



WHERE IDEAS COLLIDE



THE UNIVERSITY OF
MELBOURNE



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A Future in Public Health: Studying at the Melbourne School of Population and Global Health

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Melbourne School of Population
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Public Health is..

"the science and art of preventing disease, prolonging life and promoting health through the organized efforts and informed choices of society, organizations, public and private, communities and individuals."

*Charles Winslow, founder of the
Yale School of Public Health, 1920*





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The population health approach provides a framework that spans biomedical science and public health

Our work seeks to understand

- social determinants of health and disease
- molecular basis of disease in populations
- influence of physical, social and cultural environments on health



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We focus on ...

- Prevention of disease and injury
- Promotion of health and wellbeing
- Systems and services that society puts in place to achieve these aims
- Efficiency and cost-effectiveness
- Impact on equity and social justice



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Melbourne School of Population and Global Health

Nossal Institute for Global Health

Health Systems
Society & Environment
Communicable Disease
Non-communicable Disease

**Nossal Institute Ltd
Company**

Centre for Epidemiology & Biostatistics

Breast Cancer
Colorectal Cancer
Allergy and Lung Health
Sexual Health
Male Health
High Dimensional Analytics
Biostatistics
Modelling & Simulation
Australian Twin Registry
Neuroepidemiology

Centre for Mental Health

Mental Health Policy and
Practice
Population Mental Health
Global and Multicultural
Mental Health

Centre for Health Policy

Evaluation and
Implementation Science
Health Economics
Health Systems & Workforce
Law & Public Health
Cancer Services [proposed]

Centre for Health Equity

NCD Prevention & Control
Community Wellbeing
Indigenous Health Equity
Health Humanities & Social
Sciences
Australian Indigenous
Studies
Evidence & Child Health
Gender & Women's Health

Partnership Groups

Global Burden of Disease Group
Vaccine and Immunisation Research Group



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Professor Terry Nolan AO
Head of MSPGH

Director of VIRGo: Vaccine &
Immunisation Research Group

The largest and longest standing
child and adolescent vaccine trials
program in Australia, and one of
the leading sites internationally.

Also leaders in adult influenza
research





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Professor Kerry Arabena Chair in Indigenous Health

Inspirational
indigenous leader –
Inaugural chair of
the National First
Peoples' Congress
in 2010





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Laureate Professor Alan Lopez

Global Burden of Disease Project

20+year collaborative study of disease burden led by Lopez and Murray: morbidity and mortality rates: 500 researchers from 300 institutions in 50 countries

Bloomberg Data for Health Initiative

\$100m project collecting and evaluating birth and death data in developing countries to better monitor health outcomes





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Professor John Hopper AM
Australian Twin Registry

30 year national registry of twins for
research: hundreds of studies
covering almost every major
disease or health outcome
examining gene-environment
interactions





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Professor Hugh Taylor AC Indigenous Eye Health

- Eradication of trachoma
- National Indigenous Eye Health Survey
- Australia is the only developed country to still have trachoma and in many outback areas, Aboriginal communities have rates of trachoma as high as anywhere in the world.





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Professor Marcia Langton AM
Indigenous Anthropology



One of Australia's most sought
after indigenous academics
and media commentators



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Professors Jane Pirkis and
Dallas English
Mental Health/Epidemiology

Ten2Men: Australian Longitudinal
Study on Male Health: Cohort
study of 58,000 boys and men





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Professor Tony Jorm
Population Mental Health



Teen Mental Health First Aid:
Early identification and help for
friends with mental health
problems





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Our academic staff

- Breadth and depth of teaching and research expertise
- Practising clinicians and active public health practitioners
- Many research grants, contracts and consultancies
- Wide collaborations, locally and internationally





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Masters Degrees

Master of Public Health

Master of Biostatistics

Master of Epidemiology

Master of Science (Epidemiology)

Master of Ageing

Graduate Research Degrees

Master of Philosophy (MPhil)

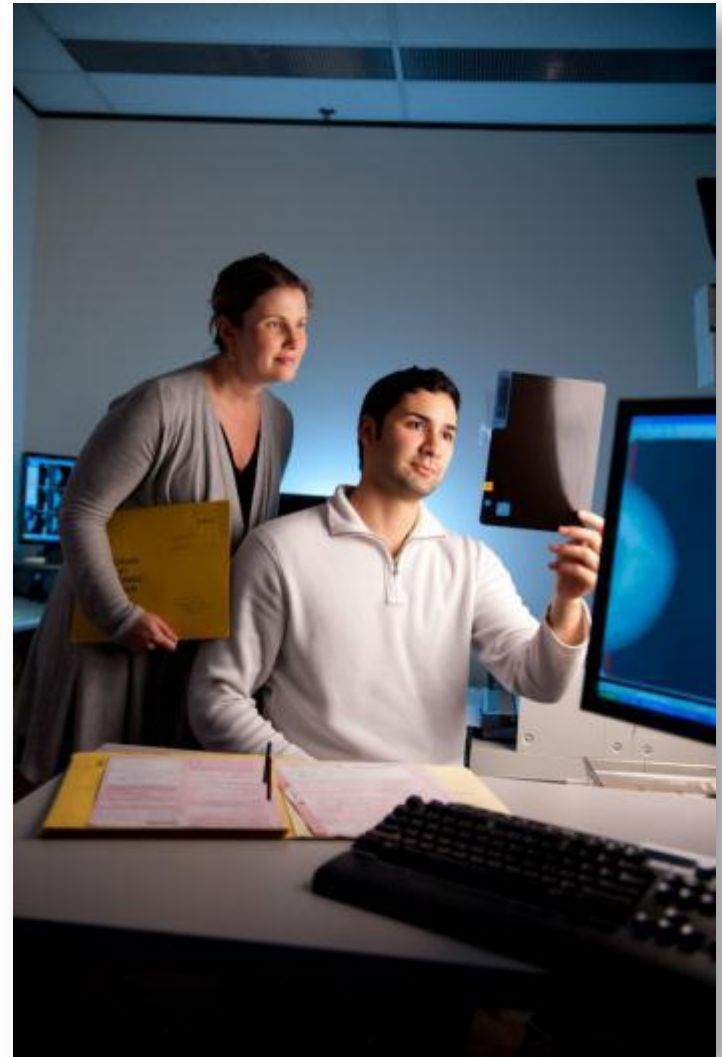
Doctor of Philosophy (PhD)

Graduate Certificates/Diplomas

Grad Dip. – Ageing

Graduate Cert. – Ageing

Graduate Cert. – Sexual Health





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Our students

- Broad range of backgrounds
- New graduates (career starters)
- Early to mid career working in clinical, scientific, public health and private sector settings (career changers)
- Preferred destination for Department of Foreign Affairs scholars training in public health and other international students
- Professionals working in government and research centres, senior health officials in their countries (career builders)



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Master of Public Health

An internationally recognised degree designed to build skills and expertise in Australian and international public health

Prepares students for future careers as leaders in health care and public health, providing a rigorous, multi-disciplinary foundation and the opportunity to specialise in priority health areas:

- **Epidemiology and Biostatistics**
- **Gender and Womens' Health**
- **Global Health**
- **Health Program Evaluation**
- **Health Economics**
- **Indigenous Health**
- **Health Social Sciences**
- **Sexual Health**
- **Ageing**
- **Capstone research project or professional placement**



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Master of Public Health Course Requirements

- The MPH is a two year full-time (or part-time equivalent) degree
- The MPH consists of FIVE core subjects and NINE elective subjects plus either:
 - Research Project (25 points)
 - Professional Practice Unit (25 points)
 - Coursework Option: Public Health in Practice and one further elective subject (12.5 points each)



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Core subjects

- Foundations of Public Health
- Epidemiology
- Biostatistics
- Qualitative Approaches in Public Health
- Public Health Leadership and Management

Elective subjects: Choose 9 subjects from 60 covering these areas of interest:

- General public health
- Epidemiology & Biostatistics
- Global Health
- Gender and Women's Health
- Indigenous Health
- Health Economics & Economic Evaluation
- Health Program Evaluation
- Sexual Health
- Health Social Sciences
- Ageing



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Master of Public Health Career Outcomes

Was...	Is...
Recent Science graduate	Victorian Government Public Health Trainee
Doctor in a medical team	Clinical Researcher in Disease Prevention
Unemployed	Epidemiologist
Local Laboratory Technician	Vaccine Trial Epidemiologist (Denmark)
Physicist in Melbourne	Epidemiologist, California Department of Health
Paediatrician (Vietnam)	University Lecturer (Vietnam)
Local Laboratory Scientist	Infectious Disease Educator in aid projects in Vietnam
Recent Economics graduate	WHO Program Evaluator in Cambodia and Indonesia



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Elective subject focus

Primary Health Care in Jamkhed, India

- Collaboration between the Nossal Institute for Global Health and Jamkhed Comprehensive Rural Health Project (CRHP), a best practice model of implementing primary health care
- 3 week program with field trips covering topics such as: primary health care, village health workers, community groups, project cycle and project development and broader development issues
- Assessment is by a group project

“It ’s probably not what you expect but has (for me) been the most mind opening experience, both personally and professionally ”

“It has been a great privilege to observe a PHC program in action that actually works! ”

“A wonderful subject highlighting the practical application of primary health care. ”





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Master of Epidemiology Master of Science (Epidemiology)

- Epidemiology is the study of the distribution and determinants of illness and injury in *populations, answering key questions like:*
 - *How do we know that smoking causes lung cancer?*
 - *How do we prevent the spread of H1N1 influenza?*
- These degrees focus on both epidemiology and biostatistics
- Epidemiologists are employed in:
 - Universities, medical research institutes and hospitals
 - Non-Government organisations
 - Pharmaceutical and biotechnology companies
 - State and national government





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Master of Epidemiology and Master of Science (Epidemiology)

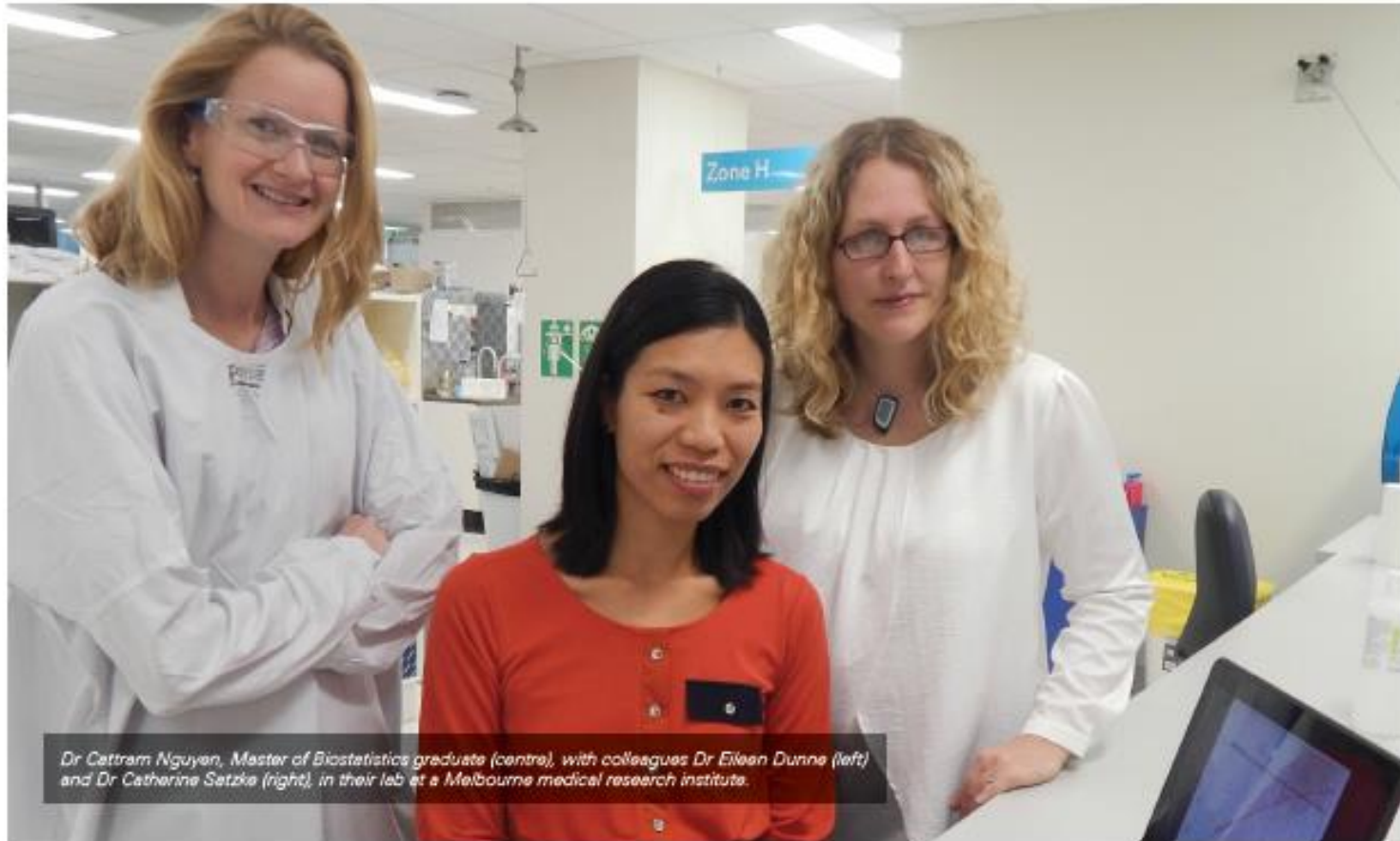
	MEpi	MSci (Epi)
Duration	2 years (part-time only) 100 points	2 years (full-time) 200 points
Compulsory epidemiology & biostatistics subjects	Same	
Science tools (preparation for the workplace)	None	Up to 3 subjects
Research project	25 points	50 points
Entrance requirements	Honours degree in relevant discipline (70% average) <i>Or</i> Degree in relevant healthcare discipline +1 year research experience <i>Or</i> Degree in relevant healthcare discipline +2 years work experience <i>Or</i> medical degree	An undergraduate degree in an appropriate discipline with at least an H3 (65%) average in the major, or equivalent



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Master of **Biostatistics**

Transform population health with cutting-edge data analysis



Dr Cattram Nguyen, Master of Biostatistics graduate (centre), with colleagues Dr Eileen Dunne (left) and Dr Catherine Setzke (right), in their lab at a Melbourne medical research institute.



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Careers in Biostatistics

“You can work anywhere in the world”

Assoc/Prof Julie A Simpson

“Variety of topics and challenges: never bored!”

Prof John Carlin

“Helping to solve problems of real-world importance”

Assoc/Prof Lyle Gurrin

“The ability to take data – to be able to understand it, to process it, to extract value from it, to visualize it, to communicate it – that’s going to be a hugely important skill in the next decades.”

Hal Varian, Chief Economist of Google Corporation





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Master of Biostatistics

- Full-time 1.5 years (3 yrs part-time) degree
- Hybrid of face-to-face & online teaching
- Access to elective subjects delivered by national leaders in Biostatistics through affiliation with the **Biostatistics Collaboration of Australia** (BCA; www.bca.edu.au)
- Strong emphasis on the application of statistical methods to **real health datasets**, and communication of statistical methods



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Ageing Courses

“Population ageing is a global phenomenon that is both inevitable and predictable. It will change society at many levels and in complex ways, creating both challenges and opportunities... It is now up to the global community to take up the challenges it identifies and truly add life to our increasing years.”



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Converging global trends

Population ageing coincides with other interdependent global trends

AGEING POPULATIONS

By 2050, 21% of the world's population will be aged 60+

URBANISATION

By 2050 75% of the world's population will live in cities

*Globalisation * Migration * Technology * Armed conflict
Epidemiological Transitions * Poverty & Inequality
Evolution of Human Rights*

ENVIRONMENTAL & CLIMATE CHANGE

CHANGES *with age*

PHYSICAL

Sensory | Mobility | Dexterity

FINANCIAL

Assets | Security

COGNITIVE

Memory | Decision-making

SOCIAL

Family | Friends | Activities



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Online & Interdisciplinary



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Master of Ageing	10 subjects + capstone
Graduate Diploma	8 subjects
Graduate Certificate	4 subjects
Specialist Certificate	2 subjects
Single Subjects	Electives or PD



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Body of Ageing

Ethics of Ageing

Ageing in Society

Economics of Ageing

Technology and Ageing

Leadership in Ageing

Ageing Health & Human Services

Mental Health & Ageing

Design for Ageing

End of Life Issues

Global Population Ageing

Ageing in Low & Middle Income Countries





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Graduate Certificate in Sexual Health

1 year full time/2 years part-time: 50 points

4 subjects: 2-3 sexual health subjects, plus 1-2 electives

- Focuses on diagnosis and control of sexually transmissible infections.
- For careers related to sexual health in the fields of clinical care, research, the pharmaceutical industry, or hospitals.
- Often, but not exclusively, clinicians/nurses without previous formal public health experience who are interested in moving into public health and/or sexual health. Also public health practitioners and students who have an interest in sexual health.
- 2 classroom subjects, 2 via distance learning.





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Graduate Research Programs

- PhD
- PhD with coursework
- MPhil



- We have over 100 PhD students
- Substantial research programs ideal for PhD projects
- Diverse research methods and research topics



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Melbourne Population Health Students Association (MPHSA)

Run by and for MSPGH students

- Professional networking activities for students
- Socialising and skill sharing amongst students
- Activities that support students' learning

www.mphsa.com

facebook.com/MelbournePHSA



"It always seems impossible until it is done."

Nelson Mandela

Photo by Dewet Willemsse



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Questions?





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