

**Welcome** to the June issue of the **In2science** Update. Placements are due to **finish this week** though some Mentors have already expressed an interest in continuing into their exam period – these are dedicated Mentors indeed!

Part of the aim of **In2science** is to foster **links** between schools and the universities. Through our Mentors there have been excursions by classes to campuses and incursions of university staff to the schools. Many schools have sought support with new and exciting aspects of the curriculum. A big thank you goes out to all university staff and Mentors who have facilitated this to happen.

Over the last couple of weeks there have been some disruptions to placements due to Swine Flu outbreaks in some of our partner schools.

**In2science prize winners, Semester one** –The following schools, teachers and Mentors names were drawn on Friday 29<sup>th</sup> May:



| Prize  | Winner(s)   |   |
|--|---|---|
| <b>An interactive talk</b> at the winning school about Free Radical Chemistry, biotechnology research (with examples of Centre research) and chemistry careers for Yr11 and Yr12 Chemistry students. Hopefully this may be scheduled near a practical class so that the Centre researcher can interact with students during the practical. Timing of this is flexible to fit in with school. | <b>Gleneagles College</b>   |   |
| <b>Half a day placement within the Bio21 Centre laboratories</b> for <u>four</u> Yr 11 Chemistry students (teacher's presence optional). The students will do chemistry lab exercises with the Centre postdocs/ PhD students. Timing of this flexible in negotiation with the school (school holidays an option).  | <b>Epping Secondary College</b><br><i>Students to be selected on merit and enthusiasm by the winning school</i> |   |
| <b>The Weather Makers: How Man Is Changing the Climate and What It Means for Life on Earth.</b> Signed copies by Tim Flannery<br>2x Mentors  | <b>Laura Duncan</b><br>(LTU)  | <b>Ben Donald</b><br>(Monash Uni)                 |
| <b>Science motivation pencils</b> pack of 25<br>2x teachers  | <b>Fiona Jackson</b><br>(Footscray CC)  | <b>Darrin Carter</b><br>(Wodonga Middle Years SC) |

Many thanks again go to **ARC Centre of Excellence for Free Radical Chemistry and Biotechnology** for their kind donations. Recipients will be contacted regarding their prizes.

**CSHE independent evaluation** - Semester one 2009 will see the **Centre for the Study of Higher Education** conduct an external evaluation of the In2science program. Schools and Mentors may be contacted during the placements to seek their participation.

Date for your diary:

**In2science Day for Y9 students  
Wednesday 2 December 2009  
The University of Melbourne**

## **In2science News**

The University of Melbourne has a new Dean of Science who we welcome to the program and the **In2science** Board. **Professor Robert Saint** is a pioneer and research leader in molecular genetics and cell and developmental biology in Australia. **In2science** wishes to thank **Professor Liz Sonenberg** for all her support and commitment to the program in her role as Dean.

This semester saw a record **fourteen** of our Peer Mentors complete their third semester of placement. These Mentors will receive a **letter of commendation** from their respective Dean. These students have shown a high level of commitment to the aims of the program and it is through their diligence and dedication that **In2science** is able to keep growing. Students completing their third placement are:

**Aiden Varan, BSc** – the University of Melbourne  
**Valli Chockalingam, BA/BSc** – the University of Melbourne  
**Rebecca McMahon, BSc** – the University of Melbourne  
**Philippa James, BSc** – the University of Melbourne  
**Ruby Yao, BSc/Education** – the University of Melbourne

**Nicole Kozaris, BSc/Science Education** – La Trobe University  
**Yagmur Farsakoglu, Bach of Biotechnology and Cell Biology** – La Trobe University  
**Lori Ferrins, Bach of Medicinal Chemistry** – La Trobe University  
**Adele Cooper, Bach of Nutritional Science** – La Trobe University  
**Temi Ananias, Bach of Behavioural Science** – La Trobe University  
**Peter Clarke, BSc/Science Education** – La Trobe University  
**Rebecca Langley, BA/BSc** – La Trobe University  
**Erin Benham, BSc/Science Education** – La Trobe University  
**Hannah Gray, Bach of Animal Science** – La Trobe University

Congratulations to all and we look forward to presenting you with letters of commendation in the near future.

## **Peer Mentoring in Action**

Over this semester of placements, our Mentors have become very attached to the classes they have been working with and some excellent activities have been undertaken with their support.

Mentor Jess has been helping out in Psychology classes at **Eaglehawk SC**. Jess was able to bring in some different activities for the students to try, testing how they think and perceive the world around them. Well done Jess.

**St Helena SC** has two Mentors working with classes this semester. Mentor Hannah has been helping students with lots of experiments and has been able to show them her insect collection; put together for one of her university assignments. Mentor David has been having great fun with Y8 science students. They have been doing dissections and really look forward to David visiting each week. Great work David.



*Mentor Hannah at St Helena SC*



*Mentor Emma demonstrates Nitinol*

New school to the program **Epping SC** has just one Mentor; Nicole. The school has seized the opportunity of having the extra help in science and has organised a number of activities to be supported by Nicole, including a visit to CSIRO. They even had an article in the local paper. Well done.

Mentor Emma has been helping in Physics at **Pascoe Vale Girls Coll**. Putting her knowledge of nanotechnology to good use, Emma has been able to show the students a range of nanotechnology applications and has been inspiring them in their studies. Great work Emma.

At **Montmorency SC**, Mentor Adele has been helping students understand the world of microbes. Adele has also been pushing her comfort zone by helping out in maths classes for the first time this semester. Keep up the good work Adele. Mentor Candice is also at the school helping out in maths classes.

At **Melbourne Girls Coll**, Mentor Valli has been helping Y7 students in maths. The students really value her help saying “*she can explain extra things*” and “*she makes maths fun*”. Also at the school is Mentor Gaby. Helping out in Y7, she too has received lots of praise from the students regarding the help she can offer them in understanding their work. Well done.



*Mentor Katie at Bendigo SE SC*

Long term Mentor Rebecca has even been doing a bit of teaching at **Lakeside SC**. Rebecca has tried her hand at explaining maths topics to the whole class which was well received by the students. Awesome Rebecca.

Maths has been a popular area for support from the **In2science** program this semester. Mentor Katie has had a great time at **Bendigo SE SC** helping the Y10 students prepare for tests and build their confidence in the subject. Also at the school Mentor Simon has been working with both science and mathematics classes and has really enjoyed explaining various concepts to the students. Simon is on a teaching course and is finding the experience invaluable for skill development.



*Mentor Rebecca aiding students in maths*

Mentor Steph at **Eltham HS** has also been building her skills in preparation for a career in teaching. Steph has been helping Y10 students get to grips with forces and motion. She has enjoyed learning from the teacher and gaining confidence in the classroom.

Dissecting fish was on offer at a recent visit to **Kew HS** for Mentor Maedah. She was able to help students identify various parts of the respiratory system and provide an extra pair of helping hands for the teacher.

DNA extraction was being undertaken with the support of Mentor Emma at **Balwyn HS**. Emma organised the resources and led the activity for the Y9 students. They were very impressed to extract “*real*” DNA. Great work Emma.



*Mentor Emma at Balwyn HS*

At **Footscray CC**, Mentor Marina has been supporting students in Y11 Biology. She has been able to help students build their confidence in aspects of the curriculum in preparation for the upcoming exams. Great work Marina. Also at the school is Mentor Marija who has been supporting one Y8 class get to grips with biology and the respiratory system. The students have built up a great rapport with her and value the extra help they are receiving.

Mentor Caspar has been having great fun helping out with the STELR program at **Northcote HS**. Both the teacher and the students value the extra help and support he can offer especially during discussions of concepts and ideas as well as issues of climatic change.

This is just a snapshot of what the Peer Mentors have been up to in schools. Others have been involved in school excursions and incursions and many have given presentations on university or aspects of their studies. Well done to all the Mentors for their fantastic effort, together they have given over **1700 hours of voluntary help** in our partner schools.

### **Information for Schools**

As we come to the end of this round of placements we would like to thank all the teachers for their efforts this semester. Teachers that are willing to have Peer Mentors in their classes to help them engage their students are key to the success of the program. The more teachers we have volunteering in schools then the more Mentors we can place. **In2science** is happy to talk with staff about the program and how to use the Peer Mentors to achieve the best benefits for all involved. Please contact us if you wish us to attend a departmental meeting etc.

**Evaluations forms** are in the schools and should be **returned by the week of 15 June**. The evaluation process has been extremely valuable in allowing us to prepare Mentors for their placement and manage the program appropriately. The evaluations have also provided us with the vital evidence of the success of the program, essential for gaining ongoing funding for the program.

Hopefully all classes were able to be told when the **Mentors last visits** were so they could say goodbye. Many of the students get very attached to the Mentors so it is important that there is formal closure for them.

This semester has been a little disrupted due to curriculum days, parent-teacher interviews etc. Key points to come out of this semester's placements again have been the following:

1. **Communication between teacher and Mentor** – in some cases the teacher has not communicated with the Mentor about school closures etc, leaving the Mentors a little frustrated especially if they have travelled to the school. Hopefully teachers will aim to ensure they have effective lines of communication with their Mentor to reduce this happening in the future.
2. **Role of the Mentor** – in a couple of instances Mentors have felt that their role was not fully understood by the teacher and therefore the students were not sure why they were there. It is important that teachers read the information packs to ensure a firm understanding and also that they introduce the Mentor appropriately to the students.

We will be starting to organise **placements for semester 2** soon so if there are any special requests then please get them sent in as soon as possible. Do let us know if more Mentors are required for the school and we will do our best to meet the need depending upon the availability on Mentors in the locality.

**National Science Week**  
**August 15 – 23**  
**Theme: *Astronomy: Science Without Limits***

If you are starting to plan for **National Science Week**, then maybe the Mentors can help out. Science week takes place during the next block of placements for semester two so let **In2science** know if there is anything you would like to do and we will see if we can help out.

### **Information for Mentors**

Congratulations on all your hard work this semester.

Many of you have already expressed interest in mentoring again **next semester** which is fantastic. Make sure you let us know and then just inform us of your availability times. Feel free to stay at the same school (you may want to talk with the teachers about continuing with certain classes) or request a change. Several of you have already put your names down for 2010 as you are going on student exchange or know you are going to be overloaded for your course.

Do let your friends and classmates know about the program and direct them to the website or the **In2science** office to find out more or register.

**Evaluations forms** are in the schools. For those new to the program, we ask that the teacher give you some feedback that may be of use for resumes etc. these will probably be done in the last week. Peer Mentors complete an online [evaluation](#).

**Travel claim forms** can be submitted either to John at La Trobe, Alison Wray at Uni Melb (via the Faculty Office) or Jacinta Hubble at Monash Uni. Forms can be found in the Mentor packs and on the [website](#).

### **In2science blog**

The blog has been getting a few more hits and we value the feedback from Mentors about its usability. Hopefully those that used it found it useful and a good way of communicating with others involved in the program.

Access the blog through the Mentor's page of the **In2science** website or [go direct](#).

## Support Mentors

**In2science** established a small team of experienced Mentors (past and current) who have offered to support new mentors through their placements via the blog or regular informal meetings. Recently set up, the Uni Melbourne team organised for the In2science Mentors at Parkville to catch up over coffee and yummy pastries at Threshermans Bakery. "We talked about the challenges of being mentors and came up with ways to overcome them. It was great to meet the other mentors and share experiences" said Support Mentor Xin-Fang. "We had a talk about how we can potentially get a better presence on campus" said Support Mentor Josh. Another catch up has been penciled in for the beginning of next semester. All current and new mentors are welcome. Hope to see you there!"

La Trobe Bundoora will be organising an event for current and new Mentors for the start of semester two.

The Support Mentors have also been offering advice via the blog which has been of much use to those mentors posting comments.

## News from the Institutions

### La Trobe University

#### **Robert Manne in conversation with Tim Flannery**

Don't miss these two leading scientists talk politics, international relations, climate change, sustainability, the environment and more...

Thursday 4 June 2009, Agora Cinema, Bundoora Campus, 12.00 noon – 1.30pm

#### OPEN DAYS

*Bendigo – 16 August*

*Shepparton – 21(Fri) August*

*Albury-Wodonga - 23 August*

*Melbourne (Bundoora) – 30 August*

*Mildura and nearby locations - 28 July to 14 August*

### The University of Melbourne

#### **Focus on Melbourne Science and discover a world of opportunities for your future.**

**Tuesday 23 June 6.30 - 8.00pm** Theatre A, Elisabeth Murdoch Building (near Swanston Street)

Melways Map 571, Grid ref. F12

Join our new evening seminar series for Years 10-12 students and their families. Take a closer look at the many flexible study options available to pursue university study and your dream careers.

For information and registration:

<http://www.futurestudents.unimelb.edu.au/events/vic/focusonmelbourne.html>

#### **The Festival of Ideas**

Throughout the Festival week, 15- 20 June, more than 50 outstanding thinkers will lead a program comprising of keynote lectures and panels and supporting cultural activities- all on the University of Melbourne's Parkville campus,

The Festival will look at the *science of climate change*, but will also consider the impact of climate change on the community – societal, political, economical, medical, geographic and creative.

All Festival events are free however attendance must be registered and tickets downloaded from the website.

For details, registration and bookings go to <http://ideas.unimelb.edu.au/>

#### OPEN DAY

*Parkville – 16 August*

### Monash University

#### **"What we do and don't know about comets"**

Free public lecture by Paul Francis, followed by astronomical viewing

Tuesday 30th June 2009 7pm Lecture Theatre C1, Building 63, Monash Clayton campus

### **Astronomy under the telescope**

A new exhibition, Astronomy in a Nutshell, has been launched at the Monash Science Centre as part of Monash celebrations for the International Year of Astronomy.

Organised by the [Centre for Stellar and Planetary Astrophysics](#), it gives visitors a brief introduction to the history, culture and science of astronomy.

It includes observational equipment from the Mount Stromlo collection, profiles of two prominent Monash astronomers and the Sir John Monash telescope, which was donated to the university by Sir John's granddaughter Elizabeth "Betty" Durré in 1985.

### **OPEN DAY**

*Berwick, Gippsland, Parkville and Peninsula campuses – 1 (Sat) August  
Caulfield and Clayton campuses – 2 August*

### **Websites to try**

Here are a couple of sites that may be of interest:

#### [The Language of Measurement](#)

Nuffield Practical Physics in the UK has this interesting article about measurement in science and some of the common errors relating to the 'quality' of measurement - may be of interest to students and teachers alike.

**Biofuels from algae** – a recent discussion on ABC Radio National's [Science Show](#) may be of interest to those teachers looking at alternative fuels. Listen to a discussion with scientists from California about this alternative source of energy.

### **Podcasts**

#### [Mouse genome laid bare to science](#) – BBC podcast

Scientists have finished sequencing the mouse genome after a 10-year effort. Dr Leo Goodstadt, of the Functional Genomics Unit at Oxford University, explains how this high-quality genome sequence will aid in the fight against human disease.

#### [Carbon capture technology tested](#) – BBC podcast

New carbon capture technology is being tested for the first time in the UK on a working coal-fired power station. Science correspondent Tom Feilden reports on whether this could kick start a whole new North Sea carbon capture and storage industry.

### **RACI event**

#### ***Chemistry with a Bang - (The Science of Explosions)***

#### **2009 Hartung Youth Lecture - and a National Science Week Event**

The 2009 Hartung Youth lecturer is Dr John Reid, an explosives expert from Thales Australia.

In the 2009 lectures, students will learn about a whole range of high energy reactions from the past and present - including the reaction for inflating car air bags. This lecture promises to be a spectacular experience, in the tradition of the lectures given by Professor Hartung over 50 years ago.

The dates and locations are:

Monday 17 August, Albury-Wodonga Campus, La Trobe University

Tuesday 18 August, School of Chemistry, The University of Melbourne

Wednesday 19 August, Powerworks Energy Technology Centre, Morwell

Friday 21 August, Warrnambool Campus, Deakin University

For enquiries contact Jenny Sharwood, Secretary, RACI (Vic) Education Group

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