

2026

Selwyn

Magazine

In this issue:
Digging up Vikings
Professor Philippa Browning
Sport at Selwyn



The House built for two

Dr Hannah White (SE 1993), Chief Executive of the Institute for Government and author of *Held in Contempt: What's Wrong with the House of Commons?* argues here that the question has become more pressing.



Institute for Government

When I began working in Parliament in the early 2000s, the place operated according to a binary logic. The House of Commons was built around the assumption of two dominant political parties. The first-past-the-post electoral system was expected to deliver a strong majority government, able to control the agenda and deliver a coherent programme of manifesto promises. It was an oppositional, winner-takes-all system that suited most MPs well enough – until it didn't.

The assumption that the UK is a two-party state has been flawed for some time, given the sizeable presence of third parties, the Liberal Democrats and the Scottish National Party. But watching Parliament over the last decade I have seen the underpinning logic of our Parliament shattered more thoroughly.

Brexit loyalties cut across parties, fracturing the previous norm of alignment between party and policy agenda. MPs got used to organising to defeat their leaders. The successful model of the European Research Group on the Conservative backbenches having since been emulated repeatedly and on Labour's side too. An existing trend of MPs' increasing willingness to rebel against their party whip was accelerated. As Johnson and now Starmer have discovered, even a large majority no longer guarantees getting political priorities through parliament.

Time pressure has also reduced the quality of laws passed. The need for speed, first from the Article 50 deadline and then from the pandemic, normalised accelerated law-making and lower standards of scrutiny. This has contributed to more u-turns and worse policy, when ministers fail to lay the groundwork for difficult choices before pushing them through. The pandemic also ratcheted up public expectations of what government can deliver and how quickly, making politicians' jobs harder once crises have passed.

Compounding all of this, a huge turnover of MPs – 335 of 650 elected in 2024 were new – has meant a massive loss of institutional memory about previous parliamentary norms. A trend towards MPs being more focused on their constituencies means they are less inclined to spend time on the important but largely invisible work of being legislators.

All this has made it harder for governments to get things done, exacerbating voter dissatisfaction, sharpened by a context in which people expect quick results. And meanwhile all political parties have together succeeded in persuading the public that "Britain is broken". Voters want answers, and fast. We now face a situation our constitutional machinery was not built to handle.

The first-past-the-post system combined with our increasingly plural party landscape will produce more seats that are three- or four-way marginals, in which voters will have to



Institute for Government

“

All political parties have together succeeded in persuading the public that “Britain is broken”. Voters want answers, and fast.

DR HANNAH WHITE

”

guess how to game the system rather than vote positively for the candidate they want. Disproportionate vote and seat shares are likely to bring the system into disrepute.

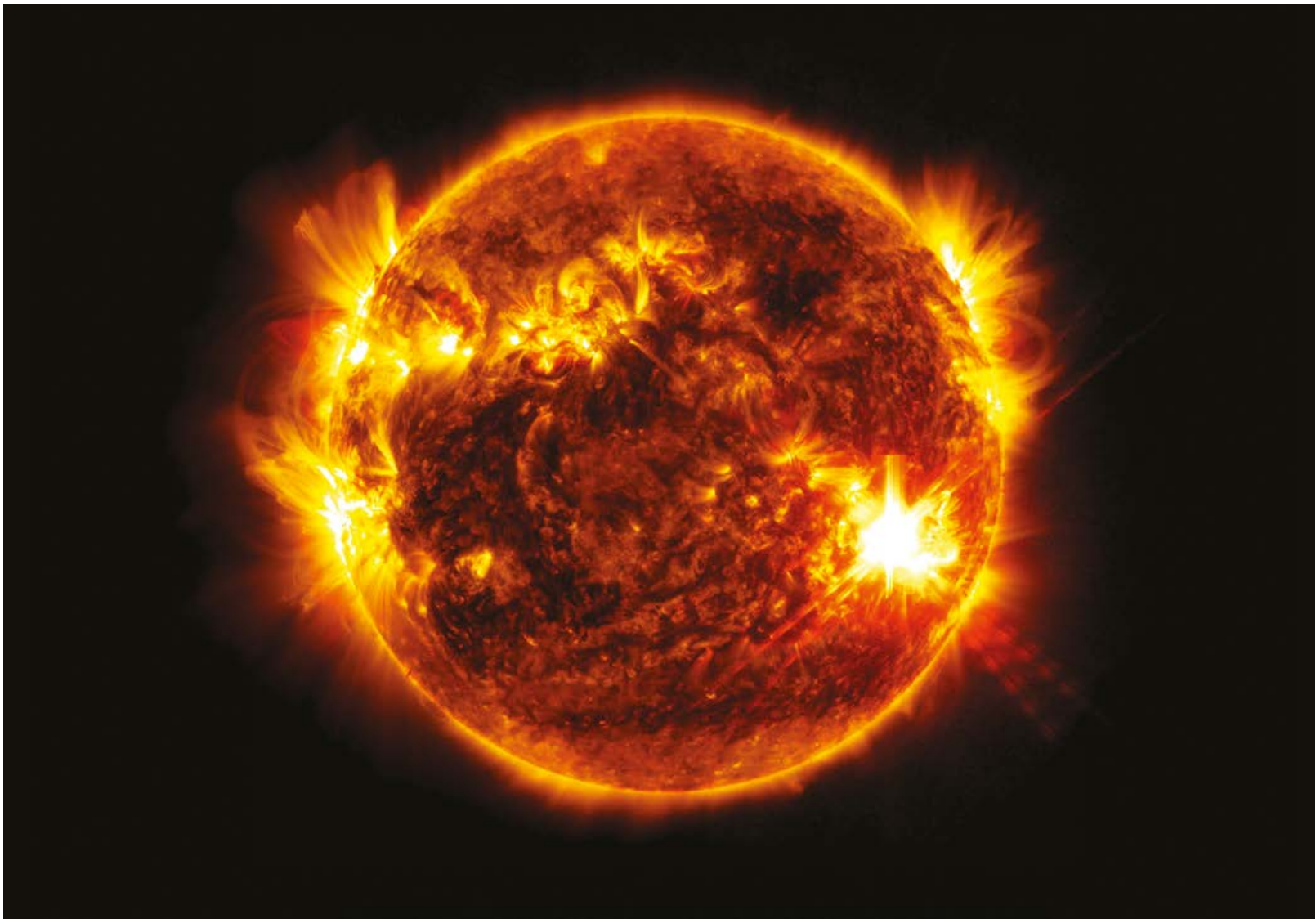
There is the real possibility of the next election delivering a Westminster parliament in which five parties each gain 15 to 25 per cent of the vote. But Parliament and wider constitutional processes are not prepared for the formation, running and scrutiny of government in such a context. After the UK's 2010 to 2015 experience, coalitions seem less likely – they are bad for the junior partner.

Minority government is more likely, but Westminster is ill-equipped for it: without fixed-term parliaments, opposition parties can vote no confidence in the government at any time. Westminster confers disproportionate benefits on the official opposition in terms of money, roles and control of parliamentary time, which

works tolerably when there is one dominant opposition but would embed unfairness if there were four of roughly equal size.

Constitutional change in the UK tends to happen incrementally or in sudden shifts, the latter usually in response to a crisis, such as the Parliament Acts and MPs' expenses. What we are not good at is spotting trends and preparing for where they are taking us. Governing parties are terrible at contemplating a future in which they do not hold power.

The fracturing of two-party politics is not a short-term fluctuation. Parties always want to believe that they can win and govern with a large majority, but even a majority is no longer enough. We urgently need a period of proactive constitutional evolution before the dissonance between electoral outcomes and institutional practices forces a crisis rather than a considered choice. ■



Above: NASA's Solar Observatory (SDO) captured this image of an X5.8 solar flare peaking at 9.23pm EDT, 10 May 2024.

A life in physics



PROFESSOR EMERITA PHILIPPA BROWNING

Professor Philippa Browning was among the first women to study at Selwyn, arriving 50 years ago in 1976. This year she retired as one of the leading figures in plasma physics. Here she reflects on the science, and on a career shaped by persistence and discovery.

I joined Selwyn aged 16 in 1976, the first year women were admitted, reading Mathematics. My grandfather, Herbert, and father, John, were Selwyn graduates, and my elder brother Tim was studying there, so the choice was natural!

I earned a scholarship through my entrance examination, but college rules had not yet been amended to award one to a woman – this was changed a year later. Remarkably for that time three of the six Mathematics students in my year were female, although women were still very much in the minority across the university. A First Class degree and then Part III (now MMath) in Applied Mathematics followed. I then went to St Andrews for PhD research into magnetic fields in the solar atmosphere, supervised by Professor Eric Priest.

In 1985 came an appointment to a Lectureship in physics at the University of Manchester Institute of Science and Technology (UMIST): the first woman physics lecturer at either UMIST or the University of Manchester; the two institutions later merged in 2004. That post became the frame for the rest of my career before I retired this year. Although I will continue to be active in research and the academic community as Professor Emerita, I am enjoying life beyond physics, including walking, playing the viola (recently resumed after a gap of almost 50 years) and spending time with my granddaughter Morgan.

None of it was uncomplicated. I have combined my career with family life – raising my son and two step-children – at a time when there were no role models to follow and childcare provision was not well established. I met my husband Ivan, a psychologist and artist, at St Andrews. Like many academic couples, we faced the so-called “two-body problem”. I was very lucky to get a job at UMIST a year after Ivan moved to Manchester.

WHY PLASMA MATTERS

Plasmas make up the vast bulk of matter in the universe, so they are central to understanding the cosmos and have practical uses on Earth, from fusion energy to lighting and medicine. Plasma is the fourth state of matter, consisting of a sea of positively-charged ions and negatively-charged electrons which conduct electricity and can be controlled by magnetic fields. Over my career, I have studied the complex interactions of plasmas with magnetic fields both in the atmospheres of the Sun and stars and in laboratory experiments on Earth, finding the connection between them. These environments contain twisted bundles of magnetic field lines, known as flux ropes. My research uses mathematical modelling and computer simulation, building on my undergraduate training in fluid dynamics, but I have also worked closely with laboratory experiments and solar observations. I am especially interested in the fundamental

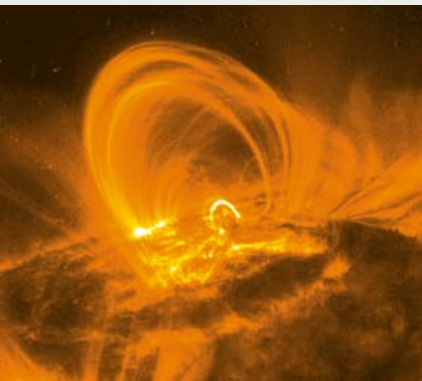
What is a magnetic flux rope?

Twist a length of rope tightly enough and it will buckle and coil in on itself. Magnetic field lines in the Sun's outer atmosphere can behave in much the same way, winding into braided, helical structures that store enormous quantities of energy.

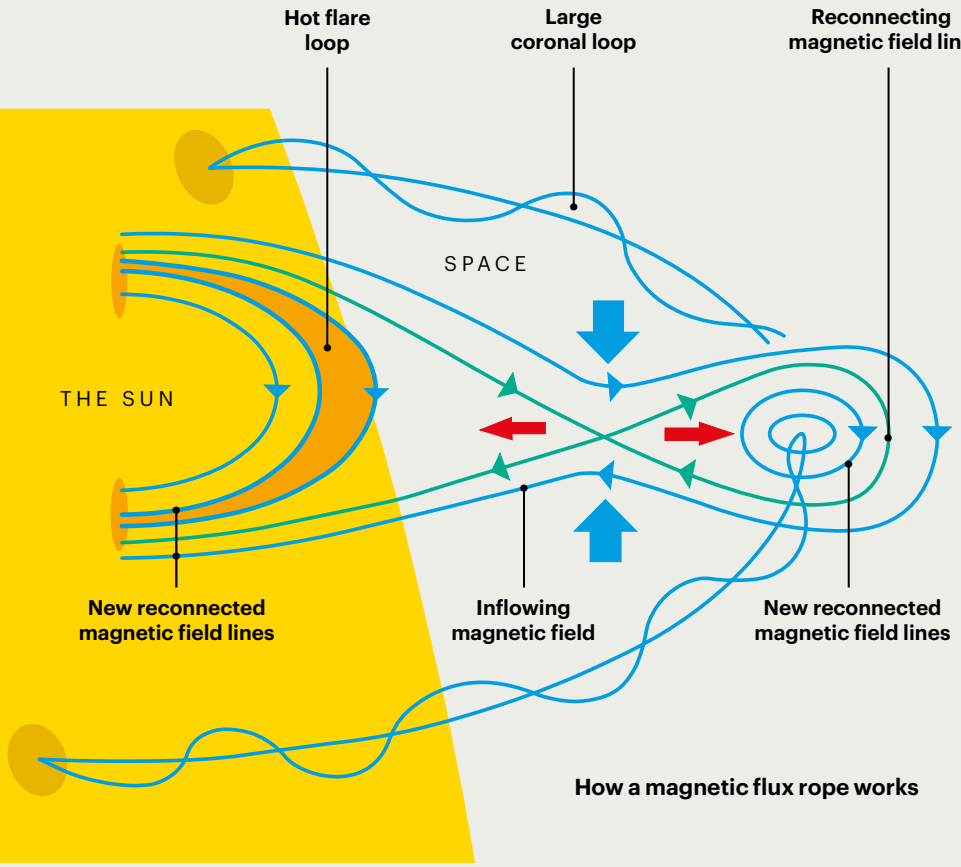
These flux ropes can remain stable for days. But if the twist becomes too great, they become unstable, releasing that stored energy suddenly and violently. This is the kink instability – a central theme of Philippa Browning's research – and it is one of the triggers for solar flares and the coronal mass ejections that send clouds of magnetised plasma hurtling into space.

When those ejections reach Earth, the consequences are practical as well as spectacular. On 13 March 1989, a coronal mass ejection hit the Earth's magnetic field. Ninety seconds later, the entire Hydro-Québec power grid failed. Six million people lost power for nine hours.

Understanding and predicting solar flares has thus become a key problem in modern science, and will also build new understanding of explosive events across the universe.

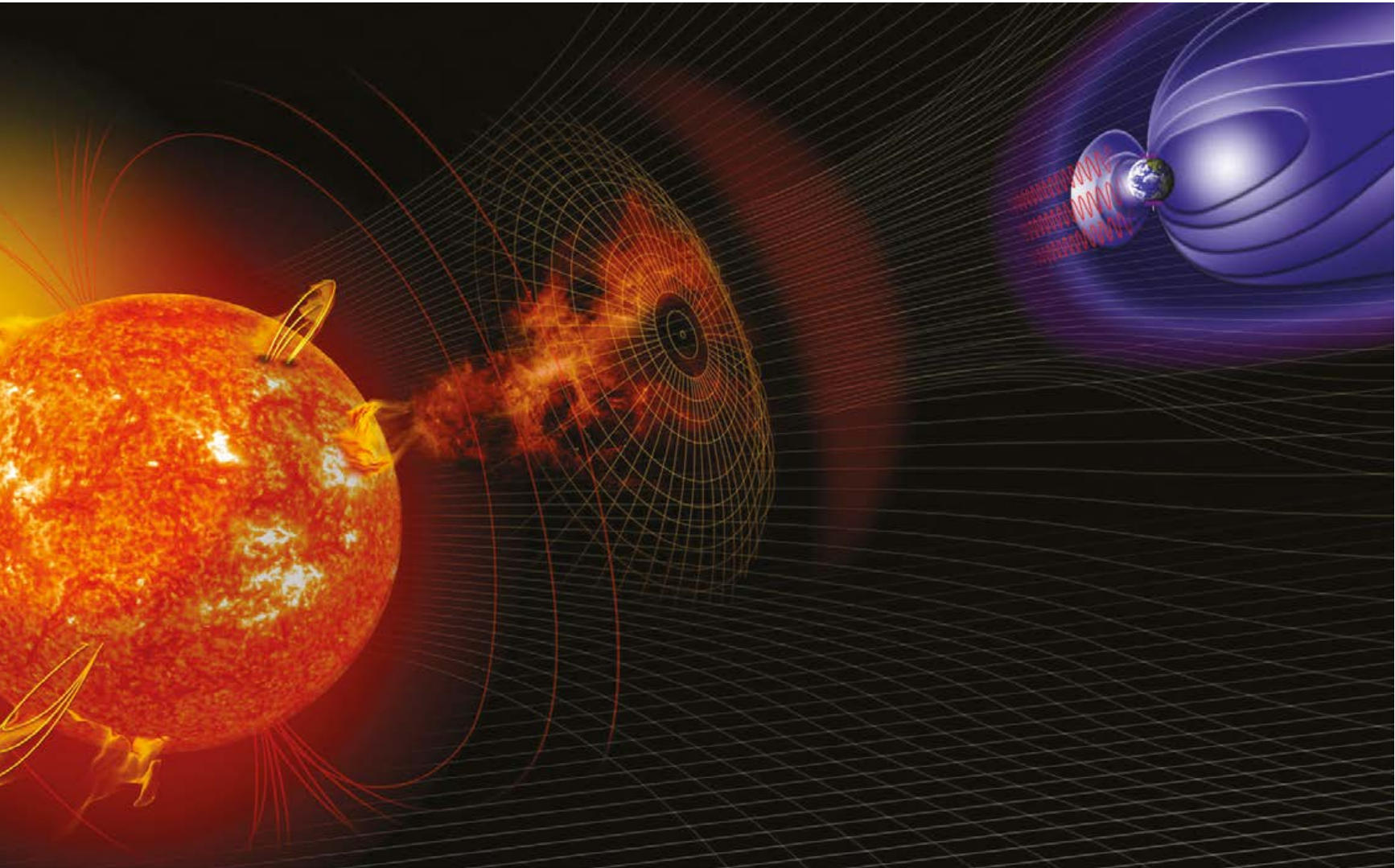


“a disturbance of one magnetic flux rope can lead to an avalanche of heating events – analogous to a small snowball triggering a snow slide in the mountains.”



(continued overleaf)

NASA / Alamy



Above: An artist's impression of events on the Sun changing conditions in near-Earth space.

“

Receiving the prize this year, and giving a plenary talk at the conference, feels like one small sign of how far women's careers in physics have come since then.

PHILIPPA BROWNING

”

physical process of “magnetic reconnection” in which field lines break and rejoin, rapidly releasing magnetic energy which can heat the plasma and accelerate charged particles. This plays an important role in both laboratory and solar plasmas. A central thread of my work has been showing how magnetic structures in plasmas can become unstable and suddenly release stored energy.

THE PROMISE OF FUSION

Fusion – in which hydrogen nuclei are combined into heavier helium – is the energy source of the Sun and stars, and would be a very attractive future source of power for electricity generation on Earth. In fusion reactors, forms of hydrogen such as deuterium are combined to produce helium. This means large quantities of energy are created from a small quantity of fuel: the lifetime energy needs of one person could be supplied from a bathtub of water and the lithium in two laptop batteries. The process is inherently safe, and the waste product, helium, is harmless. However, there are huge technical challenges, as fusion requires

effective containment of a very hot plasma (around 100 million Kelvin). This can be achieved using magnetic fields, and I have contributed to the quest for magnetically-confined fusion throughout my career. At UMIST, I led the theoretical programme for the spheromak experiment, in which the plasma was confined within a spherical container – contrasting with the conventional approach of toroidal (ring-shaped) containers. A long-standing question in plasma physics was how a plasma relaxes to its state of minimum magnetic energy. We discovered that this results from the large-scale instability and localised turbulent fluctuations. The spheromak programme also led to the building of one of the world's first spherical tokamaks: a concept which has become very successful and is now the chosen path for a potential UK fusion reactor in the government-funded STEP programme.

THE MYSTERY OF THE SUN

The solar outer atmosphere, the corona, is dynamic and is driven by strong magnetic fields. Solar flares – the most energetic explosions in the solar system – release large quantities of energy (up to the order of 10^{25} joules). They can have significant impacts on the Earth and our space environment, affecting satellites and their instrumentation, human spaceflight and even aircraft, power systems and communications. This phenomenon, known as space weather is an increasing concern as our dependence on satellites grows. Flares are caused by a release of stored magnetic energy through magnetic reconnection.

Right: Simulation view of a tokamak using 3D visualisation technology. A tokamak is an experimental device designed to harness energy from nuclear fusion. It uses powerful twisted magnetic fields to confine a superheated plasma inside a hollow, doughnut-shaped vacuum chamber. Scientists consider tokamaks the leading concept for building a future commercial fusion power plant.

Philippa's career in brief

Education

Carmel College, Oxfordshire.
Millfield School, Somerset.
Mathematics, Selwyn College, Cambridge.
PhD, University of St Andrews.

Career

1976

Joined Selwyn College.

1984

Completes PhD at St Andrews; continues as a postdoctoral researcher with Professor Eric Priest, working on solar plasmas.

1985

Appointed Lecturer at UMIST.

2004

Joins the University of Manchester following the UMIST merger.

2009

Becomes Professor at the Jodrell Bank Centre for Astrophysics.

2026

Retires from the University of Manchester, appointed Professor Emerita

Honours and awards

2009

Elected Fellow of the Institute of Physics

2016

Awarded the Chapman Medal of the Royal Astronomical Society.

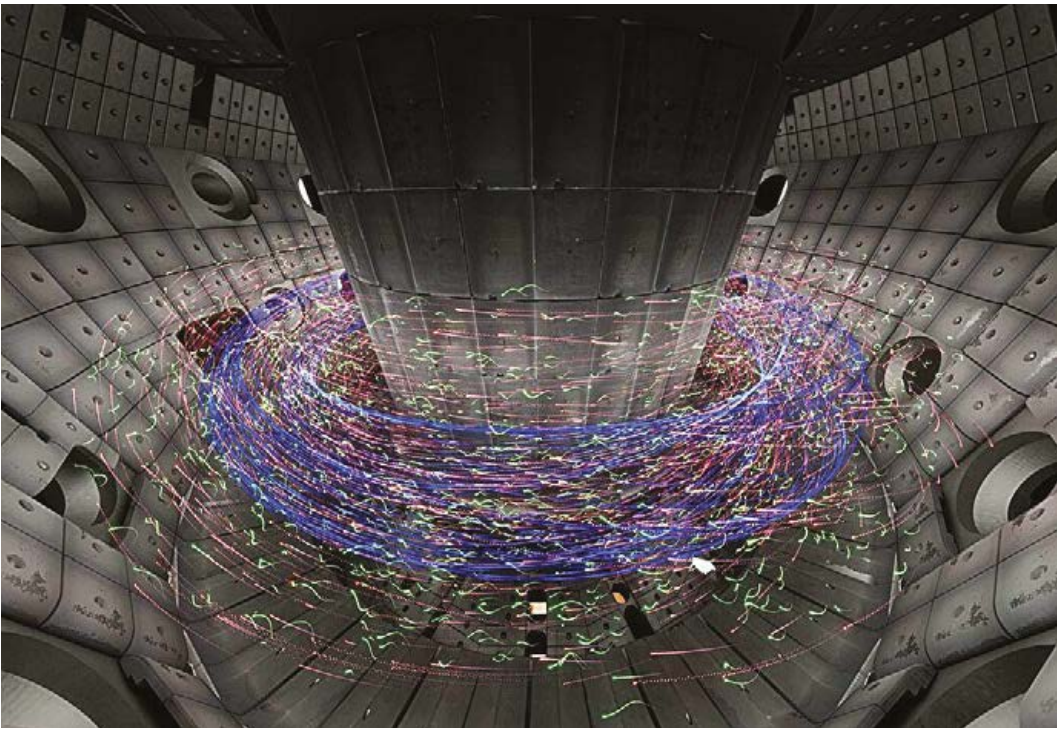
2026

Awarded the Hannes Alfvén Prize, European Physical Society.

I proposed that this can be triggered by the kink instability in flux ropes, forming many localised current sheets where magnetic reconnection dissipates magnetic energy. This heats the plasma and accelerates charged particles to close to the speed of light. A long-standing puzzle in astrophysics is to understand how the corona is maintained at a temperature of around 1 million Kelvin, whereas the surface is only at 6000 K. My colleagues and I worked out how this can result from the combination of many small flares, using magnetohydrodynamic simulations to show that a disturbance in one magnetic flux rope can set off an avalanche of heating events, just as a small snowball can trigger a snow slide in the mountains.

The 2026 Hannes Alfvén Prize, awarded by the Plasma Physics Division of the European Physical Society (EPS) for outstanding contributions to plasma physics arrived with a particular kind of meaning. It was awarded to me for work linking the physics of the Sun with fusion experiments on Earth.

When I first attended an EPS Plasma Division meeting in the early 1990s, there were no female speakers in plenary or parallel sessions, and I did not even hear any women ask questions after talks. Receiving the prize this year, and giving a plenary talk at the conference, feels like one small sign of how far women's careers in physics have come since then. ■





Herdi Leonard Photography

Moz Thomas (Hussain) read Engineering at Selwyn (SE 1993) and holds an MBA from Harvard Business School. His career spans Accenture, a start-up, Microsoft, Amazon and the foundational years of the social and AI revolutions.

A technology optimist’s honest reckoning

Moz Thomas (SE 1993) has spent three decades at the centre of the digital age. He is currently at Amazon leading the transformation of Prime into an agentic experience, and often gets asked about artificial intelligence and where it is taking us. He reflects on how the tech industry has moved faster than society’s ability to absorb it.

“AI doesn’t get up and say, I want to go to Mars. That’s a human dream. AI isn’t very good at orchestrating people with different motivations towards a shared vision. And AI is not very good at making ethical judgement calls. In a hypothetical case, if your car was out of control, would you run over your 95-year-old grandfather or a young mother with a six-month-old baby? There isn’t a right answer, but humans understand those nuances. AI just breaks down.”

He is equally clear about what AI can do. “It can turbocharge progress in some of our most pressing challenges – healthcare, climate change, education and much more. It can put human dreams within reach. While we should not stop this innovation, we also need to recognise the limits and where humans are needed.”

It is a perspective built over a long career. He came to Selwyn to read Chemical Engineering. What shaped him most, he reflects, was the supervision system. “You don’t realise it at the time, but every supervision is training you to present an idea, defend an idea, show your working and deeply understand a problem. It makes you genuinely fearless in high-stakes conversations later in life.”

Following university, he became a strategy consultant, working in high tech during the early days of companies trying to make sense of the internet. When his manager left to found a startup and pulled him in, a pattern was set. “The lesson I draw from that and repeat often: great careers are built by jumping on open doors, not waiting for the perfect plan.”

He moved to the US and joined Microsoft, where he initiated the company’s original investment in Facebook when it had revenues of only \$50 million. “I once worked on a feature that would have allowed users to share their search history with their social network. Mark Zuckerberg had a theory – we called

Zuckerberg’s Law: people will share twice as much personal information every year in exchange for a service they value. He was correct. Whether that outcome was governed well is a different question entirely, and one the industry still hasn’t answered satisfactorily.”

The moment that crystallised the reach of what he was building was in 2006. He was in an internet café in Beijing doing customer research and saw people logged in and enjoying a product he had built. “They had no idea who I was, but I had sweated over every feature and every pixel they were playing with. Seeing that joy was extraordinary.”

When he graduated in 1997, many of today’s jobs were unheard of. “Whoever had heard of a social media influencer then, or an AI prompt engineer?” The disruption ahead, he argues, is similarly unpredictable – but navigable. “You are less likely to lose your job to AI than to another human who uses AI better than you.” Before a recent family trip to South Korea, he used AI to build a personalised travel guide for each of his wife and three sons, tailored to exactly what they find interesting. “That was simply not possible even 12 months ago.”

“They had no idea who I was, but I had sweated over every feature and every pixel they were playing with. Seeing that joy was extraordinary.”

MOZ THOMAS

And this returns him to his generation’s responsibility. “My generation built the foundations: the PC on every desktop, scaling the internet and inventing uses for it. We became the managers and investors as Millennials built social media and AI on top. I am proud of the innovation. I am less comfortable with the governance deficit we leave behind.”

The next generation must be in that room when that governance model is defined. “Do not allow my generation to write all the rules for your future. My 16-year-old navigates misinformation more fluently than many of my senior colleagues. That native fluency is exactly the capability needed to govern AI in a way that is principled rather than merely reactive. Be optimistic about what the technology makes possible. But be present, and be vocal, in deciding how it develops.” ■



JAMES HE (SE 2019)

Courtesy James He

Crossing boundaries

After leaving home at fourteen, a Selwyn undergraduate used the College’s network to cross disciplines and follow his curiosity, transforming an interdisciplinary education into a venture-backed startup and opening doors for others.

Growing up at the foothills of the Chinese Tibetan Plateau, in a family where no one went to university, the expectation was that you would find a trade and maybe open a store. However, my parents also cared about my education. They found teachers who taught me poetry, art and history and that was what first made me curious about the wider world. So, when I was thirteen, I suggested going to school abroad, and somehow, they agreed. I left home at fourteen to go to New Zealand on my own.

A few years later, I applied to the University of Cambridge with an open application. I only got my passport back with the visa six hours before my 27-hour journey to the UK for interviews. Having great faith in their son, my parents’ first reaction to my Selwyn offer was, “Are you sure this isn’t a scam?”

I arrived not knowing what to expect. The winter darkness was a shock after New Zealand’s brightness, and it took time to feel at home. But somewhere in the middle of second year, I realised how lucky I was and decided to make the most of it. I moved to Psychological and Behavioural Sciences to understand how culture shapes human outcomes. We are social animals; how we do in life is influenced by the people around us. Having moved between cultures myself,

I’d seen that first hand, and I wanted to study it.

Then came the pandemic. A curse for obvious reasons, but a blessing too. I spent a lot of time in the library, watched the new one being built outside my window, and one day picked up a book on modelling how opinions spread through social networks. That changed everything. I started working with academics across departments, published my first papers, and eventually led a study that put 33,000 AI chatbots on social media to see how they’d behave. It was that summer at Selwyn that gave me the freedom to build bridges across disciplines. I moved between psychology and computer science, ancient philosophy and simulation.

All of it led to founding Artificial Societies, now backed by Y Combinator and global investors with over \$5 million in funding, building technology that simulates how groups of people react to the decisions that matter most. I wouldn’t have imagined this when I first arrived but it was my time at Selwyn that gave me the opportunity to explore ideas across disciplines. That’s why, when I got my first pay cheque, I set up a scholarship. I want to pass on the freedom for someone else to cross boundaries, just like I did. ■



All images © Cambridge Archaeological Unit / David Matzliach

Digging up Vikings



GRACE GRANDFIELD (SE 2023)

In July 2025, Biological Anthropology and Archaeology student **Grace Grandfield** (SE 2023) was part of the team that uncovered a ninth-century mass grave. The discovery is believed to date from a frontier skirmish between the Saxon kingdom of Mercia and Viking-conquered East Anglia. It is the most significant find at Wandlebury Country Park since 1976 and features in the BBC series *Digging for Britain*.

The question I am asked most often about my subject is: what is the best thing you have ever found? For the first two and a half years my answer was nothing. Completely by luck, now I can say I was part of the most significant archaeological find in Britain in a decade and somehow ended up on *Digging for Britain*, the *Today* programme and CNN. I really did not mean for that to happen, but it was exciting.

As part of the course, we carry out fieldwork to understand how archaeology works in practice: how to excavate correctly, how to read a site and how to extract information from the ground without losing it. I chose a four-week placement with the Cambridge Archaeological Unit (CAU) as I had done a couple of weeks with them in my first year and I find how they work interesting.

The first three weeks were uneventful. They were long days working carefully in a small pit with three other students and two CAU professionals. In week four, the dig leader, Dr Oscar Aldred, suggested we move to a site where an individual's remains had been found previously. We started taking off the topsoil and found a few fragments of bone. We kept going and found more, so we switched to smaller tools. And then there was a skull. And then another skull underneath it. And then a femur that did not seem to belong to either of them. As we worked further down it became clear this was far more complex than anyone had anticipated. We were expecting one individual. There were, in fact, ten.

When I first uncovered a cranium, I did not immediately know what I was looking at. I had never handled human remains before. At first glance it looked a bit like the top of an egg.



“When the professionals started saying this was the biggest find in British archaeology in the last ten years, my main feeling was: should I really be here?”

As I carefully worked around it, I realised what it was. I remember thinking that this was a person. It was quite a shock. Everything was very compacted in the grave. You would be trying to work out the relationship between what you were finding and where it lay. People working on different



sides of the pit were telling everyone what they were finding all the time. Every piece of information added to the picture of what might have happened.

What we uncovered was a mix of remains, some skeletons were intact and some were body parts clustered together. There were skulls in one area, arms and long bones in others. Among them, face down in the pit, were the remains of a man aged between 17 and 24 who would have stood around six foot five when the average male height was around five foot six. The bones were big. A member of the public walking past as we were taking one off site thought it was a cow bone because it was so large.

The university osteologist, Dr Trish Biers, came and looked at what I was finding as I was uncovering it. She was examining the ends of the bones to see how they fuse, which lets you estimate age. She told me that the individuals were probably between 16 and 21. Somehow that made them seem more human.

All of them appear to have been relatively young men, flung into the pit without care. The working theory is that this was the aftermath of a skirmish, a battle, or possibly a mass execution.

When the professionals started saying this was the biggest find in British archaeology in the last ten years, my main feeling was: should I really be here? I was by far the least experienced person on that site and it was genuinely exciting.

I will definitely keep digging and I will follow what happens with this find. I am also just very pleased that other people find it as interesting as I do. That feeling of having made a contribution, however unexpectedly, is what it is all about. ■

Wandlebury Hillfort

Wandlebury Country Park is an Iron Age hillfort and popular visitor destination three miles south of Cambridge, owned by local charity Cambridge Past, Present & Future. The University's Department of Archaeology and the CAU have conducted student training digs on the site for several years. Among the remains was a man of around 6 foot 5 inches who had survived trepanning (main image). Trepanation is an ancient surgical procedure in which a hole is bored through a living person's skull, used to treat conditions including migraines and seizures. All the remains, including the skull, dating to around 870 AD, are now held at the Duckworth Collection, University of Cambridge, where further analysis is ongoing.



Tabitha Taylor Buck

Views from the river

Two Cambridge University coxes, decades apart, reflect on their lives on the Cam. Selwyn's **Freya Jenkinson** (SE 2022) coxes today, and the College's Bursar **Jennifer Phillips**, coxed in the 90s. Both describe the pressure and camaraderie of the sport.

It's the 6 October 1996, and a self-proclaimed "short and mouthy" first-year has climbed on to a table during freshers' week to bring order to the chaos of new students around her. This display catches the attention of her college boat club members. A week later, despite never having rowed before, she is coxing the novice men's crew. Three years later, she will steer the 1999 Cambridge women's Blue Boat to victory over Oxford by one and a quarter lengths on the Henley course.

That former fresher is Jennifer Phillips, Selwyn's Bursar. "My brothers joke that I have a Blue for exercising my vocal muscles," Jennifer says with a laugh.

When she was coxing, on-board speaker systems or cox boxes were already in use in some senior crews, but nonetheless a cox's greatest asset might still have been considered volume. Today, you'd be hard-pressed to find a cox without one. As Selwyn languages student, and university-level cox, Freya Jenkinson puts it: "The job today is about steering and communicating with the crew through the speakers - it's much easier on the vocal cords."

What has not changed, both past and present coxes are keen to emphasise, is the early-morning magic of the Cam. "Watching the sun rise as you train is one of the most beautiful sights, particularly when it's a bit frosty and the mist is slowly lifting from the river," says Freya. However, rowers are not the only inhabitants of the Cam on those crisp early mornings. "Swans with cygnets, quite understandably, don't appreciate students rounding corners at speed where their offspring are tucked away in the reeds," Jennifer says.

On that occasion, she found herself being pursued by an angry swan. She remembers: "Its beak was about two metres from my head." Her repeated cries of 'up two' (or please go faster) proved entirely futile. Wings slapping the water, the swan just kept pace with the boat. "That isn't to say I didn't keep saying it anyway," she adds. Only when they were 100 metres clear did the satisfied swan drift back to its cygnets.

The pressure of steering a crew away from a territorial swan is nothing compared to the intensity of race day. As Freya explains: "In race situations, coxing becomes incredibly exciting because you carry out the plan, motivate the crew in front of you and push them to their limit. It can be nerve-wracking, because while a cox might not be the reason a crew wins, they can very easily be the reason it loses. Sitting on the start line, you really feel the weight of that responsibility."

In a sport where there is no option but to show up for one another because, as Jennifer puts it, "you can't row along with two of the blades sitting on the water", shared commitment forges bonds that last well beyond the river. "I've made some of my best friends at Selwyn College Boat Club," says Freya,

adding that she has felt "continual support from members past and present."

For Jennifer, the relationships she made while coxing for the university have also endured. Returning for the 25th anniversary of her Boat Race, she found the closeness intact, along with the same playful humour: "They definitely tried to pick me up and put me in something. I had to say, 'excuse me, I'm nearly 50, can we move on from that?'" ■



Banksie Parent

Above: Freya Jenkinson coxing Goldie during the 2026 boat race.

“

Watching the sun rise as you train is one of the most beautiful sights, particularly when it's a bit frosty and the mist is slowly lifting from the river.

FREYA JENKINSON

”



Tabitha Taylor Buck

Sport at Selwyn

Photographs by Elodie Giuge

Selwyn students are representing the University across a remarkable spread of sport, from the familiar to the surprising. The river, the pitch and the track are well covered, with hockey, rowing and cricket among them, but so are rifle shooting, powerlifting, fencing, equestrian sport and dance. Between them, students are active in around two dozen clubs. Stretching oneself through exercise has a positive impact on physical and mental well-being. At Selwyn, that is possible thanks to the support of alumni, who have funded grants across many sports, helping students develop life skills.



FENCING

Oliwia Kicek (SE 2021) is an épée fencer with the Cambridge University Fencing Club. She has competed in Novice Varsity against Oxford, has completed her Level 1 coaching qualification, and has taken on committee roles including Beginners' Secretary and Vice-President. She has also competed nationally, winning bronze at both the Eastern Region Championships and the Norfolk Open.

DANCE

Evie Pritchard (SE 2023) is a member of the Cambridge University Dancesport Team, which this year has retained its national title at Blackpool for a twelfth consecutive year, as well as becoming fourteen-time Varsity champions following victory over Oxford in May.





Left:
JUDO
Leah Jackson (SE 2023)
is a Full Blue judoka and
current Captain of the
Cambridge University
Judo Club Women's
Team. This year, she has
fielded two women's
teams in the annual Varsity
competition against
Oxford and has secured
victory in her individual
Varsity bout.



Above:
LACROSSE
Kavita Sivaraman
(SE 2023) and
Louisa Paterson
(SE 2024) are members of
the Cambridge Women's
Lacrosse Club, where
Kavita serves as Club
Treasurer. Louisa has been
a member of the Women's
blues team for two years,
which competes in the
highest BUCS league, and
has reached the national
quarter finals for the past
two years, making them the
highest ranked women's
sports team at the university.
As 2nd Team ("Kingies")
Captain, Kavita led the
Kingies to their highest
recent league finish (3rd,
Women's Premier South 2)
and also to the quarter
finals in the BUCS sixes.



Left:
FOOTBALL
A standout season
for Selwyn football
across the board. The
women's team finished
as Cambridge University
Shield runners-up and
fourth in the league,
growing from five players
to more than seventeen
over the campaign. The
men enjoyed one of their
most successful seasons
in recent history, reaching
the Cuppers Final unbeaten
and winning promotion to
Division 2 after a dramatic
playoff. Pictured (clockwise
from top left):
Lucas Clarke (SE 2024),
Holly Robertson (SE 2023),
Oscar Reeves (SE 2025),
Jaya Fox (SE 2024).

This year we profile three colleagues whose work spans the dawn of the universe, what it takes to stay across research at Cambridge and how machines see art.

Shaping knowledge

Dr Lily Whitler
Gavin Boyle Fellow
in Exoplanetary Science

Tell us about your work.
In the simplest terms, my work is like taking a baby picture of the universe. I study what the universe looked like when it was very young, so that we can understand how it grew into what we see today. Specifically, I focus on the very earliest galaxies, those that formed within the first billion years of the universe's history. To put that into perspective, the universe itself is around fourteen billion years old. By observing these ancient galaxies, I aim to understand how they first began forming stars and how they evolved over time.

What motivates you to study the universe?
It's part of the human condition to want to understand the universe. We've been doing it for as long as we've existed as a species, looking up at the night sky and trying to make sense of our place within it. That enduring curiosity is a big part of what motivates me. The key difference today is that we have far better technology than anything available to people in the past. We're still asking the same fundamental questions, but now we have the tools to start answering them.

What equipment do you use in your work?
I mostly use the James Webb Space Telescope, which is currently NASA's flagship mission. The telescope orbits a point in space about a million miles away from Earth, carries out its observations

and then links the data back to Earth via the Deep Space Network. I spend most of my time processing, analysing, and interpreting those observations.

Where is your research taking you in the future?
I am focused on a period known as the Cosmic Dawn and the Epoch of Reionisation, when the very first galaxies formed out of a soup of gas and began to influence their wider surroundings. Until now, we've had strong theoretical expectations for how this era unfolded, but very limited observational evidence. With the James Webb Space Telescope, and with upcoming instruments like the Roman Space Telescope launching later this year, we're finally able to observe this period in detail. In many ways, it's one of the last major epochs of the universe's history that we haven't been able to study directly, and I'm very excited to begin understanding it properly. ■

"It's part of the human condition to want to understand the universe. We've been doing it for as long as we've existed as a species"

DR LILY WHITLER



Tadhana Taylor Back

Dr Andrew Jackson

Director of Research Services
at University of Cambridge

What does your role involve?

The Research Office supports academics throughout the research lifecycle – from funding applications and contracts to finance, governance, compliance and research policy. Last year, we saw over £2bn of research grant applications and set up around 1,300 new awards, delivering more than £600m of income to the University.

We also work closely with funders, government and external partners to contribute to the development of national research policy and help align institutional strategy with emerging priorities. Day-to-day, I lead a team of around 240 people and set the overall direction for how research support operates across the institution.

Cambridge produces knowledge that the rest of the world wants to benefit from. How do you make sure it reaches the right hands?

Universities are no longer seen simply as generators of knowledge; they are increasingly expected to act as strategic partners in addressing major societal, economic and geopolitical challenges – from health resilience and climate change to AI, Quantum and other deep-tech areas that are strategically important for the UK.

Cambridge combines exceptional breadth across the full research spectrum with genuine global excellence. The power of collaboration – crossing disciplinary, organisational and international boundaries – has become a key part of the research environment, so a major part of our role is helping create the conditions in which those partnerships can flourish and deliver world-leading knowledge and world-changing impact.

That means helping academics engage effectively with businesses, policymakers, clinicians and international partners, while also managing an increasingly interconnected environment where contracts, compliance, finance systems, information security, ethics and national security considerations all interact.

A major focus for us is designing systems and services that reduce friction for researchers while still meeting increasingly complex external expectations from funders and government.



Tabitha Taylor Buck

Dr Andrew Jackson

“Universities are no longer seen simply as generators of knowledge; they are increasingly expected to act as strategic partners in addressing major societal, economic and geopolitical challenges.”

DR ANDREW JACKSON

What does Cambridge do well when it comes to protecting and sharing its knowledge?

Cambridge benefits enormously from a rich ecosystem of organisations and initiatives supporting external engagement and knowledge exchange. Cambridge Enterprise plays a central role in protecting and commercialising research outputs, while specialist units such as the Maxwell Centre and Milner Therapeutics Institute help connect researchers with industry and translational partners.

The wider innovation ecosystem around the University – including organisations such as Cambridge Innovation Capital, Cambridge University Health Partners and Innovate Cambridge – also creates powerful opportunities to translate research into real-world impact. Together, these activities create huge opportunities for innovation and impact, but also require careful coordination to ensure academics can find and access the right support at the right time.

Science communication and public understanding of research are also more important than ever. The Research Office coordinates the Cambridge Festival which, this year alone, enabled more than 50,000 interactions between researchers and members of the public over 17 days.

What drew you to this work?

My career has spanned hands-on research, as well as industry and university leadership. I started in engineering and physics research before moving into industrial R&D and technology commercialisation, working for and with organisations including Siemens, IBM and Canon on complex engineering and software projects. I moved into the university sector in 2005, joining the University of York as a Business Development Manager, supporting external engagement and partnership development. Over time, those roles broadened into institution-wide research strategy, operational transformation and research support leadership at Durham, York and now Cambridge.

What keeps me motivated is helping create an environment in which excellent research can thrive. At their best, research support teams do far more than administer processes – they help create the conditions that allow ambitious, collaborative and genuinely world-leading research to happen at scale. ■

Dr Leo Impett

Associate Professor in
Digital Humanities, Bye-Fellow

Can you tell us about your work?

I work in digital humanities, a field that combines computational methods with the humanities. It has long been shaped by two approaches. One uses computers to explore humanities questions by building large datasets and analysing them at a scale that wouldn't be possible by hand. The other takes a more critical perspective, examining the cultural assumptions and values embedded in technologies such as AI. I'm particularly interested in visual culture, how machines see images, how they generate them, and what ideas about style, beauty, gender or culture get baked into those systems.

How did you end up working at the intersection of AI and art history?

I studied engineering at Cambridge and, during a summer internship at Microsoft Research in Cairo, I worked on an algorithm designed to identify which photos were 'prettiest'. At a basic level that's unproblematic, filtering out blurry images and accidental photos. However, as the algorithms get better, it starts to get dodgy. What counts as 'pretty' becomes culturally loaded, shaped by the tastes of tech workers and amateur photographers whose images the machines are trained on. That was one of the first moments when I really started thinking about the cultural politics of AI and images.

Why do you use computational methods to look at art?

Machines see differently from us. You can programme a machine to ignore things that humans naturally focus on. I once worked on a project where we removed the sitters from thousands of portraits and just looked at the backgrounds. Normally, when you look at a portrait, you think about the person, who they are, how they're dressed, their expression. So, if the aim is to understand how background colours changed across Europe over two centuries, AI's more alien form of attention can be useful.

Why should art history have anything to say about AI?

People working on language-based AI have always talked to linguists and literary scholars but computer vision developed with almost no serious theory of images behind it. In the UK we sometimes think of art history as

something niche, just about old or elite art. But it's really about how images work, historically and culturally. As AI systems start behaving more and more like humans, you need the humanities to understand them.

What does a good day at work look like for you?

The best days are when you see something collective emerging. When I arrived in Cambridge, I had one PhD student and now there's a group of around fourteen people across Cambridge and Rome. There are days when that's stressful, but there are also days when you see ideas clicking and a school of thought developing. I really enjoy those days, and fortunately they happen quite often.

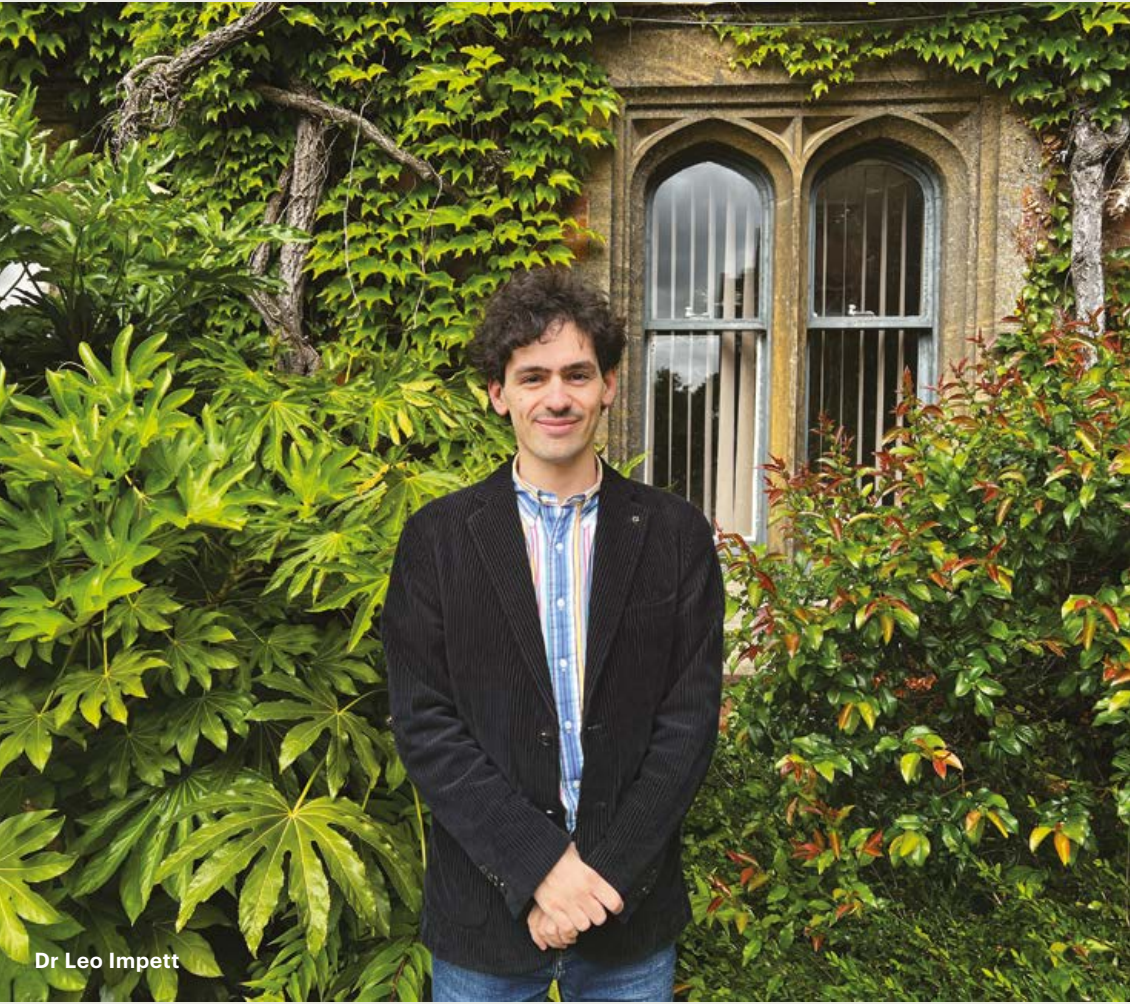
What brought you to Selwyn?

There were a few things that drew me to Selwyn. One was its longstanding strength in digital humanities. I think that partly comes from its close links with the University Library, which has traditionally been a centre for this kind of work. Selwyn felt like a place where that work was not only understood but genuinely supported.

It was also about atmosphere. I'd had a sense of Cambridge colleges for a long time, having grown up around the University and later studying here myself, and Selwyn simply felt right. It seemed relaxed, friendly and collegiate. ■

“People working on language-based AI have always talked to linguists and literary scholars but computer vision developed with almost no serious theory of images behind it.”

DR LEO IMPETT



Tabitha Taylor Buck

Dr Leo Impett

An April visit to Shandong

Selwyn Fellow and Cambridge ecologist **Professor Lynn Dicks** visited Shandong Province, East China, on a research exchange, travelling from experimental peanut fields to a reclaimed shrimp farm on the Qingdao coast and observing the wildlife clinging on in between.



Philippe Barnard



Peanut farming in China

Research exchanges work well when there is learning on both sides. I arrived in Shandong, presented my work on insect decline, then followed my hosts at the Shandong Academy of Agricultural Sciences into the field. I saw innovations in action and came away with plans for future collaboration.

Helping predators to protect peanuts

The visit began at a field station, where the President of the Entomological Society of China, Professor Ge Feng, introduced me to his group, which produces seeds and tests plant species for sowing functional flower strips. These are designed to host 'natural enemies' such as ladybirds, which can control pests in a range of important crops, including peanut, cotton, wheat and corn. The flower strips provide energy resources and refuge, especially between crops over the winter. My group has already completed collaborative work with Professor Ge Feng on the effectiveness of this system, published last year (Ju et al 2025).

Later, I saw strips of the most successful 'functional plant' for hosting natural enemies, Shechuang (*Cnidium monnieri*), being planted alongside peanuts at an experimental field site.

I was impressed by the team's approach to promoting ecological approaches as innovative technology, including very clear, engaging communications on why farmers need to think about ecology. Much of Chinese agriculture is incredibly intensive and these ideas are just beginning to gain ground in China.

Agroecology in action for apples

I visited apple orchards and mason bee rearing facilities in Yantai, hosted by Professor Men Xingyuan. Here we saw a great deal of innovation, including a bespoke machine to manufacture cardboard tubes specifically designed for the local mason bee species, *Osmia excavata*, which is a mud-collecting, cavity-nesting bee species and a great pollinator for apples.

We also saw a harmonic radar system, used to monitor the foraging range of individual female mason bees.



Left: Mason bee rearing techniques in Yantai.

Bottom left: Professor Men Xingyuan and his team in an apple orchard, Yantai.

Below: Chinese violet cress at the field station near Jinan.



I observed adoption of agroecological innovations in several commercial orchards, one large intensive operation acting as a popular demonstration site for other growers. These innovations included 'functional plants' between the apple rows, designed by Professor Ge Feng, and several biological control measures such as targeted pheromone disruption for pests.

In Qingdao, I presented our thinking from the Cambridge Agroecology group on how functional biodiversity can be supported in agricultural landscapes to avoid whole system degradation, without compromising food production. This is key to securing a long-term future for food, but it *must* sit alongside protection of natural habitats and their associated bioabundance, to prevent the complete loss of other wild species to extinctions. The larger-scale, strategic thinking about reconciling agriculture and biodiversity conservation that predominates in the Cambridge Conservation Research Institute was an important source of discussion and knowledge exchange.

Generous hosts

My visit was organised and led by two collaborators and visiting scholars in the Agroecology group: Professor Zhaoke Dong, who worked with us on the Global Insect Threat Response Synthesis (GLiTRS) and Professor Qian Ju, with whom we recently collaborated on research into the effectiveness of the Shechuang flower strips in supporting pest regulation services for aphid control in peanuts. We made plans for ongoing collaboration, including using the large-scale network of field research stations in Shandong to explore questions about the long-term success of ecological intensification and insecticide-free approaches.

Protecting globally endangered shorebirds

One early morning, I joined two knowledgeable members of the Qingdao Birding Association for a spell of birdwatching.

We visited Jiaozhou Bay, a new bird reserve on the coast of Qingdao, slowly being restored from its previous use for intensive shrimp farming, thanks to the continuous hard work of local birders. We saw a host of beautiful shorebirds, including three globally endangered species, the Nordmann's greenshank (*Tringa guttifer*), the Siberian sand plover (*Charadrius mongolus*) and the Far Eastern curlew (*Numenius madagascariensis*). The curlews were pulling quite large crabs out of the mud, and it was a joy to see them alongside their more familiar, smaller cousins, Eurasian curlews.

We saw beautiful pied avocets (*Recurvirostra avosetta*) incubating eggs and black-winged stilts (*Himantopus himantopus*). The site has recently started to be used by the critically endangered Chinese crested tern (*Thalasseus bernsteini*) as a migration staging post, where they feed and train their juveniles between June and November. It was sobering to see these special birds making their lives in such an ex-industrial context, with litter and abandoned infrastructure around them and so close to the developing mega-city of Qingdao.

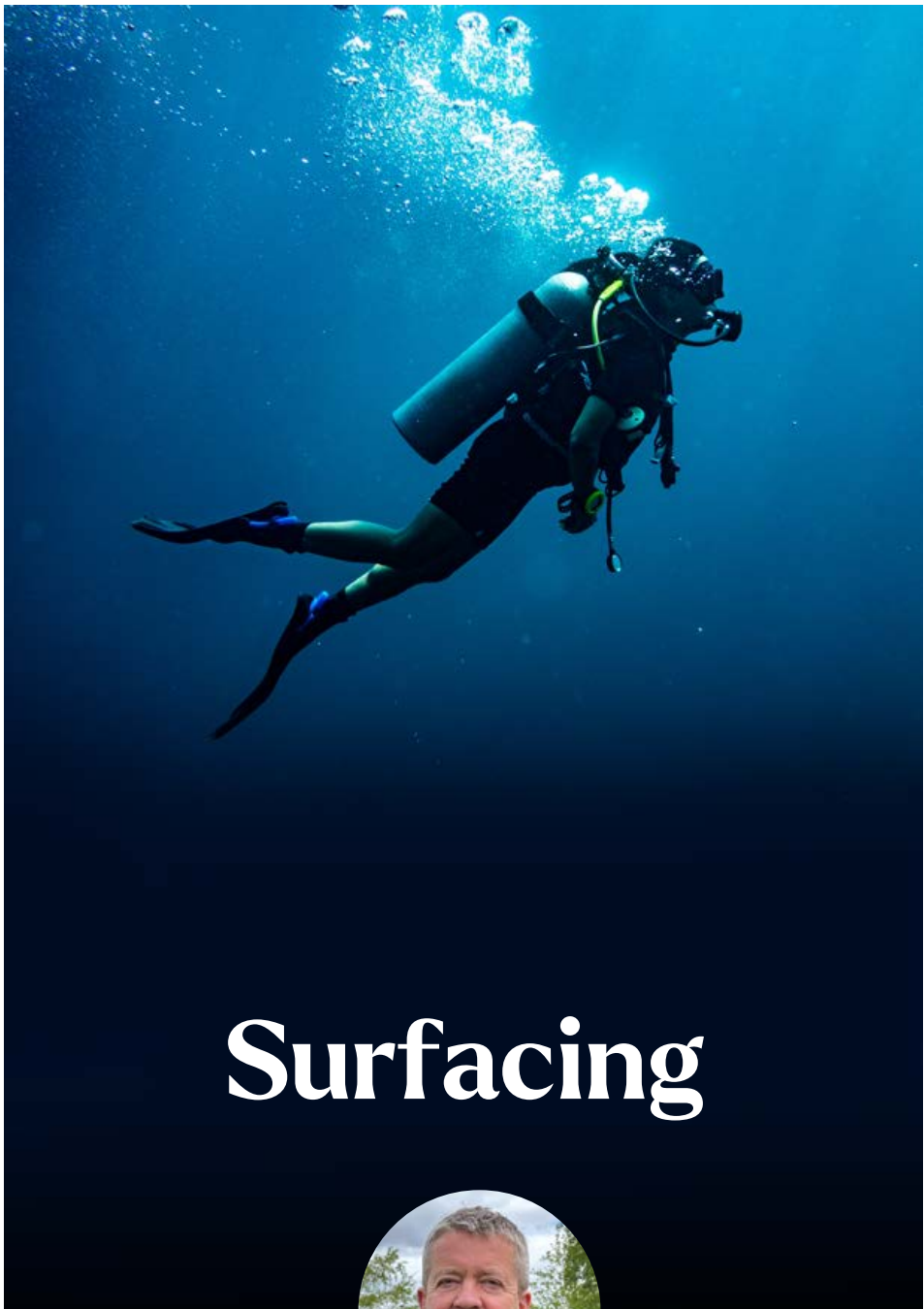
Thalasseus bernsteini.



Zhang Lei



Adobe Stock



GP **Andrew Trevett MBE** (SE 1981) arrived in Orkney in 1998 with no plans to specialise in diving medicine. A year later he was medical director of one of only two NHS hyperbaric units in Scotland. This year he was awarded an MBE for services to the Orkney community and diving medicine.

The year before I arrived in Orkney, a fatal accident inquiry into the death of a local diver recommended that the islands should have a hyperbaric facility to treat decompression illness. That recommendation – and a significant subsequent team effort – helped us shape a unit to support those working in and using the waters around the islands.

The need for a local treatment facility is due to the amount of diving activity taking place in Orkney. Scapa Flow, with the remnants of the scuttled German First World War High Seas Fleet lying on its bed, draws recreational divers from across the world. Add the scallop divers, the fish farms and the marine energy industry working Orkney waters, and Stromness – home port to most of the dive boats – was the natural place for a unit.

I moved to Orkney in 1998 with my partner Jill to take up a post as a GP in Stromness, after two years as a rural training fellow in remote and rural general practice. The post was broad, including responsibility for inpatient medical and maternity care in the local hospital in Kirkwall. The addition of diving medicine to these interests came about through circumstance rather than intention.

“

Since carrying out our first treatment in 1999, we have managed more than 500 cases of decompression illness treated by recompression.

”

Within a year we had set up a charitable trust and established a hyperbaric unit, carrying out our first recompression treatment in 1999. Since then, we have managed around 800 diving incidents, including more than 500 cases of decompression illness treated by recompression.

The unit is staffed with GPs from Stromness practice, internally trained hyperbaric chamber attendants from a range of backgrounds, and a technical team.

We also work closely with other emergency services including the ambulance service and coastguard, and have a close working relationship with the hyperbaric unit at Aberdeen Royal Infirmary. The Orkney Hyperbaric Trust is run by a group of volunteer directors.

The MBE is humbling. It is, above all, an acknowledgement of the whole team whose commitment and skill have made the service what it is. ■

Twenty-six years watching students grow

Gina Vivian-Neal retired as Tutorial Office Manager in May 2026.

On a snowy January morning, student David Cockayne (SE 2000) appeared in the Tutorial Office in his best leather shoes, ready for a full day of civil service interviews in London. Gina Vivian-Neal took one look at him and told him he was not going anywhere until he had found a pair of wellington boots. Which he did, and got the job. Now a successful businessman, he still returns to Selwyn with his children. That story, which David apparently tells frequently, says something about the 26 years Gina has spent at Selwyn.

Below: Gina pictured in 2005.

Howard Beaumont



She arrived on 7 November 1999, walked through the door and, as she puts it, simply knew it was a happy place.

The job she came to do was substantial. Stacks of paper application forms, a new admissions database to manage, processes that needed someone with both rigour and patience to hold them together. She joined a small, close team and got on with it. Over 26 years, more than 6,000 undergraduates and postgraduates have passed through the office. Gina has had a hand in seeing most of them through. “The job is huge in comparison to what it was,” she said. “But you know you are there to do a job for individuals.”

Isabel Cockayne



Gina Vivian-Neal, 2026.

The Tutorial Office has changed its shape several times over the years, including physically. Gina has worked in rooms that never saw the sun, in a portacabin on the front lawn and in offices looking out over the courts. She has seen Fellows, Masters, Porters and Deans of Chapel come and go, watched technology replace paper, and guided students through circumstances that the handbooks do not cover.

“There is something about Cambridge that keeps people. As Owen Chadwick used to say, you cannot have too much change all at once, or the whole place is in danger of falling over” she said.

She retired as Tutorial Office Manager in May 2026. What she brought to Selwyn was warmth, efficiency and knowledge.

The college is richer for 26 years of it. ■

Making progress for Development

As he prepares to retire from his role as Development Director, **Mike Nicholson** reflects on how the college has changed its approach to acknowledging its supporters.

Those of you who have attended any of the recent catch-up sessions with the Master and me at year-group reunions, will have been treated to a quick run through of the evolution of the Selwyn estate from 1882 to the present day.

The story of the expansion of the college is inspiring; for a college that was never endowed with funds of its own – it's one of the most noticeable ways Selwyn has pulled itself up by its boot straps, making it one of the very best places to live, study and work in Cambridge. Along the way, there's been a quiet revolution in how we acknowledge the support of those who have enabled these changes to happen – our donors, alumni and friends. Twelve years ago, it was possible to walk around Selwyn, admire the beauty of its buildings and gardens – and yet remain largely unaware that nearly all of it was the result of the philanthropy of individuals.

In contrast, today there are more than a thousand names now incorporated into the fabric of some of our buildings, rightly celebrating the generosity of those responsible.

Today, each new cohort of students who use the superb resources of the Bartlam Library or the Quarry Whitehouse Auditorium, or have supervisions in the Old Library cannot fail to notice that these facilities exist largely thanks to the philanthropy of earlier generations of students. But the naming of supporters is not just about new or refurbished buildings.

Each generation helping the next is a cornerstone of the way healthy communities grow, and at Selwyn this also implies a transfer of knowledge and values. Helping to make this intergenerational support visible at Selwyn has been one of the most satisfying achievements of my twelve years as Development Director, and you'll forgive me if I end by pointing out that there are more 'naming' opportunities still available for those able to support the Ann's Court North development, which when finished will see Ann's Court finally completed.



Timeline

1969

Cripps Court

Built in 1969, Selwyn's first 'named' building exists thanks to the generosity of Sir Humphrey Cripps. A major refurbishment in 2014, providing 50 additional rooms, was largely financed by the Cripps Foundation who continued their support in 2024 by providing the funds to expand its generation of solar energy and storage, greatly reducing the building's carbon footprint.

1969 Cripps Court construction



2014

2014 Cripps Court expansion



Paul Hughes

2021

Bartlam Library

The scholarly centre of the college, the Bartlam Library is named in honour of Tom Bartlam (SE 1966) and recognised his substantial gift. Built over two floors and opened in 2021, the Bartlam Library provides a light and spacious study environment for students throughout the year.

Quarry Whitehouse Auditorium

Selwyn alumni Gareth Quarry (SE 1978) and Jill Whitehouse (SE 1978) helped us build this superb new facility. Since it opened in 2021, it's hosted hundreds of lectures and events, many of which have been streamed worldwide via YouTube thanks to its integrated cameras and AV facilities.



2017



Ann's Court

Christopher Dobson Building

Christopher Dobson (SE 1957) and his wife Ann were responsible for the lion's share of the funding required to build phases one (2005) and two (2009) of the prestigious Ann's Court development. The new buildings provide more than 80 en-suite rooms and three floors of spacious offices housing the college's administration.



Below: Selwyn's Development & Alumni Relations Office Team. Left to right: Sam Davis, Tabby Taylor Buck, Gloria Morey-Picking, Jessica Bennett, Siân Grant, Christine McDonald and Mike Nicholson.

2027

Ann's Court North

The final phase of the 25-year Ann's Court development programme will see the total refurbishment of 21 and 23 West Road, linked by a smart new Entrance Pavilion, giving level access to all ground floor rooms directly from the college. All 22 student rooms will be upgraded and the entrance pavilion will provide new social and informal study areas. Naming opportunities at all sorts of levels can be found by scanning the QR code below.



Donation webpage



Artist's impression of the new construction



TAP DANCE

Rebecca Coldwell (SE 2023) is a member of the Cambridge University Dance Competition Team. They competed in Varsity against Oxford, winning overall, and also competed at Leeds Dance Competition, where Cambridge was the highest scoring university.

Photo by Elodie Giuge