

# **Cell-ebrating Cells**

Teacher Information Booklet

### **Contents**

About Us	2
About Your Session – Cell-ebrating Cells	2
Booking Information	4
On the Day	5
Working With Children Check Confirmation	6
Evacuation Map: Ground Floor	7
Evacuation Map: Level 1	8





### **About Us**

#### **About the Perkins**

The Harry Perkins Institute of Medical Research, commonly known as The Perkins, is the largest medical research institute in WA working on diseases affecting adults in the community.

With over 250 researchers located in three hospital campuses, the Perkins is uniquely positioned to fast track the development of new discoveries and treatments. Researchers at the Perkins are driven to find new ways of diagnosing and treating diseases.

### About the Lotterywest BioDiscovery Centre

The Lotterywest BioDiscovery Centre connects students, teachers, and members of the community to the world of medical science and the research happening at the Perkins. Through school visits, community tours, and teacher professional learning opportunities, we are invested in raising awareness of the importance of medical research.

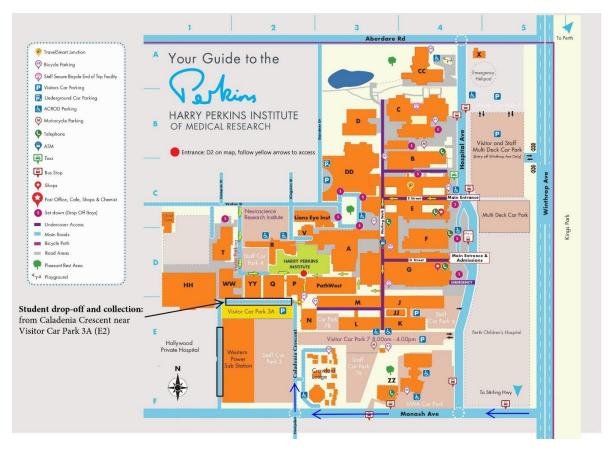
#### Where to find us

We are located in **Nedlands** at 6 Verdun St, 6009. See the green building on the map below.

#### **Bus parking**

Bus parking is organized through QEII parking. Should you require to park your school bus for the day please contact: Nicolette.Staal@health.wa.gov.au and Qeii.parking@health.wa.gov.au

Or alternatively, call on: (08) 6457 7248



## **About Your Session - Cell-ebrating Cells**

#### Cell Research at the Perkins

When Robert Hooke looked down his microscope in 1665, he noticed that a slice of cork looked a lot like honeycomb, dotted with holes. He named these holes after the holes in honeycomb, and coined the term "cells". We've learned a lot about them in the centuries since – but there's still something fascinating about seeing something so small look so big!

Researchers at the Perkins are constantly making discoveries about cells – we even have an entire **cell biology division** dedicated to them. The Iron Metabolism lab looks at how cells process iron, both in healthy people and in those with iron overload. The Cell Signalling lab investigates how cells "communicate" and know when to grow or die. Understanding how cells work can help us understand how cancers spread, or how donated blood degrades in storage. Cells may be small, but they are complex.

At the BioDiscovery Centre, your students will get to experience two fundamental techniques in medical research – cell staining and microscopy. As you enter the lobby of the Perkins, have a look at the big screens on the walls. The images displayed were taken through microscopes by researchers - some here at the Perkins!

For more information about cell biology, check out our website: https://perkins.org.au/research/labs/cancer-program/

#### What this session covers

Students will discover organelles, microscopic measurements and say hello to HeLa cells!

They will explore the structure and function of cell organelles in a fun puzzle activity. They will learn how cells work together and cooperate to make multicellular organisms. Students will gain an understanding of the size and scale of the microscopic world using our giant rulers.

Your class will engage in a lab activity that investigates the story of the first human cells to ever be grown in a laboratory - HeLa cells. Students will understand the history of HeLa cells and learn how to stain them.

Under a microscope, they will examine the differences between these cancerous cells and healthy human cells.

Curriculum links			
	Year 8 Science Syllabus		
SU Statements:	SHE Statements:	SIS Statements	
Biological Sciences: 149, 150	Nature and Development of Science: 134, 226 Use and Influence of Science: 135, 136	Planning and conducting: 141 Processing and analysing data and information: 144, 145 Evaluating: 146	

### **Booking Information**

#### **Price**

Visits are priced at \$50 per student for a group of 20 or more students. For a group of less than 20 students per day, a minimum fee of \$1000 applies. If this is an issue for you please contact us to discuss how we may be able to assist by linking you in with another school.

For bookings over multiple days, each day will be priced independently.

#### **Booking fee**

Once we receive your online booking form, you will be invoiced for our \$100 per session booking fee to confirm your place. This will be deducted from your final invoice.

#### **Numbers**

At the time of making your booking, please provide an estimate of the number of students that will be attending. You will be emailed a reminder two weeks before your visit to confirm student numbers.

It is the responsibility of the organizing teacher to confirm final numbers at least one week prior to their booking. A decrease in the number of participants will not be accepted after this point and schools will be invoiced accordingly.

#### Photo consent policy

The Harry Perkins Institute of Medical Research may use photos taken during the session for publicity purposes unless otherwise agreed upon. The onus is on the school to obtain permission for students to be photographed.

#### **Timing**

Sessions run from 9:30 to 2:30. Alternative times must be arranged ahead of the session.

#### **Cancellation Policy**

If a school cancels less than a month out, the \$100 booking fee is not refundable.

The Lotterywest BioDiscovery Centre at the Harry Perkins Institute for Medical Research requests one month's notice for the cancellation of a school's booking. If this notice is not given, the school will be charged at 50% of the original cost of the excursion or session. It is the responsibility of the organizing teacher to confirm final numbers one week prior to their booking.

#### **Shared Classes**

If the total number of students in a shared class drops below 20, all schools attending that day will split the \$1000 minimum fee proportionally to the number students attending.

#### **Duty of Care**

School staff are to remain with students at all times. External providers do not have the same special duty of care relationship with students and are not responsible for personally caring for students. Should there be any attendee with a medical condition, disability, mobility issue or special learning requirements, the school is required to attend with two adults who can accept responsibility for duty of care.

### On the Day

#### What teachers need to do and bring

Due to the evolving COVID-19 situation, we have a number of safekeeping measures in place at the Perkins. Please ensure that the organising teacher has returned a signed COVID-19 form PRIOR to the schools' visit. On the day, please provide a class list for us to collect at the start of the session. The café is not open to school groups at present. All participants, including teachers, must bring their own lunches, drinks, and snacks.

#### What your students need to bring

Students will need to bring their own food and drink. Pens and workbooks are provided.

#### **PC2 Rules**

All teachers and students must abide by PC2 (Physical Containment level 2) rules to be able to enter the lab. This means:

- Flat, fully enclosed shoes (sneakers or leather lace-up school shoes).
- All hair and fringes tied back and off faces.

No phones, bags, food or drink (including water) are to be brought into the PC2 lab area.

Pre-Visit Checklist		
	All organising teachers have completed and returned a COVID-19 Form PRIOR to the school attending	
	A class list is prepared for our staff to collect	
	All students and teachers have brought lunch, drinks and snacks	
	All students and teachers are wearing appropriate footwear and have hair tied back	
	No attendee is displaying cough, cold, or flu-like symptoms	
	No attendee has been identified as a close contact or is awaiting the results of a COVID 19 test	

## **Working With Children Check Confirmation**

It is a condition of employment at the Lotterywest BioDiscovery Centre that all staff have a current Working With Children card.

Judi Lane

Thene

**Community Education Manager** 

Lotterywest BioDiscovery Centre

Harry Perkins Institute of Medical Research

### **Evacuation Map: Ground Floor**

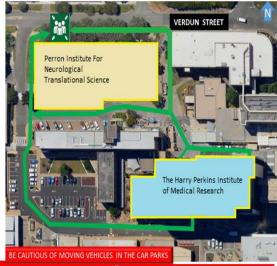
## **EMERGENCY EVACUATION DIAGRAM**

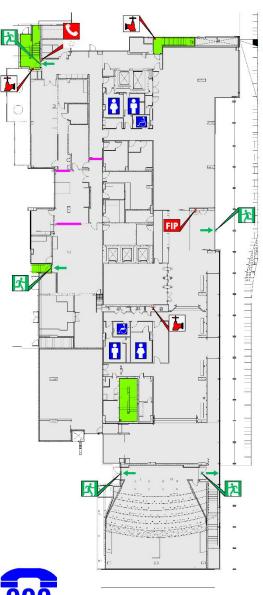
QE II PERKINS INSTITUTE GROUND

- When the ALERT ALARM(Beep, Beep, Beep) sounds, Stop what you are doing and prepare for evacuation. Listen for instructions. Follow directions from your warden.
- When the EVACUATE tone (Whoop, Whoop) Sound, under the instruction of the Wardens evacuate the building via the Emergency Exit. If no wardens are present, evacuate the building immediately via your nearest exit.
- 3 Do not panic. Move quietly and calmly to the primary Assembly Area on the footpath in Verdun Street.
- Do not return to the building until given the "All Clear" by the Chief Warden or Emergency Services.



Fire isolation roller doors





ISSUE DATE NOVEMBER 2013 VALID DATE: NOVEMBER 2022

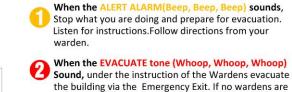
© Every Second Counts, 2013
www.everysecondcounts.com.au

With AS3745-2010 IN THE EVENT OF A FIRE RING 000 TO ENSURE FIRE SERVICE RESPONSE

### **Evacuation Map: Level 1**

# EMERGENCY EVACUATION DIAGRAM QE II PERKINS INSTITUTE

LEVEL 1



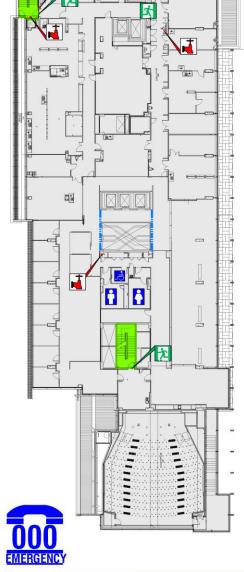
nearest exit.

Do not panic. Move quietly and calmly to the primary Assembly Area on the footpath in Verdun Street.

present, evacuate the building immediately via your

Do not return to the building until given the "All Clear" by the Chief Warden or Emergency Services.







ISSUE DATE NOVEMBER 2013 VALID DATE: NOVEMBER 2022

© Every Second Counts, 2013 www.everysecondcounts.com.au

With AS3745-2010 IN THE EVENT OF A FIRE RING 000 TO ENSURE FIRE SERVICE RESPONSE