Enhancing Career Prospects for Indigenous STEM Undergraduate Students

Information for Students

Contacts:
Indigenous STEM Project Officer – Kathrine Clarke 0390356570, 0403617678, kathrineclarke@unimelb.edu.au
Science Careers Consultant – Fiona Simpson 0390359522, fiona.simpson@unimelb.edu.au
Science Careers Consultant – Lauren De Blank 0390359553, lauren.de@unimelb.edu.au
Alternatively staff can advise students to contact the Student Success Team at Murrup Barak.

Overview:
Undertaking a Research Opportunity or Science Internship will enable students to gain real experience working in a science or technology-related workplace. The internship or research opportunity involves a placement of 80-100 hours in a single organisation, working as an intern/researcher under a supervisor or mentor while gaining experience of the science-related work being conducted in that organisation. Participating will enable students to observe the nature of the organisation more generally – its structure, how different components of the organisation interact, how projects and teams are organised to achieve their goals. Please note that not all are the same and some Undergraduate Research Opportunities may vary in terms of commitment and what is expected, but overall students are to complete the equivalent of a 2-week career pathway experience.

Eligibility:
• Students must be Aboriginal and/or Torres Strait Islander.
• Students studying a Bachelor degree in Science, Biomedicine, Engineering or Technology in 2nd year of studies going into 4th year of studies are eligible. OR
• Students studying a Bachelor of Science (Extended), in 3rd year of studies going into 4th year of studies are eligible.

What are the benefits?
• Identify and articulate your knowledge and skills and apply them to relevant science organisational contexts and work-settings; as well as linking them to specific professions and career pathways.
• Produce work in an appropriate format which demonstrates scientific analytical, research and problem-solving skills;
• Review and reflect on the process and output of a work project/placement in order to articulate your academic and career development learning from the experience;
• Understand the value of industry and professional networks and their importance to self-reliance, lifelong learning and career progression.
• Of course there will be many other less tangible benefits in enabling students to confirm or refine the direction they take after course, emerging with a greater confidence in own ability to make a meaningful contribution in a science-related workplace, awareness of the strengths you offer to a future employer as well as areas to further develop as students prepare for after studies.

What is expected of students if successful?
Students will build their medical or science-related skills, with guidance, including a capacity to contribute productively to a project or series of activities set up by the organisation for student’s placement.

What sort of work do Interns and Researchers do?
It depends on the student and organisation. Students will select whom they wish to be placed with. The host organisation will provide an experience that is authentic, so the nature of the work a student does will vary from placement to placement. They may spend time shadowing members of staff, contributing in an assisting role to many activities. Students may be asked to be a team member on a project for the duration of internship/research opportunity – an ongoing project, or one that is completed by the time they leave. Students may be assigned to an individual project that can be completed within the 80-100 hours of their placement. Alternatively, a placement may be a combination of these.
**Academic component**

Before embarking on a placement students will participate in compulsory induction and pre-placement seminars that will prepare them for the expectations of their placement, including skill development in communication and project management. The sessions will also develop a student’s understanding of science and technology-related industries and organisations.

A session to “touch base” mid-way through the placement will include an industry perspective, and a series of staff-led but largely student-presented sessions will complete the subject (also compulsory), in which students will learn from the insights and experiences of colleagues.

**How will students be assessed?**

Students are to complete the core modules and assessments already established in pre-existing Internships and Undergraduate Research Opportunities Programs. These are known as ‘Pre-Internship Classes’. 8 hours of pre-placement classes will be held before any placement is to commence. These will take place in weeks 1 and 2 (if a student takes the subject in either Semester 1 or Semester 2), and in the first two days of the first 2 days of the teaching period if you take this subject in summer. Students are encouraged to begin preparing for a placement or research opportunity ASAP! This is because the actual process may take staff and Host organisations up to 3 months to secure and finalise. If students are struggling to keep up with the requirements then they should arrange a meeting with both Subject Coordinator and Science Careers Consultant who will inform the Indigenous STEM Project Officer or the Student Success Team.

The several components of assessment seek to evaluate individual capacity to reflect on students experience as well as to gain a specific understanding of the organisation in which students have been placed. These include: a career case study based on an information interview with an employee in placement organisation; presentation on a work-related or discipline specific topic (to be presented in post-placement classes); and a reflective essay on the placement experience, connecting students studies and workplace learning. Seminar attendance and satisfactory performance on the placement are also required.

As a part of the Reflective Essay component and to better support students, a Daily Work Log is to be completed at the end of every day to keep track of what duties are given. There are also three major questions to better guide students based on what they have learnt, wish to learn more of, and what they need to research and study in order to better navigate career path. This document can be downloaded from the Murrup Barak website: [http://murrupbarak.unimelb.edu.au/study/current-students/get-involved](http://murrupbarak.unimelb.edu.au/study/current-students/get-involved).

**Applying:**

For easy access the following links have been provided for students:

- When undertaking a placement through the University, or if you have a placement in mind and know where you’d like to complete it, students are strongly encouraged to contact Indigenous STEM Project Officer Kathrine Clarke or the Student Success Team to assist with the appropriate process. If unavailable then contact the Science Careers Consultant Fiona Simpson. **Please note: Students need to select the Internship Subjects or the Research Subject portals to access further information and to complete specific Expression of Interest form.**

- Please select the relevant Internship link: For Bachelor students: [http://science.unimelb.edu.au/students/enrich-your-studies/science-technology-internship](http://science.unimelb.edu.au/students/enrich-your-studies/science-technology-internship). For students wanting to do Research in Science, Biomedical or Land and Environment: [http://science.unimelb.edu.au/students/enrich-your-studies/research-proj-studies](http://science.unimelb.edu.au/students/enrich-your-studies/research-proj-studies). Please select the relevant research subject you wish to enrol in. But, if unable to do so, we request students make their first point of call with Murrup Barak and contact the STEM Undergraduate Project Officer Kathrine Clarke or the Student Success Team to assist with the appropriate application process. This process is to ensure all placements are relevant to the subject, for example if it is a student doing research then they cannot be approved for an internship placement, they will need to enrol in the appropriate research project subject in order to do their placement.

- Students will need to fill out an expression of interest. The current form is being reviewed, but is readily available for students to complete, this can be accessed through the online portal by following the above
relevant links, or the Indigenous STEM Project Officer or Student Success Team will assist students in completing this form.

• Students will then be contacted and sent an email with a list of Host Organisations to select from including all available placements and research opportunities that are current at the time to meet with a Science Careers Consultant who will oversee the internship or research experience. If students already have a Host Organisation in mind, they are expected to source their own placements. This means contacting your preferred Host possibly via phone or email. An example of how to phrase this would be: “Dear Sir/Madam, I am currently studying an undergraduate degree in COURSE. As a requirement and to gain further experience, we are given the opportunity to complete an internship experience, and I wish to complete this experience with your organisation. I would like to discuss further if possible, my contact details are...”

Students are expected to inform the Indigenous STEM Project Officer Kathrine Clarke or the Science Careers Consultant Fiona Simpson and Lauren De Blank to begin securing Host Organisation once they have made that initial contact with their preferred Host.

• Students may add the subject to their study plan as “planned” but this enrolment will not be confirmed until Host organisation agreement is approved by the Subject Coordinator. It is strongly encouraged students begin preparing for a placement or research opportunity as possible as the actual process may take Staff and Host organisations up to 3 months to finalise. If unsuccessful the first time in seeking placement students will be placed on a waiting list to be eligible for the next semester. Another option for students who are unable to find a host organisation or who do not wish to work with the host organisation, is a PhD Researcher who is working on a project during the time of placement.

Key points to remember:
1. Plan to enrol in the internship or research subject before the commencing Semester.
2. You need to find your own placement (Students will source from Murrup Barak’s recommended Organisations, Institutions and Laboratories list.)
3. The Subject Coordinator must approve your placement before enrolment in the subject will be confirmed. You may add the subject to your study plan as “planned” but this enrolment will not be confirmed until your host organisation agreement is approved by the Subject Coordinator.
4. Once completed and placement students may begin their placement, but they are encouraged to go through everything a second time and to ask the Science Careers and Industry Consultant or Subject Coordinator if there are any uncertainties regarding experience. Students are solely responsible in managing their Internship/Research Opportunity alongside their current study load.
5. Placements are usually unpaid
6. You are covered by our insurances whilst on your placement

If students feel they may not be able to commit then please discuss this with the STEM Undergraduate Project Officer or Student Success Team at Murrup Barak regarding alternative options.

Students may wish to meet with a Careers Consultant to assist with your application, resume and interview preparation, please see Kathrine Clarke - Indigenous STEM Undergraduate Project Officer or Student Success Team at Murrup Barak, they will assist you with any questions you may have.

Enquiries

Indigenous STEM Project Officer: Kathrine Clarke 0390356570 Email: kathrineclarke@unimelb.edu.au
Careers & Industry Consultant: Fiona Simpson ph. 9035 9522 Email: fiona.simpson@unimelb.edu.au
Science and Technology Bachelor and Masters Internship Subject Co-ordinator: Professor Janet Hergt; ph. 8344 7678 Email: jhergt@unimelb.edu.au
Research Subject Co-ordinators

Land and Environment
Faculty of Veterinary and Agricultural Sciences Email: Ros Gall, Faculty of Veterinary and Agricultural Sciences

Biomedical

- Biochemistry & Molecular Biology Email: Dr Leon Helfenbaum
- Anatomy & Neuroscience Email: Dr Gary Hime
- Microbiology & Immunology Email: Dr Odilia Wijburg
- Pathology Email: Dr Vicki Lawson
- Pharmacology & Therapeutics Email: Assoc Prof James Zogas
- Physiology Email: Professor Joel Bornstein
- Vision Science Email: Dr Larry Abel

Science

- Botany Email: Associate Professor Andrew Drinnan
- Chemistry Email: Professor Richard O'Hair
- Earth Sciences Email: Professor David Phillips
- Ecosystem and Forest Sciences Email: Dr Chris Weston
- Genetics Email: Associate Professor Alex Andrianopoulos
- Geography Email: Professor Barbara Downes
- Zoology Email: Professor Mark Elgar
Example - 1

Daily Work Log

Name:

Mentor or Supervisor’s Name:

Company/Organisation:

<table>
<thead>
<tr>
<th>Date</th>
<th>Start Time</th>
<th>Lunch Break</th>
<th>Finish Time</th>
<th>Duties</th>
</tr>
</thead>
</table>

1. **I got it!**
   (Everything that makes sense and you know because of your experience...)

2. **What I am curious to research more?**
   (An area that you find interesting and worthwhile looking into...)

3. **What I want and need to learn?**
   (An area you require to further career and want/need to learn more about...)
