



MEDICAL
RESEARCH
SCOTLAND



Leaving a Legacy

About Medical Research Scotland

Medical Research Scotland is Scotland's largest independent medical research charity committed to funding vital scientific discovery that improves the diagnosis, treatment and prevention of diseases.

Our prestigious funding programmes provide the foundations for promising individuals at the start of their research careers, including support for talented undergraduates and moving progressively onto the award of doctoral studentships, small grants for researchers establishing their independence and help for scientists returning after a career break.

Whilst our team is small, our impact is great and Medical Research Scotland needs your help to support funding programmes that provide a legacy of world leading research and scientific discoveries.

If you would like to fund medical research in a specific area, or have an idea you would like to discuss, please get in touch on enquiries@medicalresearchscotland.org.uk or contact Medical Research Scotland's Trust Secretaries at Turcan Connell on 0131 659 8800.

All donations are most welcome. To become a supporter, make a donation or provide a legacy, visit medicalresearchscotland.org.uk/support-MRS.

Why Donate?

- ① By helping to fund medical research careers, you could save lives.
- ② Medical Research Scotland funds scientific careers across the disease spectrum, so by donating, you can help us all take a step towards more cures for more diseases.
- ③ To fight disease we need the brightest minds and your donation can help fund promising scientific careers that could unlock world-leading research and scientific discoveries.
- ④ Funding 15 four-year PhD studentships each year starts at £1.5 million. With your legacy, you can help to provide more brilliant minds to help us fight disease and find cures.



Current Research focusing on Mental Health

Mental illness is one of the biggest public health challenges in Scotland and it is estimated that one in three Scots will be affected by mental health issues in any one year.

From anxiety and depression to substance abuse or schizophrenia, every experience of a mental health challenge is unique, making this one of the most complex and pressing areas requiring extensive medical research.

Leading research projects funded by Medical Research Scotland exploring mental health diagnosis and treatment include:

An investigation into the relationship between sleep, emotional distress and psychotic experiences in young people to determine whether targeting sleep problems could be an effective way to improve early intervention efforts and recovery for psychotic patients.

An examination into how a potential new treatment for patients with schizophrenia acts at the cellular level, which may provide a key breakthrough in improving therapeutic options for patients experiencing the condition.

With your help, Medical Research Scotland can continue to provide funding to these research projects and other cutting edge research tackling the challenges presented by mental illness at a time where the need for effective diagnosis and treatment has never been clearer.

Source: Scottish Government Mental Health resource, available at www.gov.scot/policies/mental-health



Multiple Sclerosis (MS)

Over 100,000 people in the UK have Multiple Sclerosis (MS) and it impacts the lives of over 2,000,000 more.

MS is a condition that affects the brain and spinal cord, causing symptoms such as problems with vision and arm or leg movement, sensation or balance. It is a lifelong condition, often diagnosed while people are in their 20s and 30s. It is one of the most common causes of disability in younger adults.

While there is currently no cure for MS, medical researchers are working around the clock to find one and they have developed treatments that can help control the condition.

Leading research projects funded by Medical Research Scotland addressing vital aspects of the diagnosis and management of MS include:

The identification of a new potential therapeutic molecule that has encouraged tissue repair in studies carried out on cells grown in a laboratory.

The discovery of a key molecule that causes tissue destruction when it acts in combination with two other proteins known to be involved in the development of MS.

With your help, Medical Research Scotland can continue to provide funding to projects such as these which could pave the way to a better understanding of how tissue damage occurs and how it may be addressed for patients living with MS.

Source: NHS website as reported by the Bristol & Avon Multiple Sclerosis Centre, available at www.nbt.nhs.uk/our-services/a-z-services/bristol-avon-multiple-sclerosis-centre-brams/facts-figures-ms



Dementia

Dementia is a syndrome associated with an ongoing decline of brain function. The NHS estimates that by 2025 the number of people living with dementia in the UK will be more than 1 million.

A person with dementia may experience changes to the way they think, feel, speak and behave towards others. Placing a significant strain on both them and their support network of family and friends, those with dementia will often lose their ability to make decisions and maintain their independence.

In the late stages of dementia, people will not be able to take care of themselves and may lose their ability to communicate. A diagnosis helps people with dementia, and those close to them, get the right treatment and support and to prepare for the future.

Although there is no cure for dementia at the moment, an early diagnosis means progress can be slowed down in some cases, allowing people to maintain their brain function for longer.

Research projects funded by Medical Research Scotland studying dementia diagnosis and treatment aim to:

Investigate the effect of drugs that act on a protein involved in the onset of Alzheimer's disease, the most common type of dementia, to see what effect the drugs have on learning, memory and patient life span.

Develop ways to make early diagnosis of dementia more accurate by using a new approach to analysing brain scans in combination with patients' symptoms and test results.

With your help, Medical Research Scotland can continue to fund new research projects seeking to understand the causes of dementia and improve our ability to diagnose and treat patients, improving quality of life for those with the condition and for their support networks of friends and family.

Source: NHS website, available at www.nhs.uk/conditions/dementia/about



Respiratory Diseases

Respiratory diseases affecting the lungs and airways are diagnosed in 1 in 5 people and are the third leading cause of death in the UK.

Respiratory conditions are also acknowledged by the UK Government as a significant driver of health inequalities, even though much of this disease is largely preventable. Respiratory issues can present in a wide range of forms including asthma, lung cancer, pneumonia, flu and tuberculosis.

The onset of the Covid-19 pandemic has placed an even greater emphasis on the importance of tackling the problems created by respiratory diseases.

Leading research projects funded by Medical Research Scotland addressing vital aspects of the diagnosis and treatment of respiratory diseases include:

Identifying the best methods to protect lung tissue from being damaged when lung cancer patients are treated with radiotherapy. The results may open up new ways to reduce the adverse, and sometimes fatal, respiratory symptoms lung cancer patients can experience after radiotherapy.

Designing new chemical compounds that inhibit a protein which plays an important role in the formation of scar tissue in lung fibrosis, helping scientists to learn more about the processes leading to lung fibrosis.

With your help, Medical Research Scotland can continue to fund transformational research projects seeking to understand the causes of respiratory diseases and improve our ability to design effective treatments that meet the new challenges posed by Covid-19.

Source: UK Government website, available at: www.gov.uk/government/publications/respiratory-disease-applying-all-our-health



Covid-19 Research

Medical Research Scotland has also been at the forefront of Covid-19 research in Scotland by awarding funding to 21 innovative coronavirus research projects working to investigate the virus through clinical, diagnostic, therapeutic and social science studies, advancing the global medical community's treatment and management of the disease.

With your support, Medical Research Scotland can continue to support research labs with grants to deliver vital insight as part of the response to the pandemic, protecting vulnerable groups and saving lives both now and in the future.

How to donate

- By specifying in your Will that Medical Research Scotland should be a beneficiary.
- Through single or regular tax-efficient donations.

To become a supporter, make a donation or provide a legacy, visit:
medicalresearchscotland.org.uk/support-MRS.

For more information or to discuss your legacy, contact Medical Research Scotland's Trust Secretaries at Turcan Connell on **0131 659 8800** or email enquiries@medicalresearchscotland.org.uk.



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