### LENS Staff Jacquie Bay

BSc, MEd(Hons), Dip Tchg

An experienced Biology teacher, Jacquie was previously HOD Science at Diocesan School for Girls and is actively involved in Biology Education at a national level.

#### Helen Mora

BAg.Com, Dip Tchg

Before joining The Liggins Institute, Helen was Senior Subject Advisor Biology, South Island (2007) and prior to this, HOD Science at Gore High School. Helen has also been involved in Biology Education at a national level for a number of years.

#### Feedback

"It is easier to understand it in real life than in a book."

"It has helped me to decide what my career will be. I want to be a scientist now."



"We had learnt about gel electrophoresis in class, but this hands-on experience has made me **understand so much more about it.**"

"The ethics discussion made me think about the **impact** of science on society and the complexity of these interactions."



"The opportunity to spend time in the Liggins Institute classroom was transformational for my students. They talk of their visit and light up with the details."

"Being a scientist mentor was an extremely rewarding experience. I was inspired by the endless enthusiasm that the students showed for science."

"Presenting current research that has direct links to the curriculum has *helped me to refocus on why I am teaching science* and given me a fantastic tool to fire my students' enthusiasm."

# Funding for the programme

Funds to establish the classroom have come entirely from the charitable sector. A grant from Tertiary Education Commission's Innovation and Development Fund allowed fast tracking of programmes in 2007.

The Liggins Institute gratefully acknowledges the support we have received from organisations who are helping to bring our vision to life. Our major sponsors are:

- The Liggins Institute
- National Research Centre for Growth and Development
- The University of Auckland
- The Lion Foundation
- The Sir John Logan Campbell Residual Estate
- The Rotary Club of Ellerslie Sunrise
- MANZANA NZ Ltd
- Bio-Rad

The Liggins Institute has made a commitment to the community to make this facility available free of charge to all schools.

To find out more about how your organisation can support the ongoing costs associated with the classroom programme please contact Jacquie Bay, phone +64 9 923 4282.





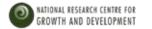
# The Liggins Education Network for Science



From Student to Scientist



Steps on a Journey



# The Liggins Education Network for Science (LENS) in the Sir John Campbell Classroom

# The Liggins Institute

The Liggins Institute is a world-class biomedical research institute within The University of Auckland. The Institute conducts research in order to improve human health through discoveries in science.

The Liggins Institute is committed to increasing understanding and awareness of science and medical research in the community. The Liggins Education Network for Science programmes are designed to do this.

"The importance of science to the continued success of New Zealand as a 21st century society is crucial. We have an economy that is dependent on agriculture and the science underpinning it. Our prosperity is dependent on strong health systems and appropriate research that will support improved health for our communities. For these reasons it is important to involve school pupils and share the excitement and possibilities of research with them."

Professor Peter Gluckman, Director Liggins Institute



#### Collaborations

There has been extensive interest in the Liggins Education Network for Science programmes from tertiary institutions and science organisations, both in New Zealand and overseas. In June 2008 the first of these collaborations was formalised bringing AgResearch Education based at Ruakura, into the Liggins Education Network for Science. Further collaborations are expected in the near future.

#### Classroom Programmes

The Liggins Education Network for Science (LENS) provides school teachers and students with access to scientific research communities. Programmes are designed to inspire schools to maximise student potential through a wide range of high quality learning opportunities for both students and teachers.

Student programmes are provided free of charge to schools. A small fee is charged for teacher events.

#### Full Day Class Programmes Senior Biology

Hands-on practical work using molecular biology techniques including PCR, Gel Electrophoresis, and DNA analysis.

Programmes link current research to curriculum content, including exploration of relevant ethical issues.

During the programme students interact with scientists in small groups.

#### Middle School

DNA exploration programmes are designed according to the needs of the class.

Hands-on practical work relating to molecular biology techniques.

Programmes introduce students to scientists and scientific research and include small group interaction.

#### Year 13 Biology Seminars

Seminars are designed to extend Y13 students. Core concepts from the Y13 curriculum are explored in the context of current scientific research by New Zealand scientists.

#### Student—Scientist Mentor Programme

Annual awards programme for Y9—10 students linked to Science & Technology Fairs.

Students participating in this programme will be given mentoring support in the development of CREST investigations.

Students will participate in the programme for up to 4 years and supported on to university.



# Teacher Professional Development

Events include seminars, symposia and hands-on workshops designed to support the New Zealand curriculum.

# Teacher Fellowship Opportunities

The Liggins Institute hosts teachers on the NZ Science Mathematics and Technology Teacher Fellowships. These fellowships are funded by the Government via MoRST and administered by the Royal Society of New Zealand.

#### Māori and Pasifika Initiatives

The Liggins Institute is committed to increasing Māori and Pasifika representation within scientific research communities. Initiatives include:

- Supporting the Whakapiki Ake project team to identify potential WAP students through the classroom programmes.
- Hosting the annual summer Whakapiki Ake programme for Y13 Māori students. Providing support and leadership opportunities for these students as they progress through university.
- Developing the Biomedical Science Summer Scholarship programme for Y13 students from low decile schools.

For information on these programmes and bookings, please contact:

Email: ligginsclassroom@auckland.ac.nz

Phone: +64 9 923 4282