Cancer Council WA

Unlocking the answers to a tomorrow without cancer.

Message from our CEO and President.

As Western Australia's leading cancer charity, we work tirelessly across every aspect of cancer, funding research, delivering prevention programs, advocating for change and ensuring vital support is available for people impacted by cancer.

Thanks to investment in cancer research, today's survival rates for the most common cancers are more than 90 per cent. In Western Australia, cancer survival rates are among the highest in the world. Although we're making great progress, there is still more to be done.

Our competitive research program aims to retain world-class researchers here in WA, with a focus on projects that have the potential to translate into practice and result in real improvements for people impacted by cancer. Each discovery brings forward the day we stop cancer.

We have contributed over **$57.5 million** to **1194 local research projects** since our research program began in 1963. As a community-funded organisation, this was only made possible through the generosity of people like you.

Thank you for helping us get closer to a future without cancer.

Yours sincerely,

Ashley Reid
Chief Executive Officer,
Cancer Council WA

Dr Ruth Shean
President,
Cancer Council WA

What we do.

Research is just one of four main pillars that we work across to reduce the incidence and impact of cancer in our community.

Cancer Prevention

We empower West Australians to live healthier lifestyles, influence public policies and create environments for West Australians to decrease their risk of developing cancer through prevention programs such as SunSmart, Make Smoking History and LiveLighter.

Cancer Services and Support

We work to ensure no West Australian has to face cancer alone through providing high-quality cancer information and support services. During the 2020/2021 financial year, thanks to people like you, we provided the following support:

- There were **4943** check-ins at our Crawford and Milroy Lodges from country patients and their carers to access treatment in Perth.
- **5550** contacts were received by 13 11 20, our cancer information and support line.
- **1548** Transport to Treatment trips were provided from our Crawford and Milroy Lodges at no cost to regional cancer patients and their carers.
- **1997** wigs, turbans, hats and scarves were provided to **795** cancer patients at no cost by our Wig Service.

Cancer Control Advocacy

We are a voice for patients, carers and the community. We work with the government to change policies and invest in areas that reduce the risk of cancer and create better outcomes for cancer patients.

What you funded in 2021.

Our competitive process ensures we fund the highest quality cancer research, with a focus on projects that have the potential to translate into practice, and result in real improvements for people impacted by cancer - locally, nationally and globally.

Thanks to your support, in the 2020/2021 financial year we have allocated over **$2.6 million** to support **80 local cancer researchers** across more than **40 projects.**

Successful cancer research projects.

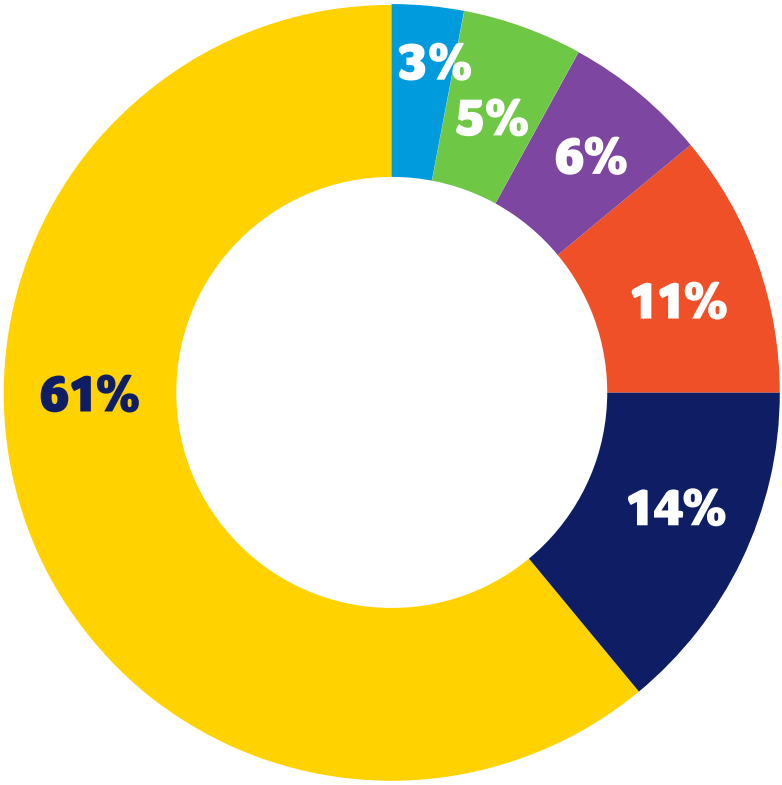
- Research Excellence Awards
- Research Project Grants
- Collaborative Cancer Research Grant Scheme
- Suzanne Cavanagh Early Career Investigator Grants
- Research Fellowships
- Postdoctoral Research Fellowships
- PhD Top Up Scholarships
- Student Vacation Research Scholarships
- Cancer Research Trust Enabling Grants
- Gastrointestinal Stromal Tumour Initiative (GIST)
- Prostate Cancer Research Initiative
- Chair of Clinical Cancer Research
- WA Cancer Prevention Unit
- WA's National Imaging Facility (NIF) Node

Palliative and Supportive Care Education for Health Professionals.

McLarty Palliative Care Scholarships

These scholarships are awarded to health professionals to provide opportunity for post graduate education in palliative care nursing and allied health, with the aim of increasing the knowledge and skills in the delivery of palliative care in WA.

2021 Research Funding Highlights.



- Causes of cancer (3%)
- Early detection, diagnosis and prognosis (5%)
- Prevention (6%)
- Patient care and survivorship (11%)
- Understanding how cancer works (14%)
- Treatment (61%)

From donation to discovery.

Thanks to the generosity of our incredible supporters, we remain the largest charitable funder of independent cancer research in WA.

Currently, one in two Australians will be diagnosed with cancer in their lifetime. In WA alone, there are around 13,000 new cases of cancer diagnosed each year.

It is critical that we use every donation in the most effective and efficient way possible. As such, all applications for funding go through a competitive, peer-reviewed process to ensure we fund only the highest quality research.

Continued investment in high quality, locally relevant research is the key to building momentum towards a cancer free future.

Spotlight on some of our incredible supporters.

Thank you, Peter.

Peter knows first-hand how vital cancer research is for people impacted by cancer. After his wife, Deeny, passed away from multiple myeloma, he decided to donate to cancer research to help others impacted by cancer.

"As I nursed and comforted my wife, Deeny, through the last months of her battle with multiple myeloma, I came to appreciate all the wonderful people who helped us during this difficult time.

"After Deeny passed, I promised her that I would try to repay them somehow for their love, kindness and compassion.

"I have been constantly delighted and uplifted by the enthusiasm and dedication of these researchers have demonstrated. They give me hope that one day we will find a cure for these awful diseases.

"I know that Deeny would have been so pleased and that, for me, makes it all worthwhile."

We're so grateful for your support, Peter.

Thank you, Friends of Cancer Council WA

Friends of Cancer Council WA is one of our amazing fundraisers and has been raising money for cancer research for over 50 years.

"Many of our committee members have been touched by cancer, personally and in the wider community and therefore are highly motivated to support in every way possible.

"We hope for improved outcomes for patients during and after treatment. We believe that without research there can be no cure for cancer."

"Our hope for the future is a cancer free future for all."

Thank you, Friends of Cancer Council WA, for your continued support.

YOUR GENEROSITY AT WORK.

Thanks to your generous support, we've committed over **$2.6 million** in funding to new and ongoing local cancer research projects in the 2020/2021 financial year.

Here are some of the life-changing research projects you've helped fund this year. To view the full list, please visit **cancerwa.asn.au/2021research.**

Cracking the code to successful cancer immunotherapy

DR JONATHON CHEE
The University of Western Australia

Immunotherapy is an exciting treatment for mesothelioma. It works exceptionally well for some cancer patients, however there are side effects, it is expensive, and some patients fail to respond.

This project will map the changes associated with successful immunotherapy to try to predict therapy outcome.

The benefit of this study is that it will allow doctors to find out early in a treatment plan if the treatment is working, so that it can be altered if it is not.

Chair of Clinical Research

PROF MICHAEL MILLWARD
The University of Western Australia

The Chair provides academic leadership in clinical cancer research in WA and aims to increase the participation of local cancer patients in clinical trials of new cancer treatments.

The purpose of funding the Cancer Council WA Chair in Clinical Cancer Research is to improve the clinical care available to people diagnosed with cancer in Western Australia. There is compelling evidence that outcomes for patients are improved when they participate in clinical trials. A key vehicle therefore to improve outcomes in Western Australia is to actively promote clinical trials in the medical and general community.

Novel targeted medicines for children's cancers

A/PROF PILAR BLANCAFORT
The University of Western Australia

Ewing's Sarcoma (EWS) and Rhabdomyosarcoma (RMS) are highly aggressive cancers diagnosed in children and young adolescents. There are no "targeted therapies" available for these cancers; current treatment involves a range of chemotherapies, radiation, and surgery, which are often highly toxic for children and severely impact their quality of life.

The root cause of EWS and RMS are fusions between chromosomes that form a new cancer driver (a fusion protein) that does not exist in normal cells. This project will further develop novel molecules that bind the gene that produces the fusion protein and radically shut down its expression. The aim is to produce new treatment modalities to apply these technologies in the clinic and develop long lasting and nontoxic therapies for these currently "undruggable" cancer drivers.

Improving detection and therapy in treatment-resistant cancers

DR JULIANA HAMZAH
Harry Perkins Institute of Medical Research

This research program will potentially benefit patients suffering from treatment-resistant cancers such as triple negative breast cancer and liver cancers where tumour stiffness is a major problem. Treatment options that include conventional chemotherapeutics are currently ineffective.

Recently, this team has developed a new medication and treatment to specifically dissolve tumour stiffness which will effectively expose tumour cells to anti-cancer medications.

Dr Hamzah's goal is to explore the use of this drug to diagnose and treat breast and liver cancers for better survival outcomes.

Developing blood tests to guide treatment of melanoma

A/PROF ELIN GRAY
Edith Cowan University

Melanoma incidence is increasing worldwide and in Australia. It used to be that once melanoma has spread through the body, the average survival is six to nine months, with five year survival rate of less than 40 per cent. The recent implementation of new treatments has improved patient outcomes and is beginning to reflect an increased survival. However, there is an urgent need for a better test to guide doctors while they are treating their patients.

The proposed study aims to develop tests that can be done from a blood sample. These tests make use of new technologies to test for evidence of markers derived from the growth (tumour) found in the blood of patients with melanoma. These markers could serve as a guide of what is going on in the cancer.

The overall aim is that these tests can effectively and accurately provide oncologists with more information about the cancer, for them to make better informed treatment decisions for patients.

Predicting liver cancer before its appearance to improve detection of individuals at high risk

DR RODRIGO CARLESSI
Curtin University

Liver cancer is one of the deadliest cancers, accounting for about 10 per cent of all cancer deaths.

Due to the lack of so-called 'biomarkers' that can be used to identify people at high-risk, patients are generally diagnosed with the disease at advanced stages, where treatment options are extremely limited.

This project is developing a new analytical platform involving large amounts of biological information from thousands of liver cells, with the aim of identifying subtle genetic changes and a distinct molecular signature present in pre-malignant liver cells. This will enable the design of a screening process to identify individuals at high-risk, which will ultimately aid in early detection and improve outcomes for liver cancer patients.

How does impaired energy production cause prostate cancer?

PROF ALEKSANDRA FILIPOVSKA
The University of Western Australia

Prostate cancer is one of the six most common cancers in the world; the incidence rates of this cancer vary due to genetic and environmental factors. This group has identified a new gene that predisposes men to prostate cancer, enabling further work on the provision of screening and early diagnosis. The team is also developing new methods to investigate the development of prostate cancer and early onset treatments.

Enabling advanced single cell genomics in Western Australia

PROF ALISTAIR FORREST
Harry Perkins Institute of Medical Research

The research team will use new 'single cell technologies' to study hundreds of tumour samples from many different cancer types donated by patients across Perth.

Tumours contain many different normal cell types that interact with cancer cells. Although some cell types are associated with good or poor prognosis, relatively little is known about all the cell types that exist in a tumour. The aim of this research is to better understand how tumours work, ultimately assisting to find better treatments.

Funding has been committed for this project for five years.

WA Cancer Prevention Research Unit

The purpose of the WA Cancer Prevention Research Unit (WACPRU) is to increase our understanding of individual and societal factors that increase the risk of cancer in the community, and, through this understanding, develop more effective policies and programs to reduce cancer risk in the community.

National Imaging Facility (NIF) WA Node Expansion

The expansion of the National Imaging Facility (NIF) will dramatically improve the biomedical research imaging capability in WA by providing state-of-the art imaging equipment including the latest MRI and PET-CT scanners.

The project is strongly collaborative with 14 organisations committing funding and is multidisciplinary, bringing together the skills of clinical researchers, technical staff, imaging specialists and informatics experts. The new facility is a statewide initiative, which addresses the current lack of dedicated imaging research infrastructure in WA.

Improving psychosocial support and education for patients diagnosed with brain or head and neck cancer and their carers

A/PROF GEORGIA HALKETT
Curtin University

A brain or head and neck cancer diagnosis is distressing as it is often life threatening and has a large impact on physical and mental health.

This study aims to improve the support and education provided to people diagnosed with these cancers and their carers. The first program developed consists of preparing patients for radiotherapy, which is often onerous with many side effects. The other program under development and being tested, centres around support of carers of these patients through improving their confidence and reducing their level of distress.

Towards targeting treatment-resistant cancer cells to prevent relapse in childhood leukaemia

DR SÉBASTIEN MALINGE
Telethon Kids Institute

Leukaemia is the most common type of childhood cancer (>25 per cent of cases). Although treatments and outcomes have improved remarkably, leukaemia remains the second highest cause of death by cancer in children, and many children with leukaemia still suffer from treatment toxicity or develop relapse.

This study aims to identify the leukaemia cells that resist current treatments and are responsible for relapse. Using state-of-the-art technologies, the team aims to discover key features and unravel new vulnerabilities to better monitor response to treatment and develop novel therapies, more efficacious and less toxic, to destroy these resistant tumour cells.

The ultimate goal is to develop new treatments for clinicians to improve the quality of care and long-term survival of West Australian children with leukaemia.

Using new drugs to make old treatments work better for children with deadly brain tumours

A/PROF NICHOLAS GOTTARDO
The University of Western Australia

Medulloblastoma (MB) is the most common childhood brain cancer and is very difficult to treat. Sadly, 60 per cent of children with high-risk MB will die.

The purpose of this research is to cure more patients with high-risk MB by finding new medicines that can be used clinically. The team has already tested thousands of drugs, known to be safe for people, for their ability to kill MB cells. The two most promising of these have been selected, and this project will further study their effectiveness combined with radiation, with the aim of finding more successful treatment regimes.

Prognostic significance of physical activity and sedentary behaviour in people with advanced non-small cell lung cancer

A/PROF VINICIUS CAVALHERI DE OLIVEIRA
Curtin University

Due to symptoms of fatigue and shortness of breath, people with advanced non-small lung cancer generally adopt a sedentary lifestyle. In people with breast cancer, diabetes, heart or lung disease, time spent physically active during the day is linked with longer survival, whereas prolonged time spent sedentary during the day is linked with shorter survival.

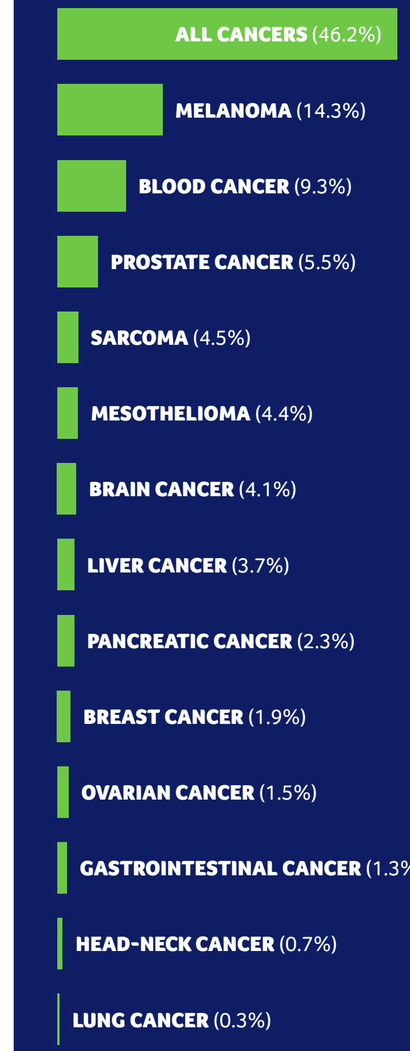
The aim of this study is to investigate if activity levels at time of diagnosis predict survival in people with advanced non-small cell lung cancer. This information could then be used to assist with recommendations and guidelines for people living with this cancer.

Developing new therapies for cancer and identifying biological markers that predict successful cancer therapy

DR ALISON MCDONNELL
The University of Western Australia

There is an urgent need to improve outcomes for patients with advanced solid cancers, including mesothelioma and melanoma. Immunotherapy has revolutionised the treatment of cancer by unleashing the immune system to attack tumours. However, not all patients benefit from treatment and there are side effects. This research aims to identify which patients will benefit most from these treatments, and develop new drugs for those patients who do not respond to current therapies.

OUR RESEARCH INVESTMENT.



Cancer Council WA

Thanks to generous community donations, we've invested millions of dollars into local cancer researchers, who are working every day to find the answers to a future without cancer.

From lab-based research to clinical trials for treatment, every result helps us to make a real difference to people here in WA, Australia and across the globe.

Below are some messages of thanks from fellow West Australians whose lives have been saved by cancer research.

"In September 2019, I was told I had a 2cm adenocarcinoma tumour in my stomach. They told me I had no hope of seeing my 34th birthday. Fortunately, I started a treatment from a clinical trial in late September and by December I was in remission and there was no sign of cancer. It saved my life."

- Savanna Griechen

"My daughter, Alex, was diagnosed with a medulloblastoma at the age of four. Thankfully, able to join a clinical trial to help reduce the long-term effects of her treatment. Just by donating you are putting your hand up to run with us, to help us over obstacles, to carry us when we feel like we can no longer run."

- Rebecca Ceglinski

If you would like to fund life-saving cancer research, please visit **cancerwa.asn.au/research** or call **08 9212 4333**.

Together, with your help, we're working towards our vision of a future without cancer.

Cancer Council Western Australia
420 Bagot Road, Subiaco WA 6008

To access vital cancer information and support, please call our cancer nurses on 13 11 20.
cancerwa.asn.au