

Who Are We?

The NSCFA is an Australian Tax Office registered Health Promotion Charity (established in 2011) dedicated to promoting the study and responsible use of stem cells to reduce the burden of disease.

The NSCFA board is drawn from diverse backgrounds in stem cell science, medicine and finance.

Our Mission

The mission of the NSCFA is to promote the study and use of stem cells in the prevention or control of disease in human beings and to enhance public education in this field.

We aim to:

- Assist Australian stem cell researchers to pursue cures for, as yet untreatable diseases, using stem cell technology and regenerative medicine - we are dedicated to progressing cutting edge stem cell science through supporting promising researchers and projects
- Provide resources for the Australian public on stem cell technology and regenerative medicine including its risks, achievements, benefits and overall technical progress.

How to Donate

The easiest way to donate is by credit card using the donation function on our website:

www.stemcellfoundation.net.au

Alternatively you can send a cheque together with your contact details (so we can send a receipt) to:

**The General Manager
National Stem Cell Foundation of Australia
PO Box 140
McCrae Vic 3938**

If you are interested in leaving a bequest in your will, look at "Including a gift in your will" under the Donations tab on the website.



National Stem Cell Foundation of Australia

EVERY DAY STEM CELLS SAVE LIVES



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Why Stem Cells are Important

What are stem cells?

Stem cells have been part of us since birth. They are in our hair, skin, intestines, bone marrow, brain, joints, and muscles. As we grow through childhood and adolescence, stem cells generate new tissue and when we have stopped growing, they replace damaged and aged tissue. It is this ability to repair damaged tissue that makes stem cells so unique, and their potential application in modern medicine so far-reaching.

What do stem cells do?

Most of the 300 trillion cells that make up the human body are fully specialised for particular functions in organs such as the heart or the brain, or in tissues like muscle, fat and bone. Others play a supply or defensive role in the blood or immune system. In fact, each cell type has a specific lifespan and function, which is dependent on the activity that cell is required to perform. Some cells are replaced, others live for the duration of a person's life. For example, blood cells only live for up to a few months, and are replaced at a rate of several billion each day, whereas brain cells may last a lifetime.

Why is stem cell research important?

Stem cells are stirring up great excitement in medical research.

It is no stretch to say that over the next few decades (as we are able to learn more about stem cells) we will see them become part of many modern medical treatments, giving hope to many facing currently untreatable and often life-threatening illnesses.

What the NSCFA does to support Stem Cell Science

The Foundation's objectives are:-

- Supporting research based around Stem Cells.
- Building a community of people with a shared interest in stem cell science.
- Providing the Australian public with objective, reliable information on both the potential and risks of stem cell medicine.

To achieve our objectives the Foundation currently:-

- Through our Matched Funding Program
 - Provides funding for two five-year research projects using stem cells to provide better solutions for Type 1 diabetes and severe heart trauma.
 - Provides four \$100,000 grants per year to support other projects.
- Awards two annual Metcalf Prizes (worth \$50,000 each) to assist young stem cell researchers further their careers.
- Provides travel grants to young Australian researchers to attend relevant conferences in Australia and overseas.
- Sponsors conferences and public events to support stem cell science.



The Matched Funding Program

The Matched Funding Program

The Foundation has launched a Matched Funding Program with the objective of providing \$4 million in direct funding for stem cell based research over the next 5 years.

The first 2 projects are in place and funding has commenced. These projects are:

- The Bioengineered Diabetes Therapy Project hosted by the Australian Foundation for Diabetes Research under the direction of Professor Bernie Tuch at the University of Sydney.

This project seeks to provide T1D sufferers with a better way of managing their disease using insulin-secreting cells derived from pluripotent stem cells. A key part of this project is finding ways to deliver insulin without the need to also administer toxic anti-rejection drugs that are currently needed to keep these implanted cells alive.

- Pluripotent stem cell-derived cardiomyocyte therapy for treating heart failure. This research project is being led by Dr James Chong at the Westmead Institute of Medical Research at the University of Sydney.

Dr Chong's team is seeking to develop an alternative treatment for heart failure using stem cells. Higher survival rates after a heart attack means that more patients are living with heart failure with 1 in 2 dying within a year of initial diagnosis. The predominant treatment for end-stage heart failure presently is heart transplantation.

The next stage of the Matched Funding Program is to provide 4 grants of \$100,000 each pa over the next 5 years for approved Stem Cell Research projects.

When making a donation you can specifically support these projects.