



Bringing Schools and
Scientists Together



NATIONAL RESEARCH CENTRE FOR
GROWTH AND DEVELOPMENT



LIGGINS INSTITUTE
THE UNIVERSITY OF AUCKLAND
NEW ZEALAND
Te Whare Wānanga o Tāmaki Makaurau

LENScience Senior Biology Seminar Series

Information for Principals

<http://lens.auckland.ac.nz>

The LENScience Senior Biology Seminar Series brings Year 13 Biology students in schools across New Zealand together with scientists and teachers from LENScience using satellite television and an interactive website. The seminars are designed to provide learning extension opportunities that link current New Zealand scientific research to concepts in the school curriculum. The educational value of this programme was recognised in 2009 when LENScience won the 2009 TUANZ Education Innovation Award.

This year the seminar programme consists of a series of nine seminars that are broadcast on Thursday afternoons from 3:45 - 5:00pm from Term 1 to Term 3. Each seminar is set up as a module with background readings and discussion questions provided for teachers and students. Each module runs for a three week block with pre and post-seminar workshops in schools during weeks 1 and 3 and the seminar delivered via satellite television in week 2. **There is no charge for schools to participate in the seminars.**

The seminars are based around the work of NZ scientists, linking to concepts at Level 8 in the curriculum. They are designed to support students preparing for NCEA Level 3 Biology and/or Scholarship Biology. This provides students with an important opportunity to (a) increase understanding of concepts and (b) learn how to apply concepts to new situations. Each seminar concludes with a live question session. A group of around 90 students from schools close to the Liggins Institute form a live audience. Students in the remote audience are able to connect via Wiki, Internet Chat or video conference. The wiki site provides the opportunity for students to post questions before the seminar and a post seminar discussion forum.

The programme is designed by experienced secondary school biology teachers at LENScience. All learning materials are written by LENScience teachers working in consultation with scientists. Seminars are co-presented by a LENScience teacher and the scientist(s).

The Senior Biology Seminar Series is intended to be a partnership between schools and LENScience. Participating schools must agree to:

- provide the technology required to run the programme in the school (TV; Set top box; Satellite dish - refer to Technology Information Sheet available from http://lens.auckland.ac.nz/images/5/55/Technology_Information_Sheet_2010.pdf) or provide access for students to a regional centre where they can view the broadcast*
- hold pre and post-seminar workshops** to support learning for students

- provide students with copies of the seminar and question papers (downloadable from <http://lens.auckland.ac.nz>)
- instruct students in how to use a wiki (instructions provided via fact sheet) and the code of behaviour that is required when using Web 2.0 tools such as a wiki site and internet chat.
- support students in making contributions to the wiki discussions

*In some centres, regional venues will enable schools to gather together for the seminar broadcasts. Christchurch and Dunedin have regional venues provided by the University of Canterbury Science Outreach team and the Laboratory for Evolution and Development at the University of Otago. In other centres schools are offering to host neighbouring schools. The [Schools Registration](#) page lists where these venues are located.

**In some centres, schools are collaborating to provide the pre and post-seminar workshops in neighbouring schools, potentially reducing teacher workload and increasing collaborative learning opportunities.

The wiki site will be monitored by LENSscience teachers. This cannot be monitored 24/7 so there is a possible risk of cyber-bullying. Students need to register in order to receive a log on to write to the wiki and any inappropriate comments will be able to be traced through this registration. Teachers will be asked to follow up any issues of inappropriate comments on the wiki site and all inappropriate comments will be removed as soon as they are seen by moderators.

The live chat during the seminar is also monitored by LENSscience teachers. Students need to register in order to receive a log on to enter the chat room. Any inappropriate behaviour in the chat room can be traced either through this registration or the IP address. Schools will be asked to follow up any issues of inappropriate comments.

A small number of schools will be approached to consider participating in the formal evaluation of the programme via questionnaires, observations and interviews. Schools that indicate that they may be interested in participating in the evaluation will be provided with full information before making a decision regarding participation in this aspect of the programme.

Questions regarding education aspects of the programme should be addressed to either:

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