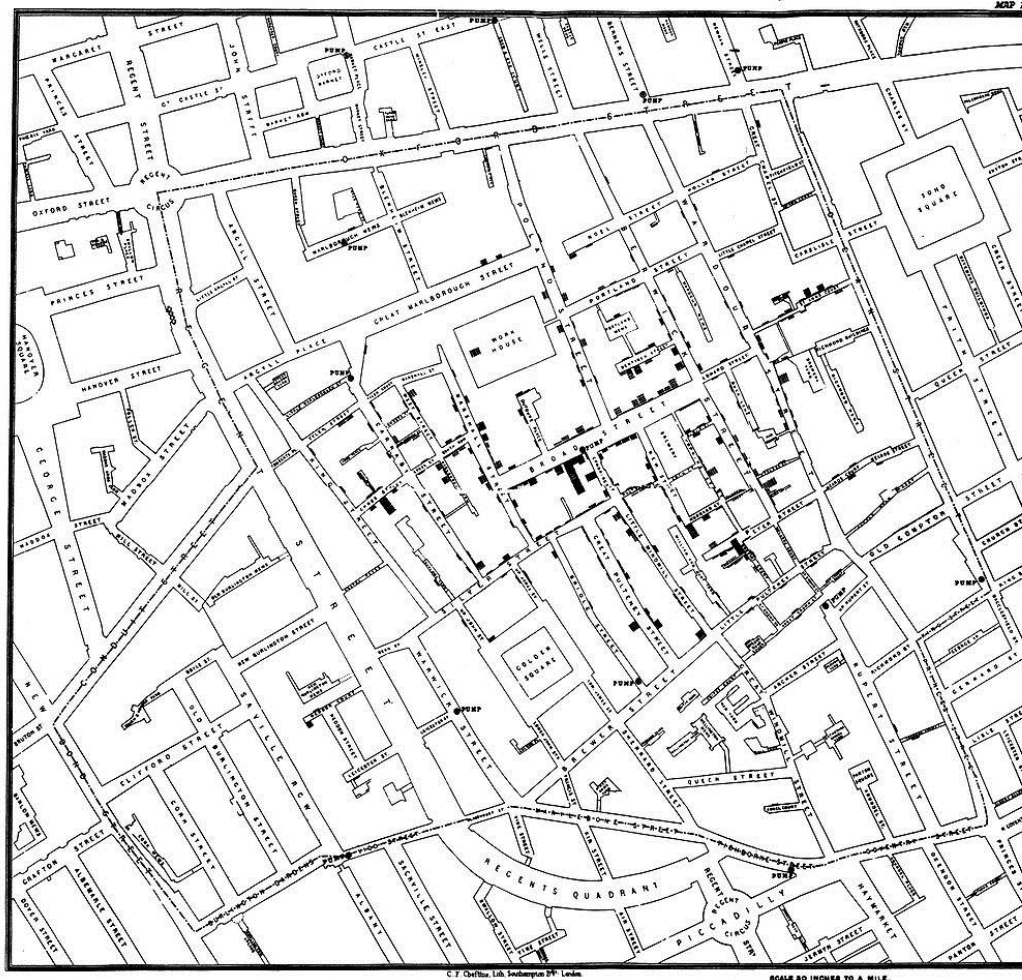


WHY DO WE NEED SCIENCE?

UTS:SCIENCE

science.uts.edu.au

SCIENCE HAS CHANGED OUR LIVES FOR THE BETTER



By John Snow - Published by C.F. Cheffins, Lith, Southampton Buildings, London, England, 1854 in Snow, John. On the Mode of Communication of Cholera, 2nd Ed, John Churchill, New Burlington Street, London, England, 1855

SCIENCE IS A PART OF OUR EVERYDAY LIVES



iCloud



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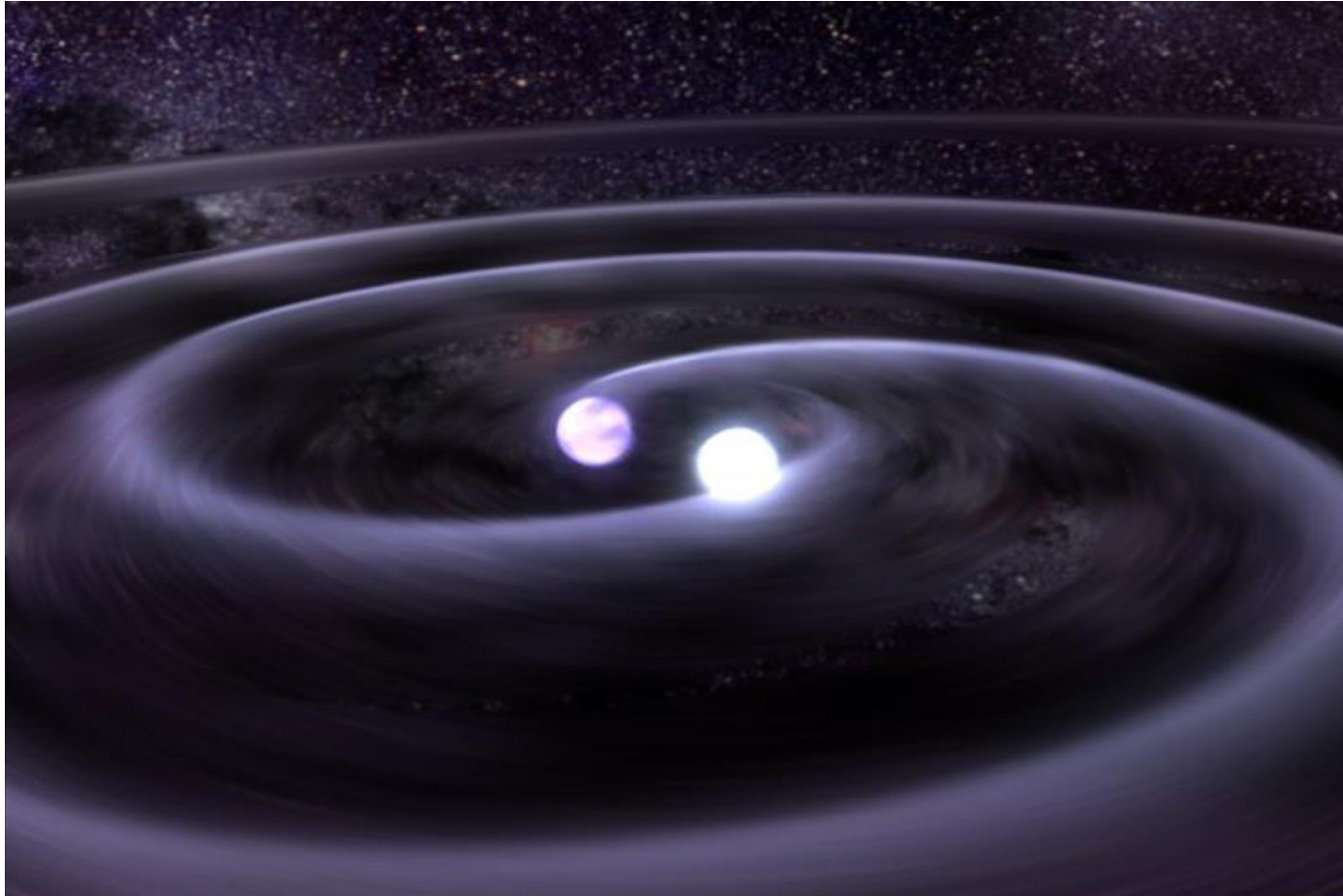
SCIENCE, WHO NEEDS IT?

The following is from a speech by Prof. Ian Chubb – former Chief Scientist of Australia:

- Do we want to know about our world, and our universe, who we are and how we came here, in ways that inspire us to cherish and protect?
- Do we want to build industries that compete on knowledge and ideas, and operate in sustainable ways?
- Do we want to generate new jobs to replace the old, jobs that people will want to do because they reward us for energy, imagination, and ambition?
- Do we want to be the beneficiaries of new medicines, better ways of getting around, cleaner air, safer cities, and new opportunities to connect with people all over the world?
- Do we want to be a confident, outward-looking nation, which contributes to the wellbeing of everyone on this Pale Blue Dot, and benefits in turn from the knowledge and ideas from overseas?

I think we do. So yes – I would say we all need science, in the sense that our lives would be intolerable without it.

WHY DO WE NEED A SCIENTIFICALLY LITERATE SOCIETY?



Credit: NASA

WHY DO WE NEED A SCIENTIFICALLY LITERATE SOCIETY?

- ❑ There is value in people from all walks of life, and in all industries having knowledge of science. Having an understanding of the scientific process, statistics, data analysis can help people make more informed and effective decisions
- ❑ Knowledge of how science is done can help build more trust in scientists.
- ❑ Having an understanding on how data is collected and analysed can help people see through the dodgy 'facts' that are presented online.

WHY DOES AUSTRALIA NEED SCIENCE?

Australia's economy is in transition. We need to use our talent and skills to cope with changes in demand for commodities, and develop high value add goods and services for local and global markets.

Australia will need a diverse economy built on sustainable productivity growth, knowledge-based industries and high value goods and services.

How do we make this transition? Science.

Science will help us manage, mitigate, adapt and even discover solutions to these issues and allow us to tackle others as they emerge.

The bottom line is Australia's future depends on a strong science focus.

BUT WHAT ABOUT JOBS?

- ❑ Science graduates are highly sought after due to the broad range of skills they develop during their studies. These are both technical skills and transferrable skills (such as problem solving)
- ❑ Many organisations looking to gain an edge over their competitors by creating new products and services or improving existing ones, employ science graduates.
- ❑ Science graduates are likely to pursue non-scientific professional roles as scientific ones. Around 40% of Science graduates use the skills and processes they learnt while studying Science to undertake roles in a wide range of areas.
- ❑ The diversity of opportunity enables graduates to adapt their careers as their interests and experience develop rather than being locked into a specific pathway.
- ❑ This is particularly relevant for the future employment market in which graduates are expected to undertake between three and five career changes, not just job changes, during their working lives.
- ❑ Scientific careers also command a certain level of prestige and Australia is a centre of development for many new scientific fields.

BUT WHAT ABOUT JOBS?

Anatomist, Behavioural Therapist, Actuary, Air Traffic Controller, Consultant, Astronomer, Analytical Chemist, Biomedical Technician, Community Health Officer, Climatologist, Intellectual Property, Researcher, Biologist, Business Analyst, Intelligence Service Officer, Biotechnologist, Clinical Research Associate, Technical Officer, Business Development Officer, Physicist, Laboratory Assistant Clinical Regulatory, Customs Officer, Affairs Officer, Forensic Scientist, Health Education Officer, Environmental Geologist, Scientist, Eco Tour Guide, Development Chemist, Entomologist, Medical Practitioner, Data Management, Environmental Chemist, Patent Examiner, Food Technologist, Outreach Program Officer, Environmental Officer, Postdoctoral Fellow, Lecturer, Geneticist, Pathology Technical Officer, Environmental Planner, Land Economist, Health Physicist, Postdoctoral Research Assistant, Pharmaceutical Sales, Field Hydrologist, Mathematician, Industrial Chemist, Research Analyst, Health Policy Advisor, Numerical Modeller, Instrument Fitter, Science or Maths teacher, Quality Assurance and Testing Officer, Researcher, Health Surveyor, Toxicology Consultant, Marine Surveyor, Research Officer, Horticultural Scientist, Statistician, Materials Scientist, Research Scientist, Immunologist, Medical Diagnostic Radiographer, Radio Chemist, , Research Technician, Marine Scientist, Technical Analyst, Medical Imaging Technologist, Scientific Officer, Microbiologist, Technician, Science Communicator, Meteorologist, Forensic Scientist, Chemical Analyst, Mapping Scientist, Nanotechnologist, Plant Scientist, Technical Writer, Quality Assurance Officer, Soil Scientist, Park Ranger, Laboratory Officer, Organic Chemist, Water Treatment Consultant, Polymer Chemist, Product Designer, Planner, Production Chemist, Radiation Therapist, Research Chemist, Sampling Technician, Auditor, Marketing Officer, Risk Management, Quality Assurance Officer.

WHO ARE THE EMPLOYERS?

Government agencies such as Department of Primary Industries, Department of Environment, Councils, CSIRO, ANSTO, Department of Defence, Museums, Public transport authority, Reserve Bank, Schools, TAFE and tertiary institutions, Australian Synchrotron,

Private organisations (but not limited to) such as banks and financial institutions, consulting firms such as PWC, KPMG, Accenture, Ernst and Young, Woolworths, AMP, Telstra, Google, Bupa, GE, HCA Healthcare.