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ST JOHN'S COLLEGE
UNIVERSITY OF CAMBRIDGE

Lent Term 2017

Behind the Scaffold: St John's Chapel Tower

Levelling the Playing Field for the Nation's Health

How a College Bursary Made my Indian Summer

10-Minute Interview with Professor Eske
Willerslev

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Welcome

to our
new staff!



► **Image credits:** All photos - St John's College 1 **Anna Bates** – Bedmaker Cripps 2 **Denise Ranford** – Bedmaker Cripps 3 **Jack Glossop** – Deputy Fellows' Butler 4 **Katherine Caddy** – Alumni Relations Officer (Publications) 5 **Susie Forster** – Assistant College Nurse 6 **Ben Duerden** – Accommodation & Bookings Co-ordinator (Guest Rooms)

And congratulations to....

... Kevin Thompson, Stores Administrator in the Maintenance Department, who reached 25 years of service at St John's in December!

If you would like to contribute to *Eagle Eye*, or have ideas for future articles, please contact the Editor, Louise Hanzlik, on lh445@cam.ac.uk.

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

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Eagle Eye

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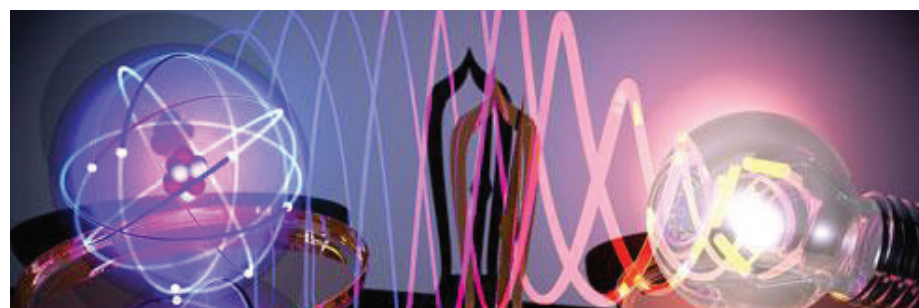
News Round-up

What's been happening around St John's



Free Thinking: St John's set out bold vision for university education free from financial concerns

St John's launched a new campaign - "Free Thinking" - to ensure that future generations of scholars can fulfil their potential free from financial concerns. This campaign aims to raise £100 million with the help of alumni and other donors, and the money will be used to expand the College's existing programme of means-tested support for home students, and to provide further assistance to overseas scholars, graduates and researchers.



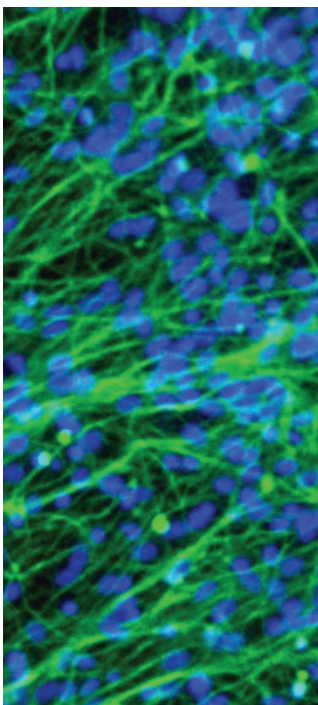
World's smallest magnifying glass makes it possible to see individual chemical bonds within a molecule

Using the strange properties of tiny particles of gold, researchers, including St John's research student Felix Benz, created the world's smallest magnifying glass. This focuses light a billion times more tightly, down to the scale of single atoms, allowing them to look at individual chemical bonds inside molecules, opening up new ways to study light and matter.



London school students kick myths about Oxford and Cambridge into touch

500 teenagers from 30 schools in London enjoyed a free day out at the home of England rugby with a session of interactive talks dedicated to encouraging more bright state school students to consider applying to Oxford and Cambridge. The event, which took place between the women's and the men's rugby matches, was targeted particularly at schools that have had little previous engagement with the two universities. Admissions staff and current undergraduates from St John's, as well as those from other Colleges in Oxford and Cambridge, chatted with school pupils about what it's like to study at a top university and gave information and advice on the application process.



A natural compound can block the formation of toxins associated with Parkinson's Disease

Squalamine, a natural product studied for its anticancer and anti-infective properties, has been found to block a molecular process thought to underlie Parkinson's Disease and to suppress its toxic products, scientists have reported. The preliminary findings suggest that squalamine could be exploited in various ways as the basis of a potential treatment for Parkinson's Disease. Researchers, including the Master of St John's, Professor Chris Dobson, carried out a series of experiments and tests which found that squalamine reduces the rate at which toxic particles form, and the results imply that squalamine could be used as the basis of a treatment targeting at least some of the symptoms of Parkinson's Disease. Further research is, however, needed to determine what the precise benefits of squalamine would be – and what form any resulting drug might take.



The secret gardener who eavesdropped at Europe's royal courts

An undergraduate research project undertaken by History student Davide Martino that set out to explore the presumed gardening career of 16th-century Florentine artist Costantino de' Servi has unearthed evidence of a career of undercover political collusion with the Medici Grand Dukes. As he sifted through thousands of 400-year-old documents, Martino discovered that rather than working exclusively at the Medici courts, like many of his contemporaries, de' Servi travelled widely around Europe and continued to receive a salary from the Medici Grand Dukes. He soon realised he had stumbled upon a paper trail that exposed the fact that de' Servi was operating as a kind of informal diplomatic agent.



The early 19th-century guide to getting into the fitness spirit

An 1834 manual from the Special Collections at St John's gives clear instructions on the art of adopting a healthier lifestyle and offers a fascinating insight into 19th-century attitudes to exercise. Donald Walker's 1834 volume *British Manly Exercises* gives instructions on a range of physical activities deemed suitable for young gentlemen, from leaping and vaulting to skating and wrestling. The author's humorously comprehensive instructions aside, *British Manly Exercises* offers an intriguing insight into what the Victorians knew about the benefits of regular exercise. The Special Collections are housed in the Old Library and can be consulted in the Rare Books Reading Room by appointment.

► Image credits: New Court – St John's College; Magnifying glass – NanoPhotonics Cambridge/Bart deNijs; London students – St John's College; Costantino de' Servi's Coat of Arms – David Martino; Neurons derived from human neural stem cells - Welcome Images; *British Manly Exercises*: The Heave – St John's College

Behind the scaffold: St John's Chapel Tower

The Chapel Tower has been covered in scaffolding for almost a year now. We talk to those in the know to find out what's been happening, and when we can expect to see the tower in its full glory once more.



As the service lift noisily rattles up the side of the Chapel Tower, the rooftops of Cambridge come into view below and become increasingly small as we continue our slow, nerve-racking climb to the top. We hold on tightly to the sides as the lift jolts to a stop. We have reached our destination.

We are with Steve Beeby, Superintendent of Buildings at St John's, and Phil Attelsey, Contracts Manager from Lodge & Sons (Builders) Limited who specialise in the restoration of heritage buildings. They are here to show us why the Chapel Tower – one

“It all centres on the power of rust. Iron rusts, and when it does, it's extremely powerful.”

of the most iconic landmarks in Cambridge, and one of the highest, at around 160 feet – has been covered in scaffolding since last March.

“It all centres on the power of rust,” Steve tells us. “The Victorians loved their ironwork. The problem we have is that the turrets are leaning, and for a number of years we’ve been trying to find out what’s causing that. And now we know why.”

St John’s Chapel Tower can be seen all over Cambridge. Architect Sir George Gilbert Scott designed the Chapel, which was built between 1866 and 1869 to replace a smaller medieval chapel, but the tower was only originally going to be a small fleche, or spire. This all changed when former member of the College Henry Hoare offered £3,000 as a down payment for the Chapel and a further £1,000 a year for five years to finance the building of a large tower. Work began, but unfortunately Henry Hoare – who was uninsured – died two years later in a railway accident, and the College was left with a large debt. The tower we have today is Gilbert Scott’s revised plan which features a square tower with a balustrade and four pinnacles, based on Pershore Abbey, Worcestershire.

With hard hats and hi-vis vests on, we walk along planks of wood on top of the scaffold to see the exterior of the tower close up, stepping over bags of rubble and squeezing through narrow spaces between the cold scaffold poles. “It’s perfectly safe and secure,” we are assured. We try not to think about how high up we are, or look through the gaps between the planks, but the green mesh strung around the outside of the scaffold somehow offers a sense of security, as if this flimsy makeshift wall is providing us with some protection.

Phil introduces us to builders Simon and Darren, and we are shown some cracks in the external stonework, many of which have been cemented up. “When major cleaning work was undertaken on the Chapel in the late 1980s some cracking issues were discovered and addressed at the time, but I don’t think anybody really knew what was causing them,” Steve explains. “At the end of 2014 we had the quinquennial inspection of the Chapel, and we already knew that the weather was taking its toll on

the parapets; they were becoming quite weak and beginning to lean. So after this report, we decided to do something about it.”

The original job was to carry out repairs to the parapet walls and spindles. But it wasn’t until the scaffold was in place, and after a good inspection, that other issues were discovered.

“We built the scaffold on the inside of the tower, which is cavernous, and then we saw that all the internal brickwork on the top quarter was cracking and lifting. It became obvious this was the cause of the cracking on the outside, and the reason why the Chapel was leaning outwards.

“The original architect Gilbert Scott decided that his tall tower should be reinforced; it’s built from Ancaster limestone and very thick brickwork inside. So he put a series of iron bands in the brickwork around the tower to tie it all together. But the only problem is, iron rusts, and when it does, it’s

“We’ll be leaving something in the walls for the next set of workers to find!”

extremely powerful. It’s lifted the top quarter of the tower.”

These issues were reported to the Buildings Committee and the history of the Chapel was reviewed. Steve suggested that the only real solution was to remove the iron and the internal brickwork. “If we don’t do it now, we’ll be doing it in 20 years,” he explained. The Buildings Committee agreed to the work, and the College employed architect Henry Freeland and engineer Phil Cooper, with Lodge & Sons carrying out the restoration work.

We climb a ladder to stand on the rooftop to see the turrets; Phil points out how much the north-east-facing turret is leaning. Darren and Simon show us a section of the





concrete ring beam under the lead roof – the ring beam will encircle the tower and be reinforced with steel and anchored into the tower to hold it all together.

“We are working with a few hundred tons of brickwork, using a method similar to underpinning a building,” Steve says. “We take out a section of brickwork about a metre long, remove the ironwork embedded in the brick courses, build it back in again, leave a metre, and move on to another metre, so you work in blocks around the tower. There are three layers of ironwork at 750 mm intervals, so we have to do the same process three times. It may sound simple and straightforward, but it’s not! There’s no possibility of righting the pinnacles; they will always be at an angle, but this will be a substantial improvement to what was there previously.”

Phil shows us some items that builders working on the tower in 1988 left behind in the turrets for the next workers to discover. “They probably expected it to be over a century later when they were found, not a few decades!” He shows us a tin containing two packets of hula hoops, and from another turret he pulls out a rolled-up newspaper from 1988, with the centre pages displaying the story of four new gargoyles being lifted onto the tower. Steve, who has been at St John’s for almost 30 years, worked on the tower that year when he was a “mere lad”, welding steelwork to support one of the gargoyles. “We’ll be leaving something in the walls for the next set of workers to find,” smiles Steve. He won’t tell us what

“We are restricted by how much work can be carried out. We can have up to five builders at any one time, but if too much brickwork is removed it could weaken the tower.”

– that’s for the builders of the future to discover.

We squeeze through a narrow gap and climb down a steep ladder to the interior of the tower just below roof level; we gaze up at the hefty timbers. Phil shows us some of the rusty bands of iron, and shows us how the bricks have lifted and pushed the structure outwards. We peer down a hole and see a long ladder leading into the cavernous interior – the area directly above the ante-chapel’s roof.

Work on the tower is on course to be completed by Easter, but it depends on our winter. The lime mixture used to relay the brickwork cannot be used if it is under five degrees. “We are also restricted by how much work can be carried out. We can have up to five builders at any one time, but if too much brickwork is removed it could weaken the tower.” Steve monitors the progress of the work in the tower every few weeks, with either he or Simon Thorburn, Deputy Superintendent of Buildings, ascending the tower to see how everything is going.

Steve has a lot of experience in major refurbishment projects, having worked on the Old Divinity School, all phases of Cripps, and the

School of Pythagoras. “The Divinity School refurbishment stands out for me,” he says. “It was an extremely difficult project, particularly when we hit ground water during the basement excavations despite the surveys showing we wouldn’t, which made the underpinning of the building very difficult. But we had a great team and it was a fantastic project to be involved in.”

We climb back onto the roof, and as we are waiting for the lift to take us down we admire the views – we watch people walking through First Court, and we look out over the city; on a clear day you can see as far as Ely Cathedral.

As we descend in the lift, passing gargoyles and statues, we are invited to return to the tower when the work is completed. “You won’t recognise it,” Steve says. “You’ll have to climb the stairs to the top though – it won’t be so easy next time!”

► **Image credits: The Chapel Tower, viewed from Chapel Court; Scaffolding; Working on the Tower; Cracking in the exterior; Iron in the wall; The view over the city; The view over First Court; Lift up the side of the tower; and Steve, Phil and Darren - St John’s College**



Levelling the playing field for the nation's health

Academics at St John's are breaking down disciplinary boundaries to tackle the UK's growing problem with health inequality.

Stop smoking, don't drink excessively, get your five-a-day and choose lower fat and sugar options.

We are all familiar with the Government's advice on healthy living. But, against a backdrop of continued cuts to welfare and social care in the name of austerity, is it helpful to place so much emphasis on individual choices while largely ignoring wider societal factors? Is current policy failing to reduce rates of avoidable disease because it does not take an individual's circumstances such as their employment options, background and local environment into account?

Research by the St John's Reading Group on Health Inequalities suggests that this is just one example of where government policy should be taking a more

considered approach to improving the nation's health. Their studies start from the assumption that it will be more informative to view an individual's actions in relation to the wider social and historical context, and that as well as calling on people to take responsibility for their own health, policy makers should recognise that environment and experiences play a powerful role in shaping our choices.

Dr Natasha Kriznik, Research Associate at the University and former Post-Doctoral Research Associate for the Reading Group, asks us to consider an example of a working single mother: "While she may be well aware that fresh food is better, she might not have the time to shop and cook regularly

and have to rely heavily on ready meals instead. The time pressures and financial constraints on people's daily lives can make healthy choices very difficult to incorporate. Our research supports an alternative conception of health inequalities which moves beyond a focus solely on individual behaviour."

The St John's Reading Group on Health Inequalities was set up in 2014 by Professor Ann-Louise Kinmonth (Director of Studies in Clinical Medicine) and Professor Mike Kelly (senior visiting academic in Public Health and Sociology) to examine the growing divide in the UK's health. The worst-off people in Britain experience poorer health and shorter lives with stark divisions evident both between and within cities and regions. For example, it has been widely reported that women in Richmond upon Thames in London can expect to live 15 years longer in good or very good health than women in the more deprived borough of Tower Hamlets.

The group is carrying out research into how and why health inequalities occur and what kinds of public policies could provide the best chance of good health,

"Policy makers should recognise that environment and experiences play a powerful role in shaping our choices"





for everyone. "Our work is at an early stage, but our ultimate aim is to influence policy. We hope to collate the fruits of our research into policy position papers aimed at key decision makers in government," explains Natasha. "Health inequality research often doesn't inform policy as it could. Much of the time it doesn't lay out clearly what could be done to redress the balance. For that reason the group aims to be pragmatic and come up with new approaches to policy action."

Academic papers published by the group are already igniting discussion. In a recent study, co-authored by Natasha, researchers from the group argued that cutting welfare and social care budgets during times of economic hardship is a historically uninformed strategy that ignores the very roots of British prosperity. The paper, published in *The Lancet*, asserted that a universalist approach of progressively funded health and welfare spending is an integral part of economic growth, and something



that modern states cannot afford to do without. The team of academics pointed out that the best growth rates during the last 100 years were those achieved following the introduction of the new welfare state in the three decades after World War II.

The Department for Work and Pensions responded to the paper via the Daily Mail, stating that their "reforms are incentivising work and

"The worst-off people in Britain experience poorer health and shorter lives"

restoring fairness to the system, while supporting people from all backgrounds" and citing high levels of employment plus spending of over £90 billion on working-age people who are out of work, disabled or carers. This comment was fiercely rebutted by a further article in *The Conversation* by the paper's lead author, Professor of History Simon Szreter, who reminded the Government that in-work poverty is now at a record high, forcing people to rely heavily on food banks as the poorest 30% have their incomes reduced more than anyone else in society. Writing in *The Conversation*, Szreter said:

"The fact that such a large number of our fellow citizens are clearly not being supported by the state renders the Government's response a 'post-truth' statement."

The St John's Reading Group is different to many other groups looking into health inequalities because of its interdisciplinary nature. "Before becoming part of the group, I had naively assumed that sociology was the main perspective" Natasha tells us, "but we have historians, philosophers, psychologists, biologists, neuroscientists and academic doctors from public health and primary care all playing an equally important role in the debate. A wide range of factors which fall under different academic disciplines contribute to health inequalities and there are significant links between them which need to be fully explored in order to develop a detailed and comprehensive account of the problem!"





“In academia it’s quite easy to become isolated within your own discipline and not look beyond your field, but discussions within the group have enabled us to learn from other specialist perspectives and challenge our different ways of thinking.” For Natasha, finding out more about the emerging role of epigenetics in the issue has been particularly interesting. “Epigenetics is the study of how different genes can be switched on and off depending on environmental factors. For example there is evidence to suggest that if a developing foetus is malnourished, it will develop mechanisms to store food. If the baby is then born into a nutrient-rich environment with access to high-sugar and fatty food they will be more likely to suffer from obesity and its related problems. Issues that affect people’s health now may need to be taken into account in policy way into the future.”

In the hope of inspiring the next generation of policy makers and medical professionals to think deeply about these issues, the group has been fostering links with the student body and particularly



the Medical Society at the College. “We have held essay competitions, panel events and meals with students and have more events planned for this year,” says Natasha. “It’s particularly interesting to discuss these issues with students training to be doctors and hear their views on future practice in terms of their patients’ background and environment, rather than just seeing them as bodies to be fixed.”

“It’s been predicted that during the careers of students now in higher education, epidemics of preventable diseases with a strong link to social disadvantage, such as type 2 diabetes, will overwhelm the NHS and social care system.

“It’s particularly interesting to discuss these issues with students training to be doctors and hear their views on future practice in terms of their patients’ background and environment, rather than just seeing them as bodies to be fixed”

An understanding of the long-term causes and mechanisms of ill health and its social patterning is obviously central to the education of young doctors and all those who will plan or implement policy.”

“A wide range of factors which fall under different academic disciplines contribute to health inequalities and there are significant links between them which need to be fully explored in order to develop a detailed and comprehensive account of the problem”



► Image credits: CanonEOS_digital rebel via Flickr; Salim Fadhley via Flickr; Taki Steve via Flickr; Liz West via Flickr; Lukes_photos via Flickr; Sandra Cohen-Rose and Colin Rose via Flickr; and Natasha Kriznik

How a College Bursary made my Indian Summer

St John's recently launched a new programme of summer bursaries, providing extra financial support to help students pursue educational and career development opportunities during the long vacation. For Katurah Morrish, it proved a chance to help a charity which is transforming the lives of young people in India.

Not long into her summer internship teaching in the village of Banjaraplaya, St John's student Katurah Morrish witnessed one of the main reasons why school attendance in this part of southern India is sometimes so poor. As she arrived for work one morning, the school was almost deserted. A bus strike was underway, and barely any pupils had made it for lessons.

"When there's a strike, everything just grinds to a halt," Katurah explained. "It's something I had never really considered. I'm used to the idea that if there's a Tube strike in London people might be an hour late, but if the equivalent thing happens out there, the schools shut down; kids can't get there."

Even on good days, some children have to walk for miles to reach the nearest school. Once there, there are still many barriers to effective learning. The classrooms can be crowded, and large class sizes make the business of teaching difficult. Moreover, many of the teachers themselves have only acquired English in a classroom setting and are often far from fluent.

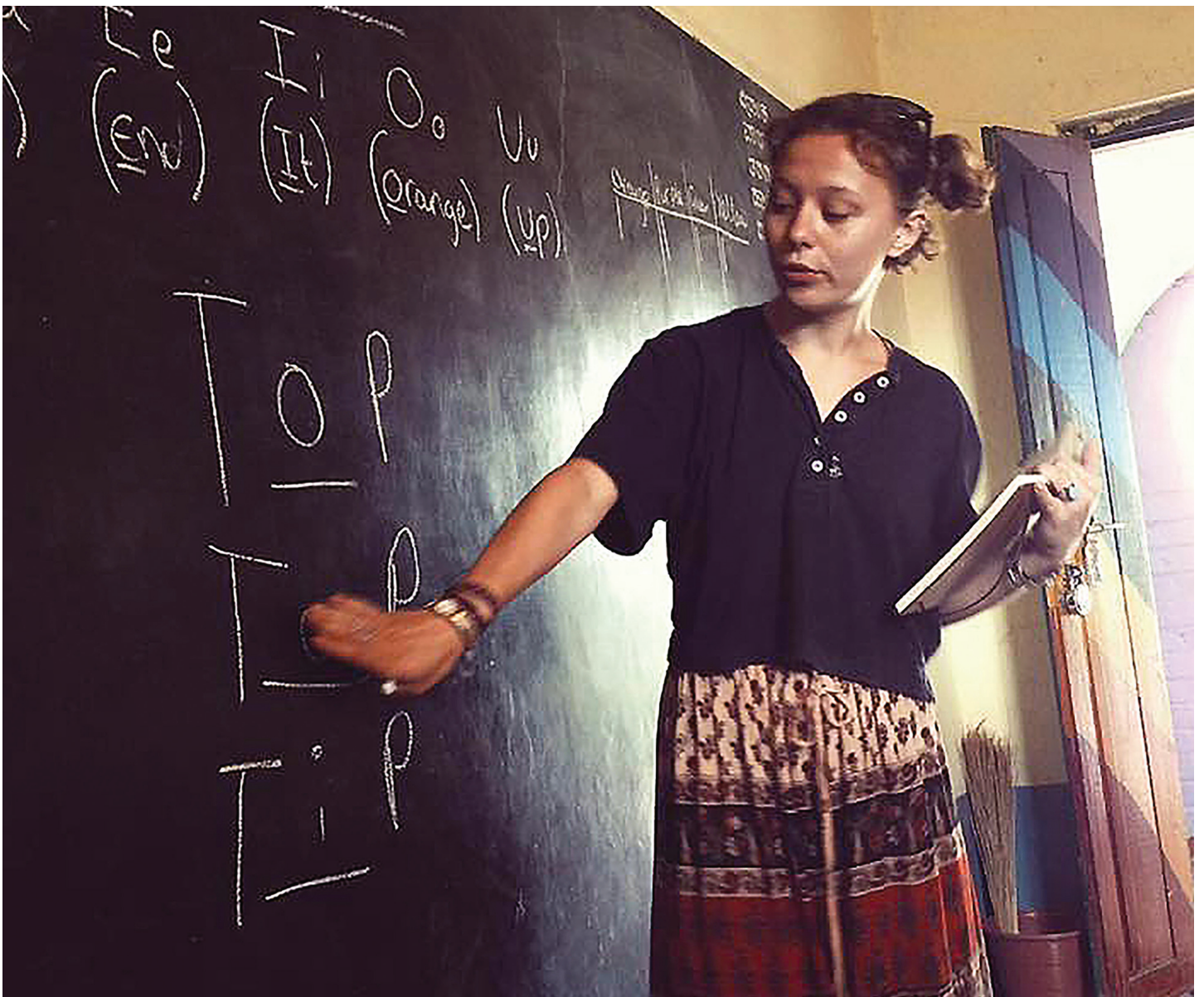


During the summer of 2016, Katurah worked at different schools with a charity called Peace Child India. The organisation, based in Bangalore, runs multiple projects with young people from disadvantaged communities in the region, focusing on social medicine, entrepreneurship and education.

Since 2004, it has been improving dozens of rural schools. This began with very foundational work, like building toilets and

providing books, but has gradually expanded to include the internship programme in which Katurah took part, which helps to give more pupils priceless access to people who speak English as their first language.

Yet for Katurah herself, this would not have been possible without some extra support from St John's. Originally from Wandsworth in London, she came to the College to study Education with Drama



and English. The course quickly intensified her interest in teaching overseas. Funding, however, was a problem.

Katurah was particularly keen to avoid a “voluntourism” project – one where students travel abroad to undertake well-meaning, but ultimately unsustainable, work in developing countries. The obvious answer was to join a year-round programme such as that run by Peace Child, which has a sustained presence in the communities it aims to help and uses interns in a more flexible support role.

Such organisations cannot always cover the interns’ expenses, including the considerable cost of getting to India in the first place. For Katurah, that made it unaffordable, until, shortly before the long vacation began, she received an email announcing the College’s summer bursaries. This new programme provides students

at St John’s who come from low-or middle-income backgrounds with money so that they can spend the vacation pursuing an educational interest or career development opportunity.

“The only reason I even found out about the charity at all was because I heard about the scheme,” she said. “I had always wanted to teach abroad in a completely different setting, but wouldn’t have been able to pay for it. The bursary gave me the chance to do what I had always wanted. It was a huge deal for me.”

Perhaps for those she ended up teaching, it will come to prove a bigger deal still. Banjaraplaya is in an unfashionable part of rural Karnataka, well off the tourist trail. Children there are often born into very poor families and learning English is important partly because it will improve their career opportunities when they grow up.

Limited resources and a lack of expert teaching inevitably make this less effective. “The children learn a lot by rote,” Katurah said. “This means that, for example, they can spell you the word ‘Wednesday’, but they don’t know what the vowel is in the word ‘sun’. Learning is completely decontextualised; it has nothing to do with pronunciation, listening or speaking.”

During her time there, Katurah worked with different age groups. In one school she took a class where the children were mainly aged between 10 and 12, although some were older because they could not get to a more senior school with ease. In another she worked with teenagers just four or five years younger than herself.

Much of the work involved teaching phonics – the method of teaching reading and writing by

focusing on different sounds and their associated spelling patterns. With the older children, Katurah also helped to develop their speaking confidence, grammar and syntax.

“By the end, the 15-year-olds had gone from being unable to explain where they come from and what there is there, to writing fully constructed sentences,” she said. “They understood things like pronouns and how to use them. The younger children were no longer just spelling by rote, things like their vowel recognition had improved significantly. Seeing these small advances in their confidence and ability was one of the most rewarding things about the whole project.”

Back at St John’s for her third year of study, Katurah has stayed in touch with the charity as it continues to provide support in the schools where she worked. She has developed resources based on the lessons that went particularly well in the classroom, and sends these to her contacts at Peace Child so that they can be used in day-to-day teaching.

After university, she aims to pursue another long-held enthusiasm, for acting. Nonetheless, teaching and learning – and how to do both effectively – increasingly represents not just an academic interest, but a passion in its own right.

“It is something that I see myself doing in the future,” she said. “But more than that, I want to go and work with NGOs again. The summer bursary meant that I could go away and do something different, but it also gave me experience to build on, and a much deeper perspective on how privileged we are to have the teaching we receive here at home.”

For further information about St John’s College’s summer bursaries programme, visit the website: <http://www.joh.cam.ac.uk/summer-bursaries>



► Image credits: Katurah Morrish

10-Minute Interview

with Professor Eske Willerslev

Professor Eske Willerslev, evolutionary geneticist and Fellow at St John's, tells us about exploring the Siberian wilderness, sequencing the first ancient human genome, and how we are walking on DNA from the past.

How did you start out on this line of work; what inspired you?

This interest came from childhood and was stimulated from expeditions I undertook. I was fascinated as a child by Native Americans, hunter-gatherers, and indigenous populations. When I was in my late teens I did many expeditions into Siberia. I worked there as a trapper when it was popular to take a gap year. Finding indigenous people who no one in the western world had studied for hundreds of years sounded like the ultimate adventure. In the wilderness I found woolly mammoth and woolly rhinoceros bones, and wondered why these animals went extinct.



Was it difficult to organise expeditions to Siberia as a teenager?

Very difficult – particularly as it was under control of the Soviet Union in 1991 when I entered so it was hard to get the necessary permissions! It took a year to organise. It was a really valuable experience, and very useful for my scientific career afterwards.

Did you enjoy science as a child?

I enjoyed history, but I really disliked going to school and I wasn't a



skilled student. But at high school I became fascinated by studying – at high school in Denmark you are taught by skilled people who are trained at university level, so learning became much more interesting.

When did you decide you wanted to be a scientist?

I knew that I wanted to be a scientist after returning from these expeditions in 1994, and even more so when I did my Master's project in Denmark in 1999, when I started extracting DNA from Greenland ice cores, which showed how microbial diversity has changed through time. It had never been done before and it got a lot of attention. I got top marks, but I couldn't get funding to continue so I ended up losing my head start and had to think about doing something else. I thought: what happens to the DNA from animals and plants that are left on the ground? If it can survive, we could reconstruct ancient ecosystems directly from the soil. We had soil samples sent over from Siberia, and managed to find a huge diversity of plant and mammal DNA. Then we looked outside permafrost regions, in caves in New Zealand, and we also found the DNA of extinct animals here. This was the first major breakthrough, and it transformed how we look at ancient and even contemporary biodiversity. Today it's called environmental DNA; at the time we did not have a name for it.

What came next?

At 33 I became a Professor in Copenhagen, and in 2010 my team sequenced the first ancient human genome from a 4,000 year-old man from Greenland. This really exploded – we were the first to do this and the discovery that ancient human genomics is possible changed the way human history is approached today; it was fantastic.

Which of your discoveries do you consider to be the most important?

I believe that environmental DNA

was the most novel discovery I have made to date. It revealed we are literally walking on DNA from the past and present not only from bacteria and other microorganisms but also from plants, birds, and mammals. It has and is still transforming the way we approach biodiversity of the present, and the past. At the time, my supervisor said it was the most stupid thing he had ever heard! It has really exploded over the last few years, with people using the concept to look at biodiversity in oceans and rivers. The ancient human genome has so far been the most influential discovery I have made, but I think that with time environmental DNA will prove to be more important.

How do you feel when people say that you have rewritten history with your discoveries?

It's great, I love that of course! You want new discoveries to have an impact. Ancient human genomics has changed our understanding of our human history in many different levels, and sedimentary DNA is the greatest innovation I have made in terms of thinking. Unfortunately, I did it early in my career!

What brought you St John's?

I got the Prince Philip Professorship in Ecology and Evolution in the Department of Zoology in Cambridge, and I met Fellows from St John's who said I should try to get a Fellowship here. I had almost no concept of what a College was like. It's the greatest thing that has happened to me in Cambridge, I really enjoy it. I've been here since last October and I've met interesting people and been treated so well by the College, and I've met researchers in all disciplines. It's a unique, incredible set up.

What are you working on now?

I'm working on some questions relating to early people in the Americas, and also on the prehistoric periods of Europe and Asia – I'm working all over the world to be honest!



Awards



Johnian received top honour for work in Statistics

The British statistician Professor Sir David Cox, an Honorary Fellow and graduate of St John's College, received the inaugural International Prize in Statistics. The new biennial award, which is made at the World Statistics Congress, is considered the highest honour in the field of statistics, and aims to raise public awareness of the growing importance and influence of the subject in modern life. It specifically recognised the importance of the 'Cox Model', originally put forward in a paper in 1972 and a means of assessing the hazard rate of a specific event occurring relative to a particular factor. It was subsequently ranked at number 16 in the journal *Nature's* top 100 most-cited papers of all time.

Rowers in red made history in the University IVs

In a sweeping series of victories, four crews from the Lady Margaret Boat Club won their races in the annual University IVs Competition,

a feat that had never before been achieved by the Club. Both the women's and the men's first and second boats for the rowing club of St John's College won their races in the University IVs, a knock-out regatta for boats made up of four rowers, which takes place every year in the middle of the Michaelmas Term.



Undergraduate the winner of top Italian student award

The *Alfiere del Lavoro* was awarded to first-year natural scientist Benedetta Spadaro from Milan for her outstanding academic performance at Italian high school. She was given the award because she produced one of the 25 best academic performances in the country for high school students last year. The *Alfiere del Lavoro*, which literally translates as 'Standard-bearer of Work', was first awarded to Italy's top students in 1961, in a ceremony marking 100 years since the unification of Italy.



Staff Photography Competition winners announced

The winners were announced at the inaugural Staff Photography Competition, which took place in November/December. First prize went to Fay Page, Student Services Officer, for her photo 'Graduands in the Hood', an image of a congregation ceremony. Second prize was awarded to Paul Everest, Biographical Assistant, for 'Pouring Glass', a photograph of champagne glasses at the College's Quincentenary event in July. The competition was open to all members of staff, and the theme was 'celebration'. This was the first time that a photography competition has been held for staff, and the trial proved to be popular and successful in its own right with many staff members submitting photographs.

New Year Honours for Johnians

Congratulations to the eight Johnians who were featured in the 2017 New Year Honours List: Sir David Richard Beamish (KCB); Mrs Sarah Persephone Sutherland Church (CB); Mr Stephen Guy Hill (OBE); Mrs Tanya Catherine Castell (MBE); Mr Keith George Caulkin (MBE); Mr (Ioan) Iestyn Davies (MBE); Major Graham James Goodey (MBE); and Mr Robert Hamilton Northridge (MBE).



► Image credits: Professor Sir David Cox - St John's College; Lady Margaret Boat Club rowers - Laura Day; Benedetta Spadaro - Benedetta Spadaro; Staff Photography Competition - St John's College; The Backs - St John's College

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