

Selwyn

The magazine
for Alumni
of Selwyn College,
Cambridge

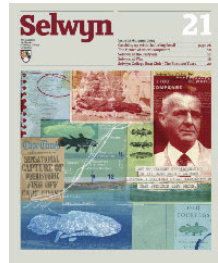


21

Issue 21 Autumn 2014

Catching up with the living fossil	page 06
The future of microcomputers	10
Selwyn at the Festivals	12
Selwyn at War	16
Selwyn College Boat Club - The First 100 Years	20





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Editorial



There is an image of Cambridge that everyone knows: age-old, beautiful buildings; punting on the river; students dressing up for May Balls. I have nothing but respect for those traditions. But in my first year at Selwyn I've seen another University too: one which is dynamic and a world-leader in the 21st century. I'm excited by how successful this University and this College can be by blending their past with a future in which even more can be achieved.

We know we cannot stand still. Britain is changing around us, and higher education is part of the tide of globalisation. Within Cambridge, Selwyn has acquired a reputation for academic strength and making our relatively limited resources go a long way; but other Colleges have learned those lessons too. They want the best academics and students just as we do – and, at a time when families across the UK are facing financial pressure, University fees are a burden and another area where there is a demand for value for money. Some students need support if we're to keep Cambridge and Selwyn open to the brightest, whatever their background.

I've been heartened by the spirit with which all at Selwyn are prepared to take on the challenges. Our debates about the College's strategy were vigorous but always ending in agreement: this is a place where we value both academic excellence and the strength of our community, and if we get it right each will reinforce the other.

As I have immersed myself in life here, I have been so impressed by the talent of our students, and by the brilliance of the teaching we offer them. In a world beset by bad news, we have the privilege of educating people who have enhanced their communities and made lives richer through their work and their learning. That is enabled by our benefactors past and present, and the task now is to be as bold about our ambition for the future as our founders were more than 130 years ago.

Roger Mosey, Master

News



Transforming skin into functioning nerve cells

Recent work by **Anna Philpott**, (SE 1985, PhD 1988, and now a Reader in the Dept of Oncology at Cambridge and Fellow of Clare College) has shed new light on mechanisms that promote the maturing of nerves during brain development in the embryo. Moreover, Anna's group has been able to use this knowledge to promote the formation of nerve cells from patient skin samples that can be used to test drugs for diseases such as Alzheimers and Parkinson's disease.

Anna's lab spends a lot of time trying to understand how the development of nerves is controlled in the very young frog tadpole; their nervous system development is very similar to mammals but the embryos that develop outside the mother are readily available in large numbers for

experimental manipulation. Using these tadpoles, Anna's lab found that specific transcription factors are modified by the addition of phosphate molecules, a process known as phosphorylation, and this can limit how well nerves mature during development in the embryo. By using this information to engineer transcription factor proteins that cannot be modified by phosphate and adding them to human skin cells, she found she could reprogramme human skin cells into nerve cells that were significantly more mature than have been generated previously, and which are therefore more useful as models for neurological disease of maturity.

Reflecting on the work, Anna said "When you reprogramme cells, you're



Opposite page: the development of the nervous system in tadpoles is similar to mammals. Above: Anna Philpott

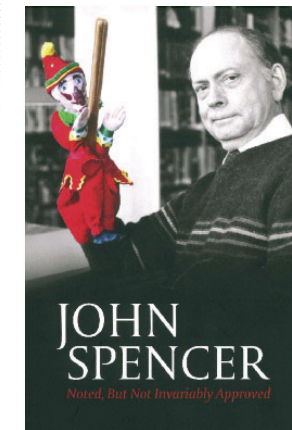
essentially converting them from one form to another but often the cells you end up with look like they come from embryos rather looking and acting like more mature adult cells. However, in order to increase our understanding of diseases like Alzheimer's, we need to be able to work with mature cells that look and behave like those you would see in older individuals who have developed the disease, so producing more "adult" cells after reprogramming is really important. To achieve this, a better understanding of how nerve cells mature in development will uncover ways to enhance the reprogramming process, as we have shown."

"Following on from our work in the nervous system, we have now demonstrated that the same method of phosphorylation control works to limit the activity of several members of this transcription factor family. Other members play important roles in generation of many tissues in development, for instance pancreatic islets, the cell type that fails in Type II diabetes. Hence, we are now using parallel methods to improve the function of insulin-producing pancreas cells for future therapeutic applications.

An enhanced understanding of how the embryo develops will be crucial in the future to underpin the rapid advancement of regenerative medicine, a field that will have increasing prominence as our society ages. I'm looking forward to an explosion of work in this area, not least because the Class of '85 is going to be in need of some serious regeneration soon!"

This work was funded by the Medical Research Council and the Rosetrees Trust.
The original scientific paper can be accessed at: <http://dev.biologists.org/content/141/11/2216.full.pdf+html>

A new book by **Professor John Spencer** (SE 1965 and Fellow) contains a selection of John's own case notes published in the *Cambridge Law Journal* between 1973 and 2013. With the exception of one note, all the notes were written under the strict CLJ word count of 1000 words and no more, providing a master-class in incisive, engaging note-taking. *Noted, but Not Invariably Approved*, published by Hart Publishing, March 2014.



The Classics group of 1956 all met recently – the first time they have all been together since the summer of 1959 when they graduated. The group (Terry Jones, Ron Impey, Keith Bisat and Don Cullington) had much catching up to do to and have resolved to reunite before the next half century .

Bell in Bloomberg Hall of Fame



Justin Bell (SE 2007) gained a place in the Bloomberg Hall of Fame in January 2014 thanks to outstanding results in the Bloomberg Aptitude Test (B.A.T.). The B.A.T. is a test of financial skills, principals and knowledge that allows participants to compare themselves with

and distinguish themselves from their peers. It is taken under invigilated conditions and is a multiple choice based test that lasts 2 hours. Prospective employers are able to search a database of test entrants by university, test score, subject studied, graduation year etc in order to find suitable candidates for vacancies they are interested in and request CVs from those candidates. As such it is a potentially invaluable exercise for anyone in the fledgling stages of (or is considering) a career in finance. Justin scored 680 (out of 880) which compares with the average score worldwide of 475 and the average from Cambridge graduates of 546, placing him 3rd in the world. Since leaving Selwyn in 2011 Justin has joined a stockbroker in the city called Oriel Securities as a trader of Investment Trusts.

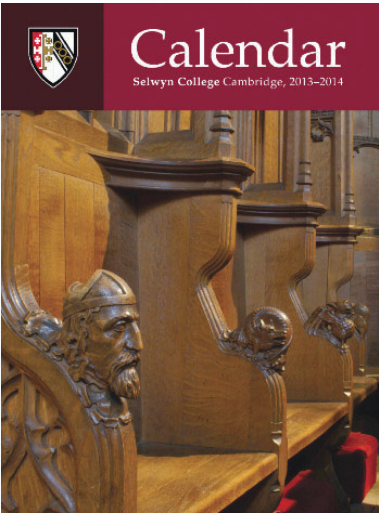
Fiona elected

Congratulations to **Fiona Morrison** (SE 1976) who has been elected as president-elect of the Institute and Faculty of Actuaries. Fiona will take on the role of President in June 2015; she will be the second woman to hold the post. Fiona studied Mathematics at Selwyn and went on to join Lane,



Clark & Peacock LLP as an actuary. She became a partner at LCP in 1984 where her work concentrates on UK pensions. While at Selwyn, Fiona rowed in the women's first boat and was President of CUWBC, winning three blues.

News



This year's College Calendar has an article by **General Sir Peter Wall** (SE 1975 and Honorary Fellow) on his army career since leaving Selwyn in 1978. Sir Peter talks about his experiences in Rhodesia, Germany, Bosnia and Iraq. His article gives a fascinating personal account of the impact of religious, ethnic and tribal influences on military operations.

Honours for Alumni

We would like to congratulate **David Fish** (SE 1975) who was knighted for services to the NHS and the **Revd Canon Dr Nicolas Thistlethwaite** (SE 1970) who has been appointed Chaplain to HM The Queen. **Christopher Hutchinson** (SE 1969) received an OBE for services to the International Atomic Energy Authority and **Professor Jeremy Sanders** (SE Fellow) received a CBE.

The meaning of success for two Selwyn women

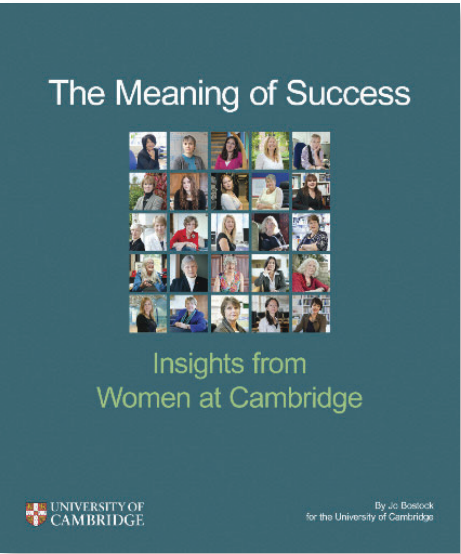
Two women from Selwyn are profiled in a book published this year by the University. *The Meaning of Success* profiles 26 women at Cambridge and features contributions from another 100. Women featured in the book are from across the spectrum of staff within the University and include administrative staff as well as leading academics such as Mary Beard. All the women were nominated for inclusion by senior members of the University as they were felt to be successful, inspirational women who had an interesting story to share.

Rachel Fogg matriculated in 1977 with a degree in MML. **Sheila Scarlett** who also studied MML at Lucy Cavendish is the Master's and Bursar's Assistant at Selwyn; she is also Junior Esquire Bedell – an office dating back to the thirteenth century – one of the University's part-time ceremonial officers.

Rachel is the Divisional Administrator for the Information Engineering Division, Department of Engineering and PA to the Head of Division. "I was absolutely certain that I wasn't going to be a stay-at-home mother; I was going to be a modern woman and go back to work.

Then financial reality hit and I realised that my salary might just about cover childcare for one child, but not three. I decided that if anybody was going to make a mess of bringing up my children, it might as well be me! It meant I had to radically change my mind about what I thought I was going to do.

Success is about working in a way that fulfils the potential you have. It's not necessarily about getting to the top of the tree; it's about using your gifts and aptitudes as best you can.



Rachel Fogg

I'm a linguist with a degree from Cambridge, and I could have had a career somewhere like the civil service. But I've looked to fulfil my potential in other ways."

Sheila says "I completed my degree at Cambridge later in life than most and with the added diversion of being a single parent... it showed me what I was capable of, indeed had been capable of for many years. It proved that I was an intelligent human being in my own right and that people believed in me. The acknowledgement and approval of others was hugely encouraging and provided the sort of confirmation on which I think many of us thrive."



Sheila Scarlett

Richard Newland (SE 1981) was the winning trainer at this year's Grand National. His horse, Pineau De Re ridden by Leighton Aspell, triumphed at Aintree with odds of 25-1. Richard studied Medical Sciences at Selwyn and went on to become a GP. He also established a number of healthcare businesses and gave up taking surgeries only last year. Horses have always been a passion for him, but he only started training them eight years ago. His stable in Worcestershire has a dozen horses and he enjoyed success in 2007 with Burntoakboy in the Coral Cup at the Cheltenham Festival.

Below: Trainer Richard Newland with Grand National winner Pineau De Re.

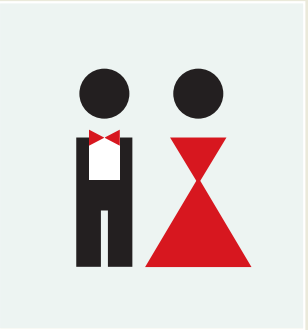


If you would like to keep up with day-to-day news from Selwyn, including pictures and videos of College life and events, then 'Like' us on Facebook www.facebook.com/Selwyn.College. Cambridge or follow us on Twitter @Selwyn1882

Diary

Note the date now!
May Ball, 2015
Saturday 20th June

There hasn't been a summer ball at Selwyn since 2008, when the 125th anniversary of the College was celebrated. So note the date – Saturday 20th June, and make plans to come to Selwyn for a night of music and entertainment.



Other forthcoming events
Events 2014-15

2014		
Dec 9		Carol Service
Dec 11		The Rugby Varsity Match
2015		
Mar 5		MA Dining Evening
Mar 7		1882 Society Lunch
Mar 14		The Parents' Lunch
Mar 28		MA Ceremony and Dinner (for those who matriculated in 2006)
Apr 11		1965 and 1975 Reunion Dinner
May 1		Ramsay Murray Lecture
May 14		MA Dining Evening
May 17		Friends of Selwyn Choir Evensong
Jun 6		The Lyttelton Dinner
Jul 3		Commemoration of Benefactors (for those who matriculated in or before 1960, and in 1970, 1980, 1990, and 2000)
Jul 4		Garden Party
Sep 19		1985 and 1995 Reunion Dinner
Sep 26		Alumni Day (including the Alumni Forum, Association Dinner and 2005 Reunion)

Choir Events 2015

Jan 17	8pm	Brahms Requiem	King's Chapel with CUMS I (dir. Howard Shelley)
Mar 14	7.30pm	Choral Evensong	Ely Cathedral
Mar 18	7.30pm	John Armitage Memorial concert	St Bride's Fleet St, London
July		Tour to Seattle, Vancouver and Victoria	TBC

Catching up with the living fossil

‘Get to nearest refrigeration in any case inject as much formalin possible cable confirmation that specimen safe’

Stuart Eves (SE Fellow in Veterinary Medicine) tells the story of Selwyn alumnus JLB Smith (SE 1919-1922) who discovered that something considered dead by scientists for 70 million years, was in fact alive.

In his own words, it was ‘preposterous’ that such a creature could have been alive all this time. The only previous encounter of JLB Smith (Selwyn 1919-1922) was with a specimen that had been infiltrated with rock around 200 million years beforehand. Further-more its descendants were thought to have become extinct some 130 million years later. Could science really have declared something dead 70 million years too early?

For science to lose a creature of this significance is something of an embarrassment. But in our defence, we didn’t even know he was missing: all evidence and common sense suggested he was lost to the fossil record along with the overwhelming percentage of species that had ever lived. It is, however, of great personal pride that a Selwyn alumnus was the first to recognise the absconder. For JLB it started an all-consuming obsession, and triggered a chain of events that would lead to international conflict, and a race to protect the discovery.

James Leonard Brierley Smith was born in South Africa in 1897. He excelled at school and read chemistry at Victoria College, Stellenbosch. Although the First World War interrupted his studies, he completed his BA in 1916, and MSc with distinction in 1919, arriving in Selwyn later that year for his PhD. This included varied research from Mustard gas and photo-sensitive dyestuffs. Upon its completion, he returned to South Africa and became first senior lecturer, and then professor in organic chemistry at Rhodes University, Grahamstown. He had extraordinary mental ability, described as having a photographic memory and being able to read 16 languages and speak eight. In his academic career, he was asked to give a lecture in Portuguese, which he subsequently learnt in three and a half weeks before delivering without notes. He was a man fascinated in the natural world, and for him there was little difference between an interest and an obsession. It was however, his boyhood love of fishing which lead him to publish

Illustrations: Sarah Hanson



‘...the first sight hit me like a white hot blast and made me feel shaky and queer, my body tingled. I stood as if stricken to stone. Yes, there was no shadow of doubt, scale by scale, bone by bone, fin by fin, it was a true Coelacanth.’ ‘

numerous articles and books on fish over his lifetime, and would bring him, on the 16th February 1939, to stand in front of something that was seemingly banished to the fossil record. ‘Although I had come prepared, the first sight hit me like a white hot blast and made me feel shaky and queer, my body tingled. I stood as if stricken to stone. Yes, there was no shadow of doubt, scale by scale, bone by bone, fin by fin, it was a true Coelacanth.’

Fish have long been classified into two main taxonomic groups. The Cartilaginous group contains sharks and rays, while the Bony fish contain the more classical fish species. However, during the Devonian period (420 to 360 million years ago), in an era known as ‘the age of fishes’, a third and extremely small group developed as a subset of the bony fish, the so called ‘fleshy finned’. The characteristic difference was the inclusion of bones in the fin projections, meaning that these fish had the necessary skeletal axis to bare weight, a necessity for the colonization of the land. There are only three known groups in this class, the freshwater lungfish, the extinct Rhipidistia, and the Coelacanth

During the Devonian, the worlds’ landmass is thought to be desolate, save for a few small spikey plants and the early insects. However, at the end of the period, it is suggested that a single species of these fish used the very appendages that gave rise to its name, to leave the water and conquer the land. In this guise it would be called *Ichthyostega* – the walking fish, the proposed origin of all land dwelling tetrapods. The future of all amphibians, reptiles, birds and mammals would hinge on these tentative steps.

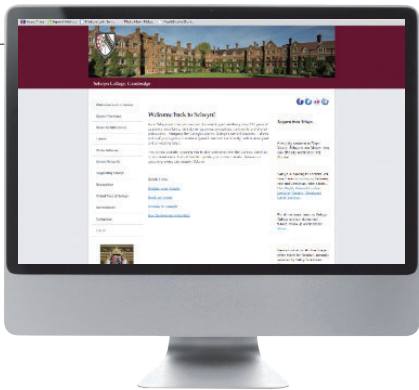
This first living Coelacanth specimen had been discovered on the 22nd December 1938, in South Africa, some 46 days before JLB first stood in front of it. Marjorie Courtenay-Latimer, curator of a small museum in East London, had been searching for potential specimens in a haul of sharks from an incoming trawler. The Christmas weather was hot and humid, so time had been of the essence. On picking through the fish, she found what she recounts as the ‘most beautiful fish I had ever seen.’ It was around 5ft long and 127lbs, with a



pale mauve and white flecked colouration accented with an iridescent sheen. Neither she, nor the trawler captain had seen anything like it before. Importantly, something other than its beauty intrigued her about the fish, so she took it back to the museum with the hope of getting it to her friend JLB. She posted a pencil drawing, but sadly, he was in Knysna, 350 miles from his desk in Grahamstown, so he did not receive word of the find until the 3rd January 1939. However, the genius of JLB meant that he was instantly able to associate a drawing of a 5ft fish caught weeks before, with a 12-inch long fossil some 200 million year old. Barely believing his own suggestion, he wrote to Marjorie urging her to save the specimen intact as the internal organs may give clues to the development of land-dwelling essentials such as lungs. Sadly, while Marjorie had been well aware of the potential significance of her find, the South African climate and technology of the time limited her ability to preserve the whole animal - she had been forced to have the fish eviscerated and prepared by the taxidermist. The critical soft tissues had been destroyed.

Standing by its side, JLB instantly confirmed to himself this was a present day Coelacanth, but convincing the scientific community would be a different matter. The world at large believed this creature to be long extinct, as no trace existed in the fossil record beyond 70 million years ago. JLB knew he must wait for official confirmation of its identity, and while he planned to announce the discovery in the leading British journal *Nature*, the news had leaked and as the local journalists descended he was concerned others may speculate on its identity. He feared that someone else would name the fish. Refusing to be rushed, it was meticulously studied before his findings being published in *Nature* in February of that year – JLB sealing its name as *Latimeria chalumnae*. While the suggestions of its identity had indeed been publicised, the article put an end to the majority of the world’s scepticism. The paper did sadly result in criticism of its honorary naming due to Miss Courtney- Latimer’s loss of the viscera. JLB responded vehemently in defence of his friend, stating that without her energy and determination the whole specimen would have been utterly lost. ‘The genus *Latimeria* stands as my tribute’.

To book events, update your details, read the latest news from College and find old friends, join us on the Selwyn Alumni Online Community at www.selwynalumni.com



Although obsessed with the specimen, the loss of the internal organs haunted JLB. The small amounts of soft tissue that remained from the taxidermy hinted at the key position of the species in evolutionary history of tetrapods. Over the next fourteen years, JLB realised he would struggle to find another specimen alone, so in 1952 he persuaded the South Africa Council for Scientific and Industrial Research, and the University at Grahamstown, to provide a reward of £100 for the first two new specimens. Fundraisers from the museum paid for the printing of advertising fliers – which were to be distributed the length of the East African coastline.

His break occurred later that year during a trip to Zanzibar, when he was introduced to fellow amateur ichthyologist and schooner captain Eric Hunt. After several evenings discussing fish, and especially the ‘living fossil’, Hunt took a handful of leaflets to disseminate on his travels along the coast. On Christmas Eve of that year JLB received the long anticipated telegram:

‘HAVE FIVE FOOT SPECIMEN COELOCANTH. INJECTED FORMALIN. KILLED TWENTIETH. ADVISE REPLY. HUNT. DZAUDZI’

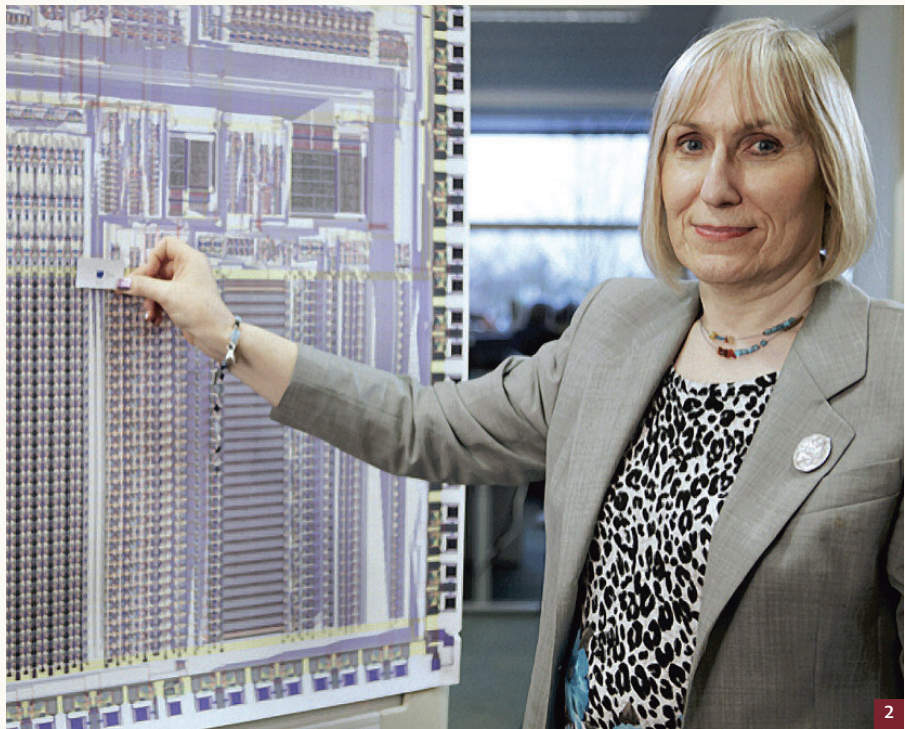
Dzaoudzi was a small islet in the Comoros archipelago, a few hundred miles off the Mozambique coast in the Indian Ocean. The Comoros at that time were under French jurisdiction, and were the authorities to identify what had been found in the territory, would rightly claim the specimen. In order to retrieve the fish, JLB went to the top, drawing on his connections to contact the South African Prime Minister D.F. Malan, who made a bold decision in ordering the Minister of Defence to provide a plane. In the end JLB spent less than three hours on the islands. As soon as he had positively identified the fish and taken very basic recordings, he was determined to not let his prize be taken from him - not least because it represented yet another species of living coelacanth. JLB suggested the name *Malania hunti*, after the two men that made the rescue possible. But Hunt requested that the French be honoured. They settled on *Malania anjouranae*, commemorating

the island of its discovery. They had been lucky. It transpired that although the message of its capture had been sent to the French scientific base in Madagascar, it had been miss-communicated in transmission. But for this, the Governor would have surely prevented its removal.

After a fourteen year search, JLB had an anatomically complete Coelacanth. The specimen was damaged, but he found some extraordinary features; the bones in the fins, for example, did indeed reflect tetrapod limbs and the structures of the gills resembled our own jawbones, suggesting their evolutionary origins. Importantly they came to realise that this was not just a surviving fossil, but a fish which had survived for 70 million years while the world around it had changed so much.

As a result of the loss of such a prize, the French subsequently restricted all investigations on the Comoros Islands. The ensuing years would produce several further catches, all of which would be claimed and researched far from JLB’s influence. However, Honours were nonetheless showered on him, being made a Fellow of the Royal Society of South Africa, an Honorary Foreign Member of the American Society of Ichthyologists and Herpetologists, a Corresponding Foreign Member of the Zoological Society, London amongst many others. He died on the 8th January 1968 at his home in Grahamstown, at 70 years of age.

Further information:
Natural History Museum: www.nhm.ac.uk
BBC: www.bbc.co.uk/nature/life/Latimeria



This is a cautious look - through examining what's happened so far and showing why it happened, I'll try to peer into the future.

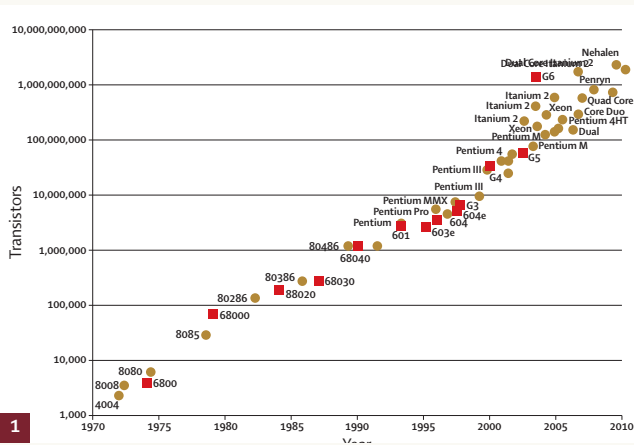
The first thing is 'Moore's Law'. Which isn't a law, really - Gordon Moore at Intel made an observation that the number of transistors on a particular area of silicon doubled every two years. Now this is taken as the driving force for the development of new silicon manufacturing processes - so it's a self-fulfilling prophecy. We all know the "law" will eventually run out - you can't make things infinitely small. In the graph (image 1) various Intel and Motorola microprocessors show the dramatic increase in transistor count over the years.

Here's another way of looking at it: on the wall behind me in image 2 (left) is a plot of the very first ARM processor - in my hand, to the same scale, is a plot of the modern equivalent: the small black dot of the Cortex M0+ is 70,000 times smaller than the original.

The increase in number of transistors means that over time microprocessors could have more complex instruction sets. Looking back at the 6502 microprocessor from 1975 that Acorn used to make the BBC Microcomputer. This processor was 21mm² with 4,000 transistors which ran at 2MHz in the BBC Microcomputer (image 3). It had 8 bit operations that took two cycles.

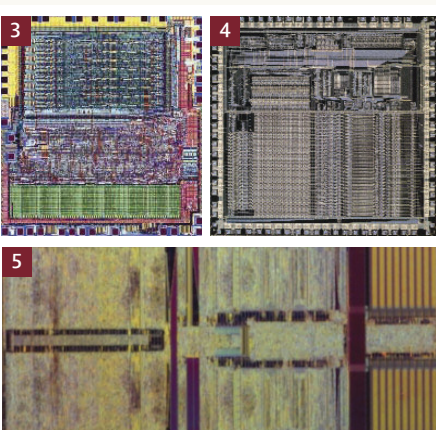
The dramatic rise in computing power and speed over the last thirty years will not be repeated. A revolution in software is needed in the future, argues Sophie Wilson (SE 1976).

The future of microcomputers



This page
1: Moore's Law
2: The changing size of microprocessors
3: The 6502 microprocessor
4: The ARM1 microprocessor
5: The Firepath microprocessor

Opposite page:
6: Amdahl's Law
7: Power Density



So what happens when we can use more transistors, provided by Moore's Law? With 25,000 transistors available in 1985, ARM1 (image 4).

The smaller transistors are faster - ARM1 ran at 8MHz - and by using more of them we get access to 32 bit operations. We also use transistors to improve the way the processor works - in contrast to the 6502, ARM1 does an operation every cycle. ARM1 was 37mm² and descendants of it have been used in over 50 billion chips by the start of 2014.

Image 5 - the Broadcom FirePath processor, there are 6,000,000 transistors. Although you can see some structure in the picture it looks messy rather than the neat regularity in the ARM picture. That's because there are simply so many transistors.

With more transistors, FirePath's instructions can be more complicated - eight 16 bit multiplies per cycle while doing eight 16 bit loads per cycle - and its cycles are much faster both due to better transistors and to using lots of them to provide a better implementation. It ran at 330MHz in 2002 and was only 7mm². If you have broadband provided by ADSL, then the odds are there's a FirePath at the other end of the wire.

There are diminishing returns in general performance from making more complicated instructions. Manufacturers prefer to use more microprocessors instead - so smaller transistors means more microprocessors. There's an immediate problem to doing this. Gene Amdahl observed that the gain in performance through the use of multiple microprocessors is limited by the sequential part of the programme (image 6).

This law has really dramatic effects. Imagine a programme which is only 5% sequential - 95% of it can be executed in parallel. The law says that no matter how many processors are available, the maximum speed-up is restricted to 20x. With 75% of a programme capable of being executed in parallel, then the maximum speed-up is only 4x. Transistors do get more power efficient as they become smaller - but we use so many more of them in a small space that things start getting hot. That old desktop computer with the fans that heats your small office at home up - all that heat is coming from a few square centimetres of silicon. When your laptop heats your lap, there's barely a square centimetre doing that, when your phone gets warm it's from less than a square centimetre. In this chart we see that microprocessors are easily hotter than your cooker at home - and we can see that there had to be a shift off to the side by increasing parallelism instead of frequency - to keep them from getting hotter than a nuclear reactor or rocket nozzle (the label "C2D" is Intel's Core 2 Duo, "Ci7" is Intel's Core i7-xxxx series) (image 7).

As we go forward, we simply don't have the ability to dissipate the heat that would be produced if we ran all the transistors at once. Modern desktops, laptops and phones keep their processors turned off as much as possible, turn them on at their fastest for only brief amounts of time and try to turn them off or run them as slowly as they can the rest of the time.

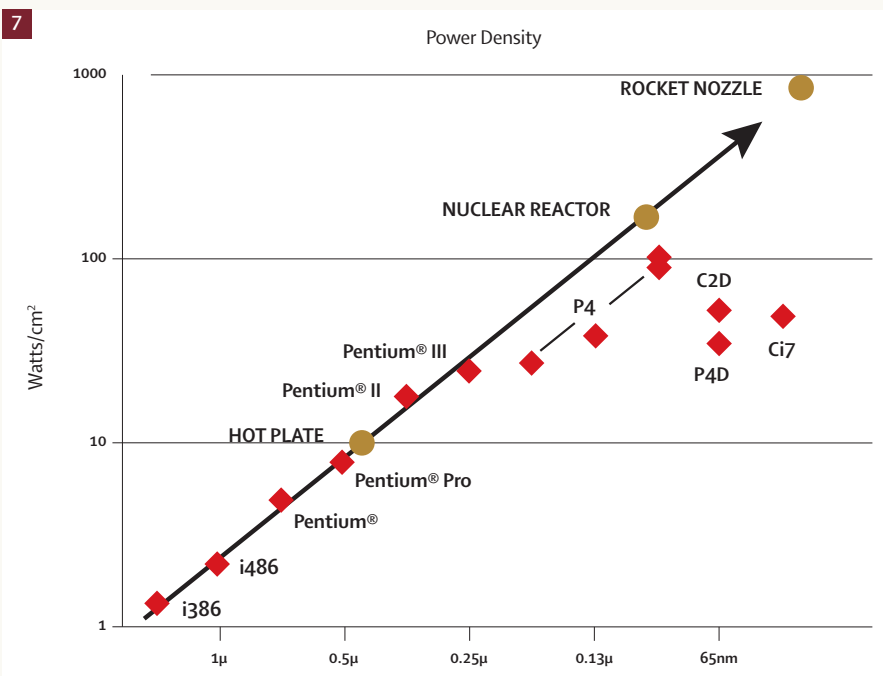
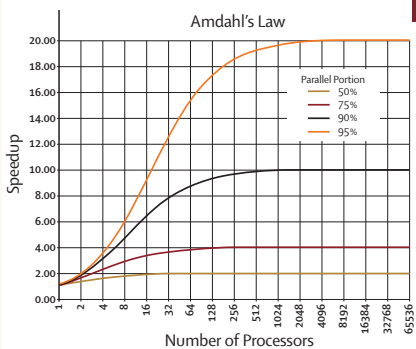
There are physical limits to how much smaller

we can make transistors, though they're still quite some way off. However, there's another limiting factor already starting - economics. In the past, smaller transistors cost less than large ones. A given area of silicon would cost much the same as it used to, but have many more transistors on it. Now it is so complicated to produce smaller transistors that the manufacturing process for them is more expensive and the transistors themselves have similar cost to larger ones. They remain better transistors - smaller, faster, more power efficient. As consumers of transistors, that's clearly quite an issue - we've got used to a world where the next thing is better, faster and cheaper and it will be quite a shift for it to cost more if it uses more transistors.

So I reach the end of this article. I'd like to make a point about predictions - they're very hard to make, especially about the future (no, not Einstein, nor Yogi Berra, Mark Twain, Sam Goldwyn - see <http://quoteinvestigator.com/2013/10/20/no-predict/> for the original Danish appearance in 1948). In April 2002, the head of Intel predicted that they'd have 30GHz, 10 billion transistor chips by 2010 - we've seen some of the reasons that didn't happen.

In conclusion, the future is one of parallel processors - multiple processors on a single die, ever more specialised to the task in hand: we can afford to design in processors which excel at each specific task and only turn them on when they are required. The power efficiency of our computing devices will rise - batteries will last longer for a given functionality. Costs of devices won't fall so quickly. The next generation of programmers will need to learn how to use parallel computation more effectively.

'the next generation of programmers will need to learn how to use parallel computation more effectively'



Selwyn at the Festivals

Literary Festivals have become highlights in the cultural calendar. Three Selwyn members share their experiences of tents, topical science and people called Bernard...

Top 5 Literary Festivals

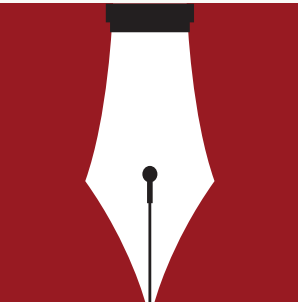
March:
Bath Literature Festival
bathfestivals.org.uk/literature/

April & November
Cambridge Literature Festival
www.cambridgeliteraryfestival.com

May
Hay Festival
www.hayfestival.com

August
Edinburgh International Book Festival
www.edbookfest.co.uk

October
Cheltenham Literature Festival
www.cheltenhamfestivals.com/literature



Robin Hesketh (SE Fellow) at the Hay Literary Festival

I must have been mad. The only explanation really when you're suddenly reminded of something you would only have agreed to whilst separated from your senses. Like having tea with your mother-in-law but much, much worse (oh yes there is!). Own fault of course. I'd just spent six weeks in Australia – an excellent way of detaching yourself from reality, especially as I'd been on a lecture tour promoting my books! Scientists just don't do that sort of thing – so no wonder I'd lost the plot. I had too.

Six weeks in hotels made be realize why pop stars and professional cricketers sometimes go off the rails. In the end, tugging from one gig to another, even with wonderful people and places, stunning flora and astonishing fauna thrown in, had me just longing for home. But it was for the very next week after I returned that I'd made that commitment, many months earlier. To do it. Give a lecture. In a field. In Wales. In May. And of course, the weather forecast was awful.

A dread image assailed me of a tent with water pouring in – bit like my earliest memory of London stations when repairs to bomb-damaged roofs still only amounted to suspended, holey tarpaulins, so you had to dodge the waterfalls. I'm at one end in wellies clutching a broly, desperately straining the weakest part of my anatomy (my voice – now, now) to reach the back row of deck chairs as they slowly sink beneath the Welsh mud.

But reality was a real shock, as it so often is, when I finally made my appearance at The Hay-on-Wye Festival of Literature and the Arts. To be sure, it was in a field but in a construction not so much marquee as

portable theatre. A four-hundred seater, raked auditorium, state-of-the-art audio and video systems complete with an IT expert to take care of just me! Add to this a packed house (I almost felt embarrassed as the evening before I'd been to an interview with Alfred Brendel and the place was only about half full) who were incredibly engaged and stimulating to talk to about cells, molecules and cancer (yes, really!!). After a fifty minute warble and a long Q & A session, quite a lot of the audience (bless 'em!) made it to the book-signing tent (aka a vast marquee). So there we were, autographing away with Lord 'Bob' Winston nearby (longer queue), Sebastian Faulks outside in the tea tent (couldn't get in) and Paddy Ashdown (getting his perm checked out in the Green Room). I think Brendel had gone home by then. And I reckoned Australia surreal!

All this because the Hay Festival has got into having a science theme. As one of the organisers revealed after congratulating me on my lecture, they'd been amazed when they started this (in collaboration with Cambridge University) to discover that there were scientists who could actually stand up, speak well and entertain whilst making important subjects understandable to non-experts! Gee. These arty folk, eh: what will they come up with next?

So let's hear it for The Hay – for being brave enough to 'do' science and for inviting me to help. And for turning my doubts and trepidation into an unforgettable experience. Brilliantly done too by the University's organisation that facilitates such collaborations and, from me, special thanks to Mandy Garner and Claire Baxter.

I'm now available for any events in fields, Welsh or otherwise.

Dr Robin Hesketh is a retired Fellow in Biochemistry. His latest book *Betrayed by Nature: the War on Cancer* was published by Palgrave in 2012.

'To do it. Give a lecture. In a field. In Wales. In May.'

Robin Hesketh



Marcus Ginn

Amer Rana (SE Fellow) at the Cambridge Literary Festival

The Cambridge Literary Festival is really quite unique with something seemingly for everyone. During the festival there are even special 'Thinking Aloud' sessions, where you can witness a flourish of topical science stories amongst the backdrop of the arts; the theme for one of the sessions this year was stem cells and it was held at Trinity College.

I gave a talk on how stem cells are being used in the field of regenerative medicine, giving the example of how we might use personalised stem cells to 'mend a broken heart'.

The heart is made up of around six billion cells, consisting mainly of muscle and blood vessels. When one of the blood vessels around your heart becomes blocked then oxygen rich blood cannot feed the heart muscle or the remaining blood vessel down stream of the blockage, and so the cells making up these structures die; this is how a typical heart attack occurs and this heart breaking process could cause a person to loose around one billion cells. But of course your heart could break for other reasons too.

To mend a broken heart we need to replace the lost, damaged or diseased cells or we need to find new medicines that will stop a heart damaging disease or reverse it. One-way might be to grow new cells and tissues that could be used to replace the ones lost or could be used for testing medicines on to check they work before giving them to patients, a type of 'tailored medicine' scenario. Stem cells could be used to do this. A stem cell has two important properties: (i) it is able to change into a multitude of cell-types when put into the right conditions and (ii) it is

usually able to make more stem cells.

There is a very special kind of stem cell called a pluripotent stem cell. This stem cell can change into any cell-type found in the body, so perfect for mending a broken heart or almost anything else. This type of stem cell is normally found in the developing embryo, but in 2006 and 2007 scientists showed we could artificially make stem cells very similar to the embryonic pluripotent stem cells by giving a set of particular genes to an adult skin

cell. These new cells became known as induced pluripoent stem cells (iPSCs). This means that it is now possible to make pluripotent stem cells on a patient-by-patient basis that in time could be used for regenerative medicine purposes. However, there are several hurdles to overcome before we can achieve this. These include: (i) the generation of clinically safe iPSC from all individuals, (ii) being able to change the iPSCs into a specific cell type at will and (iii)

'To mend a broken heart we need to replace the lost, damaged or diseased cells

developing effective ways to delivery the cells made from iPSCs to target organs or using them to setting up screens for new medicines. My lab, as well as many other labs in the world, has gone on to change (differentiate) these iPSCs into blood vessels and heart muscle. This is done by treating the iPSCs with a cocktail of chemicals that mimic embryonic development of the cell type you wish to make. These differentiated cells are not suitable yet for transplantation into patients but we are able to use the differentiated cell to study cardio-vascular diseases and help discover new medicines to treat them.

My talk ended with me describing ways in which researchers are considering how they might build three-dimensional tissues or organs for transplantation. This might include building organ 'skeletons' engineered using protein scaffolds assembled by 3D printers or using 'ghost organs', where donor organs that are unsuitable for transplantation are de-cellularised, so that all the cells fall off leaving the organ's 'skeleton', which can be re-cellularised using patient-specific iPSC-derived cells. It is hoped that such organs won't be rejected when transplanted to the patient from whom the iPSCs were obtained.

The audience of around 80, which comprised a majority of non-scientists, were very engaged and asked a multitude of questions in a discussion session after the talks. I enjoyed the whole experience very much. Engaging the general public in lively topical debates keeps the applied science we do relevant and focused and can give hope to some that need it too.

Dr Amer Rana is the British Heart Foundation University Lecturer in Regenerative Medicine. He is the author of many scientific publications.

Amer Rana



Marcus Glens

Viv Groskop (SE 1991) at Latitude

Arts festivals have become a major fixture of the cultural landscape over the past few years. So much so that many of the people who run the bigger ones (and I'm the artistic director of the ten-day Bath Literature Festival which features over 200 authors) are fond of complaining that "every piddling little village now has its own arts festival."

I have performed at dozens of these jamborees over the past year and have become a great fan of British festivals' unpredictabilities and eccentricities. When they're well-organised, they're like slick machines. When they're not so well-organised... Well, that's when they get really interesting.

Weirdly, there's no shortage of audience numbers. This is incredible given how much competition there is for people's attention. Even with instant 24/7 access to writers and performers on radio, television, Twitter, Facebook and YouTube, it seems that nothing beats being in the same room as another human being. Or, occasionally, in the same leaking tent. Because increasingly these festivals are pop-up affairs in a field. As a stand-up comedian I've played a yurt at Glastonbury to seven seemingly tripping hippies and a sleeping whippet. Other times it's surprisingly posh. I've done a lunchtime version of *Jackanory* to a genteel audience of pensioners in Harrogate in a hotel lobby usually used for weddings. At one of the most memorable events I've done, I was interviewing John Sessions, the actor and *Whose Line Is It Anyway?* legend, in a marquee in the grounds of a Scottish stately home. He's a childhood hero of mine. I pretended it was our wedding (unlikely in the circumstances if you know anything about John Sessions).

Sometimes these things are fun. Sometimes they're painful. The two aren't mutually exclusive. I've attempted to hold the attention of three hundred people sitting on the grass in a circus big top at *Latitude*. People wandered in and out. Some fell asleep. Others had been asleep when I started and were very surprised to find me there when they woke up. There was a mass exodus to see American rock duo The Black Keys halfway through. A five-year-old girl came and sat on the ground right in front of me just when I was getting to the only rude sentence of material I have. I hope her mum enjoyed explaining the word in question. I decided



Nick Salmon

I would judge the gig a success if anyone remained by the end. There were still some bodies on the floor when I finished. So officially I won.

In Edinburgh, the king of the festivals, you get every extreme, from the polite, intellectual audiences of the *Book Festival* to the late-night crowd at the *Fringe*, some of whom seem to have come for a fist fight rather than to hear some jokes. That's pretty rare, though, even with comedy audiences. The great thing about festival crowds is that they're generally open-minded, relaxed and not too demanding. Very much unlike one of the toughest gigs no comic would ever want to play: Selwyn Hall at a reunion dinner. I just about pulled it off. Or so I thought until one of my year gave this review: "Quite funny, I suppose. For a woman."

One of the best? It's Cambridge Literary Festival, of course. I was booked to do

'People wandered in and out. Some fell asleep. Others had been asleep when I started and were very surprised to find me there when they woke up'

a one-hour solo show, *I Laughed, I Cried*, about an attempt to perform 100 stand-up gigs in 100 consecutive nights, at the *Union*. It was a lovely room, next to the bar: perfect lay-out, strong lighting. The crowd was just what you want: up for it but not too rowdy. All except for one man, who was so chatty and (overly) responsive that I ended up having to make him part of the act. I teased him for his unusual name - Bernard - but couldn't see much of him because the lights were so bright. It wasn't until he came up to say hello at the end of the show that I realised it was my own Uncle Bernard, whose voice I had completely failed to recognise.

Viv Groskop is a writer and stand up comedian. Her memoir *I Laughed, I Cried: How One Woman Took On Stand-Up and (Almost) Ruined Her Life* is published by Orion.

Selwyn at War

This year marks the 100th anniversary of the declaration of the First World War (5th August 1914) and the 70th anniversary of start of the Invasion of Normandy (6th June 1944 – D-Day). This year, we have been commemorating those Selwynites who fought, and those who fell, in the conflicts whose anniversaries have taken place in 2014.

Illustration: Simon Pemberton



World War I medal citations for Selwyn alumni

5th August 1916
E. C. H. Shillaker (SE 1913) – a Lieutenant in the West Yorkshire Regiment, received his Military Cross for conspicuous gallantry and determination. He volunteered for a reconnaissance mission described as ‘dangerous’ even by the extreme standards of the war. When he reached the

parapet of the enemy’s position he was spotted, shot several times and received around 10 shrapnel wounds. Despite this he found cover in a nearby shell hole, where he sheltered for long enough to avoid enemy fire. Despite his wounds he then completed his reconnaissance alone and brought back his report.

25th November 1916
Revd C. H. Weller (SE 1898) – a British Army Chaplain, was awarded the Military Cross for conspicuous gallantry and devotion to duty. He remained calm and compassionate on the battlefield when attending to wounded soldiers, despite coming under heavy enemy fire

without the means to defend himself. He was ‘instrumental in saving many lives’ and later, despite having been severely wounded, continued to perform his duty with the utmost professionalism.

Selwyn in World War 1...

483
served in either the Army or the Royal Navy during the War

70
lost their lives

73
wounded

7
made prisoners of war

2
of the seventeen College servants who fought were killed

8
young men who had gained places at Selwyn but lost their lives before they were able to matriculate.

An act of bravery

Despite the social and political significance of the declaration of war in 1914, the initial impact upon Selwyn’s ranks of academic staff was comparatively undramatic. None of the College’s Fellows was young enough to be sent to the front, and all avoided being drawn into civil administration. The brunt of the War’s impact was borne by the young students of the College, past and present, of which 483 served in either the Army or the Royal Navy during the War. Of those members on active service, seventy lost their lives, seventy three were wounded, and seven were made prisoners of war. Two of the seventeen College servants who fought were killed, as were eight young men who had gained places at Selwyn but lost their lives before they were able to matriculate.

Despite the sense of overwhelming tragedy that pervades most recollections of the Great War, many records survive, both in the Selwyn Calendar and the College Archive, which demonstrate that amidst the tragedy there were also instances of extraordinary bravery and strength of character by Selwyn men. Many of those men were decorated or mentioned in despatches; their medal citations stand as reminders of their extreme fortitude.

A chance meeting

The College Archive houses this remarkable letter (right) written by **Montague Spinney** (SE 1906) in 1969 in which he recalls his last encounter with his Selwyn friend **Robert W. M. Close** (SE 1907) when the two met by chance in the melee of the Western Front.

A team decimated

Robert Close was not unique in being a Selwyn man who fell on a front line that he shared with friends from Selwyn. One of the worst-affected student collectives was the College Football team which fielded a squad of twelve men in 1913. By the end of 1918 six of the twelve had been killed. The team was successful in the 1913/1914 season, winning 12 of their 14 matches. The Calendar for 1914 reports that the “soccer side can look back on the year’s

performance with extreme gratification, as after several years of vain endeavour they have succeeded in finishing head of the 3rd division, thereby gaining promotion for next season”. It is a poignant synchronism that in the 2013/2014 football season, both of Selwyn’s Men’s Teams finished within the top three positions of their respective divisions, with the 2nd IX replicating the achievements of their forebears of a century ago by winning promotion at the end of the season.

A chance meeting: Montague Spinney and the letter.



Suddenly up came The 50th Div., & a young officer came up to me & asked if I was in charge. I said “No”, he’d found them over in the farm-house nearby.” He looked at me – for we all looked alike in our Tin Hats & Khaki, – and said “My goodness, Spinney, what are you doing out here” Then we parted & I never saw him again. He was a fine lad & I always liked him at Selwyn.



1st June 1918
D.P. Grant (SE 1914) – a Captain in the York and Lancaster Regiment: awarded the Military Cross. During a particularly forceful attack by the enemy he played a key role in reorganising troops and fortifying their positions. The British troop positions withstood the attack

thanks to Captain Grant’s cool and calm leadership in spite of the most testing of circumstances.

26th July 1918
D. J. Wardley (SE 1912) – a Captain in the Royal Fusiliers, was awarded the Bar to the Military Cross for conspicuous gallantry and devotion to duty. On several occasions he placed himself in harm’s way in order to rally troops who were falling back under heavy shell and machine

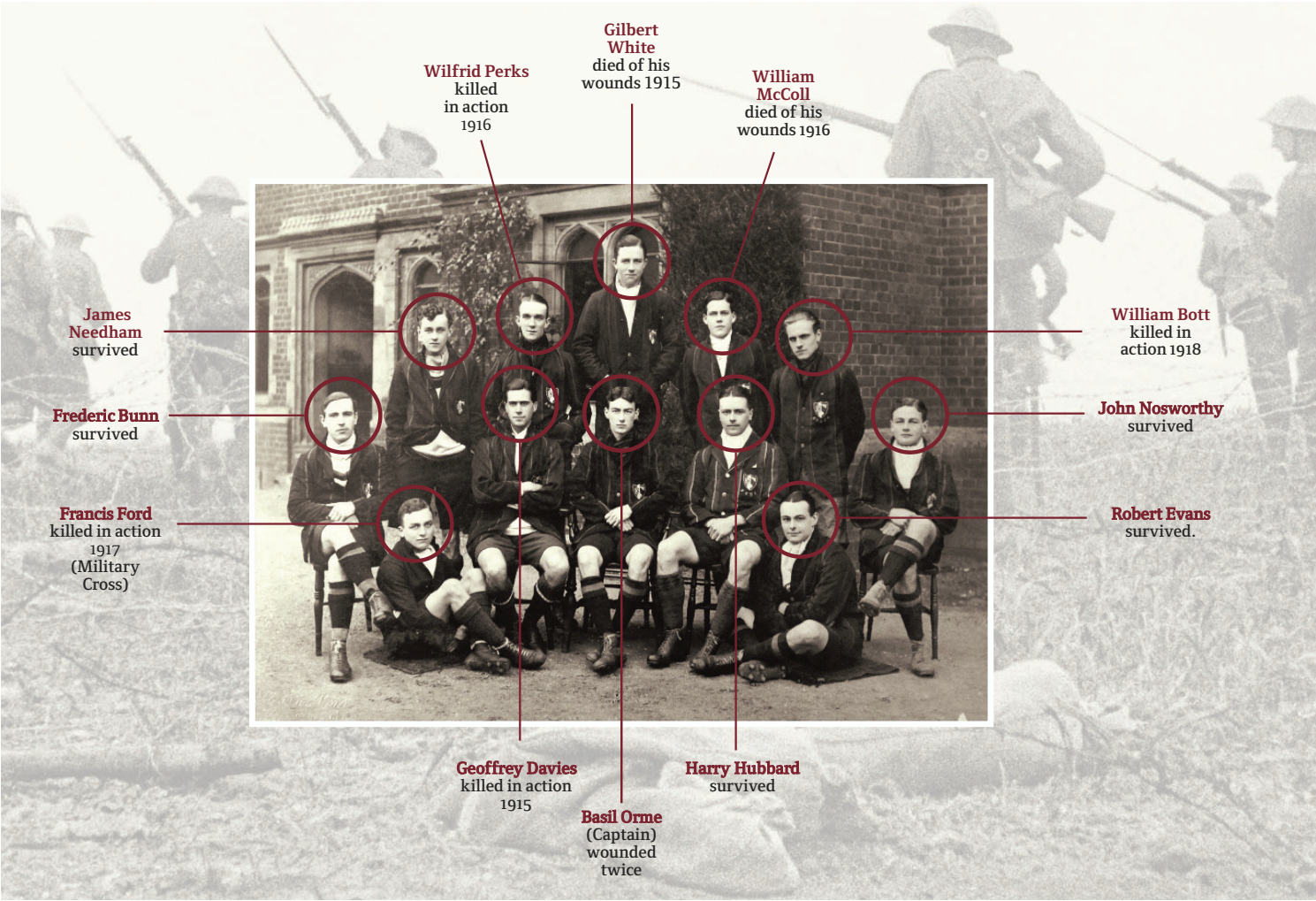
gun fire. Later, while acting as Brigade Major, displaying the greatest courage and ability, he played a key role in coordinating the defence of strategically valuable positions at crucial times in the battle. He had received his Military Cross on 16th August the previous year, whilst attached to

the London Regiment, for remaining ‘constantly on duty’ during several days of intense fighting and performing a solo reconnaissance mission, all while under heavy enemy fire. Despite the extremity of the circumstances, both of his citations make reference to the calmness, coolness,

and gallantry with which he acquitted himself on the battlefield.

A team decimated by war

The college football team pictured in 1913.



World War I medal citations for Selwyn alumni (continued)



16th September 1918
R. T. Raine (SE 1909) – a Captain in the Royal Army Medical Corps, was awarded the Bar to the Military Cross for conspicuous gallantry. His citation reads that ‘he attended the wounded under heavy rifle and shell fire and superintended their evacuation. By his

devotion to duty he set a fine example to all ranks’.



16th September 1918
R. J. Stockdale (SE 1914) – a Lieutenant in the Durham Light Infantry, received the Military Cross. When orders were given for the front line to withdraw, Lt. Stockdale (who was in support with his company) saw that the enemy was advancing so quickly on the withdrawing front-line of

British troops that they were likely to be overwhelmed. He took the decision to lead his company in a counter-attack, delaying the enemy charge for long enough to allow the withdrawing troops to reach cover. In this action he was wounded in the thigh and arm.’

A new use for the college

The Second World War brought with it many challenges for Selwyn. Parts of the College were requisitioned for the billeting of military personnel, just as had been the case between 1914 and 1918.

A black mountain in the garden

A black mountain appeared in the College garden – a result of the Bursar’s foresight in stockpiling coal before rationing became prohibitively strict. Prof. William Brock and Dr. Peter Cooper’s *Selwyn College, A History*, gives an excellent and thorough account of Selwyn during the ‘War Years’.

A solitary candle

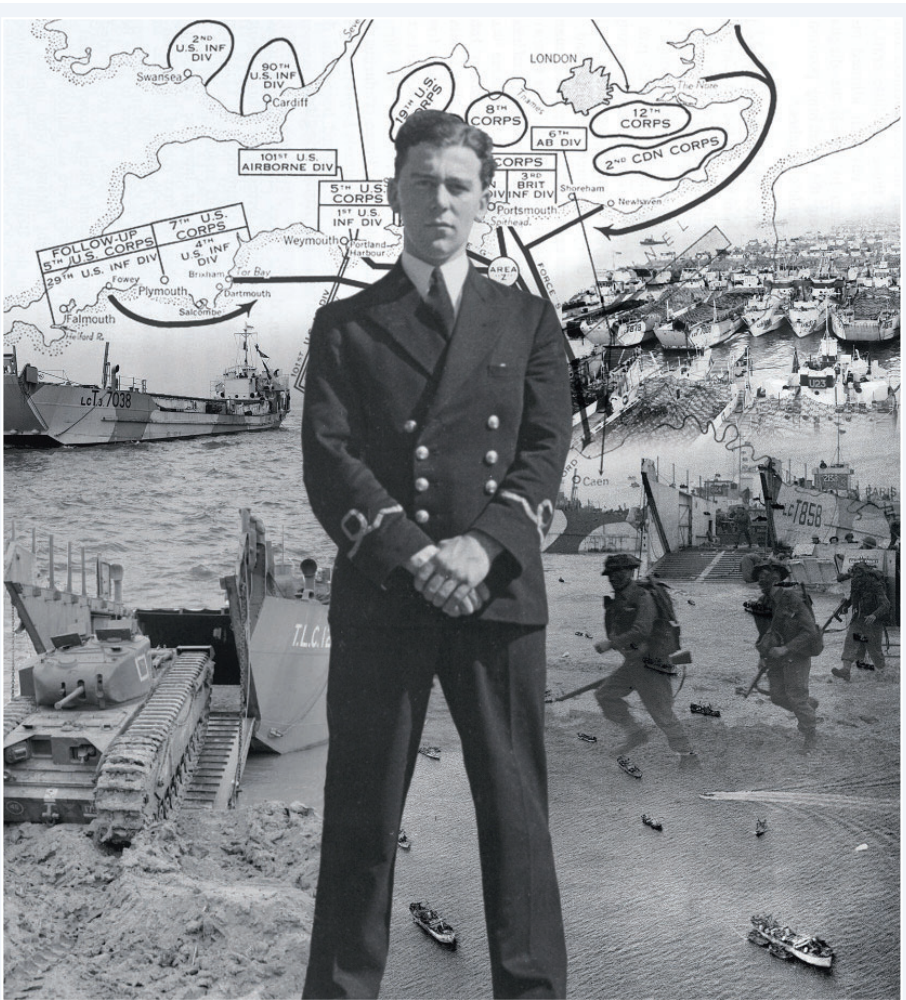
At 10pm on 5th August 2014 the only light to illuminate the Selwyn College Chapel came from a candle, which stood in front of the plaque commemorating those who lost their lives in the war which Britain had entered precisely 100 years earlier.

Normandy Landings

A generation of students less well known, in relation to the Second World War, is the group that came up to Selwyn after the war, having already served. **P M Morrow** (SE 1947) was one such Selwyn student. He arrived at Cambridge, aged 24, having already won The 1939-1945 Star, The Burma Star, The Atlantic Star, The France and Germany Star, and the South-East Asia Medal. He enrolled on a two year long course in Agriculture from which he graduated in 1949. This year marks the anniversary of one of the most famous invasions in military history, in which Pat Morrow played a key role.

By the time Operation Overlord was primed in June 1944, Pat Morrow had already received his commission as a Sub-Lieutenant (R.N.V.R.) and shortly afterward was given command of an ocean-going LCT7083 (Landing Craft Tank). It was 150ft in length, weighed 600 tons and had a draught of 3ft. It could accommodate six tanks or the equivalent in heavy transport or artillery when fully laden. It held two officers and twelve ratings (non-commissioned naval personnel).

At 5.30am on Tuesday, 6th June, 1944 Pat Morrow sailed his landing craft out of the Stour Estuary at Harwich and toward the beaches of Normandy, along with 35 other LCTs that also left Harwich that morning. Once there, he and his crew ferried British and American military personnel and equipment back and forth between the landing beaches and Southampton, and later between Boulogne and Dover. Despite the element of surprise achieved by the allies on D-Day, the crossings between Britain and France remained fraught with danger and one night Morrow’s landing craft was targeted by the Luftwaffe. The bomb missed narrowly, blowing apart the landing craft’s anchor cable rather than the vessel itself, a lucky escape.

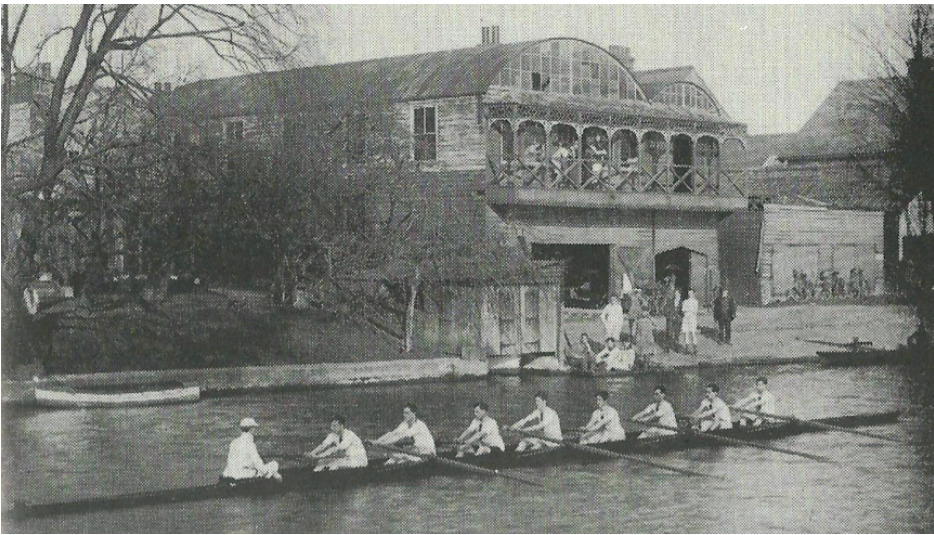


Pat’s war story is undoubtedly one of many that link Cambridge with the Normandy landings. His role in the invasion was made known to the College when he passed away in December 2013. His daughter Ginny very kindly loaned his medals and photographs to the College, along with a transcript of an interview with his granddaughter Georgia, which took place in January 2013.

If you have any photographs or documents relating to Selwyn College, or its students, during either of the World Wars, or would like information about Selwynites who served, please contact Elizabeth Stratton, the College Archivist.

References and Information

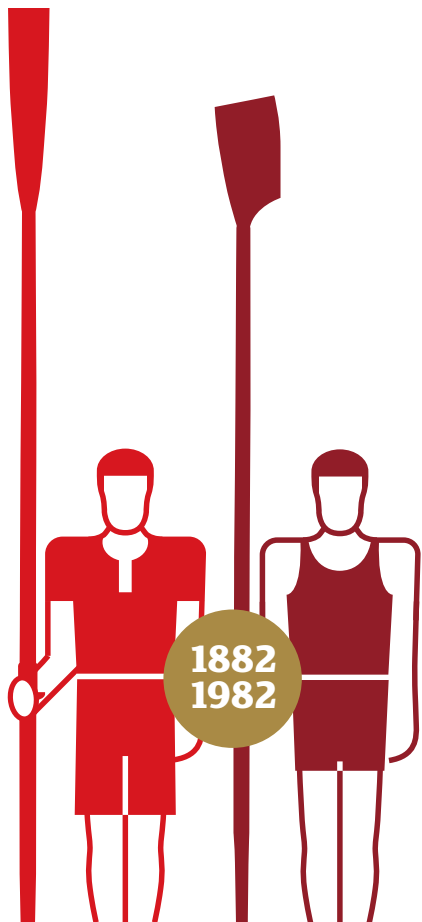
Brock, W.R. and Cooper, P.H. M., *Selwyn College, A History*, The Pentland Press, Cambridge, 1994.
Goode, M., *Selwyn Celebrated*, Jeremy Mills Publishing Ltd., Huddersfield, 2007.
Selwyn College Calendar (Years 1901-1920 and 1938-1949). Elizabeth Stratton, Selwyn College Archivist.



Martin Brown (SE 1960) rediscovers the old adage that one generation's progress can become the next generation's barrier to progress, and that consequently differing generations of Selwyn oarsmen did not always pull together in the same direction.

S.C.B.C. —the first one hundred years

Top left:
The original Boathouse
(and boatman, Bill
Phillips, standing,
extreme right) in 1922.
Photo taken from
AP McEldowney's
*Personal History of the
Selwyn College Boat Club.*



The foundation of the college in 1882, was followed in the same year by the foundation of Selwyn College Boat Club, under the leadership of its first captain C.E.C. de Coetlogon. The club started life with a rush, making rapid progress and climbing up the river from 45th on the river in 1882, to 14th by 1886, and winning the clinker fours in 1885. After this electric start a decline over the next decade was perhaps inevitable, but the Junior Dean of the college, W.L.E. Parsons, a great believer in technical efficiency, then coached the college to 8th on the river by 1903. It should be noted that at this time the starting order for the Mays was the finishing order of the Lent races of the same year, hence it was possible to rise by at least eight places each year.

During the early years of the 20th century many felt that orthodox British rowing had become stylised and stiff and difficult to execute properly. Steve Fairbairn of Jesus College devised an approach to rowing that was effective and easy to learn in a short period of time, an important factor in college rowing. He was one of the greatest rowing coaches of the first half of the twentieth century, and it is impossible to chronicle the Boat Club's history without reference to him. By 1908 the college had begun to flirt on and off with Fairbairnism, a style in which, as Dr A.P.

McEldowney (AKA Mac to generations of Selwyn oarsmen) wrote: 'hard work came first and technique would come naturally from that'. The college boatman in 1908 described the style as 'brute force and bloody ignorance', a comment that was to be echoed many times over the next fifty years. Steve Fairbairn's followers took quite a different view, and it became impossible for orthodox and Fairbairn oarsmen to be reconciled, let alone row easily together in the same boat. Nevertheless by 1914 the boat club was flourishing. The May boat finished 10th on the river and competed at Henley as favourites to win the Thames Cup. They beat a Belgian crew, but then lost to the eventual winners, Caius. The First World War stopped all rowing and many of the boat club enlisted. Tragically, by the end of the war, from the 1914 May boat, three had been killed, three wounded, one of them three times, and two Military Crosses had been won.

After the war activity on the river resumed. There followed for the next fifty or so years a battle between the 'orthodox' adherents, and those who followed Steve Fairbairn, and Selwyn was in the thick of this battle, with Mac, a friend of Steve Fairbairn, his chief advocate in Selwyn. In 1922 the club finally and fully embraced Fairbairnism, and formed a very close relationship with Jesus College. And so began the glory years of Selwyn rowing.



**Above:
1st Lent Boat 1914.**



**Below:
1st May Boat, 1914.
Bottom:
1st Lent Boat, 1926.**

This success was all the more remarkable because Selwyn is a small college and there is a close correlation between the size of a college and its success on the river. For a period of some 15 years Steve Fairbairn and his son Ian, both of whom were inspirational coaches, were heavily involved in coaching Selwyn crews. The club rose from 20th in the Mays in 1923 to 8th in 1927, and in the 1930s did not drop below 7th, finishing third in the Mays in 1931, 1932, 1934 and 1935. In 1926 the club won the Thames cup at Henley equalling the course record, and won the Mitchell cup as the best performing college boat club. In 1926-1927 the University clinker fours were won and the semi-finals of the Ladies Plate at Henley were reached. In 1927-1928 the finals of the light and clinker fours were contested, the Mitchell cup was won once more and the club lost in the finals of the Ladies Plate to Jesus College by half a length. The clinker IVs were also won in 1932. All this was done with oarsmen who very largely learnt to row at University. A.L. Sulley won an Olympic silver medal coxing the eight in 1928, and between 1927 and 1930 three men won blues. In the 1930s Ran Laurie won a blue three years running, stroking Cambridge to victory. He won the Grand at Henley with Leander in 1934. As an orthodox oarsman he found it very hard to fit in to Selwyn's Fairbairn style of rowing, and Selwyn found it very hard to



accommodate to him. In 1932 the college finished 4th out of 130 crews in the Tideway Head of the River Race. By 1937 the Fairbairns father and son do not appear to have been involved in coaching Selwyn, and the May boat fell below 5th for the first time in 8 years. However the second eight climbed in to the first division of the Mays in 1938, and the Boat Club came second in the Mitchell cup. Ran Laurie in partnership with Jack Wilson of Pembroke College won the Silver Goblets at Henley in 1938.

Although Fairbairnism, was the dominant force in British rowing for some 50 years, it was nevertheless being overtaken in the post war years by developments in rig and style, paradoxically just when it was most dominant. Many of Steve Fairbairn's followers became wedded to fixed ideas, the very thing Steve Fairbairn had decried. Very long slides changed the nature of the stroke and the way the muscles of the body were used to propel the boat. This and the changing shape of the blade ultimately spelt the end for the style by the 1990s. While effective, it had never been a particularly efficient way of rowing, and it is no accident that between 1948 and 1984 only 6 Olympic medals were won by British crews at the Olympic games, and British crews often struggled against foreign crews at Henley. In 1948 Ran Laurie and Jack Wilson, rowing in the orthodox style, again won the Goblets at Henley, and went on to win gold in the pairs in the 1948 Olympics. Selwyn oarsman Mike Lapage won an Olympic silver medal in the eight that year. There then followed a gold medal drought in British rowing which lasted for 36 years. It ended in 1984 when the Selwyn oarsman, Richard Budgett, won an Olympic gold medal in the coxed four in a crew that contained a young Steve Redgrave.

At college level Selwyn maintained itself in the top ten of the first division until 1956 when the boat club declined into division 2 of the Mays in the late 1950s. This perhaps reflected a more normal position on the river for a college the size of Selwyn. The college might have been better served at this point if it had moved consistently away from Fairbairnism. This style required enough large, fit and strong oarsmen to overcome its defects; in a small college the pool of such oarsmen is obviously small. There were occasions when this was attempted, usually with the boat captain pulling in one direction, and Mac (who remained influential in the Boat Club all his life) in the other.

There are ways for a small college to overcome the disadvantage of its size. One is by paying close attention to the rig and the higher techniques of moving a boat fast, and from time to time this course was pursued with success. Inspirational coaches, such as the Fairbairns father and son and Mac, did of course bring good results. A third way results were improved was though the presence in the club of undergraduates who had rowed seriously before coming up to University. They could and did provide rowing of good quality, and a base of skills from which novices could be better trained. By 1959 and for the next two decades a succession of such rowers joined the club, and rowing recovered to the extent that, between 1959 and 1964 12 crews won their oars, including three



Above: The changing shape of oars

first Lent boats and two first May boats. The 1961 May boat finished 22nd in the Tideway Head of the River Race out of 290 crews, won its oars in the Mays and Junior-senior eights at Reading Regatta. In 1964 the first Lent and first May boats won their oars, as did the second and third May boats. The first eight rowed on a modern rig with long slides and Macon blades, being one of two crews using these blades for the first time by any crew on the Cam. This resurgence continued through the 1960s and 1970s. Between 1968 and 1979 25 crews won their oars. A light four lost the finals of the University light fours in 1965.

There were wins at Cambridge Regatta in 1969, 1972, 1973, 1977 and at regattas at Reading in 1974 and 1977; in an inter-university race an SCBC IV beat Oxford and London Universities in 1969. The Lent boat of 1974 climbed the river to 2nd for one night in the Lents, just failing to go head in a do or die attempt, and settling to third. In 1979 the May boat finished 4th on the river. Women had been admitted to Selwyn in 1976 and immediately made their mark. In 1978 the college had its first woman Blue, Fiona Morrison winning her race against Oxford, while the college had 3 women rowing in Blondie.

It is however noted in the boat club records that by 1981 there were no experienced rowers coming up, and perhaps as a result in that year, although the boat club had a strong coaching team, the May boat finished 11th. So ended the first hundred years of the boat club, with the SCBC, while not at its highest level, still punching considerably above its weight.

Sources:
Boat Club records. 'A Personal History of the Selwyn College Boat Club' by Dr A.P. McDowdney

New boathouse for Selwyn

Work on a new boathouse will begin in April 2015. Occupying the same site as the existing one, the new boathouse will be shared, as is currently the case, with Churchill, King's and the Leys School. It will offer greatly improved facilities including a fitness room and workspace for repairs. A 100 year lease has been negotiated to secure the future for rowing at Selwyn. This, coupled with an expanded and newly equipped gym as part of the Cripps Court refurbishment, should ensure that Selwyn's sports men and women have access to great facilities.



Work starts in 2015

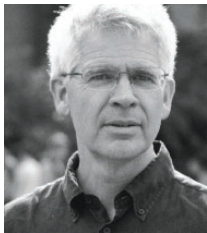
If you are interested in reading more about the history of Selwyn College Boat Club, A. P. McDowdney's book has been digitised to view online, visit: www.sel.cam.ac.uk/history-selwyn-boat-club or you can visit the boat Club's website: www.selwynrowing.org.uk

Find out more!



Courtesy RH Partnership

Comings and goings A few words from our new Development Director



I am delighted to be able to contribute to this issue of SELWYN, my first since taking over as Development Director in September. I am lucky that my predecessor, **Sarah Harmer**, did such a good job during her time here, as I've joined a well organised and friendly office where I was able to feel at home from day 1. By coincidence, Sarah and I have done a sort of swap in that my previous job was as Development Director for Sir John Soane's Museum, London, and Sarah has taken over as Head of Fundraising for the Wallace Collection, London. We hope to organise visits to both of these small but fascinating museums in 2015 as part of our programme of events for 2015/16 but in the meantime I'd like to acknowledge Sarah's considerable achievements here and wish her well with the Wallace.

You may have also noticed that there are other new faces in the Alumni and Development team as well; **Beccy Battle** left earlier in the year to take up a new appointment at Reading University and has been replaced by **Andrew Flather** as our Development Officer; and **Lizzy Cole** has also recently moved on to a new academic appointment within Cambridge; we are pleased to welcome **Giovanni Zappia** as our new Development Assistant. Thank goodness that **Shona Winnard**, who many of you will know, is still with us and without whose efforts we would have no Magazine, Annual Report or Calendar to enable you to keep up to date with Selwyn news, and neither

would we have the popular programme of events and reunions that are such a highlight of the year for many alumni.

My thanks also to the many contributors to this issue of *Selwyn*. We want this to be the magazine for Selwyn alumni and by Selwyn alumni. In the short time I've been here it's already clear to me that Selwyn enjoys remarkably diverse and successful alumni. If you have ideas for articles or features for future issues of *Selwyn*, please don't be shy in suggesting them. Likewise, with our events programme, we're always looking for new and unusual places to visit – especially places where public access might normally be restricted. Again, please don't hesitate to make suggestions – we would love to hear from you.

In addition to this magazine, some of you will be receiving a telephone call from current students in December as part of our annual telephone campaign. Whether or not you are able to contribute, I hope that you will enjoy the opportunity to speak with our students who are often amazed and inspired to learn about the successful careers and rich lives their predecessors at Selwyn have gone on to lead. And even if nobody calls you, I hope you will try to join us at one or more of our events this year; you really would be most welcome and I hope to see you soon.

Mike Nicholson
Development Director & Fellow



Q&A

Christina Baker Kline Writer

Christina Baker Kline (SE 1986) is a novelist, non-fiction writer and editor. Her greatest commercial achievement to date has been *Orphan Train* (2013) which has been a bestseller on all national lists. She spoke to the editors of *Selwyn* in August about her time at Selwyn in the 1980s, and her subsequent career.

CV

1964

Born in Cambridge, England and spent 9 years in Cambridge

1967

Raised in American South and Maine

1986

Graduates at Yale

1986

Selwyn College
Studied English.
Awarded BA and MA

1988

University of Virginia
Awarded Henry Hoyns Fellow in Fiction Writing

2007-11

Writer in Residence at Fordham University

2009

Bird in Hand published

2011

On-staff editor and writing coach at the social networking site SheWrites.com

2013

Orphan Train published and became #1 New York Times bestseller, remaining in the top 3 for over 8 months. 1.5 million copies in print and published in 28 countries



What are your memories of arriving at Selwyn in 1986, was the College what you expected it to be?

I already knew and loved the distinctive red-brick look and feel of Selwyn. I was born in Cambridge; my parents are American, but my father earned his PhD at Fitzwilliam in British Labour History, and I was quite familiar with the place when I arrived as a graduate student from Yale. My parents, ardent Anglophiles, took every opportunity to return to England while I was growing up. We lived in the tiny village of Swaffham Bulbeck for a number of years and also spent a year on Gough Way in Cambridge, during which time my sisters and I attended the secondary school Comberton Village College. We have family connections as well: My mother's sister, Nancy, married the novelist Tom Sharpe and they lived with my cousins in Great Shelford; Nancy and two of her daughters still live in Cambridge.

My boyfriend at the time — now my husband, David Kline — was at Downing College, which meant that I was probably less Selwyn-centric than I might have been. Our friends were mostly grad students, a collection of English and American students across the university. We were lucky to be at Cambridge with Claire Messud, James Wood, and Andrew Solomon, among many other now-luminaries! While at Selwyn I also worked for Bill Buford at *Granta* magazine; people like Hanif Kureishi, James Fenton and Salman Rushdie regularly wandered in. It was a marvellous, heady time.

Was the transition from studying English at Selwyn to writing as a career an easy one? And what were your first steps after Selwyn?

I wrote a short story as an undergraduate at Yale that was published in a national literary magazine and from that snagged an agent. I remember standing at a pay phone at Selwyn during my second year, talking to the agent, who said, "Now you need to apply to MFA programs and get a fellowship to defer your loans and write a novel." And that's exactly what I did. I ended up with a fellowship at the University of Virginia and spent the next two years (three, actually) working on the manuscript that became my first novel, *Sweet Water*. (Advice to aspiring writers: Fellowships are definitely the way to go.)

Was writing a best-selling novel always a goal, and if so, has achieving that goal changed the way that you feel about writing?

I never imagined that a novel of mine would be a bestseller, and to be honest I didn't aspire to it. *Orphan Train* is my tenth book and my fifth novel, and I would've been happy as a "mid-list" writer for the rest of my career; I was grateful to have a publisher and a wonderful editor

(each of my novels has been published by HarperCollins or one of its imprints) and live a life of reading and writing books and talking to people about literature. Before this, my most successful novel sold about 30,000 copies — not bad, I thought. But yes — very different from this experience. Having a bestseller makes my life easier in some ways (I don't have to convince libraries and book stores to invite me to talk; I can pay my kids' college tuition bills, no small feat in the U.S.) and harder in others (I'm inundated with requests of all kinds these days, and have to fight to find the time to work on my new book).

Has your experience of Cambridge, either the University or the city, been rendered in any of your work, either explicitly or as a basis for a fictional location?

Yes — explicitly and indirectly. My last novel, *Bird in Hand* (which is being reissued by HarperCollins in the U.S. with a new cover this fall), takes place in part at Cambridge, where the four characters first meet. But all of my novels were influenced by the books I read at Cambridge and my focus on modernism in particular — Joyce, Woolf, Pound, Rilke, Lawrence, Yeats. I truly believe that I learned to read, and write, at Cambridge.

In April 2014 you spoke at an event in New York City organised by Cambridge in America, following the success of *Orphan Train*. Was it an enjoyable experience to discuss literature with Cambridge academics, past and present, again?

It was delightful — I could've spent hours there! I've done hundreds of events all over the country, and rarely have I had such an intellectually engaged, responsive audience. Those who had already read the book pointed out things no one else had noticed; the others asked questions that made me think differently about my own process. Doing the event made me realize anew what an unusual group of alumni and academics Cambridge produces.

What are your creative plans for the future?

I'm working on a novel inspired by the iconic American painting *Christina's World*, by Andrew Wyeth. A frail woman in a pink dress yearns toward a mysterious, seemingly deserted house on a hill. I am telling Christina's story.