My induction as the 40th Master of St Catharine’s marked a return to where I read English, under the charge of Dr Paul Hartle (1971; Fellow 1977, Emeritus 2019) as Director of Studies. Fond memories of my life as an undergraduate have come flooding back, not least during the Members’ Reunion that the Alumni and Development Office hosted in April 2024 – by sheer coincidence, it was the turn of my cohort to reunite, and I was delighted to reminisce with Paul and many of my peers in attendance.

I am often reminded that the College’s Royal Charter of 1475 describes “a perpetual college … for ever to remain” and it has done an incredibly good job of remaining, and nurturing successive generations of students and Fellows over 550 years. Did you know around half the 20,000 or so people who have ever studied at St Catharine’s are alive today? I am excited by how our community has grown since I was an undergraduate, and constantly impressed by how often I hear of your contributions to wider society. I really hope you enjoy reading more about some of these contributions in The Wheel, whether you are reading in print or online.*

My focus is now on ensuring that the College benefits from an environment in which our community can thrive. We are lucky to have gained some fantastic new buildings over the last decade or so. But we are also mindful of our responsibility to maintain our beautiful historic estate. So our attention is increasingly turning to, for example, how we preserve our 10,000 m2 of roofs. The condition of our natural environment is also inextricably linked with our community’s prospects, and I welcome plans to achieve net zero emissions by 2040 as well as the introduction of plants and wildflowers in carefully defined beds on the edge of the lawn in Main Court (shown on the front cover). Not only are they pleasing to the eye, they also support biodiversity.

While I’m proud of the academic achievements of our students, it is also heartening to see so many of them engaged in the breadth of extra-curricular opportunities that we have to offer through the JCR and MCR Committees, student societies and sports clubs. Every Cambridge boat with a St Catharine’s rower triumphed over Oxford in the Boat Races and we were one of only five Cambridge Colleges to field a team in every intercollegiate sports league this year.

I hope the arrival of The Wheel prompts fond memories. We are always delighted to see our alumni in Cambridge and I promise you, you will be extremely welcome.

*You can let the College know if you prefer to read The Wheel digitally at caths.cam.ac.uk/keep-touch

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The Wheel is printed with vegetable-based inks on 100% recycled material and delivered in a potato starch film wrapper. St Catharine’s College supports the World Land Trust Carbon Capture Programme.
In case you missed it…

Some of the highlights of the academic year. You can always read more on the College website under the news section.

Best foot forward

Congratulations are in order for the St Catharine’s men’s first and second football teams. The first team are the 2024 Cuppers champions, hard-won in the final against St John’s. Meanwhile, the second team won the Shield final in the intercollegiate knockout competition, an achievement even more impressive given their recent promotion to Division 3. Follow Catz sport on the student-run Instagram, @the_kittbag

Boating triumph

Following the success of the Cambridge boats at the annual Oxford V Cambridge Boat Races in March, Catz alumni may like to know that all winning crews had at least one St Catharine’s student present!

Catz students Lewis Grey and Thomas Heppel in the men’s lightweight boat.

A new chapter for Chad’s

At the start of the academic year we opened two new student houses at the St Chad’s site, named for two Catz pioneers from the 20th century, Drs Cecil Belfield Clarke and Marian Silver.

A chapter in our history

The College’s 550th anniversary history book celebrates St Catharine’s in 64 pages with photos and artwork from our collection to bring our story to life. Purchase online at scalapublishers.com/st-catharines-college-cambridge
Catz Crosswords

Three members of the St Catharine’s community, spanning almost five decades, are keen crossword setters. We spoke with them to find out more...

Hamish Symington (1999, Natural Sciences) has set crosswords for the Guardian among other publications, under the setter name ‘Soup’. He is a Fellow of Queens’ College and a postdoctoral researcher in the Department of Plant Sciences specialising in pollination.

Archie McCann, who sets as ‘Marble’, is a fourth-year Civil Engineering student, focusing on geotechnical engineering. He sets crosswords for the Varsity newspaper in between his studies, is active in politics and elections, and has two cats named Monty and Tallulah.

Alan Chamberlain (1975, Modern & Medieval Languages), or ‘Komornik’, is a retired teacher. He helps to run the annual 3D Crossword Calendar in aid of RNIB and Children in Need, and attributes his love of crossword setting to a passion for wordplay and his language studies.

HOW DID YOU START CROSSWORD SETTING?

HS: I commissioned a puzzle for a friend’s wedding from ‘Araucaria’, the great Guardian setter, and then helped him set up a website for his custom puzzle business. One day I plucked up the courage to put together a puzzle and sent it to him. It wasn’t very good but he was encouraging so I persevered. Then it was just practice, practice, practice.

AC: I always loved wordplay. I grew up helping my family with the daily newspaper cryptics from the late 60s, and we used to set each other bizarre treasure-hunts during the holidays. When I retired, I began to take setting puzzles more seriously; but I am resolutely amateur and set puzzles only to amuse people and for fundraising.

AMc: Growing up, my dad loved crosswords and showed me how cryptic clues work: the clever twists and tricks within them. I started setting by making quick and cryptic crosswords for Varsity. It’s good fun getting to think about the clues, working out different ways of getting to the same answer, and making small adjustments until they feel right.

WHAT MAKES A GOOD CROSSWORD?

HS: A really good crossword clue is like a joke: the solution (or punchline!) is unexpected, but obvious when you know it. Solvers talk of the ‘penny-drop moment’, particularly for clever clues or intricate themes. If the setter can work humour into it, so much the better.

AC: Yes, it should be cheering, witty, and good-humoured. And, if giving people a month or more to solve it (like my annual Challenge), one should find a balance between the degree of intellectual struggle and the sense of achievement. Minor victories along the way make the solver want to persevere!
AMc: Ultimately, it’s a puzzle and a game. It should be fun, allowing the solver to sit back, satisfied, and think ‘Ooh, that’s clever’, rather than ‘Oh, they’re trying to be clever.’

TELL US ABOUT A RECENT CLUE YOU WERE PROUD OF?

AC: I recently clued SIEGE for an event at which the organiser visits each table, collecting ideas and things, in the following way: ‘In which host came round, seeking submission (5).’

AMc: A Varsity clue for SPIRIT OF ST LOUIS: ‘Awful if tourists spoil first plane across the Atlantic (6,2,2,5)’. I got some nice feedback from that one, which was lovely.

HS: One of the solutions in a recent Guardian puzzle of mine was WILD GOOSE CHASE. The clue told the solver to ‘see 1 down and 27 across’, neither of which existed!

HOW DOES CROSSWORD SETTING FIT INTO YOUR DAY-TO-DAY LIFE?

HS: There’s a part of my setting brain that’s never really turned off. I was at lunch recently and was introduced to someone called Athene. All I could think was ‘Athene… a-then-e… how can I use that for ‘ae’ in a clue?’. When I’m cycling to or from work, my brain cuts words in half, shuffles them around, and fits clues together. Then I have to try to remember them until I’m at my laptop.

AMc: Occasionally I’ll spot an interesting word or an ironic situation and try to see how that could be exploited for a clue.

FINALLY: HOW WOULD YOU CLUE THE WORD ‘MATRICULATE’?

AC: Secure admission that interviewee – Catz linguist – starts amateur career (11)

HS: Setter welcomes performance of ritual act to start at St Catharine’s (11)

AMc: Enrol in critical hospital ward, running behind after nine off table (11)

Archie McCann has kindly set a St Catharine’s themed crossword, which you can find on the back cover of this issue of The Wheel.

“A really good crossword clue is like a joke; the solution (or punchline!) is unexpected, but obvious when you know it.”
CATZ PEOPLE:

Professor Adrian Liston

Multi-award-winning researcher Adrian Liston (Fellow 2023) is Professor of Pathology at the University of Cambridge, and a proud scientist-parent.

Adrian Liston accredits his unique journey – from a truck-driving family in Adelaide, Australia, to Professor of Pathology – to a passion for scientific inquiry. Reflecting on his decision to pursue a biomedical science degree at university, a departure from expectation, he says, “I was motivated by a love of finding out how the world ticks.”

In addition to his leading work on immunology, Adrian is committed to making scientific careers more equitable and accessible. He has written at length* about how PhD students can maximise opportunities: and insists that the advice holds true at any stage. “A career in science isn’t typically a linear path, so defining a single outcome as a success misses the true breadth of opportunities available,” he explains. His number one suggestion? “Avoid a single 10–15-year goal. Instead think of your career in terms of 3–5 year ‘blocks’ that you’ll enjoy, and that open up new options.”

Adrian himself did exactly that. Following a PhD in Canberra, he moved to Seattle for a post-doctorate position, then to Belgium, where he established his first laboratory. “A science career is a great way to explore somewhere new,” he muses. Over the course of a decade in Belgium, he evolved from a junior leader to a senior professor, nurturing the growth of numerous alumni who now occupy leading roles in biotech and healthcare. In late 2019, a new chapter saw him join the Babraham Institute: “A risk, but I craved a new challenge, and fortunately, five team members relocated with me.” A scientifically successful period followed (“despite the chaos of the pandemic”), culminating in his move to his current professorship.

Adrian has also authored several children’s books and developed an educational computer game, ‘VirusFighter’. He reflects that becoming a father showed him the importance – and joy – of helping young audiences to understand complex scientific concepts. “My son would ask me about my day and I would tell him! Children are naturally curious in a way that is based in genuine interest,” he reflects. “They are already scientists, actively trying to understand how the world works. When talking to a child about science, there is never a need to convince them of economic value or unmet medical need.” Therefore, the way to encourage young audiences to embrace scientific pursuit is to simply nurture and encourage that inherent curiosity: “Let children know that they can be a scientist.

Focus on science as the skill of asking good questions, rather than the knack of reciting good answers.” Important, too, is a diverse set of adult scientist role-models to inspire future generations.

Finally, some encouragement for those who have decided to pursue science: “I’d say, congratulations on choosing a path that allows you to make a positive impact on humanity,” Adrian jokes, “and the world has a science skills shortage, so you’ll never be short of opportunities!”

Read more about Adrian’s work and download his children’s books at listonlab.uk.


Adrian reading from Maya’s Marvellous Medicine, an illustrated children’s book he authored with the aim of educating early learners.
A truly special collection

Dr Colin Higgins (Fellow 2018; Librarian) sheds a light on the meticulous cataloguing of the College’s well-preserved historic books, including a leaf dating back to the College’s founding year...

Our Library’s special collections differ from those found in the libraries along King’s Parade and Trinity Street. We do not house them in the great cathedrals of learning that are the old libraries of Trinity, St John’s, and Caius. While our Sherlock Library is one of Cambridge’s most beautiful interior spaces, we made a strategic decision to retain it for student use, instead safeguarding our rare books and manuscripts in a secure and environmentally-regulated store. St Catharine’s may not have Oppenheimer’s notes, St Augustine’s bible, or Newton’s own copy of the Principia, but we do possess a collection of about 600 fifteenth- and sixteenth-century printed books, still in their original bindings.

The majority of these remain in the same condition as when they arrived in the library, dating back to at least the eighteenth century. This is unusual, as many colleges rebound older books in gold-tooled red leather throughout the nineteenth and twentieth centuries; a practice that often erased valuable evidence of earlier history. As we did not engage in this practice, our earliest printed books usually look as they did after their first century or two of ownership and use; and a programme of careful conservation keeps them this way.

Equally careful cataloguing is essential – yet describing these rare books poses a challenge. For many years they were unknown, and are in a variety of languages. They can contain a multitude of bookplates or marginal notes, have pages missing or added in, or might even be bound together. The early twentieth century regrettably witnessed a significant number of rare books and manuscripts scattered into fragments, disassembled by booksellers and collectors. In 1919, we were given one such fragment – a single leaf of Avicenna’s Canon Medicinae, published in Strasbourg at the birth of printing. Its publication date? 1473.

Over several years, my team and I have supervised a project to create high-quality catalogue records for these unique and distinctive books, subsequently publishing these records in local, national, and international databases. The actual work was carried out, voluntarily, by an Assistant Keeper of Rare Books at another College: we are incredibly grateful for her generosity and expertise. We hope this project, now complete, will further enhance our reputation as a historical library of note.
Understanding our Universe

St Catharine’s boasts a diverse community of brilliant minds excelling in their fields. Here, we meet some of our exceptional female Fellows making a sizeable impact on humanity’s understanding of the universe – be it nature, the earth, or the cosmos.

DR SOPHIE KOUDMANI (Junior Research Fellow 2021)

Sophie hails from Hamburg, Germany, and read Physics at Oxford, followed by a PhD in Astrophysics at Cambridge. She leads the University of Cambridge Black Hole Working Group, and recently spent over a year conducting research at the Centre for Computational Astrophysics in New York.

“I became interested in physics while at high school. I am captivated by tackling fundamental questions and unravelling mysteries – about our existence and the development of our universe – through cutting-edge experiments, observations, and theoretical models. Later, astrophysics stood out to me as an incredibly interdisciplinary field, merging various branches like particle physics, general relativity, and fluid dynamics to study extreme phenomena in the cosmos.

As a JRF I am fortunate to spearhead independent research projects and pursue ambitious ideas early in my career. I uncovered the pivotal role of massive black holes in shaping the evolution of dwarf galaxies, the most abundant galaxy type in our Universe. Prior to my research, these dwarf galaxies posed theoretical challenges known as the dwarf galaxy anomalies due to discrepancies between observations and models. By integrating black holes into new theoretical models and conducting an extensive suite of computer simulations, I revealed that black holes significantly influence the evolution of dwarf galaxies, particularly in the early Universe. This work has provided crucial benchmarks for the cutting-edge James Webb Telescope, which has confirmed many black holes in early Universe dwarf galaxies as predicted by my simulations.

I most enjoy the diversity of tasks in my role – it is truly enriching, and each day is different. From immersive research and problem-solving to engaging with peers at conferences, mentoring aspiring scientists, and advocating for inclusivity in physics, each aspect brings its own fulfilment.”

DR JENNI GIBBONS (Fellow 2016)

Jenni is a Canadian Space Agency (CSA) astronaut as well as University Associate Professor in Engineering and a Fellow of St Catharine’s. When she was selected to undergo astronaut training in 2017, she was the youngest candidate chosen by the CSA, and the third ever woman.

“From a young age, I liked building and making things, as well as being outside and learning about the world around me. At school, I became interested in physics and mathematics, but wanted to maintain and utilise my creativity in my studies. Engineering seemed like a natural fit for me; using science to creatively solve problems to improve people’s lives.

The idea of working in a laboratory and learning about new phenomena always appealed to me, so I focused my efforts on research and began my career at McGill University in Montreal, working multiple summers in
Chiara studied Physics in Rome before coming to Cambridge for a PhD in spintronics. Following a Junior Research Fellowship at Caius, she built her own THz spintronics research group in Cambridge as a Winton fellow, also benefiting from a Royal Society Research Fellowship.

“Picking Physics at University was a difficult choice - I wasn’t sure about job opportunities, so considered studying economics. Deep down, I knew this was not the right choice for me and ended up picking Physics without asking too many questions or making too many plans. Sometimes you need to trust your gut.

I think that there are very few things that are more exciting than being the first to understand a new piece of nature, however small. My ‘piece of nature’ is magnets. Magnets are extremely important to all of us because this is how we store the huge amount of digital data that we all produce every day: for example by sending an email or by uploading a video on TikTok.

As our society becomes increasingly digital, we must find new solutions to reduce the energy impact of storing and handling this enormous amount of data. In my group we look for new physics and materials that allow pushing the speed and energy limits for writing and reading magnetic information. Having a team of brilliant people who share my curiosity, and being able to help them thrive, is a great reward that gives me the energy and passion to overcome research.”
A College built on legacies

As St Catharine’s has traversed the centuries, legacies – or recognising the College in one’s Will – have been a constant in helping it to secure its future. In 1745, Mary Ramsden’s bequest to the College provided the funds to build and expand the site of St Catharine’s into much of what we know and cherish today. Her generosity also supported students with bursary funding well into the late nineteenth century. There can be no doubt of the lasting impact legacies can have, well beyond the time of the bequest.

Why I’m recognising the College in my Will

PROFESSOR DAME SARAH SPRINGMAN DBE (1983, Engineering; Honorary Fellow 2015) is a triathlete, civil engineer, and academic. She is Principal of St Hilda’s College, University of Oxford, where she lives with her wife, Rosie Mayglothling OBE, and their two cats.

“I came to St Catharine’s for an MPhil in Soil Mechanics and carried on with a PhD. I had taken my BA at Girton, but many of my friends had been at St Catharine’s and I liked the ethos and the sporty nature. Mr Dudley Robinson (Fellow 1955) and Dr Chris Thorne (Fellow 1963) were both particularly supportive during my time, the latter encouraging me to represent College in Cuppers cross-country and squash.

As Principal of St Hilda’s, I am now back in a collegiate environment: living in the Lodgings, with enjoyable views of beautiful gardens, the meadow and the River Cherwell. I hope to continue to help young people at university develop and mature into ‘future-ready’ graduates. Being a Head of House has also caused me to rethink my own philanthropy: I discovered that at Oxford and Cambridge, each student creates a financial shortfall for their College, based on the share received for a student’s tuition fees or accommodation income. This is around £6,000 per student at St Hilda’s, so we compensate through other earnings, such as investments or business opportunities. Richer Colleges may not catch a cold, but those that are smaller and less wealthy have to work very hard indeed.

Earlier generations of alumni may have benefitted from financial support – no tuition fees, or perhaps a scholarship or grant – so might be encouraged to give back that support, if they are able. Meanwhile, for younger alumni – who feel less able to support in their lifetime – a bequest entails the knowledge that one is still strengthening future generations.

My own legacy to St Catharine’s comes with no strings attached. I hope that it may help in a small way to enable the College to offer an opportunity to someone with potential to study at St Catharine’s, or to enhance the student experience in some way.”

Read more about Dame Sarah’s celebrated career on the Department of Engineering website: eng.cam.ac.uk/news/alumni-profile-professor-dame-sarah-springman

The Woodlark Society

Named for the College’s founder, Robert Woodlark, the Woodlark Society of St Catharine’s recognises those who have made a legacy in favour of the College. Membership is optional, and there is no obligation to tell us of your intentions to leave a gift – however, the Woodlark Society is a way for us to thank you for your generosity and plan for the next chapter.

Contact the Alumni and Development Office if you’d like to discuss leaving a legacy to the College: alumni@caths.cam.ac.uk
In the last year, it has been a genuine pleasure to meet so many of you. I have been fortunate enough to share in many joyful gatherings in College and elsewhere, including the US and Asia on recent trips. Some of those events were new additions to our events calendar and we were pleased that they have been so well supported. The team have been hard at work expanding our offerings: including the introduction of events in London and Durham among others, special services of Evensong for alumni, and the inaugural friends and family day (which will have just taken place by the time you read this).

It’s also been a pleasure to oversee the Alumni & Development Office (ADO) collaborating closely with our Alumni Society as they marked their centenary year in style. The regional Society branches have been organising many popular events (note to self: book early next time there’s a tour of Highgrove!). The eagle-eyed among you may have noticed the Society emails are now sent via the ADO, using branding that matches their lovely relaunched website: stcatharinesalumni.co.uk

We have also introduced our social media groups, especially for alumni. I hope those of you who have joined are enjoying them as a place to receive College news in a more informal setting, network with each other, and generally stay in touch. Links to both are available on our pages on the College website: caths.cam.ac.uk/ado

Another joyful occasion was the recent Catz May Ball. Although I didn’t quite make it to 6am like some of the attendees(!), it brought back many fond memories of my own undergraduate May Balls at St John’s. A huge well done to the Catz May Ball committee for pulling off such a stylish occasion, the first in six years. I was equally impressed with the huge uptake from ‘former students’ – we had over 150 alumni and their guests in attendance! Your time at Catz is never too far in the distant past to return and have a brilliant time...

Speaking of the distant past, it’s been such a busy and productive academic year that our Telephone Campaign in October 2023 feels rather a long time ago. A group of students had the pleasure of getting to know some of our alumni over the phone while fundraising to support the College community. It was a success by all accounts, and apart from anything else, the students who took part really enjoyed the experience and found it a massive boost to their confidence. So those of you who took the calls and had a chat with them, and even better, agreed to help with student support - thank you! We will be holding our second Giving Day in November, so do look out for information on that, and please do get involved.

The ADO continues to enjoy interacting with a thriving alumni community - who, it seems, are never short of fond anecdotes of your time at St Catharine’s. We always enjoy hearing them, so please stay in touch with us: caths.cam.ac.uk/keep-in-touch
Benefits for alumni
Did you know that as well as benefits and discounts offered by the University, St Catharine’s offers a range of benefits and services offered to our alumni? These range from High Table Dining and access to exclusive events to alumni discount on conferencing hire. Visit caths.cam.ac.uk/alumni-benefits

Upcoming events
Visit caths.cam.ac.uk/alumni-friends/events for a full list and to register.
Below are examples of just some of the events to look forward to in our alumni calendar.

7 September 2024
Members’ Reunion
(2000–02)

14 September 2024
Benefactors’ Garden Party

21 September 2024
St Catharine’s Society Reunion
AGM & Dinner

8 November 2024
Economics Society Annual Dinner

A Catz Crossword
This St Catharine’s themed crossword has been compiled by Marble – see page 4 to learn more about their identity! The coloured squares also spell out an anagram for a final puzzle...

The solutions to this crossword are available at caths.cam.ac.uk/wheel-crossword-solutions