HIGHER DEGREE RESEARCH

Your research can change the world

NICM
The science of integrative medicine
NICM is an exciting and unique place to study. It brings together robust infrastructure, state-of-the-art laboratories, access to Western Sydney University’s facilities and an internationally recognised reputation for excellence.

Most importantly, NICM has a network of interdisciplinary world-class research scientists committed to your career development and research success.

As part of a team of passionate researchers, you will study in a friendly, collaborative and innovative environment, learning from the best in their field, gaining hands-on experience for your future career in natural and traditional medicine, pharma, biotechnology or academia.

Higher Degree Research candidates at NICM are motivated by what they do and the impact they have on society. Studying at NICM will give you the skills, knowledge and ability to make an impact in whichever area of healthcare you wish to specialise.

Our Higher Degree Research projects help drive the evolution of healthcare with a focus on evidence-based integrative medicine, producing tangible outputs and publishable work. NICM’s Higher Degree Research candidates have published in leading peer-reviewed journals, including BMJ Open, Journal of Affective Disorders, The Lancet, Cochrane Database Systematic Reviews, PLOS ONE, BMC Complementary and Alternative Medicine, and Midwifery.

Awarded the highest rating possible from the Australian Government with our research confirmed as “well-above world standard”,\textsuperscript{1,2} we are recognised nationally and internationally for our scientific capabilities and advice which is driving the development of innovations that make a vital contribution to the rapidly expanding integrative medicines sector and industry.

Demand for complementary medicine is strong worldwide and increasing. In Australia, industry revenue was $3.9 billion in 2015-2016 with just under 31,000 businesses contributing $1.5 billion in wages to the national economy,\textsuperscript{3} and across the United States in 2012, Americans were spending out-of-pocket, $30.2 billion a year.\textsuperscript{4}

As a trusted national leader, we collaborate with our partners to share and contribute our expertise and knowledge and help lead advances in integrative medicines worldwide, delivering results that benefit Australians and the wider global community.

As one of the world’s largest integrative medicine research facilities, NICM plays a major role in building capacity in the sector nationally and internationally.

Instrumental in developing highly skilled researchers in the sector, we further strengthen Australia’s leadership and competitiveness in integrative medicine by fostering Australia’s next generation of world-class researchers through our Higher Degree Research program, scholarships and development of early career researchers.

Our research program spans basic, mechanistic, translational, efficacy, and effectiveness research in clinical areas of national priority and global importance:

- Healthy hearts: preventing and treating cardiovascular and metabolic disease
- Healthy minds: preventing and treating neurocognitive and mental health disorders
- Healthy women: promoting sexual and reproductive health
- Healthy lives post-cancer: staying healthy through the cancer journey

As a NICM Higher Degree Research candidate, you will benefit from our meaningful collaborations with external research institutes, health organisations, industry partners and community organisations at a local, national and international level.

Our Higher Degree Research graduates are highly sought after by many research institutes, industry organisations and clinical practices. NICM’s Alumni continue to developed rewarding careers across a wide range of healthcare areas.

Our Higher Degree Research program is designed to enable you to focus on pressing health issues and scientific problems.
Our Higher Degree Research candidates are an integral part of NICM’s culture as they are the scientific leaders of tomorrow.

NICM provides support and Higher Degree Research opportunities including clinical placements in China, project funding to support research, living stipend scholarships, conference travel, annual Best Postgraduate Student Paper Award, writing stipends and communication training.

“Undertaking my PhD at NICM was a very rewarding experience. Completing a PhD is challenging, and through the mentoring and invaluable support received from NICM and my internationally renowned supervisors, I knew I could accomplish it. It was a privilege to present my research findings at national and international conferences, and having completed my PhD, I now assist Traditional Chinese Medicine practitioners in attaining their Master qualification.”

Debra Betts LicAc BHSc (Ac) PhD
Director of Postgraduate Programs,
New Zealand School of Acupuncture and Traditional Chinese Medicine
**Entry Requirement**

Admission Average Mark (AAM) of 65
An appropriate undergraduate degree

OR
Graduate certificate or graduate diploma in addition to one year of relevant work experience.

**Duration**

2F/4P

**Thesis Length**

20,000 – 25,000 words

**Coursework Content**

50%

**Scholarships Stipends**

$24,000

**Where can it take you**

- Laboratory managers
- Management in both government and private organisations
- Industry/hospital clinical trials networks
- Product development
- Policy advising
- Undergraduate teaching/academia
- Industry research

Key: F = Full-time study, P = Part-time study
MASTER OF CHINESE MEDICINE (RESEARCH STREAM)

Entry Requirement
Grade Point Average (GPA) of 5
Undergraduate degree in Acupuncture or Traditional Chinese Medicine (TCM)

OR
Diploma, Advanced Diploma or Associate Degree in TCM or Acupuncture

OR
Five years full-time equivalent clinical work experience in the field of TCM or Acupuncture and recognised by an Australian professional association representing Chinese herbalists or acupuncturists.

Duration
1.5F/3P

Thesis Length
15,000 - 20,000 words

Coursework Content
50%

Scholarships Stipends
Varied, check Western Sydney University website westernsydney.edu.au/graduate_research_school

Where can it take you
- Industry/hospital clinical trials networks
- Product development
- Policy advising
- Undergraduate teaching/academia
- Industry research

DOCTOR OF PHILOSOPHY (PHD)

Entry Requirement
Demonstrated research experience gained either:
- in Honours undergraduate studies
- in postgraduate studies – Master’s research program, and/or two independent quality publications expected
- during employment in a research based job.

It is also expected that the candidate will have a very good academic record.

The candidate has a sufficiently good grasp of English to communicate effectively and to be able to write a thesis.

The student needs to nominate a project or research area that is compatible with NICM’s research and staff profiles.

Duration
3F/6P

Thesis Length
60,000 – 100,000 words

Coursework Content
Nil

Scholarships Stipends
Varied, check Western Sydney University website westernsydney.edu.au/graduate_research_school

Where can it take you
- Senior laboratory managers
- Senior management in both government and business organisations
- Policy advising
- Academia (research and teaching), government research organisations (e.g. CSIRO) and private enterprise
- Industry research
RESEARCH AT NICM

Healthy hearts: preventing and treating cardiovascular and metabolic disease

Healthy minds: preventing and treating neurocognitive and mental health disorders

Policy and evidence translation

Herbal analysis and pharmacology of complementary and integrative medicines

Healthy women: promoting sexual and reproductive health

Healthy lives post-cancer: staying healthy through the cancer journey
POLICY AND EVIDENCE TRANSLATION

Lead: Professor Alan Bensoussan

The integrative medicine policy and evidence translation at NICM focuses on working with government to build appropriate policy frameworks and improving integrative healthcare practice by translating high-quality research into relevant guidelines and practice protocols. Topics include:

- Cost effectiveness and decision making in the use of integrative medicine
- Improving evidence translation and integrative medicine practice
- Australian bush medicines
HERBAL ANALYSIS AND PHARMACOLOGY
of complementary and integrative medicines

Lead: Associate Professor Chun Guang Li

The quality control program at NICM focuses on quality assurance and standardisation of herbal medicines and the development of protocols and instruments for use in clinical trials. Topics include:

- Phytochemical analysis of herbal medicines
- Effect of preparation methods on bioavailability and bioactivity of herbal compounds
HEALTHY HEARTS: preventing and treating cardiovascular and metabolic disease

Lead: Professor Dennis Chang

The cardiovascular and metabolic health program at NICM focuses on understanding how integrative medicine can assist with the prevention and treatment of various cardiovascular and metabolic diseases. Topics include:

- Chinese herbal medicine for diabetes and metabolic syndrome
- Diabetes and cognitive impairments
- Nutraceutical supplementations (e.g., omega-3) and cardiovascular health
- Synergistic interaction of herbal medicine compounds on cardiovascular function
- Yoga and tai chi on negative affective states, cardiovascular and cognition function in post-cardiac rehabilitation
HEALTHY MINDS:
preventing and treating
neurocognitive and mental health
disorders

Lead: Professor Jerome Sarris

The neurological and mental health program at NICM focuses on the prevention and treatment of dementia and neurocognitive decline and improvement of mental health in response to integrative medicine treatment. Topics include:

- Memory attention and learning
- Evaluations of herbal medicines and nutraceuticals used for dementia, mild cognitive impairments and healthy ageing with cognitive deficits
- Chinese herbal medicine to improve function and quality of life in patients with ischemic stroke
- Mind-body interventions (e.g., tai chi) and neurocognition
- Mechanisms of action underlying neuroprotective effects of herbal medicine
- Acupuncture and herbal medicine used to improve mental health (depression and anxiety)
HEALTHY WOMEN:
promoting sexual and
reproductive health

Lead: Professor Caroline Smith
The women’s health program at NICM covers menstrual health of young women, pregnancy, infertility, menopause and gynaecological disorders. Topics include:

- Antenatal and postnatal depression
- Integrative therapies for menstrual disorders, menopause, fertility and pregnancy
- Polycystic ovary syndrome and endometriosis
HEALTHY LIVES
POST-CANCER:

staying healthy through the cancer journey

Lead: Professor Paul de Souza

The cancer care program at NICM focuses on understanding how integrative medicine may assist with cancer management and side effects of conventional cancer treatment. Topics include:

- Management of cancer treatment related symptoms
- Chemotherapy and herbal medicine interaction
- Chinese herbal medicine for women with hot flushes during endocrine therapy for breast cancer
INTERESTED? 
NEXT STEPS

- Confirm eligibility at www.westernsydney.edu.au/graduate_research_school/grs/higher_degree_research_students
- Contact academics of interest to discuss potential research project opportunities
- Lodge an application through Western Sydney University Admissions
- There are two intakes for this program annually – please note the respective deadlines for these

Further information
p. +61 2 4620 3284
e. nicm@westernsydney.edu.au
w. nicm.edu.au