Join a team of students this summer and virtually intern with science research partners in Malaysia.

Applications are now open! Scholarships available for eligible domestic students!
Overview

Virtual Science Internships:
Malaysia Summer 2020/21
Over an 8-week period this summer, you’ll join science students from UNSW, University of Newcastle and University of Wollongong to work in teams on a research project related to your major of study.

You’ll be assisting a research partner with a genuine project they are currently tackling in their organisation. You’ll work with your team mates to deliver project outcomes in 8 weeks. You’ll have a mentor from the organisation to guide you through the project, with further support from academic staff.

As preparation for the project, you’ll undertake professional development activities, with tasks to develop transferrable skills such as teamwork, communication and critical thinking. You’ll also expand your cultural competency by undertaking beginner’s Malay language and cultural classes.
Graduate employers seek students who not only have relevant work experience, but those who are resilient and can thrive in a variety of workplace settings.

Working virtually requires a different skill set to traditional in-person workplace settings. The ability to work professionally and productively in a virtual context is a crucial skill in graduates. A virtual internship proves to future employers that you are not only work-ready, but adaptable to the changing nature of work.

Gaining global work experience shows potential employers that you are a global citizen; you exhibit cultural awareness, can work in diverse cultural settings and have an interest in getting out of your comfort zone and exploring other cultures.

The graduate labour market is highly competitive and having a global experience under your belt can help you stand out from the crowd.
Eligible UNSW Science students will undertake the virtual internship as a SCIF3199 Science Work Placement course.

This counts as a 6 UOC science or free elective.

Program costs:
Program cost is AUD$1000. Eligible domestic students accepted into program will be offered a New Colombo Plan scholarship to cover the full program costs.

Tuition Fee:
Normal tuition fees for a 6 UOC course will apply for enrolment into SCIF3199 (Standard international or domestic CSP rates).
Program Details

Virtual Science Internships:
Malaysia Summer 2020/21
When does the internship run?

The virtual internship will be held in Summer 2021/22 from Monday 13th of December to Friday 11th of February, with a break over the Christmas/New Year holiday period.

Students may access program materials from Monday 6th of December.

Class and meeting attendance is compulsory.

<table>
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<tr>
<th>Program Week</th>
<th>Program Activities/Classes</th>
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| Week 1: Mon 13 – Fri 17 Dec | • Welcome Webinar Monday 13 Dec, 11am-12pm  
• Malay Language and Culture online classes 12-2pm daily  
• Initial Meeting with Industry Mentor + Academic Supervisor (1 hour, day/time negotiable)  
• Initial Meeting follow-up discussion with Academic Supervisor (30 minutes, day/time negotiable)  
• Additional online tasks/project work to be completed flexibly with teammates |
| Week 2: Mon 20 Dec – Wed 22 Dec | • Student Team Meetings Monday 20 Dec, 11am-12pm  
• Malay Language and Culture online classes 12-2pm daily  
• Additional online tasks/project work to be completed flexibly with teammates |
| Thu 23 Dec – Sun 2 Jan | Break |
| Week 3 Mon 3 – Fri 7 Jan | • Malay Language and Culture online classes 12-2pm daily  
• Industry Mentor Meeting (1-hour, day/time negotiable)  
• Academic Supervisor catch-up (30 minutes, day/time negotiable)  
• Additional online tasks/project work to be completed flexibly with teammates |
| Week 4: Mon 10 – Fri 14 Jan | • Weekly Industry Mentor Meeting (1-hour, day/time negotiable)  |
| Week 5: Mon 17 – Fri 21 Jan | • Academic Supervisor catch-up (30 minutes, day/time negotiable) in Weeks 4 and 7  |
| Week 6: Mon 24 – Fri 28 Jan | • Additional online tasks/project work to be completed flexibly with teammates  |
| Week 7: Mon 31 Jan – Fri 4 Feb | • Written deliverable due in Week 8 (Wednesday 9 Feb)  |
| Week 8: Mon 7 – Fri 11 Feb | • Final presentations to be held end of Week 8, on 10 and 11 Feb  |
What projects are available?

3 projects are available. Students must complete a project that is relevant to their science major. Relevant majors are listed for each project.

As part of the application process, students may nominate a project they are most interested in, however we cannot guarantee that students will be offered their preferred project.

<table>
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<th>Organisation Overview</th>
<th>Project</th>
<th>Relevant Majors</th>
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<td>International Medical University (IMU)</td>
<td>International Medical University (IMU) is an integrated medical and healthcare institution, offering education, healthcare and research in partnership with some of the world’s most respected individuals and universities in the field of medicine and healthcare. IMU is Malaysia’s only university focused a 100% on medical and healthcare education, and continues to play a significant role in nation-building. It has remained focused on the central philosophy that guided its founders – access to quality medical education, innovation and imagination as its cornerstone, and continuous reflection leading to insight to guide IMU into the future.</td>
<td>Challenges from 21st century diseases: Biotechnological tools created to combat COVID-19. Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is a novel severe acute respiratory syndrome coronavirus. Many medications and pharmaceuticals are currently being repurposed or repositioned for treatment and management of COVID-19 symptoms. As the SARS-COV2 virus continue to persist in communities, its ability to mutate to evade therapeutic measures remain a global threat. Biotechnological companies have to keep finding emergent technologies to adjust and keep up with the ever-evolving and mutating SARS-COV2. This project is designed to appeal to those who would like to understand the present-day therapeutics and medical management options currently available, as well as explore desperate measures and cutting-edge biotechnology that are in development.</td>
<td>Biotechnology, Genetics, Molecular &amp; Cell Biology Majors. 3991 Medical Science students and those completing a medical science major in other science programs (Anatomy, Immunology, Neuroscience, Pathology, Pharmacology, Physiology).</td>
</tr>
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### International Medical University (IMU)

**International Medical University (IMU)** is an integrated medical and healthcare institution, offering education, healthcare and research in partnership with some of the world’s most respected individuals and universities in the field of medicine and healthcare.

IMU is Malaysia’s only university focused a 100% on medical and healthcare education, and continues to play a significant role in nation-building. It has remained focused on the central philosophy that guided its founders – access to quality medical education, innovation and imagination as its cornerstone, and continuous reflection leading to insight to guide IMU into the future.

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**Gene expression profiling for Zika virus-induced neurological disorders**

Zika virus (ZIKV) is a mosquito-borne flavivirus, mainly transmitted through the mosquito’s bite.

ZIKV infection confers to neurologic infections in the individual. It was suggested that the virus able to invade into the nervous system resulting in CNS tissue damage. Nevertheless, there is limited understanding on the exact molecular basis underlying the ZIKV pathogenesis in human infection. One of the contributing factors could be the complex gene expression during the infection at both molecular and immunological levels.

Thus, gene expression profiling is crucial in searching for potential therapeutic to relieve the symptoms or treating ZIKV infection.

Students are expected to conduct a search on databases related to the topic followed by data selection and analysis.

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**Relevant Majors**

- Biotechnology, Bioinformatics, Mathematics and Statistics majors.
- 3959 Data science program students.
- 3991 Medical Science program students and those completing a medical science major in other science programs (Anatomy, Immunology, Neuroscience, Pathology, Pharmacology, Physiology).
## Organisation Overview

Bioprocessing and Biomanufacturing Research Centre (BBRC)

The main objective of BBRC is to be a national leader in Bioprocessing and Biomanufacturing area, with the ability to help in enhancing the commercialization of biotechnology products in Malaysia.

In ensuring the product is in-line with market requirement, BBRC offer complete services from upstream to downstream processes for the development of specific biotechnological product. BBRC also offers various consultation and training services closely related to bioprocessing and biomanufacturing technology needs. With the facilities and expertise available at the BBRC, the commercialization of biotechnological products can be greatly enhanced.

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### Project

**Valorisation of Fish Sausage (Keropok Lekor) Waste for the Production of Bioactive Peptides/Protein Hydrolysates**

Keropok Lekor is a very popular snack in Malaysia, which is mainly produced in the east coast region, especially in Terengganu and Kelantan. The industry produces a great amount of fish by-products (FBPs), which are generally treated as animal feed and waste.

This project focuses on the bioconversion of the FBPs into high-value product: bioactive fish protein hydrolysate or peptides, which exhibit antioxidative and antibacterial activities. Further, the aspects of functional properties and downstream processing of the product(s) are also being investigated.

### Relevant Majors

- Biotechnology
- Chemistry
- Microbiology
Apply

Virtual Science Internships: Malaysia Summer 2021/22
Who can apply?

Applications are open to science students who are eligible for the elective course SCIF3199 Science Work Placement. Domestic and international students are welcome to apply, however scholarships are only available to domestic students.

What do I need to submit?

Applicants will be asked to provide basic about their science program (program code, major, WAM), and to nominate their preferred industry project. Students may nominate the project they are most interested in, however we cannot guarantee that students will be offered their preferred project.

Applicants are also required to write a brief (250-word) statement outlining:

1. why they are interested in the virtual internship; and
2. what skills and experience they will bring to the virtual internship.
How are applicants assessed?

Applicants will be assessed on their:

- Eligibility for SCIF3199 enrolment
- Academic WAM
- 250-word application statement

When will offers be made?

Applications close 11:45pm on Sunday 7th of November.

Students will be notified within three weeks regarding the outcome of their application.
APPLY NOW

Applications close
11:45pm Sunday 7th of November

More Questions?

Please contact us at science.industry@unsw.edu.au