



Year 8: Celebrating Cells

Teacher Information Booklet

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About the Perkins

About the Perkins

The Harry Perkins Institute of Medical Research, commonly known as The Perkins, is the largest medical research institute in Western Australia working on diseases such as cancer, diabetes, heart disease, and rare genetic diseases.

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 events, and educator resources, we are dedicated to ensuring all Western Australians become more active participants in medical research.

Where to find us

We are located in Nedlands at **6 Verdun St, Nedlands 6009**. See 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,
- Qeii.parking@health.wa.gov.au

Or alternatively, call on: (08) 6457 7248



Parking Map





About your Session

Cell Research at the Perkins

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 foyer 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!

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 Curriculum		
Science Understanding	Science as a Human Endeavour	Science Inquiry Skills
<p>AC9S8U01: recognise cells as the basic units of living things, compare plant and animal cells, and describe the functions of specialised cell structures and organelles</p>	<p>AC9S8H03: examine how proposed scientific responses to contemporary issues may impact on society and explore ethical, environmental, social and economic considerations</p>	<p>AC9S8I02: plan and conduct reproducible investigations to answer questions and test hypotheses, including identifying variables and assumptions and, as appropriate, recognising and managing risks, considering ethical issues and recognising key considerations regarding heritage sites and artefacts on Country/Place</p> <p>AC9S8I03: select and use equipment to generate and record data with precision, using digital tools as appropriate</p>



Terms and Conditions of Booking

Price

Visits are priced at \$50 per student for a group of 20 or more students. For a group of less than 20 students, a minimum fee of \$1,000 applies. Feel free to contact the education team to organise school sharing opportunities. Cost will be shared proportionately if multiple schools attend a singular day.

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

Once your booking has been confirmed, a \$100 per session booking fee will be issued within 10 business days. For bookings in the next calendar year, this booking fee will be issued in the new year, unless requested otherwise.

Numbers

At the time of making your booking, 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 organising 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 school can opt-out of this arrangement through the booking confirmation form, or through written notice to the education team at any time before or after the excursion.

Timing

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



Cancellation Policy

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.

Cancellations will not be accepted with less than one week's notice.

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 always remain with students. Staff at the Harry Perkins of Medical Research do not hold duty of care over school 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 your students need to bring

Students must bring their own food and drink. Pens and workbooks are provided.

Note: On-site cafés are not accessible for students or staff during their visit.

PC2 Compliance

All teachers and students must comply by expectations for our Physical Containment Level 2 (PC2) as set by the Institutional Biosafety Committee (C-IBC). This means students and staff must wear fully enclosed shoes, and all hair/fringes tied back and off face. Phones, bags, food or drink (including water) are not permitted in the PC2 lab area.

Working With Children Check Confirmation

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