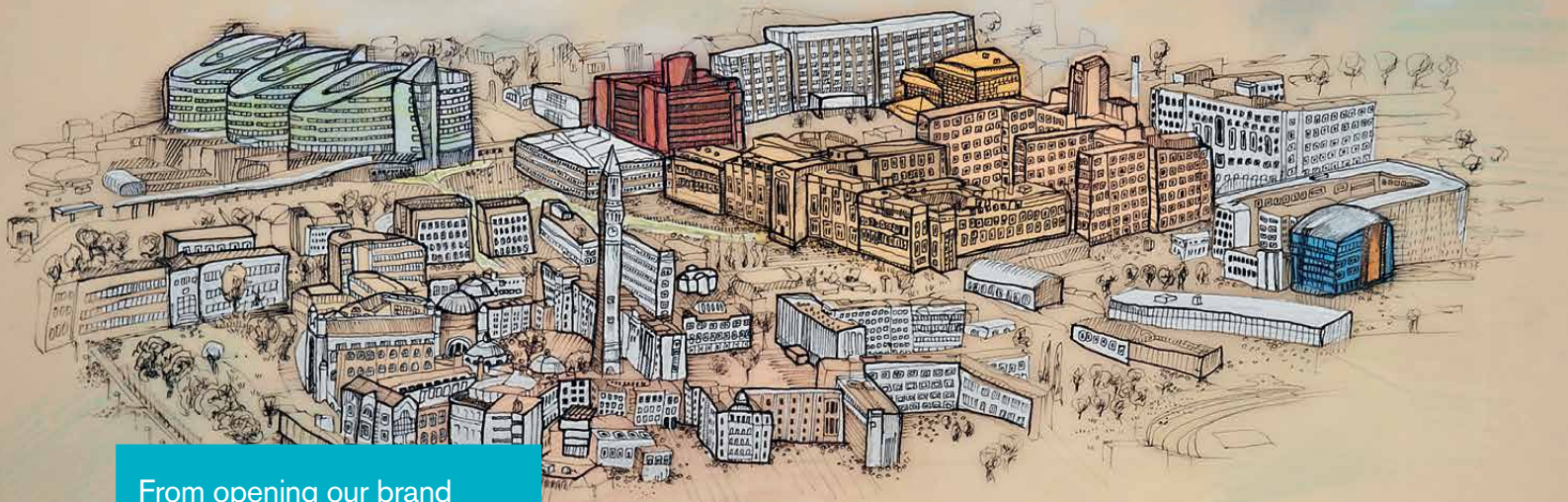




UNIVERSITY OF
BIRMINGHAM

Your gifts are saving lives



© Sarah Silverwood

From opening our brand new Institute of Translational Medicine to funding life-saving research to fight cancer, your generous gifts are saving, improving, and extending lives. Within this report, you can learn more about the extraordinary impact of your support, as well as discover some of the new, pioneering areas that we are delighted to invite you to be a part of.

By donating to Birmingham, I am convinced we are one step closer to finding a cure.

James Phillpott,
The Amber Phillpott Trust

FIGHTING CHILDHOOD CANCER

More than 1,500 children are diagnosed with cancer in the UK every year. This means that around one in 500 children will suffer from some form of cancer before they reach 14 years of age. To prevent children dying from cancer, Dr Frank Mussai is researching how children's cancers interact with the immune system, and specifically how cancers of the blood are able to switch off our anti-cancer immune response.

'Your donations are allowing us to expand our current work, supporting new technicians and research scientists. It is allowing us to buy equipment vital for analysing the blood and tumour

samples that are donated from children and their families, and develop new drugs and ways of reactivating the immune system to attack cancer in children.

'We hope that our findings here in the lab will enable new forms of treatment to be developed to fight cancer in children.'

Dr Frank Mussai, Clinical Senior Lecturer in Paediatric Oncology, Institute of Immunology and Immunotherapy



What giving means to me

The Amber Phillpott Trust was founded in memory of Amber who lost her battle with Acute Myeloid Leukaemia (AML) at just 18 months old. Whilst being treated by Dr Frank Mussai, Amber provided a blood sample to contribute to his research.

'I didn't know that the blood sample Amber provided would be of such significance that it would shape Dr Mussai's research for years to come. This sample has now led to the development of new treatments which are currently in human trial.

'My family's dream is to see an end to AML within our lifetime, so other children don't have to suffer the same fate as Amber. By donating money to Birmingham through Amber's charity, and seeing Dr Mussai's work come to fruition, I am convinced we are one step closer to finding a cure.'

James Phillpott, The Amber Phillpott Trust



HARNESSING THE IMMUNE SYSTEM TO COMBAT CANCER

The University of Birmingham is currently undertaking a number of cutting-edge research projects into fighting cancer. Similar to Dr Frank Mussai, teams at the Cancer Immunology and Immunotherapy Centre are exploring how a patient's immune system can be unleashed to selectively kill cancer cells through immunotherapy.

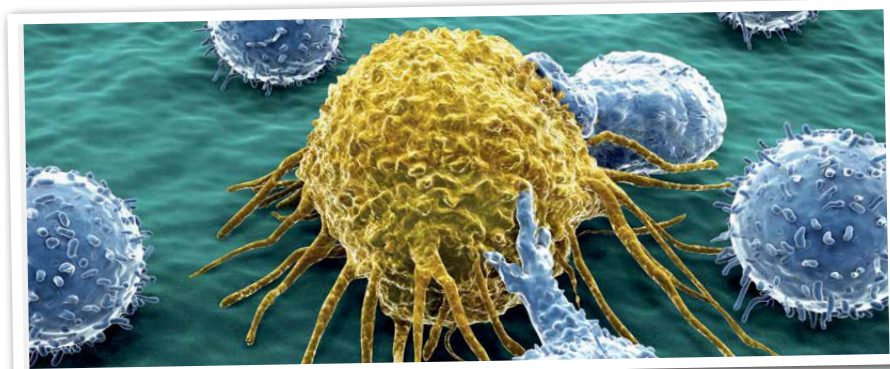
Specifically, Professor Gary Middleton is focussing on types of cancers where this treatment isn't currently effective.

'Whilst it's still early days, I've seen some really remarkable results of immunotherapy. I've had critically ill patients who've responded phenomenally, and now have no sign of any cancer at all.

'I'm particularly interested in the diseases where immunotherapy doesn't work, for example in bowel or breast cancer. Once I have unpicked this, I can then find strategies to combat the inhibitory effect to unlock these treatments for all kinds of cancer. The impact of this is potentially massive.

'Your support will help us translate this research into reality, and develop treatments to save and improve the lives of patients fighting cancer.'

Professor Gary Middleton, Professor of Medical Oncology, Institute of Immunology and Immunotherapy



What giving means to me

'In February 2013, I was diagnosed with renal cancer. I feared I would die and not see my four children grow up. At that moment, when you hear the diagnosis, you realise the importance of the vital research that has been, and is being, done to find a cure for all forms of cancer.

'There has been much progress in this field and now many cancers are not a death sentence. I was fortunate that my tumour was caught at any early stage, and I've now been given the all clear. But imagine a world where every cancer can be cured or prevented. Where no-one needs to face the fear of not seeing their children grow up. That is why I donate to the Cancer Immunology and Immunotherapy Centre.'



Adam Freeman, (LLB Law, 1992) Donor and Alumnus

SAVING MOTHERS' LIVES

Thank you to everyone who supported our Christmas appeal, which raised £20,000 to help Birmingham researchers save the lives of mothers in the developing world. Your generosity is helping Dr Lissauer and his team to develop and trial their new 'Sepsis Bundle' — a set of diagnostic tools and treatments adapted for the developing world to ensure health workers can immediately identify and treat mothers with sepsis.

'Currently, nearly half of all mothers who develop severe sepsis in the developing world will die. However, in the UK the right care helps to ensure women who develop sepsis make a full recovery.

'My team is working alongside local health professionals in Malawi to develop a set of diagnostic criteria and treatments to identify sepsis in its early stages and to treat it immediately.

'One of the hard working midwives in Malawi, Theresa, faces the reality of mothers dying from sepsis all too often. She tells us, "I see so many mothers with sepsis. We try our best to give the best care we can, but it is not always enough. We lose too many to this preventable illness."



'With the help of your generous donations, we are able to pilot our research in the field and help health workers like Theresa to save lives. Thank you!'

Dr David Lissauer, Clinical Lecturer in Maternal and Fetal Medicine

FROM BENCH TO BEDSIDE IN BIRMINGHAM

'I am delighted to announce that, with the help of your generous donations, the Institute of Translational Medicine (ITM) opened in early Autumn 2015.

'The Centre for Rare Diseases is now fully operational, with the first patient cohorts welcomed in September, and provides a 'one stop clinic', enabling co-ordinated care for patients with multi-system disorders.

'Dr Simon Bach has been appointed to lead the clinical trials team. Simon joined the University in 2007 as a Senior Lecturer. His appointment represents an exciting opportunity to further deliver our vision for the ITM to progress the very latest scientific findings into pioneering new treatments.

'Thank you again for your generous support that has helped make this possible. Your support will help accelerate the development of new treatments to save and improve lives for many years to come.'

Tom Clutton-Brock,
*Interim Director of the
Institute of Translational
Medicine*



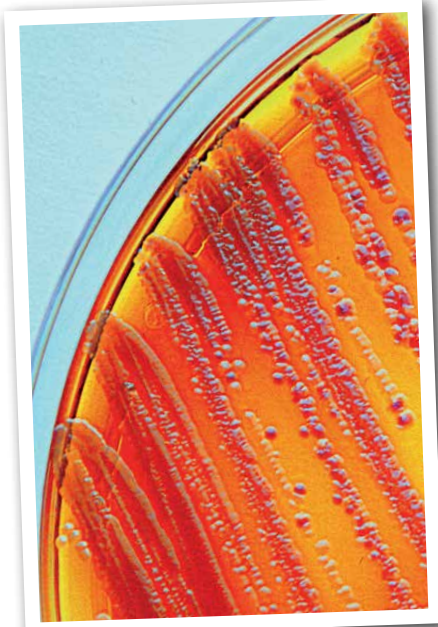
ADDRESSING ANTIBIOTIC RESISTANCE

'Antibiotics have saved millions of lives and transformed healthcare in low and high income countries. However, now almost 70% of bacteria are drug-resistant. Many of the antibiotics used today were developed more than 20 years ago.

'Antimicrobial resistance is a global problem. The failure to develop new drugs will lead to a post-antibiotic era; whether this will be within five, 10 or 20 or more years is unknown – but we cannot afford to wait.

'The University of Birmingham has established an internationally-leading research base in microbiology, the Institute of Microbiology and Infection (IMI), to address this growing crisis. We have brought together leading experts from many different fields of microbiology to understand the basic biology of microbes, how bacteria become drug-resistant, and to discover new drugs and vaccines to address the global antibiotic resistance crisis.

'Donations like yours are helping to support this cutting-edge research into antibiotic resistance and new treatments, and will increase the scope, pace, and reach of our work.'



**Professor Laura
Piddock, Professor
of Microbiology,
Deputy Director,
Institute of
Microbiology
and Infection**



Combatting Ebola: Genome sequencing success

'Thanks to your support for my research into Ebola, we have developed a new, portable nanopore genome sequencing system that helped tackle the Ebola outbreak.

'Your gifts enabled a member of my team to conduct a field visit to Guinea, to start sequencing genomes in real time. The results we collected helped provide information to epidemiologists who were trying to trace where new Ebola infections originated from. This information has been particularly helpful in understanding how Ebola can survive in the body without causing symptoms for some time.

'Your generosity has gone a long way in supporting our work – thank you.'

Dr Nick Loman,
*Institute of
Microbiology and Infection*



HEALTHY AGEING

As we get older our immune systems are less able to deal with new infections, or to control infections we were immune to in our youth. As a result we become more susceptible to infections, for example pneumonia, and inflammatory diseases such as rheumatoid arthritis. Professor Janet Lord is researching how this increase of infection as we age can be prevented.

'At the Institute of Inflammation and Ageing, we are examining the deterioration of immunity that comes with age and contributes to increased illness in older people. By understanding what happens to our immune system as we age, we want to break that link between ageing and illness. You could say we are working to ensure old age is something to be enjoyed, rather than endured.'

*Professor Janet Lord,
Professor of Immune Cell
Biology, Head of Institute of
Inflammation and Ageing*



DID YOU KNOW?

Research into ageing and inflammation can be applied to a vast range of diseases, rather than to one illness only. This means for every £1 donated, £50 worth of research is carried out!

A FINAL THANK YOU FOR YOUR SUPPORT FOR CIRCLES OF INFLUENCE CANCER RESEARCH PROJECTS

During our Circles of Influence campaign, you gave an incredible £997,816 towards cancer research at Birmingham.

Thanks to your generosity, we are now pioneering cutting edge research to prevent, diagnose, and treat a wide-range of cancers including breast, prostate, brain cancer in children, and Burkitt's Lymphoma. Research made possible by your donations has helped to save lives across the world, from people

in our local community to children living in Sub-Saharan Africa. We have improved early diagnosis breast cancer survival rates by 30%, developed new technology to tackle prostate cancer tumours, and reduced the risk of bladder cancer recurrence by a third.

We wanted to take the opportunity to send one final enormous thank you to everyone who has enabled this research by supporting the campaign projects.



IMPROVED
EARLY DIAGNOSIS
BREAST CANCER
SURVIVAL
RATES BY **30%**



YOUR GIVING TO CIRCLES OF INFLUENCE IN NUMBERS

What giving means to me

'I participate in the 1000 Elders group, a group of volunteers committed to supporting research into the effects of ageing.'

'I found out about Janet Lord's research into the effects of age on the immune system at a conference I attended last year. I've now joined a panel of participants, from a range of age groups, who donate blood for this study.'

'In future years, I look forward to continuing to support medical research at the University through volunteering as part of the 1000 Elders group.'

*Dr Martin Kenig, (BSc Biochemistry
1969) Volunteer for 1000 Elders Group*



**UNIVERSITY OF
BIRMINGHAM**

Edgbaston, Birmingham,
B15 2TT, United Kingdom
www.birmingham.ac.uk

GRAND TOTAL RAISED
FOR CANCER RESEARCH **£997,816**

48 GIFTS TO SUPPORT CHILDHOOD
CANCER RESEARCH FUND **£27,131** TOTAL

1,005 GIFTS TOWARDS BRAIN CANCER
IN CHILDREN RESEARCH FUND **£32,713** TOTAL

617 GIFTS TO BURKITT'S LYMPHOMA
CANCER RESEARCH FUND **£110,711** TOTAL

1,388 GIFTS TO SUPPORT BREAST CANCER
GENETIC RESEARCH FUND **£177,415** TOTAL

5,622 GIFTS TO SUPPORT PROSTATE
CANCER RESEARCH FUND **£278,973** TOTAL

5,597 GIFTS TO CANCER INSTITUTE
AND RESEARCH FUND **£370,873** TOTAL

THANK YOU!