



## ANSTO Big Ideas - Choosing a Scientist

You should choose a scientist whose scientific discovery or contribution to science you are interested in or passionate about. You could be inspired by something you have learnt at school, something you saw on television or social media, your personal interest, or a discovery you feel has impacted your life.

Below are some suggested topics, and associated Australian scientists. However, these are just a few of the many Australian scientists making incredible discoveries! Your scientist does not have to be well known. Maybe you can come up with your own!

- developments in cancer treatment, such as **Dr Mitra Safavi-Naeini** and Neutron Capture Enhanced Particle Therapy (NCEPT)
- the use of nanotechnology in medicine, such as **Professor Mark Kendall** the creator of the nanopatch and **Scientia Professor Justin Gooding** who is developing nanoparticles to assist in the early detection of diseases
- technological advances developed in Australia for better health and to improve the environment, such as **Associate Professor Penny Allen** and the bionic eye, **Dr Len Humphreys** and his Catalytic Hydrothermal Reactor (Cat-HTR), and **Dr. Michael Dong Han Seo** and graphene membrane filters
- developments in our understanding of cells and how this impacts areas such as health and medicine, for example, **Professor Ian Frazer** and the HPV vaccine against cervical cancer, **Elizabeth Blackburn** and the discovery of telomerase, **Dharmica Mistry** and Breast Cancer Associated Lipids; **Professor Alan Trounson** and IVF technology.
- creating new materials such as advanced materials, synthetic fibres, and pharmaceuticals for example **Professor Fiona Wood** and medical scientist **Marie Stoner** and spray on skin; **Dr Nasim Amiralian** and cellulose nanofibers; **Dr. Wenchoo Huang** and his contribution to ultraflexible organic solar cell
- effects of climate change, such as **Professor Ove Hoegh-Guldberg** and coral bleaching; **Professor Nerilie Abram** and the Indian Ocean Dipole events
- the contributions of Australian scientists to the study of human impact on environments such as **Dr Andrew Smith** and changes in atmospheric greenhouse gas concentrations

Check out some other Australian Scientists at

<https://www.science.org.au/learning/general-audience/history/interviews-australian-scientists>