportunity to attend the UK's most prestigious higher education institutions.

Dr Victoria Harvey, St John's College Tutor for Undergraduate Admissions, said: "We are aiming to show these outstanding black students that Cambridge welcomes students of all backgrounds and gives them the academic environment to thrive."

St John's also launched the Link Area Webinar Programme, another online state school access scheme, in January.

Scientists win ERC funding

Two innovative St John's scientists have won funding from the European Research Council (ERC).

Biophysicist Professor Tuomas Knowles has received a share of a €655 million Consolidator Grant funding package awarded to 327 researchers in the EU's Horizon 2020 research and innovation programme. His work focuses on understanding the basic molecular principles that govern the activity of proteins in health and disease.

Chemist Professor Erwin Reisner's project is among 55 to share in €8.25 million Proof of Concept funding. The grant will help his lab explore commercially developing a solar-driven process that turns waste into hydrogen.

New books explore historic 'influencers'

St John's Fellows have been delving into the histories of two household names – Cicero and Mary Wollstonecraft.

Marcus Tullius Cicero (106-43BC) was a scholar, lawyer and politician whose prolific writings form one of the greatest bodies of literary and philosophical work in classical antiquity. His letters and speeches tell us about the final years of the Roman Republic, when power struggles, civil wars and the dictatorship of Julius Caesar led to the rise of the mighty Roman Empire, presided over by authoritarian emperors.

Cicero, a book written by Professor Malcolm Schofield, Emeritus Professor of Ancient Philosophy, about the scholar whose philosophical ideas have influenced Western thought for centuries, has just been published.

Sylvana Tomaselli, Sir Harry Hinsley Lecturer in History, Director of Studies in History and Human, Social and Political Sciences, paints a richly rounded picture of the writer and philosopher Mary Wollstonecraft in her latest book. Her aim was to restore her to her rightful place as a major thinker of the 18th century. Wollstonecraft was an advocate for equality of men and women and a keen abolitionist of the slave trade and slavery. She was a controversial writer and fierce critic of societal norms in her own brief lifetime – she died days after childbirth, aged 38 – and the different labels attached to her today can eclipse her place in history as a leading intellectual and philosopher, argues Tomaselli in her book *Mary Wollstonecraft: Philosophy, Passion, and Politics*.

Dream come true

Third-year Chinese Studies PhD student Flavia Xi Fang has had her debut book published on dream metaphors in East-West literature. Her findings inspired her PhD into the history of the Silk Road. *La luna nell'acqua: metafore oniriche tra la letteratura cinese ed europea* is published in Italy, where Flavia did her Master's, and means *Moon in the Water: dream metaphors in Chinese and European literature*. Visit alboversorio.wordpress.com

'Rosetta Stone' of the internet could help solve puzzle of ancient Minoan language



Photo credit: Ester Salgarella

Dr Salgarella with an inscribed stone at the Minoan Palace of Knossos, Crete, in 2016. The sign is a Linear A mason mark and is likely to be read with the phonetic value 'si'.

Huge strides have been made towards deciphering a 'mysterious' Greek script that could transform our knowledge of a Bronze Age civilization.

Known as Linear A, the ancient script from Crete appears on some 1,400 inscriptions dating back to c1800-1450 BC, during the island's flourishing Minoan era. A later prehistoric Greek script called Linear B was cracked in the 1950s – but Linear A has continued to elude scholars.

The Minoans were a Bronze Age civilization based on Crete and other islands in the Aegean Sea. Named after the legendary King Minos, this lost civilization was one of Europe's first urban societies. Ruled from vast palaces, the civilization fell into decline after a volcanic eruption on the nearby island of Thera.

Now Dr Ester Salgarella, Junior Research Fellow in Classics at St John's, has shed fresh light on the Minoan Linear A script and proved a close genetic link to Linear B, which appeared 50-150 years later in mainland Greece and Crete, c1400-1200 BC. Her research could provide the key for linguists to unlock the secrets of

the Minoan language – and learn more about its society.

Using evidence from linguistics, inscriptions, archaeology and palaeography (the study of the handwriting of ancient scripts), Dr Salgarella examined the scripts in socio-historical context. To compare them more easily, she created an online resource of individual signs and inscriptions called SigLA – The Signs of Linear A: a paleographic database, at sigla.phis.me

She said: "We don't have a Rosetta Stone to crack the code of Linear A, and more linguistic analysis is required, but this structural analysis is a foundation stone."

Dr Salgarella reveals her findings in her book, *Aegean Linear Script(s): Rethinking the Relationship between Linear A and Linear B*. Professor Tim Whitmarsh, A.G. Leventis Professor of Greek Culture and Fellow of St John's, said: "Dr Salgarella has demonstrated that Linear B is closely related to its mysterious and previously illegible predecessor. She has brought us one step closer to understanding it. It's an extraordinary piece of detective work."

Function is identified of ‘mystery’ Parkinson’s protein

Scientists have made a ‘vital step’ towards understanding the origins of Parkinson’s Disease – the fastest growing neurological condition in the world.

A study published in *Nature Communications* presents compelling new evidence about what a key protein called alpha-synuclein actually does in neurons in the brain.

Dr Giuliana Fusco, Research Fellow at St John’s College, and lead author of the paper, said: “This study could unlock more information about this debilitating neurodegenerative disorder that can leave people unable to walk and talk. If we want to cure Parkinson’s, first we need to understand the function of alpha-synuclein, a protein present in everyone’s brains. This research is a vital step towards that goal.”

Parkinson’s disease is a progressive neurological disorder that causes nerve cells in the brain to weaken or die. The disease has a variety of symptoms including tremors, gait and balance problems, slowness and extreme stiffness in the arms and legs. Parkinson’s develops when cells in the brain stop working properly and can’t produce enough dopamine, a chemical that controls movement in the body by acting as a messenger between cells. The new study looked at what was

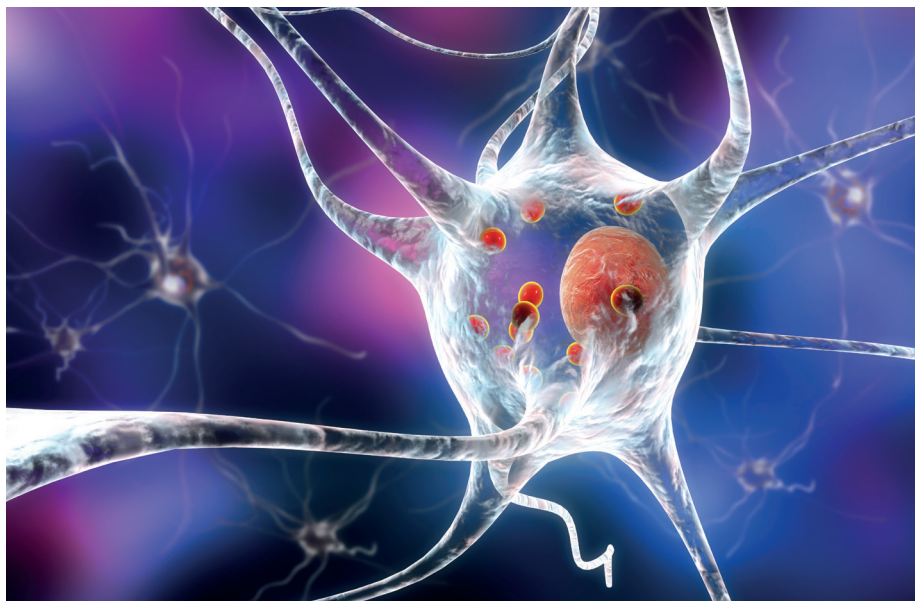


Photo credit: Kalenyna Kon via Shutterstock.

3D illustration showing neurons containing Lewy bodies small red spheres, which are deposits of proteins accumulated in brain cells that cause their progressive degeneration.

going on inside healthy conditions to help pinpoint what is going wrong in the cells of people with Parkinson’s. All cells in the body have a plasma membrane that protects cells and usually transports nutrients in, and clears toxic substances out.

Dr Fusco explained: “One of the top questions in Parkinson’s research is: what is the function of alpha-synuclein, the protein that under pathological conditions forms clumps that affect motor and cognitive abilities?”

“Usually you discover a protein for its function and then you explore what is going wrong when disease strikes, in the case of alpha-synuclein the protein was identified for its pathological association but we didn’t know what it did in the neuron.

“Our research suggests that the alpha-synuclein protein sticks like glue to the inner face of the plasma membrane of nerve cells but not to the outer – a crucial new piece of information.”

Academics are honoured

Two academics from St John’s have been elected Fellows of prestigious societies.

Dr Graham Ladds, Director of Studies for Pharmacology and Reader in Receptor Pharmacology, was made a Fellow of the British Pharmacological Society for demonstrating distinction and peer recognition in pharmacology. Professor I Nick McCave, College Supervisor in Geological Sciences and Emeritus Woodwardian Professor of Geology, was made a Fellow of the American Geophysical Union for exceptional contributions to marine geology.

New study route for disadvantaged

A Foundation Year offering talented students from backgrounds of educational and social disadvantage a new route to undergraduate study was launched by the University of Cambridge – and St John’s College has signed-up to take part in the pioneering scheme.

The free one-year course – aimed at a new stream of applicants who have the ability to succeed at Cambridge, but have been prevented from reaching their full potential by their circumstances – will offer them the chance to progress straight to an undergraduate degree at Cambridge.

Male butterflies mark mates with repulsive smell

Butterflies have evolved to produce a strongly scented chemical in their genitals that they leave behind after sex to deter other males from pursuing their women – scientists have found.

Researchers discovered a chemical made in the sex glands of the males of one species of tropical butterfly is identical to a chemical produced by flowers to attract butterflies. The study, led by Professor Chris Jiggins, Fellow of St John’s, and published in *PLOS Biology*, identified a gene for the first time that shows butterflies and flowers independently evolved to make the same chemical for different purposes.

Inside the NHS with St John's medics

The University's clinical medical students are on the front line of the pandemic, working in placements across an NHS in the grip of Covid. Karen Clare caught up with three students from St John's to ask them about the challenges they face.



Photo credit: Nordin Caric.

Clinical medical students (from left) Claudia, Lucy and Ashwin.

Ashwin Venkatesh is a sixth year medical student from Leeds who in February finished his final exams and began a work placement on a respiratory ward at West Suffolk NHS Foundation Trust in Bury St Edmunds. The ward includes Covid patients being treated in two specialist isolation bays.

Clinical training begins in the fourth year of a medical degree at Cambridge,

so Ashwin has experienced life as a medic pre-pandemic as well as now, during the greatest crisis in National Health Service history. For student medics, the changes are stark.

The 24-year-old said: "It's a very different setup in hospitals now, and a very different learning experience to before. Obviously, there are lots more infection control measures

around the hospital, we're trying to limit numbers where possible. So wherever GPs can take care of patients without needing them to come into hospital, that's ideal.

"In respiratory, they've been trialling what is called a virtual ward round; this is for patients who are well enough to be at home, but still need to be monitored frequently. We can now send remote monitoring equipment to their house

to check in virtually with them after we've done the physical ward round in hospital. The model of medicine really hadn't changed for hundreds of years, until Covid hit. Suddenly we are using technology to be innovative."

Stories of hospital patients dying without their loved ones by their side, because of the Covid-19 restrictions, have been plentiful – and poignant. During Ashwin's first week working in palliative care for the first time since Covid, he provided end-of-life care for an 85-year-old woman. She had advanced dementia and no longer recognised her daughter, who sat beside her.

"The challenging thing is that under the current restrictions, only one person or family member is allowed in the hospital at any one time. No one wants to die alone and, in an ideal circumstance, you'd be surrounded by the people that you want to be with you," said Ashwin.

"The daughter was with her mother, telling us about their life and her relationship with her mum, and how she's got siblings who unfortunately couldn't be there because of Covid.

"For a doctor, it's a holistic picture, it is about addressing the needs of everyone in the scenario, not just the person who's dying. With a death comes a whole process of grieving for the family, and for a medical student, a lot of communication skills are required so you know how to deal with these kinds of situations. Usually we're trained to preserve life, but in this case, it's just about dying with dignity and in peace. And that's something that you don't really learn or appreciate too much when you're a young doctor who just wants to cure people or save people. It's a different mindset. You've got to experience the whole range of things to become a good doctor."

Lucy Chinnery, who is 21 and originally from Newcastle, is in her fourth year studying medicine at St John's and is currently on placement at the Queen Elizabeth Hospital Emergency department in King's Lynn, Norfolk. Living in hospital staff accommodation four days a week, she returns to Cambridge on Fridays. Twice weekly since December, she has also been working as a steward at the Addenbrooke's vaccination centre, helping more than 600 people a day through the doors. She still has

to pinch herself when she considers what a success story the vaccination programme has been. She said: "When we started back at St John's in September, the vaccine was a distant dream, the scientists were still in the process of developing them. Now I think it's amazing what they're doing and the numbers of people getting their jabs every day is incredible."

The week before we spoke, Lucy had spent a Saturday morning assisting in the Covid Intensive Care Unit at Addenbrooke's. "I was acting as a runner, assisting the doctors and nurses as they care for the most critically ill patients. Being able to help and work alongside the doctors and nurses is incredibly fulfilling. The unwavering compassion and dedication they show, despite the immense emotional and physical strain working in ICU can have, is truly inspiring."

'The model of medicine really hadn't changed for hundreds of years, until Covid hit'

Fellow fourth year Claudia Tam, 21, from Southampton, got her first taste of clinical training at Hinchingbrooke Hospital in Huntingdon last term and recently finished a two-week General Practice placement. She said: "Even though, because of Covid, it was all done by telephone or video call, it was great to talk to patients one-to-one, that's when I really felt for the first time that I am going to be a doctor."

Now working on a six-week project for her student selected component, based at Paediatric A&E at Addenbrooke's, the stringent hospital restrictions in a Covid world are all she has ever known. "It has been hard because of all the measures in place, but I suppose it has been less weird for us than for the fifth and sixth years because they had a taste of what it was like before Covid," said Claudia. Her first few months of clinical training have made her even more determined to achieve her dream. "Being a doctor right now is a very tough job. I can't wait to get more clinical experience and to be very active in tackling this kind of disease."

For Ashwin, who is looking forward to taking up his first junior doctor post at The Royal London Hospital in August, human connection is also what he loves best about medicine. This can be

particularly difficult on the Covid ward, with the medical staff head-to-toe in PPE and patients short of breath or hooked up to oxygen masks and other life-saving equipment. "You've just got to be very patient," said Ashwin.

"What I really enjoy about being a doctor is having the tangible impact on someone's life. There's not many jobs that you get to ask someone questions that really dig into the depths of who they are. For example, in people who've got acute conditions where something's immediately gone wrong, and it needs fixing, say, for example, a road traffic accident, you can take them from where their life has gone from a high to being dropped off a cliff, and you can bring them back to roughly where they were before, which is just amazing.

"For people who've got more chronic conditions, it's about helping them to live a good quality of life that they want, and really connecting with them and learning about and understanding their priorities in life. That helps you connect with humans to a much deeper level."

Dr Tim Sadler and Dr Fleur Kilburn-Toppin, Clinical Director of Studies for Medicine, paid tribute to the hardworking medics of St John's. In a joint statement they said: "We should all be immensely proud of the St John's clinical medical students. They have had a particularly difficult time with disruption to their training as well as their examinations. They have more than risen to the challenges created by these circumstances, the hospitals relying on them more than ever to provide much needed support to the NHS during this pandemic. We are very lucky to have them as our future doctors."

The Covid-19 crisis may not have given medical students the usual clinical training experience, but it has offered different kinds of lessons.

"I've had exposure to things that I probably wouldn't have had if it weren't for the pandemic," said Lucy. "I've seen what the real NHS is, how it can respond to disasters, and what works where.

"On the news you see a glimpse of what's going on, but actually being in it and being a part of it is really special – and I can tell my grandchildren that I helped during the pandemic."

'I've known for a long time how fragile life is – the rest of the world is just catching up'

When seven-year-old Jonathan Gilmour started bumping into things and falling over, his family initially thought he was going through a clumsy phase. But tests discovered that Jonathan has Duchenne Muscular Dystrophy. Jo Tynan spoke to the award-winning postgraduate student about his life and where he thinks the Covid-19 virus began.

"I remember being held down as the doctors did tests with electrodes to stimulate the muscles – it was horrible and I still have a needle phobia today because of it. Even back then it wasn't a very up-to-date way of doing things."

Jonathan has had to use a wheelchair since the age of 13, he lives with full-time carers, and he now has limited use of his arms, which means that he can no longer perform basic tasks like dressing and eating. He has Duchenne Muscular Dystrophy, a progressive muscle-weakening and wasting condition caused by a lack of a protein called dystrophin. It is a genetic condition that usually only affects boys – around 2,500 boys and young men are living with the life-limiting condition in the UK. Duchenne Muscular Dystrophy cannot currently be cured.

'I was the child who would read encyclopedias for fun'

Jonathan said: "When I was diagnosed, there wasn't any medication available to slow the decline in muscle strength and mobility but steroids can now be prescribed that help a bit. It was traumatic when I was a teenager and I needed to start using a wheelchair but fortunately the majority of people at school didn't make an issue of it.

"My academic development was quite slow compared to the other children and I've never been any good at maths, which can be common. Some teachers thought my disability would hold me



Jonathan at his BA graduation in 2008.

back more but living with this condition is about making the most of things. I was lucky that I could always lose myself in books and I would read encyclopedias for fun."

Despite undergoing a major operation on his spine during his A-levels, which left him in intensive care for 10 days, Jonathan still got straight As and secured his place at

St John's to study Theology and Religious Studies.

"My mum encouraged me to apply and I was the first person in my family to go to Cambridge. Other disabled people need to know that having a disability does not mean that the doors of the world's top universities are closed to you – I have thrived at St John's."

Now 33, Jonathan is speaking to me on Zoom from his family home in Hampshire, where he has been shielding with his parents, Brian and Angela, since March 2020. None of them have left the house, apart from for urgent hospital appointments, for a year because of the Covid-19 crisis. But the PhD student has a positive attitude towards the uncertainty of life in a pandemic and the resulting enforced isolation.

He explained: "I've known from a very young age how fragile life is and knew I couldn't let my condition hold me back. For the past year, the world has been catching up and realising that our time is limited and we have learn to be patient but also make the most of our lives when we can."

'Having a disability does not mean that the doors of the world's top universities are closed to you – I have thrived at St John's'

"I was in hospital recovering from pneumonia when the first news stories about Covid-19 began to be reported. I was immediately quite worried as any infection can kill me so I knew it wasn't something that I wanted to get. I only had a few weeks in Cambridge in 2020 after I got out of hospital before we decided that it would be a good idea to head home to my family. I can't take any chances and, although I live in a specially adapted College flat, there are communal areas that I share with other students so I can't be too careful."

Jonathan, who now breathes with the help of a ventilator, has a team of carers who look after him around the clock. Their shift work has to be very carefully coordinated to make sure that they do not inadvertently bring the virus into Jonathan's home.

"Over the years I've been used to not going out to places that I want to go to when I haven't been feeling well, but it is weird that the entire world is now also stuck at home when they don't want to be. It is really horrible what is going on but



Jonathan aged seven just before he was diagnosed.

I've been coping by not reading too much about it in the news so that I don't get overwhelmed – I very much recommend that! I've got a lot of things to be doing for my work which keeps me occupied and, like everyone, I am having a lot of Zoom chats."

Jonathan, who graduated with a First in his undergraduate degree and scooped University and College awards for his work, is now in the final stage of his PhD on inter-faith studies at St John's. His academic achievements and a fundraising campaign that he spearheaded, won him the Muscular Dystrophy Campaign's Young Person of the Year award for 2010/11.

"When I first came to Cambridge in 2005 I was a lot more independent than I am now and I could even go out at night with my friends to the College bar and into town to pubs and to nightclubs. In fact I'm sure Covid-19 probably started in one of them – they weren't very hygienic!"

Jonathan's grandfather died of Covid-19 in the first wave of the pandemic in the UK and he said it was a stark reminder of how quickly the virus spreads.

He said: "He was in a care home so we hadn't seen him and that has been the hardest thing for everyone, to be kept apart from our loved ones. I did see my two younger sisters and my young nephews in the garden during the summer when things seemed to improve but we had to have a quiet Christmas at home to protect me."

Jonathan, his parents and his team of carers, who wear full PPE, have now received the first vaccination – something the family pushed to happen as soon as possible. They continue to disinfect shopping and quarantine post to reduce the risk to Jonathan.

"Someone finally came to our house to vaccinate us at home and it was a huge relief for me and my family. Reports that vulnerable people should stay at home while everyone else gets on with their lives was very off-putting for someone in my position. It is also really rather silly – no one really knows who will be affected by Covid-19. We should all be in this together because no one from the outside can put a value on the lives of people like me." Jonathan misses St John's and the sense of community the College offers and, of course, the famous May Balls, but he isn't in a rush to return to Cambridge.

'I'm coping by not reading or watching the news too much'

"I've been in Cambridge for a long time so I can't grumble too much about missing this period of time. I can't wait to go back to College but I'm going to be cautious for a while. Everyone at St John's really cares about the students. A lot has been done over the years to improve accessibility and the atmosphere is so special – I have always felt included and that I had a place and belonged. St John's has funded a typist and research assistant to help me to write up my PhD, I do a lot of it over Skype now of course and I'm nearly at the final editing stage."

Jonathan seems remarkably positive for someone who has faced great challenges for most of his life and is now housebound.

He explained: "I've learned to just get on with things. I found it hard when I had to stop eating because I couldn't swallow the food and it was dangerous. But I've also learned to live with danger in my life. I have even had to face my fear of needles to get the vaccination and if I can do that, anyone can."



Jonathan as a postgraduate student in Hall with his friend Albertyna.

Whispers of the past breathe life into College project

A newly created 3D model of the First Court as it was in the early 16th century has found its way home to St John's College, after navigating the challenges of the pandemic. Karen Clare found out more.

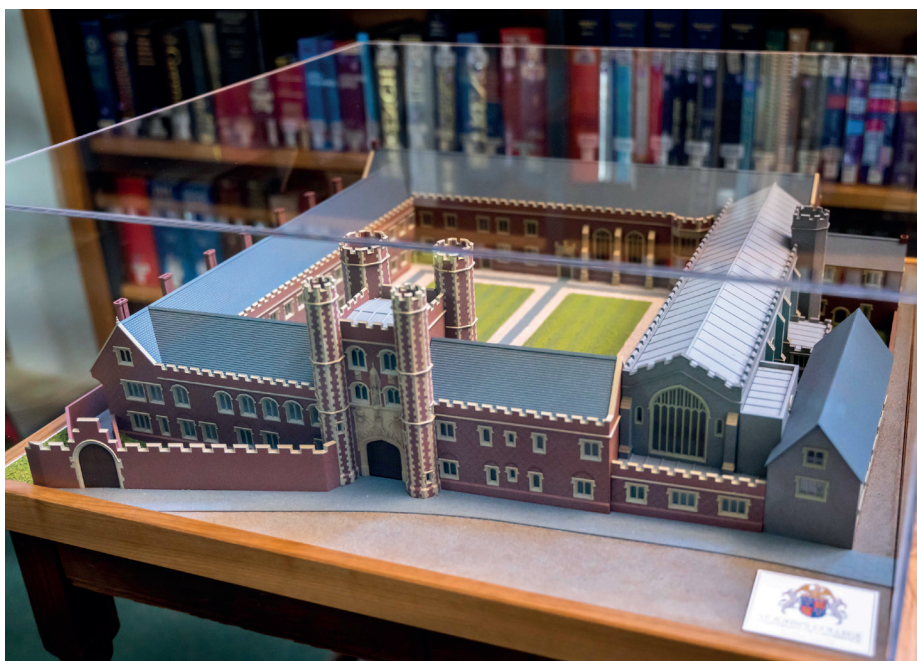


Photo credit: Nordin Caric.

The new model of First Court.

Alexander Kuszyk, who is in the second year of his PhD in History of Art at St John's, was the driving force behind the project to recreate the stunning architecture of Bishop Fisher's First Court in model form. He first became interested in its history while studying for his MPhil, and applied for a grant from the College Annual Fund in 2019 to build a thought-provoking educational exhibit.

"There are so many whispers of the past," he said. "I wanted people to learn the forgotten, visual roots, of our College, particularly First Court because it has changed so much in the 500 years since the foundation of St John's."

The old chapel was built in 1280, modified in 1516-19 following the foundation of the College, and demolished in 1869 to make way for the beautiful Victorian Chapel we enjoy

today. The memory of the old chapel is preserved as the footprint in the grass of First Court, while another mysterious building – the infirmary of 1200 that later became student accommodation known as the Labyrinth – has vanished without trace. Along with the original Master's Lodge, these structures formed the northerly side of the First Court for more than 300 years.

The model illustrates the earliest architectural developments that took place from around 1516 to 1533. "This was an exciting era of building, as it marks the first steps taken to incorporate the pre-foundation buildings into the fabric of the College," explained Alexander. From the start, he wanted the model to provide a greater understanding and appreciation of the College's rich, ever-evolving history and close connection to religious worship, dating back to the medieval period.

He was supported in his endeavour by Fellows Dr Mark Nicholls, as project supervisor, and Dr Frank Salmon, his PhD supervisor. Amalgam Models Ltd in Bristol came on board to do the build, with model maker Matt Quick at the reins. Matt began work on the project in December 2019 but progress was abruptly halted by the pandemic. After four months, construction resumed and, after around 430 hours of work, the model was complete. "I'd done most of the design work from home and it largely existed in my own head at that point, so it was very cathartic to finally get down to some proper model making," said Matt.

The finished model sits on a base approximately 500mm x 500mm and has been made at a scale of 1:100 – that's 100 times smaller than the original First Court. It was delivered to St John's on 1 February, where it now resides in the Library until it can go on permanent display and be used for talks and exhibitions. It will eventually feature information plaques telling the social and architectural history of First Court through the ages, as well as reproductions of Victorian photographs, taken before the demolition of the old chapel, from the College archives.

Dr Nicholls said: "The detail in this lovely model takes our breath away. We see things for how they were, five centuries past. The College is small, dominated by its medieval chapel, now long gone, and by the surviving Tudor Great Gate.

"While much is familiar, look carefully and you will see the differences. The original Master's Lodge so convenient for both Hall and Chapel, the walled garden between College and street,

the ancient 'Labyrinth' named after the convoluted access route and home to many of our earliest students. It lacks only the tiny figures of our forebears emerging from staircases and striding through the Court, to bring this wonderful concept to life."

With Lent Term online due to Covid-19, Alexander is at home with his family in California and has only seen photos of the model, but he is thrilled to know it is now where it belongs. He said: "I'm amazed at how our vision has evolved into something so wonderful. The model is really detailed, it has far exceeded our expectations."

"It was great working with Dr Nicholls and Dr Salmon, they have so much knowledge about the College and its history, I felt as if I was researching in the archives just to catch them up! We also had help and advice from Professor Deborah Howard, Professor Emerita of Architectural History, and Professor Patrick Boyde, Fellow Borderer, so it really was a collaborative effort to visualise the past."

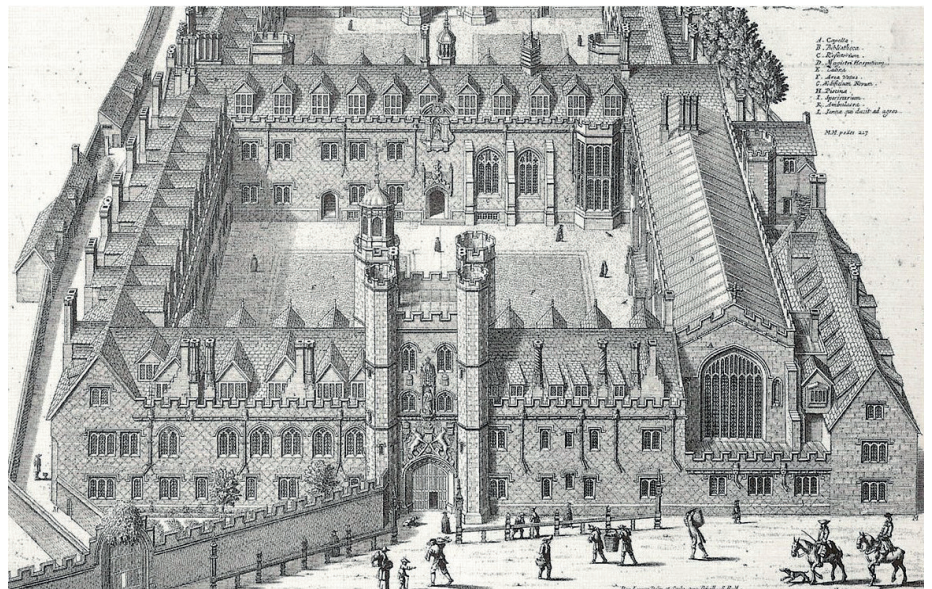
For Matt, the project has also been atypical. "What made this project a unique challenge for me was the fact a large section of what I was making hasn't existed for several hundred years and I was unable to find much in the way of architectural drawings for the sections that are still standing," he explained.

The most useful sources of information proved to be reproductions of architectural engravings made by the artist David Loggan in the late 1600s. As well as the northerly side of the Court, they provided the information required to reconstruct the south side of the Court, before it was given its Georgian façade. College Archivist Dr Lynsey Darby sent Matt images of architectural drawings so he could get to work.

The window and door frames and crenulations of the model were 3D-printed before being slotted into a more traditional laser-cut main structure. "I felt so much of the character of the building was wrapped up in the sculptural stone elements that trying to represent these using layers in 2D shapes, which work brilliantly on more



Alexander was behind the model project.



Engraving by David Loggan, 1690.

modern designs, would be doing this particular building and model a great disservice," explained Matt.

"I always have a real sense of achievement whenever I finish a model, you have to get satisfaction out of the end product in this job as the process itself is often long, fiddly and can be quite frustrating. But I feel especially proud of my work on this one."

Alexander added: "The pandemic made things a little difficult in terms of archival research but thank goodness for the technology that has made the distance a bit less, particularly now I'm in California. We had a lot of discussions by phone and email and Matt kept me

informed and sent me photos of the construction, so I felt like I was still there during all the stages, even though I was in a different continent for at least the last portion of this.

"I am very excited to see it in person when I'm back at St John's."

Alexander is also looking forward to seeing his favourite part of the College – the Victorian Chapel. He said: "I love the Chapel, it is a beautiful thing. Everything about it is absolutely amazing, it's just a marvel to look at all these little details, architecturally."

"I know I shouldn't say that, of course, because it isn't part of the model, but it's hard to beat."

From digging up news to putting down new roots

As David Austrin takes on his new job as College Head Gardener, he tells Karen Clare how his passion for plants saw him divert to the career path that has brought him to St John's.



Photo credit: Nordin Catik

David examines some Wintersweet in front of New Court.

David Austrin calls himself 'a classic career changer.' "I was a journalist for 10 years. I was a radio producer at the BBC in a previous life, but I got green fingers in the mid-noughties and started studying horticulture as an evening course."

Shift patterns at the BBC meant he had time off during the week to volunteer at Osterley Park and House, a Georgian estate owned by the National Trust near his home in West London – and gardening quickly turned from a pastime into a passion. In 2008, David took the plunge and left the BBC to do a one-year apprenticeship at Kew Gardens. A year's further traineeship at Cambridge University Botanic Garden followed, after which he'd planned to return to Kew to study for a diploma – but Mother Nature had other ideas.

"I'm East Anglian by birth – I'm from Ipswich originally – and it felt like I was almost coming home after living in London for a decade. This was 2009-10 and I fell in love with Cambridge, fell in love with someone in Cambridge, and decided to stay, so I never made it back to Kew."

A commutable job as head gardener at a country house in Hertfordshire followed for five years, before David returned to

Cambridge Botanic Garden in 2015 to work on the demonstration and display section, developing the Winter Garden, Mediterranean beds and entrance areas into an ornamental feast for the eyes.

David worked at the Botanic Garden until February this year, when he filled the shoes left by Adam Green, who retired as Head Gardener in January after 35 years. Beginning a new job in a pandemic brings its own challenges and, as we speak, David is sharing the responsibility of home-schooling seven-year-old son Ellis with his partner Nathalie, while their three-year-old, Lucas, attends nursery. Until children return to school, he is working in College part-time: on Mondays, Wednesdays and Fridays. Where his creativity was once in wielding the pen, it is now in wielding the spade.

"I like the creative side of this job, and I like the physicality. I get my kicks from playing around with plants, essentially. I'm not a great artist, I'm not a painter, I'm not a musician, but I like creating combinations of plants and seeing how they look."

After leaving journalism to retrain at Kew, David lost several stone in just six months working in the Princess of Wales Conservatory, where it was 25 degrees every day and 85% humidity. "That winter was the first time they'd had a serious snowfall in London in goodness knows how many years, and I was still going to work in shorts, it was a real luxury," he recalls.

"Gardening keeps me pretty fit – it's cheaper than joining a gym – though I will have to watch those puddings in the Buttery!"

David is a great believer in gardening being good for mental health, too, which is especially important during the Covid-19 lockdowns. He wants to encourage students, Fellows and staff to use the outdoor spaces as much as they can.

With Heather Hancock, the Master, being an enthusiastic gardener herself, plans are afoot to develop a more drought-friendly planting scheme near the Lodge, while David has plenty of ideas for new plantings in and around the Courts, with lots of colourful displays.

"The setting at St John's is just something else – the river, the buildings, the Courts, the history and the space," he said. "I love the wilderness in the Fellows' Garden, it's a pocket of countryside in the middle of the city. I've heard all about the spring bulbs and bluebells and I can't wait to see the displays. The winter aconites look great, and some of the early daffodils are getting going, it already looks lovely. There's great potential as well, especially with the new Master being so passionate about gardens."

David relished adrenaline-inducing times and travel in his previous career, from finding himself in the midst of a football riot at the 2006 World Cup in Germany – protected in his BBC hard hat as chairs and bottles flew past – to covering the Tour de France and major news in Nigeria. But his journey from journalism to St John's has brought him to a new happy place.

"I don't get the edge-of-the-seat thrills I used to have in live radio, where I could have been editing the midday news, and had five different stories all breaking at 11.55am. I loved it, but I was always moving on to the next live programme," he said.

"When I found horticulture and plants, it was a revelatory moment where I realised I had a calling in life, so I've never looked back.

"I grew green fingers and that was that. What I do now has much more lasting rewards."



in then everyone who thinks Cambridge might be for them should give it a go.

You are the first Black, Asian and Minority Ethnic (BAME) Officer of the Samuel Butler Room (SBR) – how did that role get introduced?

I was the Ethnic Minorities Officer of the JCR and when I became a postgraduate student at John's, I wrote to the President of the SBR and said that there ought to be a BAME Officer to represent the community. She agreed and an election later, here I am! I noticed that when minority ethnic people come to Cambridge they often try to assimilate themselves into the dominant culture, or they go the other way and embrace all the opportunities there are to connect with other people of similar backgrounds. I just want to be able to help to make being at Cambridge as positive an experience as possible for as many people as possible. Different cultures should be celebrated.

How can white people be good allies to people of colour?

I think listening and learning is really important. I am a South Asian woman so I can only speak for my experience, I don't know what it is like to be black, for example, and every person of colour has a different experience. I feel passionately about acknowledging my own privilege and being open and willing to represent everyone no matter their background or ethnicity. I think white people need to understand the impact of white privilege and how microaggressions can make people feel. They should also seek out work by people of colour whether it is art, music or literature. Being open to change can only ever be a good thing.

Have you had a chance to organise the events you hoped to?

I think people have been getting Zoomed out, particularly when we are learning remotely now. But we are hoping to do events based around activities like a curry night to make it more fun. I've set up an SBR BAME Facebook group for us to chat to each other and we are planning to launch a book club featuring BAME authors.

What else do you do for fun?

I've got cycling legs now and fortunately going for a walk around beautiful Cambridge never seems to get boring. I also love music so I spent a lot of time listening to that and reading books of course!

10-minute interview

Maaha Elahi, 23, Black, Asian and Minority Ethnic (BAME) Officer of the Samuel Butler Room

What is it like being in Cambridge during a pandemic?

I'm doing an MPhil in Criminology which is only a one year course so it has all been under Covid-19 restrictions so far. I did my undergraduate degree in Law at St John's too so I feel very lucky that I got to experience normal Cambridge life during that. Although it does mean I know what we are all missing out on at the moment! During Michaelmas Term I had some face-to-face teaching which I enjoyed but it is all online now and Cambridge and College are very quiet. We are keeping positive by doing lots of remote events and dreaming of May Balls without restrictions.

Why did you decide to apply to Cambridge?

I wasn't one of those students who dreamt of coming to Cambridge, it wasn't even on my radar when I was growing up. My mum moved to the UK from Kenya when she was 11 and she went to University but my dad, who is an engineer and moved here from Pakistan when he was three, didn't. He always encouraged me to aim high and aspire to be a doctor, a barrister, or an architect. Although he didn't really mind what I did

as long as I fulfilled my potential. I dreamt of studying law but I thought Cambridge was full of white people who went to private school. Now here I am, the first person in my family to go to Oxbridge, planning to be a barrister, so I was wrong!

What changed your mind?

I have always liked reading, I used to walk around with my nose in a book all the time even when I was walking to school. And I've always liked arguing! Not just arguing for the sake of it, but forming a view based on research and complicated ideas. The adrenaline of structuring a compelling argument is addictive! When I decided I wanted to do Law I started researching summer schools, the one at St John's was free and straightforward to apply to and I came and fell in love with the College.

How did you feel when you got offered a place?

I had the attitude that it was better to get rejected by the best University than not to try in the first place. My school didn't encourage me to apply, even though I always got good grades, I told them it was what I wanted to do. When I got offered a place I thought that if I can get



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