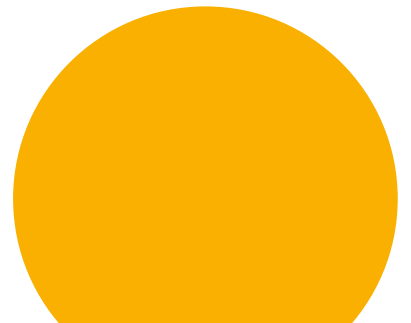


IMPACT REPORT 2020





INTRODUCTION

I am delighted to introduce this, the latest North West Cancer Research Impact Report.

Since our last impact report in 2018, we have diversified our portfolio of world-class research to better reflect the needs of our communities. This report brings our impact up to date.

North West Cancer Research has been putting the region's cancer needs first for over 70 years and since 2000, we have invested over £43m into life-saving research. Our focus is increasingly on improving knowledge on the cause, the care and the cure for the disease and ensuring that the work we fund is relevant to patients and the people in our region.

As a region, our overall levels of cancer are higher than the national average, and particular types of cancer are much more common here than the rest of the UK. For example, in the North West, you are 26% more likely to get lung cancer than the rest of the UK and in North Wales, Head and Neck cancer is 18% more common than the rest of the country.

Statistics like these drive us forward and remind us how vital our work is. We need to understand what causes these variations and then take action, in order to provide information and solutions for our communities. It is also important that our research is well targeted and effective in its aims.

We have thought a great deal about how we focus our research funding. We wanted to ensure that we funded work throughout the research spectrum to include studies from the laboratory bench all the way to the patient's bedside and further – for those living with and beyond cancer. Because of this we have funded work which develops the research community and the next generation of scientists, and we have also funded work with doctors based in our hospitals and research active clinicians. Our work has included studies on the effectiveness of psychological support for cancer patients, alongside research looking for bio-markers and ways of detecting cancer sooner. Crucially, we have also funded work in a wide variety of cancers – including cancers of the prostate, breast, lung, head and neck and others.

Our education and outreach work has been expanded to ensure that our communities are aware of cancer, its symptoms and importantly how they can lower their risk of developing cancer. Nearly 40% of cancers are preventable. We are determined to help our communities achieve a cancer-free future.

None of this would be possible without a key group of people - our supporters, who provide us with the resources we need in order to fund our work. We have so much to thank them for and we want them to know that we appreciate all that they do for us and in helping to create a cancer-free future for the region.



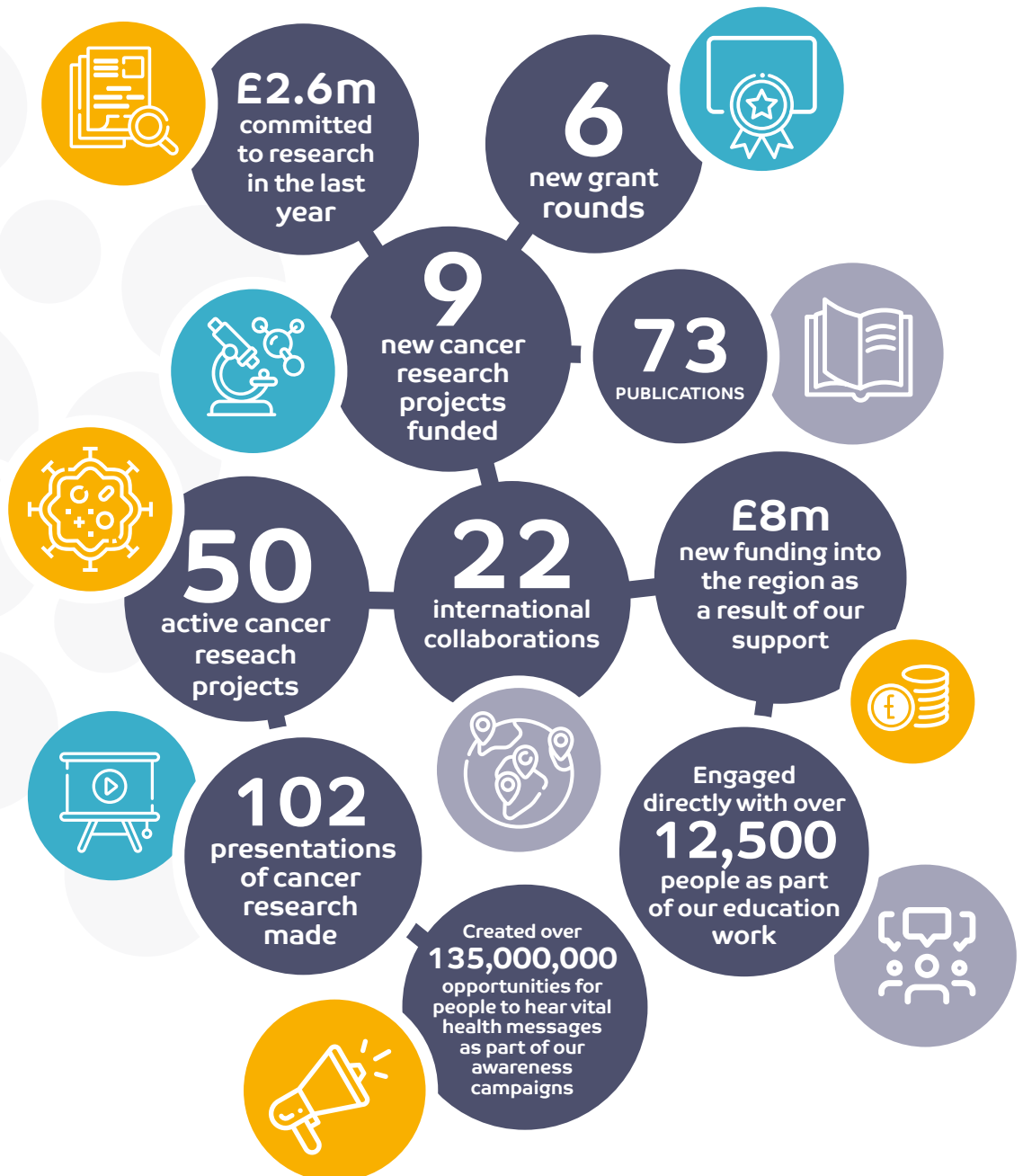
Alastair Richards
CEO





OUR IMPACT

This report looks at the impact of our work – understanding what we have achieved and how we have moved forward cancer knowledge in a two-year period.



RESEARCH

Putting our region's cancer needs first by funding world-class cancer research

We fund only the highest quality research that has the greatest impact on the lives of people in the region.

We are proud to be members of the Association of Medical Research Charities (AMRC) and adhere to their processes and guidance to ensure our funding and the management of our research priorities are transparent and rigorous.

We work collaboratively with a team of scientists, researchers, clinicians and patients who form our Advisory Groups and help determine which projects are most relevant and impactful to our community.

In 2019/20, we introduced greater diversity into the types of projects that we fund to ensure that we are:



Tackling the cause by funding research that seeks to understand the biological mechanisms that cause cancer and the differences in our communities that lead to higher cancer levels



Improving the care by finding kinder treatments and better ways of communicating



Finding the cure by funding world-class research to create new drugs and surgical techniques



RESEARCH PROJECT CASE STUDY

PROSTATE CANCER MERSEYSIDE



Investigation of volatile organic compounds to diagnose and stratify men with prostate cancer.

Despite being the most common male cancer in the North West, there is no effective screening programme to help earlier diagnosis of prostate cancer. The current Prostate Specific Antigen (PSA) test can not predict the risk of prostate cancer developing and is not recommended for screening. Professor Probert and his team at Liverpool University will be studying Volatile Organic Compounds (found in waste products from the body such as urine) to see whether they can be used as indicators for prostate cancer.

The findings from this project will be used to help develop a test to help identify at risk patients and allow early diagnosis.

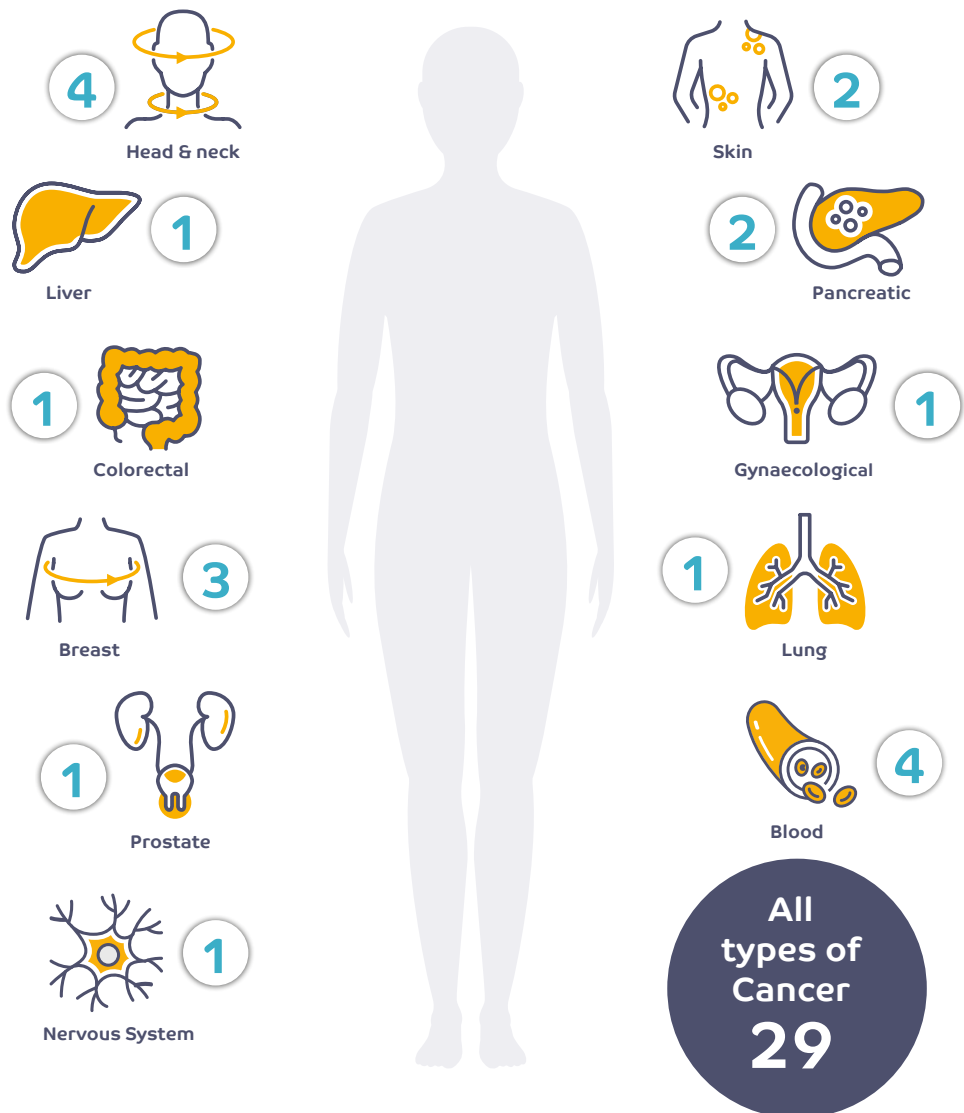






RESEARCH PROJECTS BY CANCER TYPE

Our research projects are working on multiple cancer types, ensuring we maximise the impact of our work across our community.



SHARING OUR KNOWLEDGE, DISCOVERIES AND PROGRESS

Our research has led to a significant amount of vital new knowledge which we have shared with the wider cancer community to drive change and improve outcomes for patients.

In 2019/20, the work of our researchers has been featured in 73 publications to allow the circulation of findings to a wide clinical and academic audience.

The researchers also presented their discoveries to audiences of academics, researchers, clinicians and members of the public 102 times to ensure that their findings are disseminated to as wide an audience as possible.

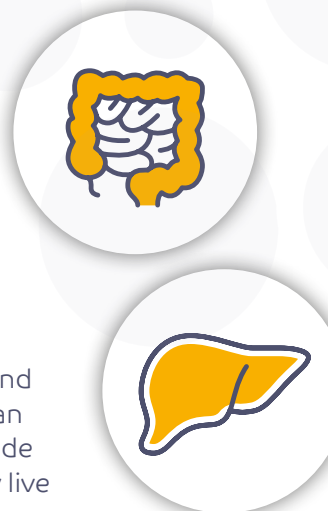


RESEARCH PROJECT CASE STUDY COLORECTAL & LIVER GWYNEDD

Patient centred benefit-risk assessment of treatment for colorectal liver metastases

Patients with colorectal cancer can be treated with surgery, and/or systemic anti-cancer therapy (for example, chemotherapy). There are different risks and benefits for the different types of treatment. Systemic anti-cancer therapy can increase the amount of time a person lives for, but because of undesirable side effects, can reduce their quality-of-life. Patients who are treated with surgery live for longer after they are treated, but there are also risks to receiving surgery.

Dr Holmes and her team at Bangor University are hoping to understand how patients, and different groups of patients, view the benefits and risks of treatments and will help improve communication between patients and doctors when making difficult decisions. Knowing how preferences for treatments differ between different groups of patients, including vulnerable groups, will help to improve the care for people living with cancer in the North West and North Wales.



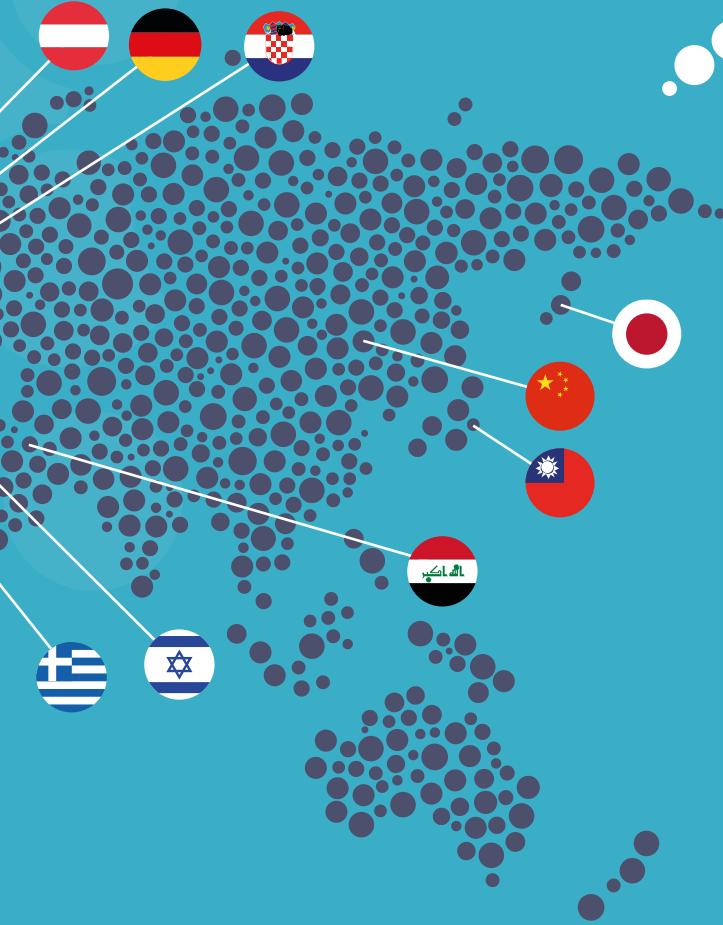
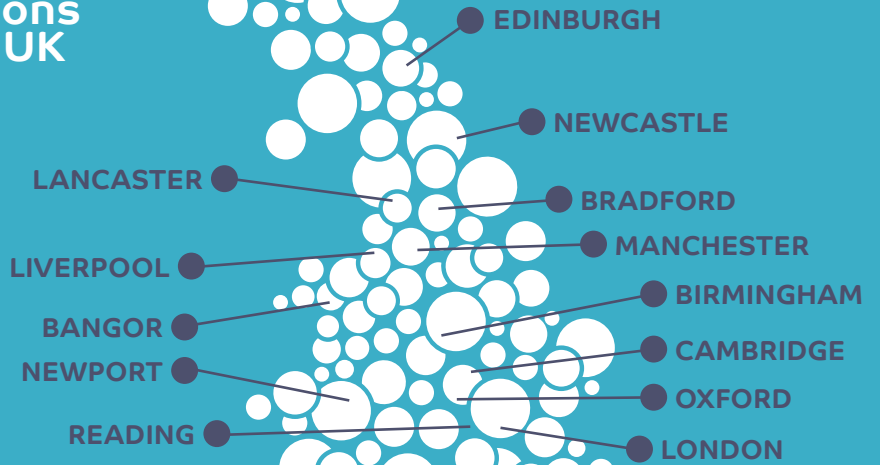
LOCAL FOCUS, NATIONAL COLLABORATION, GLOBAL IMPACT

Our national and global collaborations continue to grow and develop as North West Cancer Research scientists work in partnership to increase the reach of their work.



13

Collaborations within the UK





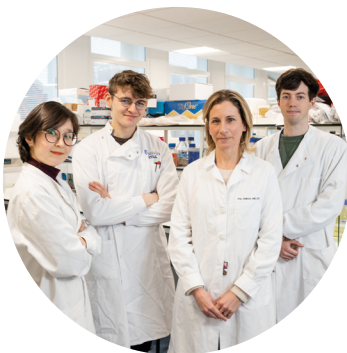
RESEARCH PROJECT CASE STUDY

SKIN CANCER CHESHIRE

Finding My Way Project

Over a third of people who have cancer treatment experience anxiety or depression, and three quarters of patients say they experience psychological distress. However, there is a lack of evidence about what might best reduce this distress and make their cancer journey a little easier. Professor Nick Hulbert-Williams and his team at Chester University are adapting an on-line programme to suit the needs of people in the region and are collaborating with a team in Australia who have had success with this type of initiative.

The programme is designed to help cancer patients to better cope with some of the mental health challenges that cancer treatment can bring and will discover the most effective approaches to easing stress.



SUPPORTING CANCER SCIENTISTS OF TOMORROW

We are targeting investment to ensure the future of cancer research in our region by supporting scientists early in their careers.

“The grant from North West Cancer Research was extremely helpful in establishing my research group. As a result, we have grown from a lab of one to several students and staff members, with 5 students being awarded their PhDs, 7 awarded Masters, and 11 research articles – all in the last 5 years!”

Dr. Shankar Varadarajan





RESEARCH PROJECT CASE STUDY

HEAD & NECK CANCER

MERSEYSIDE

North West Cancer Research Career Development Fellowship

A large portion of head and neck cancers are difficult to treat because they are particularly resistant to radiotherapy and high doses of radiation are needed to destroy the tumour. Unfortunately, these treatments often have severe side-effects, lead to a very poor quality of life for the patient and are not always successful.

This project will investigate why head and neck cancers are resistant to radiotherapy and whether a combination of radiotherapy, together with a targeted drug, can improve the effectiveness of the radiotherapy and lead to a greater level of cancer cell death.

The data gathered by this project will allow clinicians to predict which patients would respond well to this combination of radio and chemotherapy and in turn create a more personalised approach and a better outcome for patients.

In 2019, we were delighted to see Dr Gabrielle Grundy receive the North West Cancer Research Fellowship award to support her work in head and neck cancer.



RESEARCH PROJECT CASE STUDY

PANCREATIC CANCER MERSEYSIDE



Validating candidate biomarkers for future use in pancreatic cancer detection amongst individuals with new-onset diabetes.

A research project at University of Liverpool is hoping to improve screening and early diagnosis of pancreatic cancer for people with new-onset diabetes.

Pancreatic cancer remains challenging to treat, resulting in poor outcomes for patients. This research, led by Professor Eithne Costello, looked at the link between diabetes, which is seen in over half the cases of pancreatic cancers, to determine the possibility of developing a blood test to predict the presence of the cancer. It paved the way for the development of biomarkers to help in screening this high-risk group of individuals.

As a result of North West Cancer Research's support, the team have secured £1.9 million of additional funding to validate the identified biomarkers and fully assess their use in screening for this type of cancer.

ATTRACTING FUNDING AND INVESTMENT TO THE REGION

Our initial funding and support has secured an additional £8,000,000 in investment into life-saving cancer research in the region.

Research funded by North West Cancer Research has also led to the registration of two new patents, with a further two potential patents seeking registration. These registrations grant exclusive rights to the researchers in the development and production of new drugs to improve cancer care. Any revenue North West Cancer Research receives from their production in the future would be reinvested and used to fund further ground-breaking research.





RESEARCH PROJECT CASE STUDY

GYNAECOLOGICAL CANCER

LANCASHIRE

Living well during and beyond treatment for gynaecological cancer: Exploring the lived experiences of patients undergoing treatment for gynaecological cancer.

The aim of this project is to explore the physical and mental symptoms and stresses experienced by patients receiving radiotherapy for gynaecological cancer. Dr Ashmore will use interviews and diaries to focus on the impact of coping with radiotherapy, the expectations patients have of radiotherapy and the levels of support needed. Patients will share their stories via a website and a book to help support other patients and their families in order to improve the quality of life and wellbeing of everyone affected by gynaecological cancer.



PUTTING OUR REGION'S CANCER NEEDS FIRST THROUGH EDUCATION, ENGAGEMENT AND OUTREACH

As well as supporting life-saving research, we directly engage with communities across the region to help further education and understanding of the ways to prevent cancer and to highlight the early warning signs.

Our award-winning and innovative educational projects highlight key issues and give people the practical skills and tools to become advocates for early diagnosis, well-being and healthy living in their community.

Whether we are providing hands-on Labcoat Learning sessions to help school children understand the science behind our work, highlighting the symptoms of cancer to encourage early diagnosis or warning outdoor workers of the dangers of skin cancer, we are determined to improve the health of the region.



Through our engagement work we have:



**Worked with over
50 local schools,
community groups
and venues to
raise awareness**



**Engaged directly
with over 12,500
people from
across the region**



**Given people
over 135,000,000
opportunities to
hear vital health
messages as part
of our awareness
campaigns**



ENGAGEMENT CASE STUDY

Head and Neck Campaign

In the North West, around 1,100 people a year are diagnosed with head and neck cancer – one of the worst rates in the UK. Men are three times more likely to be diagnosed with head and neck cancer than women.

We teamed up with a host of local celebrities to highlight the early symptoms of head and neck cancer in a bid to encourage men to #SPEAKOUT and visit their GP.

The #SPEAKOUT campaign

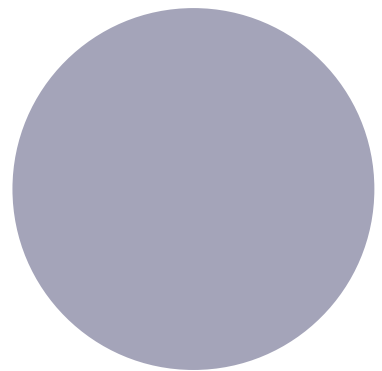
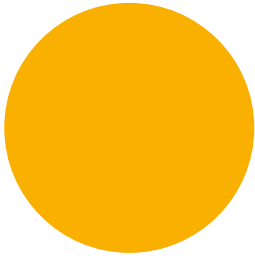
The #SPEAKOUT campaign saw well-known names such as BBC broadcaster Mark Radcliffe, football legend Graeme Sharp, comedian Dave Spikey and snooker player and commentator John Parrot feature in an informative video that was shared across social media. Mark Radcliffe also told his story of dealing with cancer of the tongue and lymph nodes to radio and print media.

Along with the #SPEAKOUT campaign video and press coverage, we also produced an infographic highlighting the symptoms and causes of head and neck cancer, ensuring the public know what to look out for and how best to avoid developing the disease.

The campaign received the support of Public Health, along with a number of MPs and local councils. We were delighted to receive two prestigious awards in recognition of the campaign.







North West Cancer Research
200 London Road, Liverpool, L3 9TA

Visit nwcr.org/get-involved
or call **0151 709 2919** or email:
info@nwcr.org for more information

Registered Charity No. 519 357

