Professional Development Program
for Science, Biology and Ag-Science Teachers

20th—21st August 2009

The 2-day professional development program for science teachers is held at the world-class research facilities of the Centre for Integrative Legume Research (CILR) at the University of Queensland’s St Lucia campus.

Participants are exposed to cutting-edge technologies in plant science, learn techniques and experiments that can be conducted in the classroom as EEIs. They also get the opportunity to network with scientific researchers and other teachers.

Participating teachers will be provided with a CD of the talks, handouts, experiment results and photos of the 2-day program. They will also receive an experiment kit containing wild type and mutant seeds to be able to conduct an exciting nodulation experiment at their respective school.

Registration closes Friday 24th July!
Limited to 15 places.

Program fee: $150
Application forms can be accessed from the CILR website at www.cilr.uq.edu.au
For further information please contact Charlotte Camerer: c.camerer@uq.edu.au or phone (07) 3346 9534

The STEP IN LABS Program is kindly supported by:
Program Overview

Thursday 20th August

♦ **Overview of the CILR and Tour through the Laboratories (seminar and tour)**
  Learn about the exciting research projects that are being carried out at the CILR and get to know the cutting-edge equipment that our researchers are working with.

♦ **Safety Induction (seminar)**
  A short seminar on safety regulations of PC2 laboratories will allow you to work in our state-of-the-art facilities.

♦ **Turning Real-life Science into EEIs (seminar)**
  Listen to the experiences from a scientist-turned-teacher and learn how he brings real-life science into the classroom.

♦ **Introduction to Molecular Biology Techniques (seminar)**
  Get an overview over tools of molecular biology, such as electrophoresis, transgenics and polymerase chain reaction (PCR) and learn what scientists use the different techniques for.

♦ **Nodulation & Nitrogen Fixation (seminar and workshop)**
  Learn about the importance of legume nodulation and different research approaches of the CILR during a seminar. Conduct a hands-on experiment in the laboratory, working with wild type and mutant soybean plants. We will provide you with seeds, so that you can conduct this experiment at school.

Friday 21st August

♦ **Legumes as a Source of Biodiesel (seminar and demonstration)**
  Learn about the advantages and disadvantages of different fuel sources and get an insight into the exciting biodiesel research that is being conducted at the CILR.

♦ **Tissue Culture (seminar and workshop)**
  In a seminar you first learn about methods and uses of gene transformation and get introduced to the basic steps of tissue culture. Subsequently you will get to set up your own tissue culture sample in the laboratory.

♦ **Plant Hospital—Pétiole Feeding (seminar and workshop)**
  The inventor of a new bioassay to track communication streams in plants will introduce you to his research and teach you how to set up his interesting experiment.

♦ **Discussion**
  Use the time after the workshops and during breaks to network with our researchers and your fellow teachers to work out how you can take the experience at the CILR back to the classroom and develop new EEIs.