



Work Experience Program Guide 2021

MONDAY 27 SEPTEMBER TO FRIDAY 1 OCTOBER

Congratulations on being selected for the SAHMRI Work Experience Program!

This program aims to introduce you to some of the many career options the research field has to offer by giving you the opportunity to hear from world-class researchers and see some of what they do. Throughout the week, you will be hosted by a variety of personnel from our research themes and research support services across SAHMRI.

You will hear about what they do and have the chance to do some hands-on work in the laboratories yourselves. At the end of the week you will be asked to give a short presentation reflecting on your experiences throughout the week, what you have learned and your future career aspirations.

This short guide will help you navigate your way through the week.

Our dedicated RAP Officer Sarah Smith will be available to provide student support and guidance to any Aboriginal and/or Torres Strait Islander Students.

You can contact Sarah at:

Sarah.Smith@sahmri.com
or **8128 4037**

For any questions or more information contact:

SAHMRI Human Resources
HumanResources@sahmri.com
or **8128 4199**

TO GET THE MOST OUT OF THIS PROGRAM, WE RECOMMEND YOU DO A LITTLE PREPARATION BEFOREHAND, INCLUDING:

Make sure your paperwork is completed and returned to HumanResources@sahmri.com

If you haven't already done so, make sure you've provided us with a signed copy of your Workplace Learning Agreement Form before **Friday 24th September. Students who have not returned a completed form will not be able to participate in the program.**

A little preparation goes a long way

We recommend you have a look through the schedule, read the session info on pages 8-11 and start thinking about questions you may have for the hosts.

Tip: to find out more about a host and their work you can always google them!

What to wear

Because you'll have the opportunity to spend some time in our laboratories you need to be dressed appropriately. This means we require students to wear enclosed shoes and full-length pants. Long hair must also be tied back while in laboratories.

Students who are not dressed appropriately will not be able to participate in laboratory work.

What to bring during the week

We recommend you bring a notebook and pen to take notes during sessions throughout the week. This will also help you in preparing for your presentation at the end of the week. You can either bring lunch with you or buy lunch from the café at SAHMRI or surrounding outlets.

When you arrive

Sessions will start at 9:30am each day however we recommend you arrive a bit earlier than this so that you have time to prepare beforehand.

When you arrive, sign in at reception to collect your visitor sticker and ask the reception desk to call Ailie Stoffels. Someone will then come down to collect you. You will have a chance to store your belongings on Level 8 North (you'll be shown where on your first day) before heading to your first session for the day.

What to do if things go wrong

We understand that even with the best planning sometimes things go wrong.

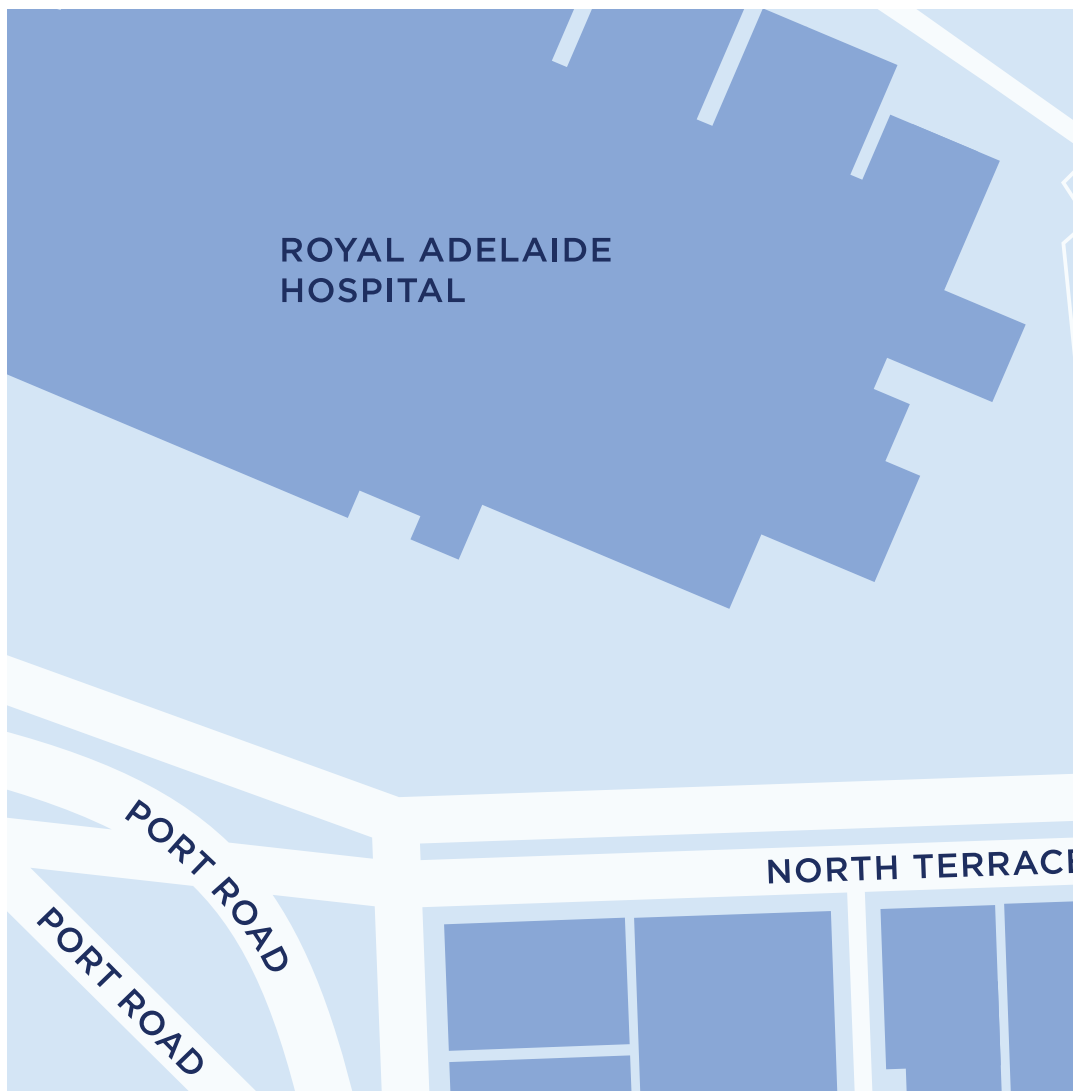
If you are running late or unable to attend the work experience program, please let us know by contacting:

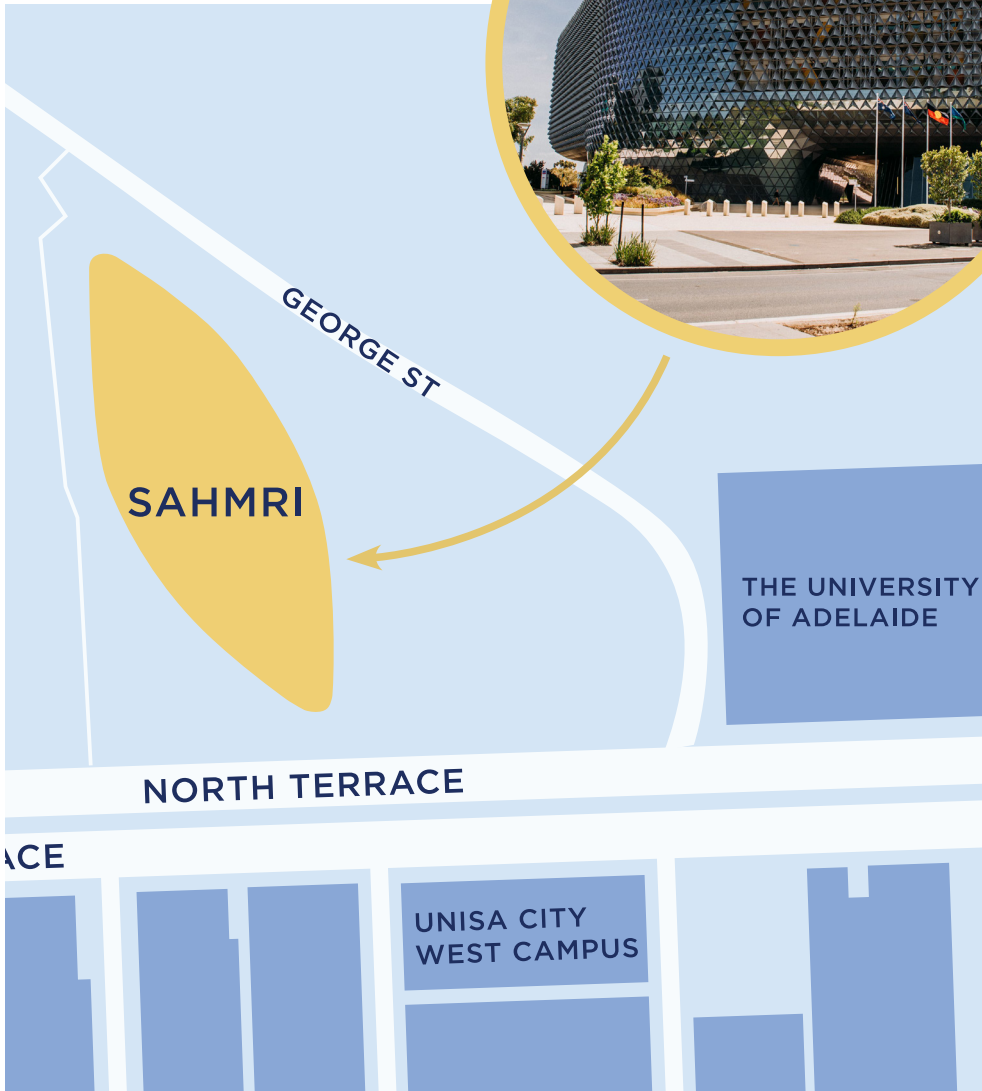
**HumanResources@sahmri.com
or 8128 4199**

Similarly, if you need any special arrangements during the week, for example leaving early or arriving later, please contact us to arrange this ahead of time.

Getting here

SAHMRI is located on North Terrace, Adelaide SA 5000 – highlighted on the below map.





Schedule

	MORNING	LUNCH	AFTERNOON
MONDAY 27 SEPTEMBER	9:30 – 10:10 Getting to know you, SAHMRI induction & expectations for the week Ailie Stoffels Level 8 North 10:10 – 10:30 Morning Break 10:30 – 12:30 Pathways into Research & SAHMRI Students: What's it like being a student at SAHMRI? & Q&A Ailie Stoffels & SAHMRI Students Level 7 North	12:30 – 1:30 Lunch	1:30 – 4:00 (includes 20-minute afternoon break) Mass Spectrometry Marten Snel, Paul Trim & Sushma Rao Level 6 North
TUESDAY 28 SEPTEMBER	9:30 – 12:30 (includes 20-minute morning break) Cancer Theme Stephanie Arbon Level 5 North	12:30 – 1:30 Lunch	1:30 – 4:00 (includes a 20-minute afternoon break) Myeloid Metabolism & Epigenetics Group Daniel Thomas Level 5 North
WEDNESDAY 29 SEPTEMBER	9:30 – 12:00 (includes 20-minute morning break) Hopwood Centre for Neurobiology Sophie Lazenkas & Bridget Milky Level 6 North	12:00 – 1:00 Lunch	1:00 – 3:00 Aboriginal Health Equity: Walking Public Health Tour Karla Canuto, Dominique Birbeck & Courtney Hammond Level 3 Foyer 3:00 – 3:20 Afternoon Break 3:20 – 4:00 Student Presentation Preparation Ailie Stoffels Level 8 North

	MORNING	LUNCH	AFTERNOON
THURSDAY 30 SEPTEMBER	9:30 – 11:50 (includes 20-minute morning break) Heart and Vascular Health Giuseppe DiGiovanni & Thalia Salagaras Level 6 South 11:50 – 12:30 Student Presentation Preparation 2 Ailie Stoffels Level 8 North	12:30 – 1:30 Lunch	1:30 – 4:00 Health Policy Centre Nathan Harrison Level 8 North
FRIDAY 1 OCTOBER	9:30 – 12:30 (includes 20-minute morning break) Research Support Services Natasha Pyne & Sarah Chaplin Level 0	12:30 – 1:30 Lunch	1:30 – 3:00 Neil Sachse Centre Sandra Jenkner Level 7 South 3:00 – 4:00 Student Presentations, Survey & Wrap-Up Ailie Stoffels Level 8 North

Session info

MONDAY 27 SEPTEMBER: YOUR FIRST DAY

When you arrive report to reception, sign in and collect your visitor sticker. Someone will come to collect you so you can store any belongings before your first session.

SAHMRI Induction: Getting to Know You & Our Expectations

Host: Ailie Stoffels

A short introduction to each other, SAHMRI and the work experience program. The session will involve a short 'getting to know you' activity and a discussion of our expectations for the week.

SAHMRI Students: What it's like being a student at SAHMRI and Q&A session

Host: Ailie Stoffels & SAHMRI Students

The first part of this session will involve a discussion about the different pathways into research. In the second part of the session you will hear from current Honours/Masters/PhD students at SAHMRI about what they're working on and how they got into research. **You will also have a chance to ask questions so come prepared!**

Think about what questions you might want to ask the students including:

- What degree did you complete?
- What subjects did you take at school?

- Any tips for being successful?
- How did you choose your research area?

Mass Spectrometry

Host: Marten Snel, Paul Trim & Sushma Rao

The Mass Spectrometry Core Facility provides high-end mass spectrometry techniques to the SAHMRI community and other bio-medical researchers. Their areas of interest include metabolomics, lipidomics, MALDI MS imaging, and mass spectrometry method development.

After your last session for the day, you'll be taken back to Level 8 North to collect any belongings. When you leave remember to sign out at reception and return any visitor access cards.

TUESDAY 28 SEPTEMBER

When you arrive report to reception, sign in and collect your visitor sticker. Someone will come to collect you so you can store any belongings before your first session.

Cancer Theme

Host: Stephanie Arbon

The overarching goal of the Cancer Theme is to foster excellence to the full spectrum of cancer-related research, from fundamental genomic discovery, developmental

biology, translational research and the development of innovative clinical trials. A core of the Cancer Theme is the study of haematologic malignancies, which are a leading cause of childhood cancer morbidity and mortality, and commonly lethal disorders in adults.

Myeloid Metabolism & Epigenetics Group

Host: Daniel Thomas

Many of the early driver mutations that are common in cancer alter both the regulation of metabolism in the cell and the epigenetic switches on DNA and histones that change differentiation states of the cell. Research into the relationship between epigenetics and cancer is important because these pathways can potentially be corrected with small molecules and dietary change. Dan's research has discovered specific metabolic vulnerabilities conferred by common mutations in blood cancers (including IDH1, IDH2, TET2 and WT1 mutations) that offer hope for developing new targeted therapies.

After your last session for the day, you'll be taken back to Level 8 North to collect any belongings. When you leave remember to sign out at reception and return any visitor access cards.

WEDNESDAY 29 SEPTEMBER

When you arrive report to reception, sign in and collect your visitor sticker. Someone will come to collect you so you can store any belongings before your first session.

Hopwood Centre for Neurobiology

Host: Sophie Lazenkas, Bridget Milky

The Hopwood Centre for Neurobiology aims to use integrated lifestyle (nutritional) interventions, novel pharmaceuticals and stem cell-based regenerative medicine approaches to identify the mechanisms that underlie major neurological disorders and devise novel therapeutic approaches to tackling them.

In this session you will spend time with two teams within the Hopwood Centre for Neurobiology.

The Lysosomal Health in Ageing

team focuses on the role of the lysosomal network in common neurodegenerative diseases such as Alzheimer's disease. The lysosomal network manages quality control and recycling of machinery within the cell.

The **Laboratory for Human Neurophysiology, Genetics and Stem Cells** develops and applies innovative biotechnologies *in vitro* to discover new treatments for brain disorders.

Aboriginal Health Equity – Walking Public Health Tour

Host: Karla Canuto, Dominique Birbeck & Courtney Hammond

Led by Professor Alex Brown, the Aboriginal Health Equity Theme aims to establish the nation's leading research unit focused on reducing inequity in health and wellbeing among Australia's First peoples, and the development of the next generation of Indigenous research leaders.

Enjoy a walking tour around the North Terrace Biomedical Precinct where you will hear about the public health equity research conducted by Wardliparingga and how human health can be influenced by physical, social and environmental factors that exist in our everyday life and communities where we live, work and play. See **page 12** for more information and a map of the route this tour will follow.

Student Presentation Preparation

Host: Ailie Stoffels

This time is set aside for students to prepare their presentations. More information on the presentation task and instructions can be found on **page 13**.

After your last session for the day, you'll be taken back to Level 8 North to collect any belongings. When you leave remember to sign out at reception and return any visitor access cards.

THURSDAY 30 SEPTEMBER

When you arrive report to reception, sign in and collect your visitor sticker. Someone will come to collect you so you can store any belongings before your first session.

Heart & Vascular Health

Host: Giuseppe DiGiovanni & Thalia Salagaras

The Heart and Vascular Health Research program aims to advance the ability to prevent, detect and treat cardiovascular disease, with a committed focus on rapid translation of discovery into practice and health impact. The Vascular Research Centre is committed to develop new strategies to prevent, diagnose and treat atherosclerosis, the major cause of heart attacks and stroke.

Student Presentation Preparation 2

Host: Ailie Stoffels

This time is set aside for students to prepare their presentations. More information on the presentation task and instructions can be found on **page 13**.

Health Policy Centre

Host: Nathan Harrison

Our SAHMRI Health Policy Centre undertakes behavioural research to provide evidence to inform the development of policy and legislation to improve health outcomes at a population level.

The Centre has programs of research in public health, specialising in dietary risk and obesity prevention, tobacco control, alcohol consumption, and COVID-19. It actively engages with policy makers and non-government organisations for improved health outcomes.

After your last session for the day, you'll be taken back to Level 8 North to collect any belongings. When you leave remember to sign out at reception and return any visitor access cards.

FRIDAY 1 OCTOBER: YOUR LAST DAY

When you arrive report to reception, sign in and collect your visitor sticker. Someone will come to collect you so you can store any belongings before your first session.

Research Support Services

Host: Sarah Chaplin & Natasha Pyne

SAHMRI has a range of departments and services that operate behind the scenes to support our researchers. You'll get to spend time with two of our research support areas: histology and cryogenics. The histology laboratory at SAHMRI provides researchers with training and access to bookable equipment to be used in the preparation of tissue for microscopy. The equipment available

include a tissue processor, paraffin embedder, microtomes, cryostat, staining facilities, and a microscope for quality checks. The cryogenic facility is used for storage of cell lines, tissues, and patient specimens, and has capacity for approximately half a million samples.

Neil Sachse Centre

Host: Sandra Jenkner

The Neil Sachse Centre's vision is to find to a cure for spinal cord injury. They are committed to funding the critical research steps required on the journey to a cure, particularly research that would otherwise go unfunded.

Student Presentations, Survey & Wrap-up

Host: Ailie Stoffels

In your final session of the work experience program you will be delivering your presentation to an audience consisting of your hosts from throughout the week. We will also have a short survey for you to complete about the program.

After your last session for the day, you'll be taken back to Level 8 North to collect any belongings. When you leave remember to sign out at reception and return any visitor access cards.

Walking tour details

PLEASE READ THROUGH THE BELOW OVERVIEW

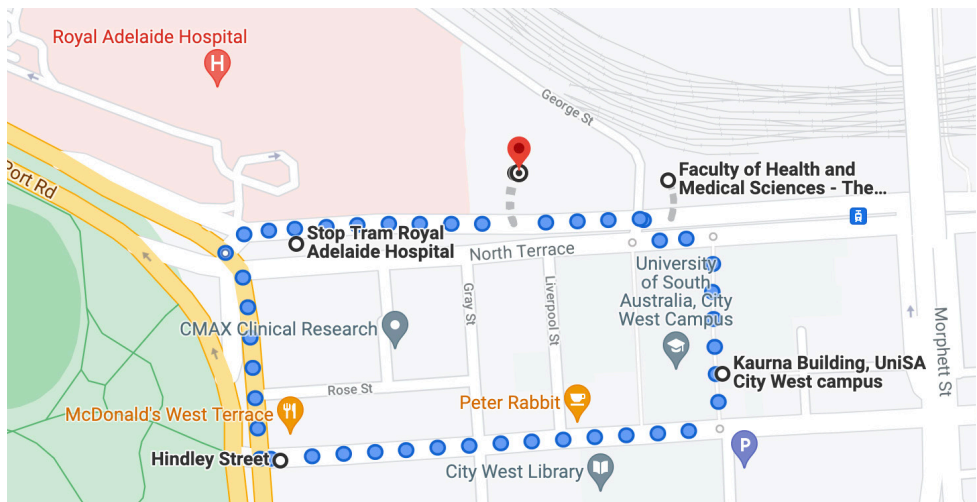
At the outset we will provide an overview of public health equity research conducted by Wardliparingga. Following this introduction, we plan to take you on a public health walking tour of the area surrounding the North Terrace Biomedical Precinct. We will depart from Level 3 of the SAHMRI Building on North Terrace at approximately 1pm.

During the tour, we will discuss how human health can be influenced by physical, social, and environmental factors that exist in our everyday life and communities where we live, work and play.

On our return, we will talk in more depth on the concepts that emerged during the walking tour and consider research examples for understanding how these physical, social, and environmental factors influence our population's health.

We have provided a map for the approximate route, encompassing North Tce; West Tce; Hindley St; & Morphett St. A few practical details (for you and your parent/guardian):

- You will be supervised by Wardliparingga staff at all times;
- Wear comfortable walking shoes and bring a water bottle, & anything else you may need (particularly if the weather is warm).



Presentation task

As part of the work experience program you will be asked to give a short presentation reflecting on your experience on your last day. You may choose to talk about what you have learned throughout the week and how this has impacted your future career and study aspirations.

You should be prepared to talk for approximately 3-5 minutes.

We have included some questions below that you can use as a starting point. Think about your answers throughout the week and prepare responses to at least 3 of the questions.

You are welcome to prepare your own questions to answer as well – you can discuss alternative questions during the preparation session on Wednesday.

Starting Questions:

1. Which research area interested you the most during the program and why?
2. Is there any area you'd like to learn more about since completing the work experience program?
3. Is there an area that you have learned about that you think would not be a good fit for you and that you don't want to pursue after the work experience program?
4. What surprised you the most during your sessions and why? (give at least 2 examples)

5. How has this week impacted your career choices? (e.g. Have you discovered a new area to consider? Are you more confident in your choices?)

Preparation session on Wednesday:

You will have approximately 40 minutes on Wednesday afternoon dedicated to preparing for your presentation.

This is a good opportunity to think about if you have any further questions for the hosts you will have met earlier in the week or research about the hosts you will meet later in the week – we may be able to organise for you to chat to them further during this time.

If you would like to arrange to talk to a specific host further during this session, please let Ailie Stoffels know before you leave on Tuesday.

The next page has space provided for you to take notes and prepare your responses to your chosen questions

Presentation question responses

Starting question 1:

Response:

Starting question 2:

Response:

Starting question 3:

Response:

Notes:



SAHMRI
South Australian Health &
Medical Research Institute