

**Welcome** to September's edition of the **In2science** newsletter. The end of the 3<sup>rd</sup> school term for 2008 is nearly upon us and our tertiary students have been very busy in their role as Peer Mentors to a growing number of schools across Victoria.

**Placement dates**

Placements officially finish in the week of **20<sup>th</sup> October**.

**In2science prizes for semester 2** – the following prizes have

been donated to be given away to teachers and Mentors who participate in the program this semester:



Prize	Donated by:
<p><b>Three prizes of \$500 each</b> to schools who have just commenced teaching a unit on nanotechnology or who are preparing one for 2009. The money must be put towards nanotechnology resources to aid teaching. <b>Schools will be required to submit a brief summary of what they are doing to the Peer Mentoring Manager by the end of September 2008 for judging.</b> This is open to school involved in the <b>In2science</b> program and those who have participated in the <b>In2nanotech</b> roadshow.</p>	<p><b>Nanotechnology Victoria Ltd</b></p>
<p><b>Australia's Lost World - A History of Australia's Backboned Animals</b> by Patricia Vickers-Rich et al - a great reference guide 3 copies to go to teachers 3 copies to go to Peer Mentors</p>	<p><b>The Monash Science Centre</b></p>
<p><b>The Weather Makers: How Man Is Changing the Climate and What It Means for Life on Earth.</b> By Tim Flannery 1 copy to go to a teacher 1 copy to go to a Mentor</p>	<p><b>In2science</b></p>
<p><b>One years annual subscription to STAV (or free registration at a STAV conference if already a member)</b> X1 teacher</p>	<p><b>Science Teachers Association of Victoria</b></p>
<p><b>One years annual student subscription to STAV</b> X1 Mentor</p>	<p><b>Science Teachers Association of Victoria</b></p>
<p><b>Geoscience Australia</b>- has donated several resources for teachers to help engage students in Earth Science. These will be drawn from a hat at the end of placement:  <b>1. Earth Echoes</b> – DVD of Victoria's crust and seismic survey 2 copies to go to teachers  <b>2. National Oceans Fly through (3<sup>rd</sup> footage), Sensitive High Resolution Microprobe (SHRIMP) CD-ROM</b> 2 copies to go to teachers</p>	<p><b>Geoscience Australia</b></p>

**Additional prizes may become available during the semester.**

**Mentoring in Action**

Since the start of Semester 2 many Mentors have been actively involved in a variety of science and mathematics classroom activities. Mentor involvement has extended to helping with practicals, worked on small group activities and presented a 'show and tell' about themselves and their work at University.



*Mentor James helps maths students at The Lakes School*

At new school to the program, **The Lakes School** in **South Morang**, Mentor James has been a great help in **maths**, working with students in groups and individually.

At **Bendigo SW Secondary College**, Mentor Louise has been doing wonderful work with the classes there. To help the students understand molecules and structure she took in models for the students to look at to aid their understanding.

At **Northcote HS**, Mentor Marcus has been helping students with their chemistry and flame colour testing.

At **Mac Robertson Girls HS**, Mentor Philip has been helping students with their studies of light. He was able to

explain how light is also used in geology to understand and identify minerals and their properties.

Mentor Rebecca at **Gilmore College for Girls** has been helping the students understand cells in preparation for studying genetics. Well done Rebecca.

Helping students become more confident in maths is all part of Mentor Aravin's role at **Fitzroy HS**. He has done a great job sharing his passion for maths.

Mentor Victoria at **Footscray CC** gave a great presentation about her studies as a **geologist** as part of the school's **Science Week** activities. Victoria will be starting work next year using explosives in the mining industry – keep safe Victoria!

Geology Mentor James at **Eltham HS** has been helping students get to grips with chemical bonding. As an ex-student of the school he has enjoyed the chance to inspire the current students in science.

Mentor Temi has worked all year at her old school; **Strathmore SC**. She is doing a great job helping out in maths and science and is also a regular contributor to the staffroom quiz.

Also back at his old school is Mentor Ross. **Templestowe College** is new to the program so it is great to have experienced Mentors like Ross helping establish the program there.



*Mentor Victoria explains the role of a geologist*

Mentor Jen is at another of our new schools **Westall SC**, and has been working with a small group, to help inspire and focus their talents in science. Recently they have been designing and building model rockets. Mentor Emily, also at **Westall SC**, has been able to share her passion for geosciences with the students; she has proven to be a valuable resource for this class as they got to grips with geological formations and fossils. Also at the school is Mentor Mai, who is working with an ESL group of students. Mai's specialty is immunology and she has been introducing the students to the fascinating world of microscopic life.

At **Wheelers Hill SC**, another new edition to our growing number of schools, Mentor Katherine has involved herself with helping students plan and prepare a major investigation task, as well as working on some fundamental, practical science room experiments.

**University HS** Mentor Maeve has been having a great time helping the students understand cells. She has also had chance to talk to the students about her own research into algae and how they can be removed from boats with the least environmental impact.

Mentor Natasha, an environmental science student is at **Glen Waverley SC** and is a valuable resource to the students involved in an environmental investigative initiative being run for Year 9 there.

Several of our Mentors have been involved in trips and visits with the classes. At **Pascoe Vale Girls College**, Mentor Karen pulled on her gum boots to visit a local creek for some pond dipping. The students were identifying invertebrates in the water to help determine water quality. Mentor Adele is also

at the school and has been working with the same class all year, building up an excellent rapport with both the teacher and the students.



*Mentor Adele helps Y7 students classify some animals*



*Mentor Karen helps Y11 students collect aquatic samples*

### Information for Mentors

Many thanks for all your commitment and hard work so far this semester. Many of you are now experienced Mentors with two or three placements completed. Others are experiencing for the first time the excitement and pleasure of being a Mentor. As a result of your ongoing commitment as a Mentor, many of you are becoming very proficient at identifying the needs of the students and responding to them. Try to show initiative where possible and don't feel shy about offering to bring something to show the students or suggest an activity you think the students may enjoy.

Many of you are becoming proactive in the classroom interaction you are having with the students; asking them about the work they are doing and engaging them in meaningful conversation – well done! Where possible, relate the class work to the work you are doing at university.

Remember to encourage the students to explain their ideas and understanding of the work they are undertaking. A good Mentor has good listening skills.

Praise and encouragement go a long way with everyone – use it to your advantage. The bookmarks and stickers help too! Should you require more let John or Jacinta know.

Do talk to the class teachers you are working with to see if there is anything they would like support with during the rest of the placement.

Don't forget to keep a record of your travel expenses for reimbursement of up to \$10.00 per week. Travel claim forms are located at the back of your Peer Mentor's pack or on the [website](#).

### Mentor Morning Tea

All Mentors are invited to meet and share their experiences from their semester 2 placements at any of the following venues:

**La Trobe University:** Thursday 25th September, 10.30 – 11.30am, SEMS meeting room, 221, Physical Sciences, Bundoora campus

**Monash University:** Monday 29th September, 11.00 -12.00 noon, Building 74 – The Monash Science Centre

**University of Melbourne:** Wednesday 1st October at 10.30 - 11.30am in the Dean's Den, Old Geology South

These sessions are open to anyone – you don't need to go to your university if it does not suit.

Reminders will be sent out closer to the date.

**Schools are on holiday from  
Monday 22 Sept - Friday 3 Oct  
inclusive**

## Information for Schools

Many thanks to all the teachers who have welcomed Mentors into their schools and classrooms during Term 3. Communication between the Mentor and teacher is integral to the smooth running of a placement. Hopefully all teachers have had an opportunity to talk with the Mentor about their expectations and about ideas for classroom lessons. We have found that the maximum impact of having a Peer Mentor is gained where classes are doing either practical work, group tasks, discussions or individual projects as this provides the opportunity for the Mentors to interact. In2science encourages teachers to try new activities or methods of organising the class with the support of the Mentor. Many teachers comment that the 'extra pair of hands' is a real asset and gives them the confidence to try different pedagogy.

If teachers wish to undertake activities that may require additional support from the Universities, your initial contact should be with the Mentor who can then liaise with the program coordinators and possibly other staff at the university. In2science is very keen to support activities which help engage students with the university community.

## Website to try

Looking for the latest news in science try <http://www.abc.net.au/science/news/>

A great site for young (and young at heart) enquiring minds <http://www.abc.net.au/spark/?site=science>

Want to know more about the Australian Synchrotron then this is especially for teachers  
[http://www.synchrotron.vic.gov.au/content.asp?Document\\_ID=430](http://www.synchrotron.vic.gov.au/content.asp?Document_ID=430)

The Australian Academy of Science has a variety of interesting events and all things science on its website <http://www.science.org.au/> including expressions of interest from young scientists (under 30 years) who may be interested in research awards for the National Institutes of Health in the USA. Hurry – applications close 3<sup>rd</sup> October 2008.

<http://www.kidsbiology.com/> is an online site for junior secondary students.

## News from the Institutions

### La Trobe University

#### **New Biosciences Research Centre to be built**

The Biosciences Research Centre (BRC) will be a \$230 million world-class facility for agricultural biosciences research and development.

To be located at La Trobe's Bundoora campus, the project is a joint venture between La Trobe University and the Victorian Government, through the Department of Primary Industries (DPI). [Find out more](#)

**Talk and Tour** is a school holiday program being run on Tuesday 23 September. The program offers students and their parents the chance to take a tour of our Melbourne (Bundoora) campus, attend a talk, ask lots of questions and join us for morning tea. For more information:

<http://www.latrobe.edu.au/study/events.html#talkandtour>

#### **The Siemens Science Experience Program**

Three days of hands-on science in universities for Year 9 students entering Year 10 in 2009. The program will be held at La Trobe University, Bundoora campus on 3-5 December 2008.

Registrations close: 26 September 2008. For more information:

<http://www.scienceexperience.com.au/>

### The University of Melbourne

***Mining biodiversity and genes*** - VC's Research Lecture Series

**Speaker:** Professor Ary Hoffmann FAA

**Time and Date:** 6:30PM, Monday 8th September 2008

**Venue:** Theatre A, Elisabeth Murdoch Building (bldg 134), Parkville

**Earth Science Week 2008**

**12 - 18 October**

Visit [Geoscience Australia](#) for more information

### Contact Details

**Name:** Robyn Trethowan **Phone:** 8344 4392 **email:** [dvc-research@unimelb.edu.au](mailto:dvc-research@unimelb.edu.au)

**Department:** Bio21 Institute

### Chemistry Careers Night

Information highlighting the diverse career paths open to chemistry graduates, including lab, and non-lab jobs.

Chemistry employers and university representatives will be on hand to answer questions. There will be representatives from the pharmaceutical, biotech, agriculture and government bodies to start students out on a career or give them the tips they'll need to find work.

**Time and Date:** Monday 15 September, 4-7pm

**Venue:** Storey Hall Foyer, RMIT City Campus, Level 3, Building 16

Enter from Swanston St near La Trobe St

For more information see <http://www.vicsco.com.au>

### ***Beyond Tomorrow - pathways through graduate study in Science, Health, Management, IT and the Environment.***

Come along and find out what lies beyond tomorrow. Listen to information sessions about the following programs:

- Honours
- Masters (coursework and research)
- PhD

There will be staff on hand to answer any questions you may have from over 20 departments across the Faculty's of Science and Medicine, Dentistry and Health Sciences. Information on courses, fees, scholarships and career pathways will be provided.

**Time and Date:** Thursday 4 September, 4.30 - 7.30pm,

**Venue:** Ground Floor, Architecture Building, University of Melbourne

Free Entry - more information at: <http://graduate.science.unimelb.edu.au/news/home>

*RSVP's required - email [e.wilson@unimelb.edu.au](mailto:e.wilson@unimelb.edu.au).*

### Monash University

#### Monash Science Centre Fan Club

Join the Monash Science Centre Fan Club and participate in our "Science in the Suburbs"

#### "Stem Cells meet Immunology – a new horizon of therapies"

Wednesday 24<sup>th</sup> September at 7.00pm

Presented by: Professor Richard Boyd from the Monash immunology and Stem Cell Laboratory

Inquiries and bookings: (03) 9905 1370

#### Wildlife of Gondwana Exhibition

Commencing September 2008, the Monash Science Centre will host the Wildlife of Gondwana Exhibition. This exciting exhibition explores the diversity of life in the great southern super-continent Gondwana from 3.8 billion years ago to the present. More information: (03) 9905 1370

Professor Tim Flannery will present "***A Vision for Australian Sustainability***" on Thursday 25<sup>th</sup> September at Federation Square. This is part of an interesting and informative series of lectures to coincide with the celebrations of the 50<sup>th</sup> Anniversary of Monash University.

<http://www.monash.edu.au/50years/lecture-series.html>

**John McDonald**

**In2science Manager**