

COMMERCIAL SERVICES

Your
independent
research
partner

NICM
Health Research Institute







NICM Health Research Institute (NICM HRI) is a focal point for innovation and independent research offering a full range of commercial testing, clinical evaluation, and product development services for complementary and integrative medicine, pharmaceuticals, and veterinary products.

As a full service research-intensive institute, from the bench to the bedside (preclinical, clinical and translational), we advance evidence-based analysis focusing on product quality, safety, efficacy, and effectiveness.

Our world-class researchers and state-of-the-art facilities at Western Sydney University offer novel, innovative and creative solutions for technical challenges faced by industry. Partner with NICM HRI and leverage cost-effective scientific capabilities and technical expertise to help enhance your business competitiveness.

PRECLINICAL DEVELOPMENT

Our preclinical research capabilities extend to various novel *in vivo* and *in vitro* models.

Utilising a wide range of instruments and advanced techniques such as Nuclear Magnetic Resonance Spectroscopy and High Performance Liquid Chromatography systems, we provide a strong scientific foundation for product development.

NICM HRI's fully equipped laboratories support industry with independent and accredited testing and research services, including:

- Pre-formulation studies, excipient compatibility, physicochemical/chemical purity
- Formulation studies, dosage form design
- Analytical method development and validation
- Stability testing - physical and chemical; batch to batch quality assurance
- Potency testing - Active Pharmaceutical Ingredients and compounded pharmaceutical preparation in all dosage forms
- Authentication of botanical identity of raw herbs and identification of active ingredients
- Extraction, isolation and quantification of herbal biomarkers
- Herbal synergy and combination optimisation
- Bioassay guided fractionation
- Cell based antioxidant, anti-inflammatory, anti cancer, vascular health, neuronal and antimicrobial assays
- Molecular targets studies underlying clinical effects of herbal medicines
- Pharmacokinetic studies and bioavailability of herbal medicine
- Herb-drug interaction studies
- *In vitro* and *in vivo* toxicity testing
- Medicinal cannabis and hemp analysis

In our herbal analysis and pharmacological laboratories, our analytical capabilities go beyond routine testing and quality control or assurance.





TRANSLATIONAL TO THE CLINIC

NICM HRI is Australia's lead clinical trials facility in integrative medicine. We can also assist in having your research translated into practice by providing evidence summaries for therapeutic products, including literature retrieval in Chinese language and data package analysis; and cost-effectiveness studies.

CLINICAL DEVELOPMENT

Essential to the development of new interventions, clinical trials research verifies a product's benefits and targeted indications, along with its limitations and precautions.

NICM HRI can assist in developing your research program by providing a range of clinical research services, including:

- Clinical trials - ICH compliant, phase II and III
- CRO services, including protocol development, trial design
- Clinical bioavailability studies
- Clinical study medication supply
- Cardiovascular and neurological function testing using technologies such as electroencephalography (EEG), SphygmoCor and computer based cognition testing

WHY PARTNER WITH US?

Our research in Australia is unrivalled. NICM HRI is rated “well-above world standard” by the Australian Government’s Excellence in Research for Australia (ERA) process which provides tangible confirmation of the outstanding quality of our researchers, research outputs and reputation. ERA 5 ranking is the highest possible and the reflection of a high output collaborative research team that is driving innovation and advances for some of Australia’s greatest health challenges. In addition, our herbal laboratory facilities have received an A1 compliance rating from the Australian Therapeutic Goods Administration (TGA), the highest rating possible.

NICM HRI is a research-intensive institute that facilitates a high-level of innovation by providing evidence-based analysis for product development, validation and training.

We have a track record in delivering high-quality results to our partners, including industry, government and disease foundations. Our far reaching and long-term international collaborations provide access to the world’s leading experts and facilities. Our team of interdisciplinary researchers provide preclinical and clinical research and work collaboratively creating opportunities for unique insights and development of new intellectual property.

- TGA accredited analytical chemistry laboratories provide commercial testing services and preclinical research
- PC2 accredited pharmacology laboratories support mechanistic studies of herbal medicines
- A Commonwealth Office of Drug Control (ODC) Manufacturing Licence allows for the preclinical investigation of medicinal cannabis, along with relevant State authorisation from the NSW Department of Health
- Clinical laboratories and ICH compliant clinical trial facilities support clinical research
- World-class researchers and collaborations ensure reliable, high-quality outcomes

NICM HRI is one of only two university laboratories licensed by the Australian Therapeutic Goods Administration to undertake and provide certificates of analysis for herbal products in line with regulatory requirements.



KEY COMPETITIVE ADVANTAGES OF PARTNERING WITH NICM

Comprehensive scientific expertise

World-class researchers; ERA 5 rated research institute; comprehensive range of capabilities related to evidence-based analysis and product development from preclinical; clinical and translational

Proven track record

Over the last 10 years, NICM HRI has completed many consultancies. Laboratory standards: TGA and PC2 certification - leverage NICM HRI's independent and accredited laboratories; tests carried out can be used to support product certification and submitted to relevant regulatory agencies for review and approval. NICM HRI also holds a Commonwealth Office of Drug Control Manufacturing License for medicinal cannabis analysis

International, national and local networks

Provides an expert platform for knowledge generation

FULL SERVICE RESEARCH FACILITY

Enhance your competitiveness - take your product through the product development lifecycle with a skilled and committed research partner

Tertiary institute

Qualified trainers to facilitate skills-based training courses

Strategic partnership

Leverage off the strategic partnerships that NICM HRI has established with other organisations - including potential funding support from government bodies; industry associations; hospitals and academia to bring your product to market

State-of-the-art facilities and infrastructure

Gain access to nationally significant equipment and facilities only available within a university research environment

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