Research Impact Report 2021

Thank you for supporting research at Warwick
This is the first edition of a new report designed to show you how impactful the support of our alumni and friends is on research across the University.

I am new to the post of Pro-Vice-Chancellor for Research, and if I had to pick one word to describe our research environment, it would be interdisciplinary. Warwick’s research is unconfined by boundaries. From energy, to health, to sustainability, your support is helping us work quickly and flexibly to find solutions to some of the planet’s biggest challenges.

Philanthropy is the most effective method through which Warwick can continue to advance its global position. Our ambitious vision for the future is one in which our research will transform the way that we understand this world, and perhaps worlds beyond this planet, creating lives that are healthier, safer, just, more resilient, and fulfilled.

You are helping us attract the world’s best thinkers and locate them in the best facilities. Please read on to learn more about our fantastic new Interdisciplinary Biomedical Research Building and our ambitions to build a Science Precinct to help reimagine the future of Science, Technology, Engineering and Maths at Warwick.

Thank you once again for your support. As you will see in this report, it is very much appreciated by researchers at all stages of their careers. Your philanthropy is helping us attract the most talented senior academic researchers to Warwick, whilst supporting undergraduate students testing out academic careers through the University Research Support Scheme, and inspiring the PhD students who are the future of research.

With very best wishes
Professor Caroline Meyer

Did you know?
Philanthropic support from donors and organisations has raised £37 million for research at Warwick since 2018. Thank you for making a difference.
The COVID-19 pandemic continues to have an unprecedented effect on societies, communities and economies worldwide, and is recognised as both a health and an economic crisis.

In response, Warwick has established an Institute for Global Pandemic Planning, combining world-class expertise to develop comprehensive solutions for global leaders struggling to respond to the health, social, economic and psychological impacts of pandemics.

Through the Institute, an interdisciplinary response group of Warwick’s experts will be rapidly mobilised to advise governments and establish a robust pipeline of doctoral students to expand worldwide scientific leadership on managing pandemics. More than 1,100 alumni registered for our webinars to learn more about the Institute for Global Pandemic Planning and 767 applications were made for the first round of pandemic planning PhD scholarships.

After donors gave £3 million in just eight months to support the Institute, the first six of our 30 new PhD pandemic research scholars will start at Warwick this autumn. They will be part of a new network of international PhD students who will act as ambassadors for our scientific approach and feed key learnings back into their respective countries.

Dr Nicole Robb leads a team of biologists working on influenza and coronavirus based in the Interdisciplinary Biomedical Research Building and is involved in the PhD programme.

“Over the last two decades, viral outbreaks have become more and more frequent and they’re increasing in severity,” she said. “Having a group of scientists and students who can tackle future pandemics is incredibly important.”

Alumni Clive Gillmore (MSc Management Sciences, 1979-82) and Keith Skeoch (MSc Economics 1978-79) are the principal donors behind the PhD scholarships, and we would like to thank them for their support.

Behavioural scientist, Professor Nick Chater, said: “The really crucial next step for the Institute is building up both core faculty whose sole responsibility is dealing with global pandemic planning and, under them, having a team of brilliant young researchers who are coming into the field and solely working on these crucial issues. Building up this core research strength can only really be done through to flexible and speedy routes of philanthropic donation.”

Watch a video about the Institute at www.warwick.ac.uk/giving/projects/igpp

The Interdisciplinary Biomedical Research Building (IBRB) is now complete, bringing to life the University’s commitment to delivering world-leading research in neuroscience, microbiology and infection, cell biology, disease models, and supporting and facilitating interdisciplinary biomedical research of the highest quality.

Thanks to a £750,000 grant from the Wolfson Foundation, The Wolfson Tissue Mechanobiology and Human Disease Laboratory will be a crucial part of this innovative research environment. The next generation of academics can train and collaborate to understand the origins of diseases of the body and brain, with the aim of finding new ways to extend healthy life spans.

Dr Nicole Robb and one of her students

Our new Interdisciplinary Biomedical Research Building (IBRB) is now complete, bringing to life the University’s commitment to delivering world-leading research in neuroscience, microbiology and infection, cell biology, disease models, and supporting and facilitating interdisciplinary biomedical research of the highest quality.

Thanks to a £750,000 grant from the Wolfson Foundation, The Wolfson Tissue Mechanobiology and Human Disease Laboratory will be a crucial part of this innovative research environment. The next generation of academics can train and collaborate to understand the origins of diseases of the body and brain, with the aim of finding new ways to extend healthy life spans.

Dr Nicole Robb and one of her students

Life after Warwick: Paul Kihiko

Name: Paul Kihiko (BSc Biological Sciences, 2016-19) 
About me: I’m studying Medicine at Keele University after taking part in the Warwick’s Undergraduate Research Support Scheme (URSS) in 2018. The scheme enables undergraduate students to carry out an interdisciplinary summer research project and receive a bursary to support them while they complete this.

The impact of URSS: The two learning objectives of my project were learning how to conduct and analyse Polymerase Chain Reaction (PCR) experiments and learning how to extract and synthesise DNA from bacteria. The crucial skills I gained from this experience were critical thinking, statistical analysis and data analytics. As I continue with my studies in Medicine, I’ll definitely use these skills within patient care in making good clinical decisions. This experience has also sparked my interest in possibly specialising in pathology.

“Dr Nicole Robb and one of her students

Interdisciplinary Biomedical Research Building

Life after Warwick: Paul Kihiko

Name: Paul Kihiko (BSc Biological Sciences, 2016-19) 
About me: I’m studying Medicine at Keele University after taking part in the Warwick’s Undergraduate Research Support Scheme (URSS) in 2018. The scheme enables undergraduate students to carry out an interdisciplinary summer research project and receive a bursary to support them while they complete this.

The impact of URSS: The two learning objectives of my project were learning how to conduct and analyse Polymerase Chain Reaction (PCR) experiments and learning how to extract and synthesise DNA from bacteria. The crucial skills I gained from this experience were critical thinking, statistical analysis and data analytics. As I continue with my studies in Medicine, I’ll definitely use these skills within patient care in making good clinical decisions. This experience has also sparked my interest in possibly specialising in pathology.
Giving Day

Warwick celebrates philanthropy on the 29th of May, each year, to honour The 29th May 1961 Charitable Trust, which helped found the University and continues to support us to this day. On the 27th and 28th of May 2021, we held our first Giving Day – a 36-hour online fundraising challenge for students and research.

Together, more than 300 of you raised an amazing £246,894 and the research area that attracted the greatest number of gifts over Giving Day was antimicrobial resistance.

Professor Chris Dowson, who leads the Warwick Antimicrobial Interdisciplinary Centre, said: “Antimicrobial resistance (AMR) presents a danger to us all. It’s been described as the silent pandemic. At Warwick we’re tackling antibiotic resistance by integrating expertise across disciplines.

“Thank you so much for your support on Giving Day, which will have a transformative impact on our current research and help train the next generation of global AMR experts to research and develop new antibiotics, alternatives to antibiotics, rapid diagnostic tools, and clinical trials to help solve this global challenge.”

Thank you once again to everyone who donated. You can watch the livestream content shown on the day at https://29may.warwick.ac.uk

Donor spotlight:

Name: Dr David Stirling (PhD Biosciences, 1974-78)  
Area of support: Antimicrobial resistance  
What giving means to me: After completing my PhD at Warwick, I moved to the U.S. and co-founded the pharmaceutical company Celgene. I have many fond memories of studying at Warwick, supervised by Professor Howard Dalton, and wanted to give back to support an area of research that I think is critically important. I chose to pledge my $250,000 donation on Giving Day to inspire my classmates to support our University.

Researcher spotlight: Harry Wilde

Scholarship: Feuer International Scholarship in Artificial Intelligence  
About me: I’m studying for a PhD in sustainability science as part of the Leverhulme-TRANSFORM Doctoral Scholarship Programme. The programme aims to train a new generation of transdisciplinary leaders who are able to address current and future sustainability challenges. My research to date has focused on renewable energy solutions for use in rural areas in South America, broadening my perspective on the critical implications of sustainability transitions, particularly in developing countries.

My inspiration: As a sustainable energy advocate, I’m looking forward to academic opportunities to produce knowledge that can contribute and hopefully enhance the undergoing transition to a cleaner global energy regime. I’m very grateful to the Leverhulme Trust for enabling me to undertake this important research.

Researcher spotlight: Laura Quinteros Nogales

About me: I’m studying for a PhD in sustainability science as part of the Leverhulme-TRANSFORM Doctoral Scholarship Programme. The programme aims to train a new generation of transdisciplinary leaders who are able to address current and future sustainability challenges. My research to date has focused on renewable energy solutions for use in rural areas in South America, broadening my perspective on the critical implications of sustainability transitions, particularly in developing countries.

My inspiration: As a sustainable energy advocate, I’m looking forward to academic opportunities to produce knowledge that can contribute and hopefully enhance the undergoing transition to a cleaner global energy regime. I’m very grateful to the Leverhulme Trust for enabling me to undertake this important research.

Learn more about the Feuer International Scholarships at: www.warwick.ac.uk/feuerscholarships

“Thank you so much for your support on Giving Day, which will have a transformative impact on our current research and help train the next generation of global AMR experts to research and develop new antibiotics, alternatives to antibiotics, rapid diagnostic tools, and clinical trials to help solve this global challenge.”

“My scholarship has enabled me to continue the theme of impactful work through helping the NHS, British Heart Foundation and Government during the pandemic.”

Donor spotlight:

Name: Dr David Stirling (PhD Biosciences, 1974-78)  
Area of support: Antimicrobial resistance  
What giving means to me: After completing my PhD at Warwick, I moved to the U.S. and co-founded the pharmaceutical company Celgene. I have many fond memories of studying at Warwick, supervised by Professor Howard Dalton, and wanted to give back to support an area of research that I think is critically important. I chose to pledge my $250,000 donation on Giving Day to inspire my classmates to support our University.
Your gifts are advancing Warwick’s research priorities, helping our researchers work across disciplines to solve global challenges. Here are some areas where your support is making a huge impact.

Sustainability and circular economy

Our planet is facing a climate emergency and Warwick is playing its part to help. As an international institution of research and learning, with deep connections to society and industry, we are leading by example across our campus, our community, our research, and teaching.

Through supporting a new research training pathway for sustainability science, your gifts will create a greener, cleaner, safer world for us all.

Our ambition is to nurture a new generation of transdisciplinary leaders who are able to address current and future sustainability challenges. We are testing the real-life implications of creating a sustainable future and tackling the practical challenges of getting there, for every member of society.

Warwick already offers an undergraduate and Masters course in Global Sustainable Development and a new PhD programme led by the Institute for Global Sustainable Development, enabled by the Leverhulme Trust and hosted in the School for Cross-faculty Studies, will begin in 2021. This cohort of students will also be embedded within a larger network of researchers working on sustainability from across Warwick’s departments and interdisciplinary research centres.

Did you know?

Scientists and engineers from Warwick are working on the WorldF3rst, the first racing car designed and manufactured from waste material.

Centre for Ancient Greek Culture and Society

History can inspire the future. At Warwick we want to ensure that lessons from the past are shared and enjoyed by younger generations, in an ever more global and challenging world.

Your support is helping create a new Centre for Ancient Greek Culture and Society, a hub of excellence and experience offering world-class teaching and research opportunities, collaboration with Greek institutions and public engagement.

The Centre will be based within the new Faculty of Arts Building, which will be completed this year.

Visit www.warwick.ac.uk/CAGCS to watch our video and learn more.

Centre for Early Life

How can we support the birth and development of healthier children? The Centre builds on the University’s existing expertise in early life research by aiming to pioneer research into the formative factors in our lives.

The Centre’s scope starts before pregnancy with research into parenthood planning, egg and sperm production, and early embryo development, extending to research into physical and mental health disorders in the first five years of life.

Your support will enable a cross disciplinary approach, bringing together expertise from leading clinicians, mathematicians, engineers, software designers, childhood development specialists and lab-based practitioners. Partnering with industry and the University Hospitals Coventry and Warwickshire NHS Trust, the Centre will accelerate the development of new clinical tests and treatments and support education and training of healthcare staff.

Find out more at www.warwick.ac.uk/go/cfel
The future of STEM

Warwick is committed to growth, particularly in the science, technology, engineering and mathematics (STEM) disciplines.

As part of that vision, we are planning to create a new science campus that fosters multi-disciplinary and cross-sector collaborations, inspiring future generations of scientists and engineers, and preparing students for technology-oriented careers in a 6G-enabled world.

With your support, we can grow and strengthen our world-class research and education, with state-of-the-art facilities where innovation will flourish. We will expand our partnerships and collaborations, and create an inclusive, inspiring, interdisciplinary environment for our students, staff, and visitors.

The Science Precinct will be so much more than a collection of laboratories and buildings, it will be a space where brilliant minds can work collaboratively to solve some of the biggest global challenges of today. At its heart, the development aims to maximise our existing strengths and capabilities, whilst adapting to new opportunities arising from rapid advances in data science, machine learning, and automation.

Learn more at www.warwick.ac.uk/STEMGC

Did you know?

Warwick Boring, a team of students and alumni from across STEM disciplines, have made the finals of the most prestigious tunnelling competition in the world this summer. They will travel to LA to take part in the contest, hosted by Space X entrepreneur Elon Musk. Thank you to the alumnus who generously gave £60,000 to support their efforts.

Life after Warwick

John Morgan, former Wolfson Scholar

Scholarship: Wolfson Postgraduate Scholarship

About me: I completed my PhD in History at Warwick in 2015, writing a thesis on responses to flooding in England between 1500 and 1700. In 2016, I took up a permanent lectureship in early modern history at the University of Manchester and was awarded the 2017 Harold Grimm Prize for the Best Article on the Reformation. Here I continue to teach, supervise my own PhD students and research on the environmental history and historical geography of early modern Britain.

How my scholarship helped me: Wolfson’s funding opened lots of doors for me as a student and gave me the space and scope to aim high. The History department at Warwick taught me everything about how to be a historian and a colleague.

“I remain very grateful for both funding from the Wolfson Foundation and my time as a Warwick student.”

Cancer Research Centre

Cancer research at Warwick continues to focus on four main areas: understanding cancer, improving diagnosis, developing new therapies and contributing to clinical trials.

An interdisciplinary approach is key and the team are building on our research strengths in different disciplines, ranging from biomedical research to work in Chemistry, Engineering and Mathematics.

This year, your gifts have helped support the team to move into the new IBRB building (see above). There, researchers are working to understand the ‘basic science’ of how molecular and cellular changes make cancer cells grow and spread around the body.

During the pandemic, a team of virologists have adapted their research looking at links between cancer and the Epstein Barr Virus, which causes chronic fatigue syndrome and glandular fever, to examine the virus’s effect on Covid-19. This research could improve outcomes for patients affected with long Covid.

Did you know?

The Wolfson Foundation has supported PhD scholarships in the Humanities at Warwick and other leading universities since 2012, awarding more than £20 million to 300 scholars. Thank you to the Foundation for renewing their support for the scholarships for the 2021/22 academic year.
Researcher spotlight

Name: Ruoyu Wang
About me: I’m a PhD scholar working with both the Department of Computer Science and Warwick Medical School. My research focus is improving the diagnosis of head and neck cancer using digital pathology and machine learning. By studying the cells from biopsies, I’m looking for patterns to tell us how patients will respond to therapy. This is an example of using technology for personalised, precision medicine and I hope my research will result in improved outcomes for cancer patients.

My proudest achievement: In my first-year study is successfully chairing a lab meeting. That was the first time that I used English to host an academic discussion, and it was also my first time presenting in front of my colleagues about my work.

“This scholarship gives me an opportunity to pursue a PhD degree in a prestigious university, in an international research environment and with some of the world’s foremost scholars in my field. With this scholarship, I am able to devote myself to studying and conducting research without worrying about any financial issues.”

Find us on Facebook

To keep you up to date on the latest news and events from the University, please follow our Warwick Alumni and Friends Facebook page at www.facebook.com/WarwickAlumni.

Contact us

Jo Clark
Senior Donor Relations Manager
jo.clark@warwick.ac.uk
02476 150064
07385 037139

Chloe Grainger
Donor Relations Executive
c.grainger@warwick.ac.uk

Did you know?

Technology that can detect cancer tumours through patients’ skin with high-precision robotic surgery is to be developed for use in hospital settings for the first time in a project led by Warwick.