

2022

HEALTH+MEDICAL RESEARCH

RNA Future Leaders Program

PhD Program

Guidelines



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SHPN: (OHMR) 211165

Call for Applications

NSW Health invites eligible Host Universities (enrolling universities) to apply for the RNA Future Leaders Program **PhD Scholarships**. The Program has two components; the first is the selection of the PhD Project, and the second is the selection of the PhD candidate. This Program has been designed to support the next generation of innovators in RNA-based diagnostics, therapies, production, vaccines and delivery systems. The Program awards funding for PhD candidates to undertake research within these priority research areas. These Guidelines apply to Stage One of the application process, the PhD Project, which is outlined on pages 5-6.

Host organisations are invited to submit up to 8 applications. **Applications close at 12PM on Friday 18 February 2022.**

Program outline

The Program supports opportunities for PhD candidates to conduct research in RNA-based diagnostics, therapies, production, vaccines and delivery systems under academic supervision. Funding and in-kind support is drawn from two sources: NSW Health and the Host University.

- NSW Health provides \$20,000 per annum for four years as a contribution to a stipend for a PhD candidate;
- Host Universities provide a financial contribution of \$20,000 per annum to match NSW Health's contribution, bringing the PhD candidate's total stipend to \$40,000 per annum for four years. Host Universities may also provide in-kind support and fund the candidature beyond four years at their discretion and according to local arrangements.
- Host Universities may partner with an industry organisation, medical research institute, NSW Health local health district or specialty health networks, or other affiliated NSW research organisations. The application must include details of the partnering organisation(s) and the role and contribution that the partnering organisation(s) have in the project. Appropriate executive sign-off from the partnering organisations must be included in the application.

Eligible areas of research

This funding will support the recruitment of PhD candidates to undertake research projects in RNA-based diagnostics, therapies, production, vaccines and associated delivery systems including nanotechnology. Only research projects that

improves wellbeing and health outcomes for patients will be considered eligible.

Program objectives

The objectives of the Program are to:

- attract high quality PhD students that strengthen successful RNA medicine research programs
- build workforce skills and capacity in the development and manufacture of RNA diagnostics, therapies, vaccines and associated delivery systems in NSW
- create new opportunities for PhD students to study RNA diagnostics, therapies, production, vaccines and/or associated delivery systems
- improve graduate understanding of the diversity of employment opportunities in the NSW RNA medicine sector
- improve graduate understanding of the commercialisation pathway for these therapeutics to support closer engagement with industry.

Commercialisation Training Program

NSW Health has developed a training program in [commercialisation](#), which PhD candidates are required to complete during their candidature. The training will provide students with a high-level understanding of the pharmaceutical industry, its structure, corporate roles and the process of taking a product from a concept through to market. Specifically, students will understand the essential steps required to create successful therapeutics from a formulation, manufacturing, regulatory and reimbursement strategy point of view that they can then apply to the RNA medicine sector. At the completion of the course students will understand how to construct a target product profile and associated business case for a new therapeutic product.

Research collaborations and partnerships

Applicants are encouraged to identify and engage relevant partners who will provide a meaningful contribution to delivery of the research project and implementation of outcomes.

Partners may include:

- NSW Health System partners including NSW Ministry of Health, Pillars, and statewide health services
- local health districts and specialty health networks
- Advanced Health Research Translation Centres and Centres for Innovation in Regional Health
- universities and medical research institutes
- Aboriginal Community Controlled Health Services

- Primary Healthcare Networks
- clinical networks
- non-government organisations
- consumers and patients.

The research must be conducted in NSW but may be part of a wider collaboration.

RNA Production and Research Network

Applicants are encouraged to consider collaborating and working with the NSW RNA Production and Research Network. The RPRN can be contacted via rprn@unsw.edu.au and include 'OHMR's NSW RNA Future Leaders Program' in the subject line.

Industry Partnerships

Outcome-focused collaborative research partnerships between industry organisations and Host Universities are encouraged.

The following conditions apply:

- Industry partnerships must involve a lead applicant who is based at an eligible Host University and who is the main driver of the project. Industry organisations are not eligible to be host organisations.
- Only an eligible lead applicant can apply for grant funding and submit an application on behalf of project partners.
- Applications may include and maintain among project partners one or more industry organisations.
- Industry organisation(s) must contribute resources to the project. Industry matched funding is encouraged, but not required.
- Industry organisation(s) must enter into a legally binding agreement with the Host University to ensure their obligations are met under the Program, including education quality, student insurance at both sites, intellectual property arrangements relating to contributions of the PhD student and policies relating to thesis submission and thesis publication.
- A nominated industry supervisor must be employed by the industry organisation on an ongoing basis, or hold an employment contract for at least the projected duration of the PhD candidate's studies.
- Industry organisation(s) must meet all standard employer responsibilities required by law, and accommodate and support the industry supervisor and PhD candidate for the duration of the PhD
- In collaboration with the Host University, the industry organisation must apply policies and

practices concerning under-represented groups in the selection of prospective PhD candidates.

- Industry organisation(s) must intend to commit to hosting a PhD candidate at their site for 30% of the PhD candidate's time. If the industry organisation is registered to conduct its business activities outside of NSW, consideration should be given to any travel or living expenses to be granted to the PhD candidate, as well as justification of the benefits of external industry exposure for the student and NSW. A COVID risk plan must be submitted by the industry organisation to ensure completion of the project. Clear justification should be provided if the industry organisation is unable to host the PhD candidate at their site for 30% of the PhD candidate's time and offer an alternative pathway for sufficient supervision by the industry supervisor.
- The Industry Supervisor must commit to releasing the PhD candidate for the [Commercialisation Training Program](#).

NSW Health is open to different partnership arrangements providing the eligibility criteria and conditions relating to industry partnerships are met. The partnership should be clearly outlined in the application. For example, start-ups may partner with larger industry organisations in addition to their academic partner.

Program Logic and research impact

Applicants are required to submit a Program Logic diagram with their application, including project aim, inputs, activities, outputs, and expected outcomes and impacts.

Note that outcomes and impacts may not be realised during the funded period, they may be projected to occur in the future. Particularly for basic science, the 'next users' who are responsible for taking the research findings to the next step for translation should be involved from the start of the project so they understand the research and can move the findings towards translation.

Research Impact Assessment

The Program Logic will be used to optimise the probability of research impact at application stage. If the research is funded, the Program Logic will guide the measurement of impact throughout the project and at its conclusion.

Research impact will be considered across five domains:

Domain 1: Knowledge Generation

- New interventions, treatments, diagnostics or drug targets.
- New clinical or medical prototypes.

- Peer-reviewed publications and presentations at conferences.
- Media coverage and other non-peer-reviewed publications.

Domain 2: Capability Building

- New partnerships leveraged
- Training and professional development
- Research students supported.

Domain 3: Policy and Practice

- Instances where research findings are considered in policy development
- Instances of change in clinical practice
- Instances of new health technology or new treatments used in clinical care

Domain 4: Patient health and population outcomes

- Improved health outcomes, including change in:
 - time to develop an outcome
 - likelihood of an outcome occurring.

Domain 5: Economic outcomes

- Research jobs created and sustained.
- Patents and commercialisation.
- Value of leveraged research funding (external grants awarded due to NSW Health funding).
- Reduction in cost of delivering care.
- Potential for return on investment.

Research Translation

All research projects should have potential to lead to changes in clinical practice or policy in the short and/or long term, even if not during the funded period. Applications must clearly describe:

- the long-term goal and clinical significance of the research
- the expected pathway for this to occur (note this may not be linear)

How the researchers will engage with 'next users', i.e. research partners and other stakeholders who will take the research to the next step on the translation pathway.

An example translation pathway is at Appendix A. Applicants may use their preferred framework.

Priority populations

It is important that all research projects consider and respond to the distribution of the burden of disease within the population and the needs of higher risk and priority populations where appropriate. These may include women, Aboriginal and Torres Strait Islander people, individuals from a non-English speaking background, socioeconomically disadvantaged groups and people living in regional and remote areas.

Relevant partners should be engaged early to ensure that the research design and conduct will be effective and appropriate for these population groups.

Research projects with a primary focus on Aboriginal health or involving Aboriginal people as participants should attach a completed Aboriginal Health Impact Statement to their application, available at www1.health.nsw.gov.au/pds/ActivePDSDocuments/PD2017_034.pdf.

Intellectual Property

Intellectual property (IP) arrangements should be agreed between all research partners and organisations, according to local policy. IP arrangements must cover both background IP and IP that is developed during the project. IP arrangements should consider the contribution of the PhD candidate. The arrangements should be detailed in the application.

Application Process

PhD Project Application

Stage One: Host University submits PhD Project application to NSW Health

To apply, the academic supervisor(s) and Host University must download and complete the NSW Health RNA Future Leaders Program PhD Scholarships 2021 Application Form for the proposed PhD Project, which is available at www.medicalresearch.nsw.gov.au. PhD Project applications are not to be completed by a prospective PhD candidate.

Applications must be approved by a designated senior representative (Research Director, Dean of Research etc.) and submitted by a representative from the Grant Office of the Host University. All applications must use the NSW Health RNA Future Leaders Program PhD Scholarships 2021 application form and attach supporting evidence as required.

Applications must be saved using the following format for naming in the email subject line: *'Host University Short project title'*.

For each additional attachment, the following format for naming should be used: *Supervisor Surname_ Supervisor First Name Document name*.

All applications and attachments should be submitted by email to moh-ohmrgrants@health.nsw.gov.au by **12PM AEDT on Friday 18 February 2022**.

Applications submitted by any other means will not be considered.

All applications will receive an email acknowledging receipt within 48 hours. It is the applicant's responsibility to follow up if no acknowledgement is received. Please note that the maximum file size is 20MB. Larger files will be rejected by the NSW Health server.

The confirmation email should be retained as this may be required by NSW Health as evidence of submission. If an email confirming receipt of the application is not available, no further correspondence regarding the application will be entered into.

Please refer to www.medicalresearch.nsw.gov.au for relevant program dates and updates to the program.

Host Universities are invited to submit a maximum of ten (10) applications only.

For queries regarding the Program, please email moh-ohmrgrants@health.nsw.gov.au.

Stage Two: NSW Health notifies Host Universities of successful applications

NSW Health will notify Host Universities of successful and unsuccessful applications following expert panel review.

PhD Candidate Application

Stage Three: Host University selects a suitable PhD candidate to undertake the research project

PhD candidates will be recruited to funded project opportunities according to Host University (enrolling university) procedures for **merit-based recruitment**. This process is to be administered by the Host University for each project. Aboriginal and Torres Strait Islander researchers, people from culturally and linguistically diverse backgrounds, and primary carers who have experienced career disruptions, should be encouraged to apply.

Following recruitment, a selection report and other required documentation for the proposed candidate must be submitted to NSW Health. Further guidance on the format for this report will be provided to successful Host Universities. Once the proposed candidate has been reviewed and approved by NSW Health,

candidates will be notified of the outcome of their application.

NSW Health will enter into a funding agreement with the Host University. Following this process, an announcement of successful candidates will be made.

Eligibility Criteria

ALL criteria must be met for applications to be eligible.

Academic supervisor

Note that the number of academic supervisors per PhD student will vary depending on the Host Universities' policy. Details and track records of all academic supervisors should be included in the application.

1. Australian citizen, permanent resident or appropriate visa

The nominated academic supervisor must be an Australian citizen or permanent resident or hold an appropriate visa.

2. Contract with eligible host

The academic supervisor must be employed by the Host University on an ongoing basis or have an employment contract and/or affiliation agreement for at least the projected duration of the PhD candidate's studies.

3. Commits to releasing their candidate for the Commercialisation Training Program

The academic supervisor must commit to releasing their PhD candidate for the Commercialisation Training Program

Host University

The Host University is the enrolling university and holds an employment contract and/or affiliation agreement with the academic supervisor AND at which the PhD candidate will undertake the research project.

The Host University must have a track record in development and/or manufacture of RNA diagnostics, therapies, vaccines and/or associated delivery systems.

Host Universities may partner with a Medical Research Institute(s), NSW Health Local Health District(s), NSW Health Specialty Health Networks or other affiliated NSW research organisation(s). The application must include details of the partnering organisation(s) and the role and contribution that the partnering organisation(s) have in the project. Appropriate executive sign-off from the partnering organisations must be included in the application.

1. Located in NSW

The Host University and partnering organisation(s) must be located in NSW.

2. Guarantee of financial support by providing matching funding to NSW Health

The Host University must provide a financial contribution of \$20,000 per annum to match NSW Health's contribution, bringing the PhD candidate's total stipend to \$40,000 per annum for four years. Host Universities may fund additional candidature beyond four years at their discretion and according to local arrangements.

3. Legally compliant and committed to providing appropriate support

The Host University must meet all standard employer responsibilities required by law and accommodate and support the academic supervisor and PhD candidate for the duration of the PhD.

4. Compliant and committed to policies and practices that ensure recruitment is fair, responsive and inclusive

The Host University must apply policies and practices concerning under-represented groups in the selection of prospective PhD candidates.

PhD Candidate

Should the PhD Project application be successful, the prospective PhD candidate who is selected by the Host University must also meet **ALL** applicable eligibility criteria. Candidate selection process reports will be reviewed by NSW Health as outlined in Application Process – Stage Three to ensure these criteria are met.

1. Australian citizen, permanent resident or appropriate visa

The candidate must be an Australian citizen or permanent resident or hold an appropriate visa. Applicants who are not citizens or permanent residents must provide evidence, certified by a Justice of the Peace (JP) or equivalent, of residency status and right to remain and work in Australia for at least the projected duration of the PhD candidate's studies. For electronic documents, an official VEVO statement is sufficient; JP certification is not required. Australian citizens and permanent residents are not required to show evidence.

2. Nomination by the Host University

The candidate must be nominated by the Host University for support under the program.

3. Academic track record and research experience

The candidate must hold an undergraduate degree with at least a credit average (or equivalent).

Candidates must also have research experience through an Honours program (first class, or second-class division one) or Master's degree by research in a relevant subject. Candidates with a Master's degree by coursework will not be deemed eligible.

4. Commits to completing Commercialisation Training Program

The candidate must commit to completing the Commercialisation Training Program.

PhD Project Selection Criteria

All applications for funding that meet the eligibility criteria in Section B of the application form will be assessed against the following selection criteria. Reviewers may not all be content experts in each specific field, so all technical terms must be explicitly defined, methods clearly explained, and thorough background for the research proposal should be provided.

Summary of Selection Criteria and Weighting

Selection Criteria	Section of Application Form	Weighting
Research Proposal	C-D	30%
Skill Development Plan	E	40%
Host University and Academic Supervisor(s)	D-G	30%

Research Proposal (30%)

Applications should describe the proposed research project by including:

- a clearly defined research question or problem
- a detailed study methodology and outcomes, which are appropriate to research objectives
- a relevant evidence gap that the project aims to fill
- the patient needs and potential impact of research on human health
- an approximate timeline and key milestones mapped across the PhD project, and the likelihood of being able to complete the project within the timeframe of a PhD
- an indicative budget that is realistic and appropriate
- roles of researchers who will work on the project
- evidence of engagement with the NSW RNA Production and Research Network and/or international collaborations
- engagement with industry is desirable

- a program logic model, including inputs, activities, outputs and outcomes for the proposed project.

Skill Development Plan (40%)

Applications should include a well-articulated skill development plan for the student including:

- the specific skills to be developed during the PhD, and why the development of these skills is a priority for building the RNA medicine workforce in NSW
- the strategies that will be used to support the student attain the skills in collaboration with the Academic Supervisor and any other career development partners
- the evaluation measures that will be undertaken to demonstrate the successful attainment of the skills by the student.

Host University and Academic Supervisor(s) (30%)

Applications will be assessed on:

- track record of the academic supervisor(s) with respect to the PhD research area
- track record of the academic supervisor(s) in developing the RNA medicine sector in NSW
- track record of the academic supervisor(s) with respect to successful outcomes for
- students
- track record of the host organisation in development and/or manufacture of RNA diagnostics, therapies, vaccines and/or associated delivery systems.
- the extent to which the Host University will support the skill development plan
- financial and in-kind contributions from the Host University and any other sources, which will be provided for the duration of the PhD candidate's studies.

PhD Project Selection Process

STEP ONE: Initial eligibility appraisal

Following the closing date for applications, NSW Health will determine whether each application has satisfied ALL the eligibility criteria.

STEP TWO: Review by panel of experts

NSW Health will convene a selection panel, comprising experts in relevant fields. The panel will assess applications against the selection criteria and assign a total score to each. Based on these scores,

recommendations for funding will be made to the NSW Health.

STEP THREE: Notification of successful PhD Projects

NSW Health will notify applicants of the result of their application. This decision is final and may not be appealed. The Host Universities will then, through a merit-based competitive process, select eligible and suitable PhD candidates (see below).

STEP FOUR: Funding Agreements

NSW Health will contact successful applicants' Host University to establish funding agreements. Note: Funds may not be drawn down until an eligible PhD candidate is selected, approved and commences study.

PhD Candidate Selection Process

STEP FIVE: Identification of PhD candidate

The Host University is responsible for identifying a suitable PhD candidate to undertake the research project through Host University procedures for merit-based recruitment. The Office for Health and Medical Research can assist with advertising the available position if desired. The successful candidate should commence studies no later than the end of June 2023, otherwise the scholarship will be rescinded, and all funds recovered.

Prospective PhD Candidates

Details of funding

The table below outlines all funding details for the NSW Health RNA Future Leaders Program PhD Scholarships:

Funding Source	Amount	Duration	Purpose of funding
NSW Health	\$80,000 (\$20,000 per annum)	4 years full time or part time equivalent	Salary costs of PhD candidate
Host University	\$80,000 (\$20,000 per annum)	4 years full time or part time equivalent	Salary costs of PhD candidate

Duration of candidature

NSW Health will support the PhD candidate for four years full time, or part time equivalent. PhDs longer than four years are permitted depending on the Host University's policy; however, the Host University must negotiate funding and other arrangements. These arrangements should be clearly outlined in the application.

Part time students

NSW Health recognises that full-time study may not be possible for all prospective candidates. The Host University will be required to assess applications for part-time study on equal terms with applications for full-time study.

Funding will be pro-rata for part time candidates based on the student load approved by the Host University (e.g. a 50 per cent student load will be awarded \$20,000 per annum over eight years). Confirmation that the Host University has accepted the part time enrolment and the terms of that enrolment will be required.

Conditions applying to the scholarship

The standard scholarship conditions and administrative requirements of the Host University will apply to these scholarships (e.g. recreation leave, sick leave, leave of absence).

Funding conditions and exclusions

The NSW Health scholarship is allocated to the PhD candidate's stipend and cannot be expended on capital works, general maintenance costs, organisational infrastructure or overheads, telephone/communication systems, basic office equipment, rent, or the cost of utilities.

Funding is conditional on the Host University, supervisor(s) and the PhD candidate remaining compliant with all eligibility criteria for the duration of the research program. Recipients must meet all reporting and program evaluation requirements set out in the Funding Agreement. The Agreement emphasizes the Host University's role in supporting the candidate's career development.

Once successful PhD candidates and their Host Universities are notified and the Funding Agreement is finalised, a revised copy of the application submitted incorporating any amendments required by NSW Health, will act as a record of the planned activities.

PhD Candidates are advised to obtain independent tax advice regarding the PhD Scholarships.

No funding may be drawn down until the PhD candidate has been selected and commenced studies. The PhD candidate may not receive any other scholarship in addition to the RNA Future Leaders Program PhD Scholarship.

NSW Health will not provide additional funding for PhDs greater than four years duration, or part time equivalent, whether this extended candidature is due to pre-arrangement with the Host University, delays with the project, or leave of any type taken by the candidate.

Reporting Requirements

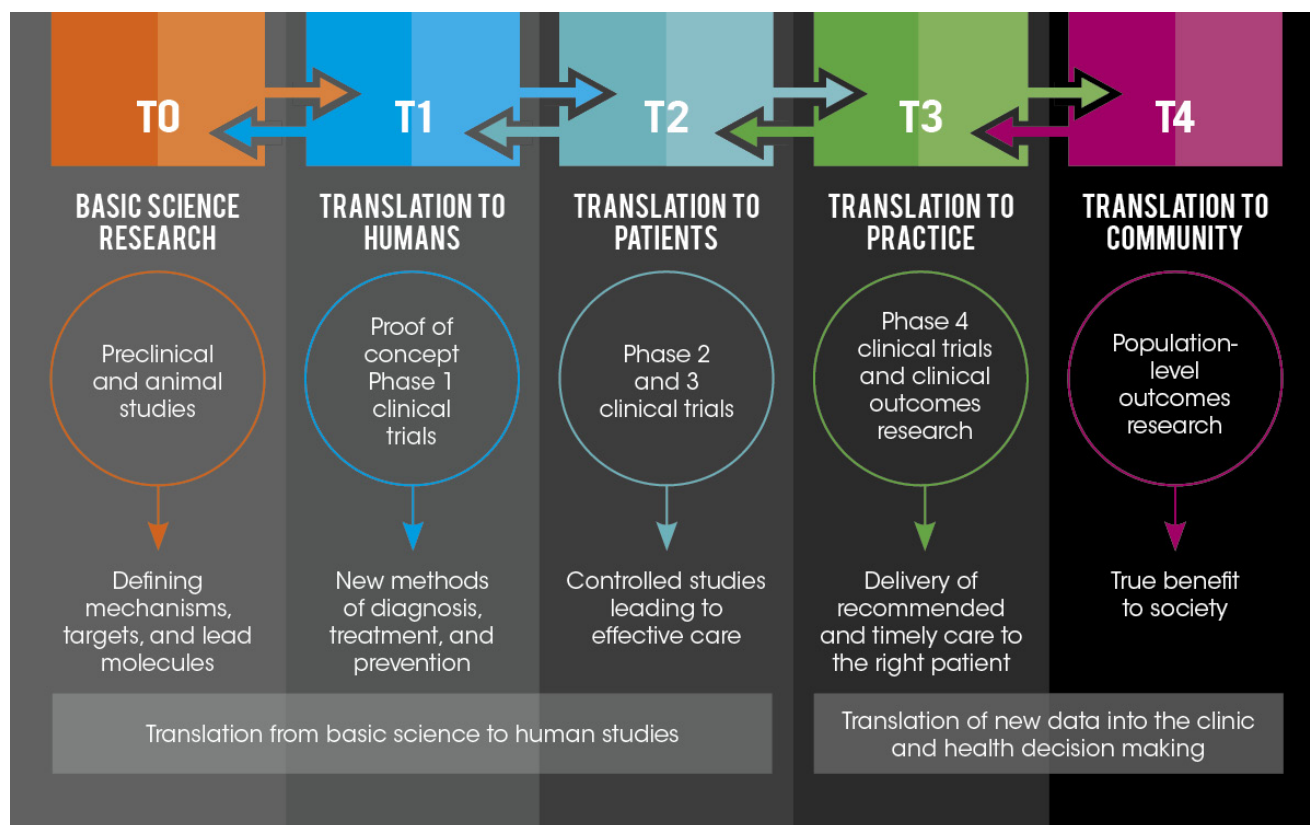
The Host University will enter into a Funding Agreement with NSW Health that sets out its obligations. A schedule for reporting will be outlined in the agreement and will include a requirement to provide:

- Annual Progress Report, with input from the supervisor(s) and the PhD candidate
- Annual Financial Report
- A Final Report upon the conclusion of the project.

Program Evaluation

The NSW Health RNA Future Leaders Program will be evaluated against its intended purpose and objectives. NSW Health will perform this evaluation in collaboration with the Host University, supervisor(s), and the PhD candidate. This may include face-to-face meetings for which all parties will be required to make themselves available. Feedback received will be used to inform the future directions of NSW Health EMC and PhD Program.

Appendix A



Source: University of Arkansas for Medical Sciences Translational Research Institute - <https://tri.uams.edu/about-tri/what-is-translational-research>