

## "I have looked further into space than any human being did before me."

ASTRONOMER WILLIAM HERSCHEL, 1781

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From his Georgian townhouse in Bath, William Herschel saw the planet Uranus, a discovery that effectively doubled the size of the then known Universe.

When most universities turn 50, they set themselves a target of raising £50 million, but we're not most universities. So, given that the name of our campaign was 'Look Further', we set ourselves the challenge of raising £66 million, because we were founded in 1966.

Thanks to you, and thousands of others like you, we have now surpassed our target. It can be difficult to visualise the difference this kind of support makes, beyond the three amazing new buildings on campus, but we hope this special Impact Report will give you an idea of how many lives have been touched by your generosity.

During this campaign, your gifts have created almost 1,400 scholarships at undergraduate, postgraduate and PhD level. Our new Gold Scholarship Programme, for 50 students to join the University every year and receive not just financial assistance but also mentoring, networking and enhanced pastoral support, is a jewel in our crown.

There have also been extraordinary research breakthroughs in prostate cancer, diabetes, wound dressings, hip replacements, vaccines - the list goes on. Through supporting our research, you have helped us to tackle some of today's biggest challenges, as you'll see in the following pages.

And, because being at Bath is about learning new skills as well as gaining knowledge, we capture some of the many ways that you have helped our students grow into successful graduates.

The University is not just one charity. It's an array of amazing causes under the umbrella of the University of Bath. We have achieved so much in 50 years, and we owe much of our success to our supporters. Looking further to the next 50 years, we're excited by what we will achieve together.

YOUR IMPACT 2008-2018





Building a future Bath opportunities



1,299 undergraduate and postgraduate scholars

PhD research

## Not to mention...

As a community you are generous with your time and expertise.

1,431 Experts have joined Bath Connection to help students and alumni get ahead in their careers.

Students have benefitted from more than 7,500 hours of time volunteered by alumni.

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Above: Ben in Electrical Engineering lab Right: Team Bath Racing Electric

### SUPPORTING BRIGHT MINDS

Dr Ben Metcalfe has the world at his feet, thanks to your support.

A teenage Ben Metcalfe probably couldn't have imagined his future self, addressing a packed room of University supporters at the House of Lords in 2016, reducing many to tears. Since then, Ben has channelled his talent and tenacity to grow from the "imposter" he described that day into someone who embodies Bath at its very best.

Two scholarships set Ben on the road to becoming Dr Metcalfe. Their support meant that he could come to Bath and thrive here: he's now ensuring that others can too.

On top of teaching engineering undergraduates and pushing the boundaries of his research into treating people with spinal cord injuries, Ben also volunteers his time as a Gold Mentor to our Gold Scholars (see page 6). Like him, they've come from backgrounds where university wasn't encouraged.

"Having support when you're a student, whether that's financial, mentoring or social support, from someone who you've never met before, is a unique experience," says Ben. "Initially it can be quite daunting. Who is this person? What do they want in return?

But you learn very quickly that it can be an incredibly powerful and supportive relationship. That person is investing in you, they care about you and your success, and they'll do everything they can to see you grow and support you."

Ben's own PhD sponsor, fellow electronic engineer Dr Brian Nicholson, joined Ben as a Gold Mentor this year. He explains why:

"I was the first generation in my family to go to university, so I really needed somebody who was able to help me fill in the gaps. I've received a number of scholarships to enable me to get where I am today. There's no doubt in my mind that, without that assistance, I wouldn't have been able to fulfil my potential, so I personally understand what a significant difference scholarships can make."



Ben has achieved extraordinary things in his time at Bath, and there are many students like him whose potential has been nurtured through scholarships. Thank you to all of you whose gifts, large or small, have made an impact on the lives of so many.

As if teaching, research and mentoring scholars wasn't enough, Ben is also part of Team Bath Racing Electric (TBRe). Alumni donations have helped the team take top spot at the UK Formula Student competition two years running, and in 2018 TBRe became the first British team to compete at the equivalent contest in China.

Supporter and honorary graduate Sir CK Chow met the team at an alumni reception in Hong Kong. He said: "We are all deeply impressed by the passion and competence of members of Team Bath **Racing Electric; they are great** ambassadors."

## GOLDEN O P P O R T U N I T I E S

Launched in our 50th year, **Gold Scholarships give 50** young people the chance to succeed at Bath every year.

"The best thing about my life right now is my independence," says Sherifat. "I've never had my own room before and having my own space has been really empowering." Her Eastwood accommodation is decorated with letters and photos from home. Raised by her mum in East London, Sherifat helped to care for her two autistic brothers. "Through the Gold Scholarship funding, I can go home monthly," she says. "My mum knows I'm there whenever she needs me - it's impacting not only on me but my whole family."

Sherifat was one of our first Gold Scholars, and like her, they have all overcome challenges to get to where they are today. Background or circumstance should never be an obstacle to talent. That's why we launched the Gold Scholarship Programme, providing opportunities for 50 students to succeed, year after year. It's your support that makes this possible. The security of a £5,000 bursary helps students with living costs and means they can

devote more time to studying rather than finding part-time work.

As Alex puts it: "It's a big weight off my shoulders. After my parents divorced, work was tough to find, so I grew up in quite a challenging environment. My mum and I were homeless staying in friends' houses or hostels - a fair few times. Before uni, I was really worried about paying for accommodation and food, so having the Gold Scholarship is an incredible help. Thank you."

But the programme provides more than financial assistance. Team activities and training sessions on everything from networking to communication help develop soft skills that will translate to any career. The Gold Scholars put into practice what they have learned when meeting their Gold Mentors - alumni and friends who give their time to advise the students on university life and the world of work.

Sherifat is studying Economics at Bath thanks to a Gold Scholarship



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## Mum knows I'm there whenever she needs me

"The idea of speaking to

people I didn't know was scary," Rebekah recalls, "but the training made it seem less overwhelming. Networking is something I expect to do again in future, and I'm so thankful to have experienced this already with the support and guidance of the scholarship team." These opportunities for personal development are vital. Research shows that graduates from disadvantaged backgrounds go on to earn less than peers from high-income families, even when studying the same course, in the same place.

Gold Scholarships gift a sense of belief and achievement. Part of this comes through each Scholar's commitment to complete 50 hours of volunteering, fundraising and outreach each year. They've helped the homeless in Bath, got

involved in conservation projects in Sri Lanka, taught disabled children in India, spent time in hospices and care homes and more. Often, it pushes students out of their comfort zone, like Rachel who admits that her shyness has been a barrier to speaking up in the past. Now she's a student ambassador, giving a voice to her peers. "I never would have put myself forward for that role had it not been for the Gold Scholarship," she says. "It's really helped give me confidence."

Thanks to your continued support, the programme is now in its second year and we have welcomed another 50 bright young men and women to Bath. Sherifat speaks for them all when she says: "I'd like to thank everyone who has given me this opportunity to attend an amazing university and not have to bear such heavy burdens."

Watch Sherifat's story on bit.ly/Sherifat

## NEW PERSPECTIVES

You bring the brightest minds to Bath, who help us to see things differently and make an impact globally.

### low can we develop a better world?

It's a question which probably occupies the minds of us all from time to time. For some of our students, particularly from developing countries, it's what drives them to study at the University of Bath. They apply what they've learned when they return home and, in turn, our community learns from them.

Scholars are chosen for their academic excellence, but also their leadership qualities. Many have overcome endemic poverty, or a culture which discourages women from getting an education. The expertise they gain here at Bath gives them the skills and confidence to put their learning into practice and to look further for themselves, their families and their communities.

"Without your help, I wouldn't have been able to afford such a wonderful opportunity," said Taonga Silungwe, before she graduated from Bath with a Master's degree in International Development in 2015. On returning home to South Africa, she moved into managing a fundraising programme to alleviate poverty in Johannesburg's inner city.

Victor Atiase's Bath experience propelled him to becoming head of Ghana's biggest microfinance bank when he returned home. He's since furthered his academic talents too, gaining a PhD and teaching entrepreneurship and enterprise development, passing on the knowledge he gained from his time here.

It's clear that the scholars you have supported are proving that their education was worth your investment. Thank you for helping them to develop a better world.

**Taonga Silungwe** manages a fundraising programme to alleviate poverty in Johannesburg

Victor Atiase used his experience to become head of Ghana's biggest microfinance bank

Susan Mawemuko was awarded the Association of MBA's **Student of the Year** 



Water pollution and refugee rights: research supported by your gifts

## Singular thinking

Chilean mathematician, Professor Manuel del Pino, got a pleasant surprise when he arrived to start his new job at the University in 2018. He found out he'd been awarded a Royal Society Research Professorship Award, the most prestigious scientific research award in the UK, and only the second that has been awarded to a Bath academic.

Funding by honorary graduate David Medlock DL ensured that Manuel chose Bath as a place to further his exceptional research into how and when singularities occur in natural phenomena. Now the Royal Society award gives him the freedom to focus solely on these questions, which can ultimately help us to understand more about climate change, the spread of a tumour or black holes.



## A clear opportunity

Pollution blights people's lives across China, as urban populations increase and the economy continues to grow. It's a problem which inspired PhD chemical engineer Ranran Zhao to research new, low cost ways to clean the water supply.

Ranran is here at Bath thanks to Hong Kong network member and graduate Mickey Ko. He established the Ko Scholarships, which provide financial support to talented science and engineering researchers from China.

## "I have an opportunity to pursue my dream"

"Thanks to the scholarship, I have an opportunity to pursue my dream," she says.

"I love studying. The University of Bath is the best place in the world to research water science. There are cutting-edge theories, advanced laboratories, experienced supervisors, quiet environments and beautiful views. From here, I can improve myself, widen my knowledge and sharpen my mind. And in the future, I can use my knowledge to make an effort for the whole society."

## ugee rights

Postdoctoral fellow Dr Fariba Alamgir is about to visit her home country, Bangladesh, to study the experiences of Rohingya people, many of whom are living in refugee camps. Fariba's fieldwork aims to understand how their status as displaced people affects their access to rights.

This is important research that speaks to one of the greatest challenges of our time: how we treat exiled populations and the role of the state in humanitarian crises. And it's happening here at Bath because of a generous donation, which, since 2012, has brought brilliant young academics to work at Bath on areas of global importance.

Fariba says: "I'm really happy to be part of a great intellectual community of people who have valuable experience of working on global development issues."

PLACEMENT GRANTS

Your support helps pioneering students pursue life-changing opportunities.

### Honorary graduate Sir David Attenborough said: "The whole of life is coming to terms with yourself and the natural world. Why are you here? How do you fit in? What's it all about?"

University is a great time to consider life's big questions. But taking the next step requires courage and, more often than not, a little financial support.

The Alumni Fund makes placement grants to students who want to push the limits of their experience, like for Helen Mylne, who secured a placement with the African Lion and Environmental Trust in Zimbabwe. Now she has graduated with a degree in Natural Sciences and is working as an elephant researcher for the same organisation, addressing the conflict between people and wildlife in Africa.

Helen says: "Without the Alumni Fund supporting me through some of the costs of an unpaid placement on the other side of the world, I can say for certain that I would not be here now."

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## It was the Alumni Fund grant that made this all possible

**Jack Rossiter** 

Jack Rossiter shares Helen's, and Sir David's, drive to discover and protect the world we all share. His placement grant enabled him to go to Nepal in 2013, where he set up cameras along a forest corridor to monitor tiger populations. "The data collected was essential to discover whether current conservation initiatives are successful or not," he explained. "Our research showed that they're working – tiger numbers are stable and on the increase.

"It was the Alumni Fund grant that made this all possible. I was able to increase my scientific knowledge, experience the wonder of a different culture and network with international organisations. Thank you very much!"

Biology graduate Jack now works for the UN Environment World Conservation Monitoring Centre. We think Sir David would be proud.



Right: Jack Rossiter Far right: Helen Mylne with Pax and Penga





### MAKING WORL DIFFERENC



With your support we're striving to improve people's lives and safeguard the planet for future generations.

## Keeping vaccines safe

While taking her daughter for routine jabs, Dr Asel Sartbaeva noticed the vaccines were kept refrigerated, which keeps them from breaking down and becoming unusable. She was inspired to find a way of storing vaccines that didn't rely on refrigeration, which is not only expensive, but also a major logistical problem when delivering vaccines to remote areas of the world.

She and her research group have created a technique which keeps vaccines intact up to 100°C by locking them in microscopic silica cages. Silica - the main component of sand - is non-toxic, inert and can be removed chemically. This discovery has the potential to save millions of lives.

Asel was able to accelerate her research thanks to your support. She says: "The donations were amazing because I was able to hire a postdoctoral researcher, who has been instrumental in moving our project from what was just an idea into something that's actually working now."

### "They might come up with something that could save the world.'

These were the words of alumnus Roger Whorrod OBE, when he and his wife Sue made an extraordinary £1 million gift to the University in 2010. Theirs was an investment towards our new Centre for Sustainable Chemical Technologies (CSCT), where researchers from different disciplines work together to find practical solutions to some of the world's biggest problems.

Our CSCT researchers are rising to these challenges with some truly visionary thinking. Like cars fuelled by coffee. Paper with the power to test for polluted water. And even plastic made from sugar and carbon dioxide.

Dr Chris Chuck, one of the first Whorrod Research Fellows, is working on a forestfriendly alternative to palm oil, using yeast. In 2015, Chris won a multi-million-pound Government grant, which has enabled him

to grow his research team to develop the technology that will, in turn, grow the yeast on an industrial scale.

On joining Chris's research group, PhD student Rob Hicks was inspired to dig deeper into the politics behind palm oil, the world's most widely produced oil crop. It led him to an internship at the Rainforest Foundation NGO in Norway, thanks to a Santander Postgraduate Mobility Award. These awards help students develop the international research links that are vital in finding solutions to global problems.

"I have to give a big tusen takk (thousand thanks) to the CSCT and Santander for funding me for this internship," he says. "It was an incredibly unique opportunity for me - it wouldn't have been possible without them."

## Fighting cancer with landmine research

Hidden landmines and cancerous tumours are two problems with one common challenge. Both can only be detected with extremely accurate imaging techniques. It's life-saving research that began here in 2015 with funding from honorary graduate Sir Bobby Charlton CBE and his charity Find A Better Way.

Since then, the team, led by Professor Manuchehr Soleimani, has produced a smart camera that uses copper electrodes to scan the ground to determine how insulating it is. As modern-day landmines are made of plastic - a good insulator - they can be detected. This technology is now being developed for use in the field.

Manuchehr's team is also working with CERN, the European Organisation for Nuclear Research, to create medical imaging software with the potential to significantly improve the treatment of cancer patients. The new software can produce images faster and at a lower radiation dose. Importantly, it can also account for movement, so when a patient is having a scan, the images are clearer, enabling more accurate treatment.

## SAVING LIVES AND IMPROVING HEALTH

**Diagnosis**, treatments and care are ever-evolving because of medical research - the kind that is happening right now in our labs.

## Understanding Alzheimer's

The six-fold glutton caterpillar loves sugar so much that our scientists have used it to monitor the effects of glucose on protein damage in the body. Now, for the first time, they have established a link between high blood sugar levels and Alzheimer's. This is vital to learning how the disease progresses and could lead to new treatments. This important work was funded by the Dunhill Medical Trust, alumnus Raoul Hughes and his wife Catherine, and the Hospital Saturday Fund.

Following Alumni Fund donations which helped the team buy a specialised microscope, Alzheimer's Society awarded funding to Professor Jody Mason and Dr Rob Williams for a PhD student to investigate whether the toxic build-up of the protein beta-amyloid associated with the disease can be prevented. This is building on previous work that looked at the effect of a type of chemical called flavonoids found in dark chocolate and red wine - which were found to lower beta-amyloid.

One person develops dementia every three minutes, and Alzheimer's disease is the most common cause. It's vital that we continue to drive forward research for treatments and, ultimately, a cure.



## Developing new drugs to fight cancer

One in eight men will be diagnosed with prostate cancer in their lifetime. Our scientists are striving to find ways to treat the disease vital research supported by Prostate Cancer UK and the Movember Foundation, as well as donations from graduates through the Alumni Fund.

Researchers from Pharmacy & Pharmacology and Chemistry are studying a protein associated with cancerous cell growth. They have developed a simple colour-changing test to accurately measure levels of this protein, making it easier to then examine how efficient certain molecules are at suppressing this growth. Project lead Dr Matthew Lloyd says: "The test that we've developed at Bath makes this work possible, and the information will help us to move towards new anti-cancer drugs."

Donations not only buy researchers the time and equipment they need, they can also accelerate the pace of research by creating postgraduate opportunities. Ben Sharpe is a shining example. He completed his PhD in prostate cancer research thanks to a scholarship from the Annett Trust. Now, he's applying what he's learned to continue the fight against cancer.

Every year in the UK, 4,000 children are treated with serious burns, mostly caused by tea and coffee. Most patients are under the age of three and their immature immune systems make them particularly vulnerable to infection. Current methods take up to two days to determine whether a wound is infected, but a burns dressing developed by Professor Toby Jenkins can change that. It glows if it detects bacteria, alerting doctors quickly to a potential infection.

Donations from the James Tudor Foundation, the Annett Trust and alumni were critical in getting the research off the ground and unlocking further funding of a £1 million grant from the Medical Research Council. Toby says: "We're hugely grateful to our generous alumni and charitable trusts who have supported us over the years, and continue to do so."

Competition 2018.

Thanks to support from the Enid Linder Foundation and the James Dyson Foundation, the Centre has recruited talented PhD students, working alongside orthopaedic surgeons, to develop new technologies for diagnoses and treatment. Following graduation, they've gone on to apply their expertise - acquired at Bath in the NHS, research labs and the medical device industry.

Donations from the Alumni Fund have also helped the Centre to buy specialised equipment to underpin their research. It's this generosity which has led to the design and commissioning of our unique spine simulator, that's now providing new insights into the mechanisms which contribute to back pain.

Toby and his team received international recognition after their Smartwound dressing was named as a winner in the Royal Society of Chemistry's Emerging Technologies

## We're hugely grateful to our generous alumni and charitable trusts who have supported us

Nearly 30 per cent of the UK population is living with a musculoskeletal condition such as arthritis, back or joint pain. Our Centre for Orthopaedic Biomechanics is finding ways to minimise the impact of these debilitating conditions on people's quality of life.

The generosity of charitable trusts, foundations, alumni and friends is helping us tackle many of the complex health challenges we face. These are just some of the projects that are making strides thanks to your continued support.

## WORLD-CLASS CAMPUS

### BUILDING FOR THE FUTURE

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From furnishing study spaces to funding state-ofthe-art research equipment, providing practice spaces with pianos or labs with specialised computers, your support touches every corner of our campus. Here are just a few of the highlights.



Thanks to an Alumni Fund grant, our wheelchair basketball team now have a full set of competition chairs.



Our researchers at the Centre for the Analysis of Motion, Entertainment Research and Applications can now capture 360-degree images of the human body, thanks to cameras purchased with an Alumni Fund grant.

## **Students' Union**

A bigger and better Student Centre opened in 2010. You donated £100,000 to fit out the new Centre to meet the changing needs of our growing number of students.

## Milner Centre for Evolution

The Edge

Our dedicated home for dance, music,

reality thanks to your support.

theatre and the visual arts: a vision made

A record breaking £5.6 million gift gave us world class home for research, education and outreach (see page 22).



A simulated human patient, purchased with an Alumni Fund grant, helps students hone their prescribing skills.

Parents and friends have generously donated towards our learning resources, to ensure our 24-hour Library remains at the heart of campus life.

Library



## BATH'S BEST

## SPORTING SUCCESS

Your gifts enable our athletes to aim high.

## 

**The University was** the perfect place to enjoy sports, train really hard, and also study for a very academic degree





"My lecturers were so open-minded and loved the fact that I had another passion," explains French and Politics graduate Samantha Murray. That passion was for one of the most demanding sports in the world: Modern Pentathlon. And Samantha is one of the very best, winning a silver medal in the 2012 Olympic Games while she was still studying, and becoming World Champion two years later.

"They helped me balance my timetable, resit exams in the summer when I was away in the exams period, and gave me extensions on deadlines," she continues. "The University was the perfect place to enjoy sports, train really hard, and also study for a very academic degree. I also had excellent support from the Santander Scholarship, which saw me through the Olympics in 2012."

We are proud to be the first UK university to have offered sports scholarships to students,

back in 1976. Our programme has really taken off in the last decade, as we've helped more than 100 talented young people like Samantha balance studying for a degree with achieving sporting success, thanks to your generosity. At the time of writing, four scholars are in the current Team Bath netball squad competing in the Vitality Superleague, and three scholars are in the Bath Rugby Premiership squad.

And, in 2018, Team GB's Skeleton bronze medal winner. Dom Parsons. ioined Samantha on Bath's Olympic podium of scholars. Dom also benefitted from a Santander Scholarship as an undergraduate. He's now continuing to train while completing a demanding PhD in Electrical and Electronic Engineering, and recently inspired our new Gold Scholars to aim high when he spoke at their annual celebration.

Above: Bath University Boat Club Left: Samantha Murray Enhancing our excellent scholarship programme, the Elite Athletes Fund gives students a boost while they're studying. Thanks to donations, more than 100 of our finest competitors have received Elite Athlete grants since 2008, covering the travel costs of competing internationally. Only last year it helped swimmer and Thompson Educational Trust scholar, Anna Hopkin, get to the Commonwealth Games, where she won bronze in the 4 x 100m freestyle relay. Anna crowned her achievement by being voted Sports Personality at the Blues Awards and BUCS Sportswoman of the Year.

Of course, for every athlete who goes on to represent their country, thousands more pursue sport for different reasons: to improve their skills, increase their fitness and enjoy time with their friends. Many Bath teammates remain friends for life, and go on to support future generations of sporting students through the Alumni Fund.

Your gifts mean that sports societies can renew and repair equipment, and in doing so, raise the level of their performance. For example, donations have enabled Bath University Boat Club to purchase a new racing shell and training kit, and your gifts have also made a big contribution towards the Club's first ever dedicated boathouse on the Saltford stretch.

From funding competition chairs for the University's Wheelchair Basketball team to a new trampoline for the Trampolining Club, a ball machine for our hockey players and a bowling machine for our cricketers, your donations continue to propel University sport forward. Not to mention new team kits, which mean our sportsmen and women can wear the Blue and Gold with even more pride.

Thank you for being some of our students' biggest fans.

## EVOLUTION ON CAMPUS

Campus has grown steadily in the last 50 years, and in 2018 it gained an exciting new addition.

## **Our mission**

Ask the big evolutionary questions.

Find new technological and clinical research applications.

Take evolutionary research into the community.

Near the lake stands a state-of-the-art research facility: the Milner Centre for Evolution, named after Biology graduate Dr Jonathan Milner who gave the University its biggest-ever gift of £5.6 million.

The Centre is the first of its kind in the UK a hub of world-class evolutionary research. Improving knowledge in this area not only helps us to understand our past by explaining how and why species change over time, but it also impacts on our future by informing how to treat cancer more effectively, to develop better therapies, or to help tackle climate change.

Another key element of the Centre's work focuses on outreach, in particular to school-aged children, in order to improve understanding about evolution. A PhD study, also supported by Dr Milner, found that children understand evolution better when they are taught basic genetics first.

We've developed a MOOC (massive online open course) in Understanding and Teaching Evolution for school teachers, students, parents and anyone interested in understanding evolution. This free online resource begins with the genetics of inheritance and variation, how natural selection and adaptation leads to speciation, followed by macroevolution and geological time, ending with human evolution.

The MOOC followed the official launch of the Milner Centre for Evolution on 21 September

2018, which welcomed 120 local school children to campus. They explored aspects of evolution, including making frogspawn beads, learning how sharks smell, and got up close with owls to learn about how these birds have adapted to their environment.

Within the Centre there is a dedicated area for outreach activities, as well as offices, laboratories and a seminar room. Designed with collaboration in mind, all the shared spaces are positioned centrally so that people will pass by each other every time they leave their office. Who knows what ideas will be inspired and problems solved from these chance encounters?

Bringing everyone under the same roof will enable the team to build upon their research, employ more talent, publish more findings and undertake further outreach and public engagement than ever before. As Dr Araxi Urrutia puts it: "The Milner Centre for Evolution has provided us with a coherent identity to the outside world. Looking to the future, I envisage that it will continue to grow its reputation as a top institution for evolutionary and big data research around the globe, and I am proud to be part of that effort alongside my colleagues."

Director of the Centre, Professor Laurence Hurst FRS, adds: "By combining pure science, applied science and outreach, we will endeavour to make discoveries and make a real difference."

## 

I had one of the best mornings of my life Holly, aged 8





Above: The alignment wall is a series of colour-coded gene sequences of different species

Left: School children are invited into the labs to learn about evolution

# INSPIRING INNOVATION

Your support is helping Bath graduates grasp opportunities.

From festivals to weddings, flowers in India take centre stage in celebrations and religious ceremonies. They're so dominant in Indian culture that they make up one third of the country's total solid waste. Discarded flowers litter land and waterways, a problem that inspired PhD chemical engineer Parimala Shivaprasad to set up a company creating essential oils from flower waste.

## Her idea won her the

University's Business Plan Competition and she was also able to test out a prototype with seed funding from a successful pitch to alumni funders in a Dragons' Den-inspired contest. Now, a £15,000 Innovation Award means she can focus on setting up a pilot plant based at a temple in her home city of Bangalore, Southern India.

Flowers can only be used in temples for a single day, and each day two million tonnes of flowers are discarded across India. Retra, meaning fragrance in Sanskrit, will upscale the flower waste by extracting the essential oils from rose and jasmine petals, using the remaining biomass for compost. Parimala will run Retra as a social enterprise, employing local women in the process and giving a share of the profit to the temple. The compost will be used to fertilise the temple's vegetable patch.

"The idea came to me on a trip home and being involved with student enterprise at the University has given me the confidence to go ahead with it and help me think through the idea beyond the chemical extraction, which is my trade," she explains.

"I'm very excited to be setting up the pilot process in Bangalore. There's a lot of work to do before then, including finishing my PhD, but I'm very grateful to have the opportunity to turn my idea into an actual enterprise that will benefit my local community and hopefully grow way beyond."

Computer Science graduate Ashton Clapp always knew he wanted to start his own business. All he needed was a little support. "It can be difficult to find a route to entrepreneurship right out of university," he explains, "since it requires a certain amount of guidance, mentorship, and financial security."

Fortunately, Ashton's potential as an innovator didn't go unnoticed. As a student he worked tirelessly to develop and achieve recognition for his ideas: winning the University's Apps Crunch contest with a novel concept for an app which helps people plan days out with their friends and family. His prize was a trip to Silicon Valley - the

tech start-up centre of the universe - where some of our most successful alumni and friends generously gave him their time and expertise.

Success at the Bath Business Plan competition soon followed, then, in his final year, Ashton's blend of technical gifts and entrepreneurial drive earned him a coveted Innovation Award from a fellow graduate, His Excellency Khalil Foulathi. It was a gift that would change his life.

In just two years, Ashton and his business partner, graduate Max Maybury, have founded three businesses across different technology sectors, employ a team of nine, including other Bath graduates, and have grown all their products without seeking any external investment. Their thriving tech consultancy business, Backslash Build (\build), is their foundation, allowing them to cultivate new ideas which they've quickly turned into successful spin-off companies.

Ashton says: "To my donor, I would like to say thank you for the seed that you planted. Gifts like yours enable entrepreneurial alumni like Max and me to follow our dreams."

We're proud that Ashton is building his future here in Bath. It's looking extraordinarily bright.

Thank you for the seed that you planted

## LASTING IMPACT

Leaving a gift in your Will doesn't cost anything in your lifetime, but it can make a lasting difference to our University.

Quantity Surveyor Dr James Nisbet was involved with the construction of all the early buildings on campus. Today, the University is building on his legacy. James left a gift in his Will that established the University's Endowment Fund to support special projects and to champion initiatives of strategic importance. It was an aspiration that perfectly describes our Gold Scholarships, hence the investment in the programme, and the people.

Our five Nisbet Gold Scholarship students owe the support they receive to the kindness of someone they have never met. "Thank you for giving me this chance to prove myself," writes one second year student, "for levelling the playing field, and helping me to overcome my insecurity of not being good enough. I promise your faith is not put in the wrong hands."

When pledging a legacy, you decide where you want your support to go, whether that's towards the University as a whole or an aspect that means the most to you, like alumnus and Football Blue, Jeff Trendell. His gift established the Trendell Family Sports Scholarships, which are now continued by his wife and son. These scholarships are awarded to students who combine exceptional sporting and academic talent.

Beneficiary Hadia Hosny El Said came from Egypt to combine a full-time Master's with a packed schedule of badminton training and international fixtures. Hadia represented Egypt at the Olympic Games in 2012, and graduated with an MSc in Medical Biosciences that same year. "It was such a hard time between travelling, tournaments and coursework but whenever I came back to the University, I felt like I arrived home," she said. "I really want to thank the Trendell family and I am honoured to have been one of the recipients of the scholarship."

For Dorothy Walters-Godfree and Margaret Dewey, it was the arts that they wanted to foster at Bath. Dorothy was married to one of our very first lecturers, Gerald Walters, and she maintained contact with the University throughout her life, while Margaret was a music teacher here and loved helping students thrive. Both bequeathed arts scholarships to nurture up-and-coming talent.

For legacy givers Noel and Winnie Gear, however, it was engineering that was close to their hearts. Noel had worked as an electrical design engineer for the Admiralty (where he met Winnie), and they were keen to help bright engineering students who might not otherwise be able to afford a university education. Their legacies created the Pringle Gear Scholarship Fund, which has supported eight students. One wrote: "This scholarship has made my first year of university amazing, and something I will cherish. I will not take this opportunity for granted."

Noel and Winnie had not studied at Bath but were local philanthropists, like John and Barbara Redwood, whose recent legacy created three Gold Scholarships. This generosity is not lost on the students, as one recipient explains: "Outside of birthday and Christmas presents, I've never really been given much, so it still feels a bit surreal to know I was accepted. I can't describe how happy I was when I found out I had been awarded the scholarship. Thank you."

Over the past 50 years, gifts of all sizes from our generous alumni and friends have made, and are making, such a tremendous difference at Bath. We hope they are proud of the legacies they have left, and the students they are inspiring.

Thank you for aivina me this chance to prove myself





Top: Winnie and Noel Gear

Above: Dr James Nisbet (second left) at the signing of the contract for the first building on campus, 1964

## Members of the **1966 Society**

Established to recognise those who pledge a legacy, the 1966 Society takes its name from when the University received its Royal Charter.

Mr Stuart Appleton Mrs Kathryn Arnold & Mr Simon Arnold Mr Andrew Batterham Mrs Sarah Bevan Mr Alan Bowsher Dr Jayne Carrington Dr Peter Cave Mr Dave Chapman & Mrs Elaine Chapman Professor Richard Conder Mr Michael Cornell Mr Robert Cotta Mr Gary Cottle & Mrs Jacqui Cottle Ms Rosemary Davies Mrs Margaret Dewey Mr Steven Charles Docker Mr Bernard Dokelman Ms Sue Duncan Mr Jim Edwards Mr Phillips Ehizojie Mr Fernando Flores-New Mr Peter Flower Mr Tim Ford Mr Tim Gates Mr Noel Gear \* & Mrs Winnie Gear\* Mr Laurie Goldsmith Mr Robert Goodhand Mr Richard Hall Mr Martin Hamilton & Mrs Carol Hamilton Dr Hylton Hardisty\* Dr Graham Hill & Mrs Sheila Hill Vice Admiral Sir Robert Hill KBE & Lady Deborah Hill Mrs Catherine Howlett Mr Malcolm Jenkin Mr Tony Kerpel MBE

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17 anonymous donors

\*Deceased

## **Members of the Rolls of Honour**

Our Rolls of Honour are a lasting record of those who have made exceptional gifts to the University.

### **Chancellor's Roll of Honour**

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\*Deceased

This Impact Report captures the essence of what has been achieved at our University as part of the Look Further campaign, thanks to the collaboration between our donors, staff and students. Like all the best initiatives, it has been a team effort.

Our University has been fundamentally improved by harnessing the generosity of our supporters with the ambition and talent of the beneficiaries - they're mutually reinforcing, and I hope that has come across.

I have had the privilege of being involved with the Look Further campaign from start to finish, and I would like to take this opportunity to pay tribute to colleagues over the years who played invaluable roles in delivering a seismic shift within the University. We have learned, among other things, that thousands of alumni and friends stand ready to support us, when we ask; that gifts so frequently come in non-financial guises, whether offering networking opportunities, mentoring, careers guidance, or guest lectures, all providing today's students and recent graduates with the tools to thrive, through what is now very definitely the global Bath network.

That global reach is something else to highlight - not just the source of donations, but rather the impact your gifts have already had, or might have - and that *might* is key. Philanthropy does not deal in certainties - it's the combination of generosity with aspiration, of support with hope, which makes donations to a university so full of potential. One of our scholars thanked her donor for a gift which "levelled the playing field" - if that's the one single outcome of a 10 year campaign, then I think your gifts have been more than amply repaid.

Here's to a level playing field for the years to come, and a University that is even better supported, where potential is even more fulfilled, and another team effort that makes an even greater impact on individuals, and the world at large.

Thank you.



Gavin A. Maggs Director of Development & Alumni Relations University of Bath

"As donors you are making such a big difference in helping people like me develop into the people we are meant to be. I can't thank you enough."

DR REBECCA MEAD, PHD SCHOLAR





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