

Golden Opportunities

Experiential Learning Days for Primary Students

Hosted by Corinda State High School 2018

WHAT: *Showcasing Problem Solving in Living Systems*

Students will use skills that are critical to Twenty First Century Learners to analyse living systems and identify challenges that the world will face in a changing climate.

WHO: Open to any interested year 4/5/6 student

WHEN: Monday 11 June 2018,
8.30am to 2.50pm

WHERE: Corinda State High School
46 Pratten Street, Corinda 4075

COST: \$20 per student (Thanks to our Industry Partners)

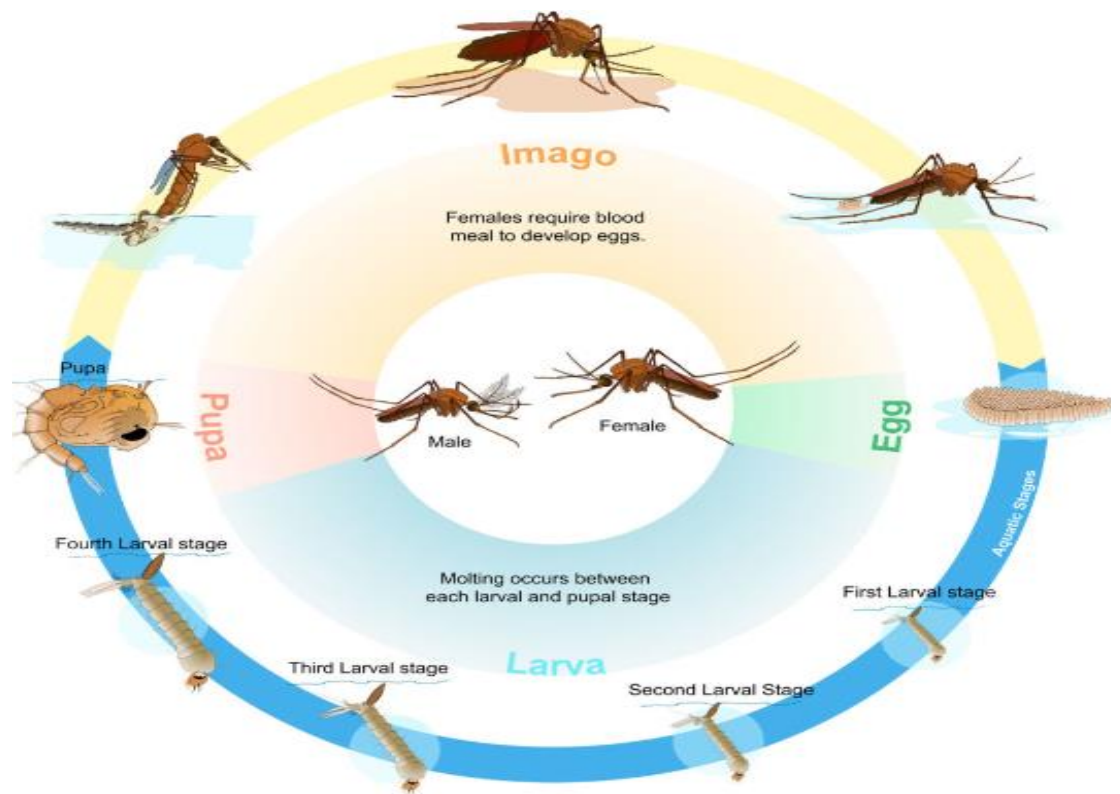
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Exceed Your Expectations



Showcasing Problem Solving in Living Systems



About your presenters:

Dr Jill N. Fernandes is a medical entomologist at QAAFI, centre for Animal science at the University of Queensland. Jill's research focuses on characterising mosquitoes of medical importance specifically on those that transmit malaria, dengue, Zika and yellow fever. Her current research applies the near infrared spectroscopy (NIRS) technique for defining potentially infectious mosquito populations. Jill is passionate about using research to help predict future vector-borne disease outbreaks.

Mr Chris Butcher is Agriculture Coordinator at Corinda State High School. He is a member of the Queensland Mycological Society and he has a keen interest in the possible uses for this special group of organisms. Chris also wants to create an awareness of fungi in soils and the symbiotic relationships that exist between fungi and plants in the 'wood wide web.'



REGISTRATION FORM: Showcasing Problem Solving in Living Systems

Child's name: _____ Date of Birth: _____

Year Level in 2018 _____ Male/ Female: _____

Your Child's School: _____

Parents' Names: _____

Address: _____

Mobile: _____ e-mail: _____

Does your child have any ongoing medical condition? YES / NO

Please specify:

Emergency contact: _____ Phone: _____

Medicare No: _____ Medical Cover: _____

Emergency medication carried by your child: _____

In an emergency, if medical assistance is needed for my child, I assent to Corinda State High School taking whatever steps necessary.

I understand that photographs and video recordings may be taken of the group, to be used in Corinda State High School media.

Corinda State High School agree that no names will be mentioned in any resulting publication.

I understand that, if any student's behaviour is disruptive, interfering with other participants' ability to fully benefit from program participation, his/her parents will be contacted, and he/she may be removed from the program. I understand that, once enrolment applications have been confirmed and payment is made there will be no refunds.

Parent Name: _____ Date: _____

Parent Signature: _____

Please post to: Bree Hackett, Corinda State High School, 46 Pratten St, Corinda 4075
or scan to bhack17@eq.edu.au

Payment can be made in cash on the morning of the event.



Students will break up into two groups and rotate through the workshops

8:30 am Registration and Orientation: Meet at the front gate on Lynne Grove Avenue

9:00 am Farm tour: Students will be given a guided tour of the many parts that make up our working agricultural farm. This is the perfect time to see the complexity of some living systems in action and ask questions.

9:30 am– 11:00 am	First Break	12:00 pm – 1:30 pm	Second Break	2:00 pm
Group 1		Group 2		Reflection and review
Group 2		Group 1		

Workshop overviews

Invertebrates: Dr Fernandes will lead the group in a discussion about the special structures and sensory abilities of mosquito as well as the mosquito lifecycle. The students will then go on a field walk to Cliveden Avenue Reserve in order to identify possible mosquito breeding sites in the local environment. The larvae that are collected are then examined and compared to other specimens in order to carry out mosquito classification to determine if these mosquitos are possible disease vectors and gain a deeper understanding of the possible impact of a changing climate on mosquito populations, tropical countries and us here in Australia. What are some possible solutions and how can these be evaluated?

Fungi: The session will begin with an overview of taxonomy or classification systems. Students will then classify less common and exotic types of fungi based on the colour and shape of their fruiting bodies and create their own imprints of spore patterns as the fall from the gills of Oyster mushrooms. They will then examine specific features of fungi and their unique chemical properties that allow them to feed on a substrate. The final activity will be a field walk to find examples of fungi as both decomposer and biological partner. What are the strengths, weaknesses, opportunities and threats of harnessing fungi to use in natural and farming systems?

2.00pm Reflection

2.50pm End of Day: Students to be collected at front gate on Lynne Grove Avenue

What do students gain from this activity?

When today's students are adults, they will face many complex problems that we can't currently even conceive or imagine. Students need analytical skills in order to ask questions and solve problems in both standard and innovative ways. Examining the complexity of living systems is the perfect environment in which to practice and refine these skills in regards to future changes to food production and public health.