

2019

HEALTH+MEDICAL RESEARCH

PhD Partnership Program

Guidelines



NSW Health
100 Christie Street
St Leonards NSW 2065
(02) 9391 9228
www.health.nsw.gov.au
www.medicalresearch.nsw.gov.au

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SHPN: (OHMR) 190500

1. Call for Applications

NSW Health invites eligible host universities, in partnership with industry, to apply for the PhD Partnership Program.

The Program awards funding for PhD candidates to undertake research within the pharmaceutical and biological therapeutics sectors. These Guidelines apply to stage one of the application process, which is outlined on page 4.

2. Program outline

The Program supports opportunities for PhD candidates to conduct research in drug discovery and drug development (including biologicals) under the joint supervision of academic and industry-based supervisors. Funding and in-kind support is drawn from three sources:

1. **NSW Health** provides \$20,000 per annum for three years as a contribution to a stipend for a PhD candidate
2. **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 three years. Host universities may also provide in-kind support and fund the candidature beyond three years at their discretion and according to local arrangements
3. **Industry partner** organisations are also required to match NSW Health's contribution, either by providing financial support or in-kind support, or a combination of both, to the value of at least \$20,000 per annum for three years. In-kind support includes but is not limited to training, supervision, networking opportunities, project equipment, provision of compounds or assays, travel or accommodation to support the PhD candidate attain onsite industry experience. Smaller companies including start-ups may provide a justification for why this matched contribution would not be possible, and instead propose in-kind or other support to be clearly outlined in the application.

Program objectives

The objectives of the Program are to:

- promote collaboration between industry and university researchers
- build commercialisation capacity in the pharmaceutical and biological therapeutics sector
- increase the number of locally developed therapeutics reaching Phase I clinical trials
- create new opportunities for PhD students to study the development of novel therapeutics
- ensure graduates leave university with the skills necessary to succeed in industry
- improve graduate understanding of the diversity of employment opportunities in the NSW pharmaceutical and biological therapeutics sectors.

Priority areas of research

The Program supports research towards the development of novel therapeutics. This includes small molecules and biologicals such as cell and gene therapies. Scholarships will be targeted at pre-clinical research with an identified therapeutic target, with a view to readying novel therapeutics for Phase I clinical trials. Human trials, including Phase I, II, III and IV clinical trials, will not be funded by this program.

Eligible areas of research include, but are not limited to:

- fragment-based and/or high-throughput lead discovery
- lead optimisation
- pharmacodynamics and pharmacokinetics (including absorption, distribution, metabolism and excretion)
- medicinal chemistry
- chemistry and antibody design
- manufacturing
- formulation and the development of drug delivery platforms
- efficacy and proof-of-concept
- acute toxicology

- gene vector design and manufacture
- therapeutic applications of macromolecules
- pre-clinical models, including cell and animal trials.

For areas of research that do not appear above, applicants should present a justification as to why the proposed project is a priority in NSW and should be funded. In general, basic research will not be funded without clear therapeutic and commercial potential in the near term.

Commercialisation Training Program

NSW Health is developing a Commercialisation Training Program, which PhD students 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. 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.

3. Application process

Stage one: Host University submits applications to NSW Health

The PhD Partnership Program 2019 Application Form is available at www.medicalresearch.nsw.gov.au/phd-scholarships/.

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 on behalf of the partnering industry organisation. All applications must use NSW Health's PhD Partnership Program 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_Industry Partner Organisation_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 email moh-ohmrgrants@health.nsw.gov.au by 5pm on 1 November 2019. Applications submitted by any other means will not be considered. Please refer to www.medicalresearch.nsw.gov.au/phd-scholarships/ for relevant program dates and updates to the program.

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

Answers to frequently asked questions are available at www.medicalresearch.nsw.gov.au/phd-scholarships/. For all other 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 the independent review of applications by a panel of experts.

Project summaries and contact details of the supervisors will be made available at www.medicalresearch.nsw.gov.au/phd-scholarships/ and advertised through other channels, including by the host university and industry partner.

Stage three: host universities select a suitable PhD candidate to undertake the research project

PhD candidates should be recruited to funded project opportunities according to host university procedures for merit based recruitment. This process is to be administered by the host university in consultation with the industry partner 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 organisations. 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 and industry organisation. Following this process, an announcement of successful candidates will be made.

Indicative application timeline

NSW Health 2019 PhD Partnership Program	Date
Call for applications	August 2019
Applications close	1 November 2019
Announcement of successful applications	17 December 2019
Advertisement of opportunities to PhD candidates commences	January 2020
Funding awarded by NSW Health	March – May 2020
Commencement of studies	April - August 2020

4. Eligibility Criteria

All criteria must be met for applications to be eligible. The academic supervisor, host university, industry supervisor and industry organisation must complete **Sections B and J** of the application form, submitting supporting evidence, where applicable.

Academic supervisor

Note that the number of academic supervisors per PhD student will vary depending on the host organisation's 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. 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 until the later of 30 August 2023 or the projected conclusion 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. 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

Note: Medical research institutes that are affiliated with a university and other formally affiliated organisations such as local health districts are also invited to apply and must adhere to the eligibility criteria below. For the purpose of the Guidelines and Application Form such organisations will be referred to as host university.

1. Located in NSW

The host university 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 three years. Host universities may fund additional candidature beyond three 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.

Industry supervisor

1. Contract with eligible organisation

The nominated industry supervisor must be employed by an eligible industry organisation on an ongoing basis, or hold an employment contract for at least the projected duration of the PhD candidate's studies.

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

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

Industry organisation

1. Registered in Australia or Overseas

The industry organisation must be registered and conduct its business activities in Australia or Overseas. If the industry organisation is located 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.

2. Committed to hosting a PhD candidate

The PhD candidate must spend at least 30% of their time at the industry organisation's site. If the industry organisation is unable to host the PhD candidate at their site, they must provide strong justification in their application as to how the student would get meaningful industry experience and exposure to an appropriate level of seniority within their organisation.

3. Guarantee of support by providing matching funding to NSW Health or in-kind support of equivalent value over three years

The industry organisation must provide a minimum financial contribution of \$20,000 per annum to match NSW Health's contribution, or in-kind support of equivalent value, to cover project and skill development costs over three years. A combination of financial and in-kind support of equivalent value is also acceptable. In-kind support includes but is not limited to training, supervision, networking opportunities, project equipment, provision of compounds or assays, travel or accommodation to support the PhD candidate attain onsite industry experience. Smaller companies including start-ups may provide a justification for why this matched contribution would not be possible, and instead propose in-kind or other support to be clearly outlined in the application.

4. Legally compliant and committed to providing appropriate support

The industry organisation 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.

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

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

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

PhD Candidate

Should the application be successful, the prospective PhD candidate must also meet **ALL** applicable eligibility criteria. Candidate selection process reports will be reviewed by NSW Health, as outlined in stage 3 of the application process, to ensure these criteria are met.

1. Australian citizen or permanent resident

The candidate must be an Australian citizen or permanent resident. Candidates on any form of temporary visa will not be deemed eligible.

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.

Intellectual Property

Intellectual property (IP) arrangements should be agreed between the host and partner 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.

5. 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. The academic supervisor, host university, industry supervisor and industry organisation must complete **Sections D to Section I** of the application form to be eligible for review by a panel of independent experts. 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	D	30%
Commercialisation Activity Plan	E	25%
Supervision by Host University and Industry Organisation	F	25%
Track record of Academic Supervisor(s) and Industry Supervisor	G-I	20%

Research Proposal (30%)

1. Research project (20%)

Applications should describe the proposed research project by including:

- a clearly defined research question or problem
- commercial opportunity for the host and company that this research addresses
- a detailed study methodology and outcomes, which are appropriate to research objectives
- a relevant evidence gap that the project aims to fill

- the patient need and potential impact of research on human health
- an approximate timeline and key milestones mapped across the PhD project
- an indicative budget that is realistic and appropriate
- financial and in-kind contributions from the host university and industry organisation, which will be provided for the duration of the PhD candidate's studies
- roles of researchers who will work on the project
- a program logic model, including inputs, activities, outputs and outcomes for the proposed project.

2. Research benefits of proposed partnership (10%)

Applications should describe how the proposed partnership will support the research program and generate translational outcomes beyond what each partner would be able to achieve in isolation. This could include complementarity of skillsets, access to expertise or equipment, and financial and in-kind support provided by each partner.

Weighting:

- i. value of financial and in-kind contributions to the research project (5%)
- ii. explanation of value-add of collaboration (5%).

Commercialisation Activity Plan (25%)

Applications should describe commercialisation benefits of the proposed partnership (25%) including:

- extent to which this research project will align with the industry's commercial strategy including details of how the body of work outlined in the proposal align with the objectives of the company
- how the flow on benefits to NSW and beyond including filling a skills gap, the development of new intellectual property and potential commercial returns.

Supervision by Host University and Industry Organisation (25%)

1. Student development benefits of proposed partnership (5%)

Applications should describe student development benefits of the project over a standard academic PhD and extent to which in-kind contributions from the industry organisation will support the student's development.

Weighting:

- i. value of industry financial and in-kind contributions to student development (2.5%)
- ii. explanation of value-add of collaboration for the student's development (2.5%).

2. Student-industry integration (5%)

Applications should describe:

- extent to which the partner will involve the PhD candidate in its research ecosystem and decision-making processes
- extent to which the PhD candidate will be exposed to wider business operations, including business development and commercial strategy.

3. Student development plan (15%)

Applications should include a well-articulated skill development plan for the student comprising three parts:

1. research skills
2. commercialisation skills
3. generic skills.

For each part, the following information must be provided:

- the specific skills to be developed
- the strategies that will be used to support the student attain the skills through the collaboration of academic and industry partners
- the evaluation measures that will be undertaken to demonstrate the successful attainment of the skills by the student.

Weighting:

- i. student research skill development plan (5%)
- ii. student commercialisation skill development plan (5%)
- iii. student generic skill development plan (5%).

Track record of Academic Supervisor(s) and Industry Supervisor (20%)

Applications should include:

- track record of the academic supervisor(s) with respect to research and commercialisation
- track record of the industry supervisor with respect to commercialisation and research.

Weighting:

- i. track record of academic supervisor(s) (10%)
- ii. track record of the industry supervisor (10%).

6. 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: independent review by panel of experts

NSW Health will convene an independent 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 NSW Health.

Step three: funding agreements initiated

NSW Health will notify applicants of the result of their application. This decision is final and may not be appealed. NSW Health will make contact with successful applicants' host university and industry organisation to establish funding agreements between the host university, the industry organisation and NSW Health. Note: Funds may not be drawn down until an eligible PhD candidate is selected, approved and commences study.

Step four: identification of PhD candidate

The host university and industry organisation are responsible for identifying a suitable PhD candidate to undertake the research project. NSW Health can assist with advertising the available position if desired. The successful candidate should commence studies no later than the end of August, otherwise the scholarship will be rescinded and all funds recovered.

7. Prospective PhD candidates

Details of funding

The table below outlines all funding details for the PhD Partnership Program:

Funding Source	Amount	Duration	Purpose of funding
NSW Health	\$60,000 (\$20,000 per annum)	Three years full time or part time equivalent	Salary costs of PhD candidate
Host university	\$60,000 (\$20,000 per annum)	Three years full time or part time equivalent	Salary costs of PhD candidate
Industry organisation	\$60,000 (\$20,000 per annum) or in-kind support of equivalent value. A combination of financial and in-kind support of equivalent value is acceptable. If full matched support is not possible, justification should be provided in the application.	Three years full time or part time equivalent	Project and skill development costs

Duration of candidature

NSW Health will support the PhD candidate for three years full time, or part time equivalent. PhDs longer than three years are permitted depending on the host university's policy, however, the host university and partnering industry organisation 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 university and industry organisation 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 six years). Confirmation that the host university has accepted the part time enrolment and the terms of that enrolment will be required.

Existing PhD students

Current PhD candidates whose academic supervisor is successful in receiving a PhD Partnership Program scholarship are eligible to receive the NSW Health scholarship if less than one year has elapsed since commencing their studies. Current PhD candidates will not be allowed to change supervisors or research projects to receive a NSW Health scholarship without the written permission of the host university.

The scholarship will be awarded pro-rata for the remaining duration of a three year full-time (or part-time equivalent) scholarship, i.e. if 1 year has been completed, the scholarship will be for two years (or part-time equivalent).

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, Industry organisation, both supervisors 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 emphasises the host university and industry organisations' role in supporting the candidate's career development.

Once successful applicants 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.

Applicants 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 NSW Health's PhD Partnership Program scholarship.

NSW Health will not provide additional funding for PhDs greater than three 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.

8. 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 both supervisors and the PhD candidate
- Annual Financial Report
- A Final Report upon the conclusion of the project.

9. Program Evaluation

The NSW Health PhD Partnership Program will be evaluated against its intended purpose and objectives. NSW Health will perform this evaluation in collaboration with the host university, industry partner organisation, both supervisors, 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 PhD support programs.