



THE UNIVERSITY  
OF QUEENSLAND  
AUSTRALIA

GREEN  
LABS  
ANNUAL  
REPORT  
2013

[www.uq.edu.au/sustainability](http://www.uq.edu.au/sustainability)

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## MESSAGE

### FROM THE MANAGER SUSTAINABILITY AND PROJECT OFFICER SUSTAINABILITY

In 2013 the newly developed Green Labs program was opened to the UQ community. In its inaugural year, the program welcomed 18 representatives from 12 different Institutes, Schools and Centres across 5 campuses and sites. Each representative, with the support of their management, volunteers their time to engage their colleagues in positive sustainable practices in their laboratories.

The Green Labs program has closed a gap in our operational and engagement initiatives by supporting UQ staff involved in our core business of learning and discovery. It has also established the opportunity for staff from all disciplines to contribute to and influence UQ's sustainable performance.

The potential of the Green Labs program to enhance the University's sustainable performance is evident through the dedication of its representatives and their successes to date. We've seen the training program well supported and this year the prestigious Annual Green Programs Awards honoured those representatives and labs leading initiatives to foster and embed sustainability in their day-to-day activities. This Green Labs Annual Report highlights the people and initiatives that have made for a successful program in such a short time period.

The Green Labs program was also featured in a UQ News TV Episode earlier this year, further highlighting the commitment of Green Labs representatives to the program and the initiatives they have implemented. UQ Labs Going Green can be accessed via [www.uq.edu.au/sustainability/green-labs-video](http://www.uq.edu.au/sustainability/green-labs-video).

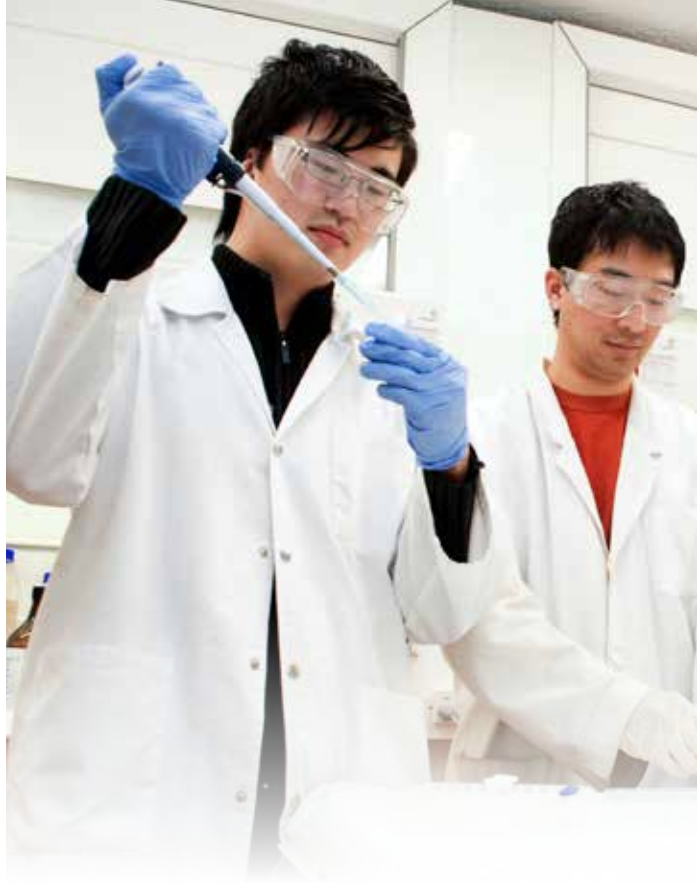
We thank all our Green Labs representatives for their contributions to-date and look forward to continuing to develop the program into the future.



*Stuart Green, Manager Sustainability*



*Kelly Treloar, Project Officer Sustainability*



## GREEN LABS ASSISTANT

The Green Labs program is supported by the Green Labs Assistant. The position is held by a UQ student for a 12 month period and enables them to gain valuable work experience. Kimberley Lennon was appointed to the position in May this year to help administer the various aspects of the program. With a background in teaching, Kimberley is now undertaking a Masters in Environmental Management, majoring in Sustainable Development.

New to the laboratory environment, Kimberley was initially faced with the challenge of navigating the lab climate and communicating with representatives based across a number of sites. Kimberley has since acknowledged the diversity of lab experiences at UQ and witnessed first-hand the challenges faced by laboratory staff to implement sustainable practices.

With a particular interest in climate change adaptation for sustainable business practice, in addition to education for sustainability, Kimberley endeavours to achieve greater networking between the Green Labs reps as well as encourage the purchasing of more energy efficient lab equipment. She is passionate about her new role and looks forward to working with reps to implement exciting new sustainable lab initiatives next year.



*Kimberley Lennon, Green Labs Assistant*

# GREEN LABS REPRESENTATIVES



## **Casey Pfluger** *UQ Centre for Clinical Research*

Casey joined the Green Labs program in its pilot year because he was eager to implement lab initiatives that would make a major difference to sustainability in his workplace and within UQ as a whole.

Casey has achieved this through his work as a Green Labs representative and Research Assistant at the UQCCR Neuroimmunology Lab, by digitising paper based documents and introducing recycling to his lab. Through the introduction of recycling Casey was extremely satisfied to see the immediate reduction in lab waste being incinerated, an issue which had troubled him for a number of years!

Despite this, Casey still feels there are many obstacles to implementing sustainable laboratory practices. Some of his current concerns relate to providing education and training about the unnecessary running of lab equipment which continuously consumes large amounts of energy. He also faces the challenge of educating others about the new chemical disposal options through UQ's Chemstore, for which there are enhanced recycling opportunities.



## **Jacky Hung** *Institute for Molecular Bioscience*

Jacky's curiosity for the unknown is what first led him to the role of a researcher at the Institute for Molecular Biosciences, however as his lab expanded, Jacky took on more of a support role, becoming the floor manager for level 6. When he recognised the immense impact his laboratory was having on the environment, Jacky enthusiastically volunteered for the Green Labs program.

Jacky has been a valuable member of the program since joining this year, coordinating the chemical inventory audit for his lab and implementing a chemical sharing initiative with other lab staff to minimise waste and reduce water and energy usage.

Despite the many challenges he faces in managing staff schedules and facilitating the day to day running of his lab, Jacky is eager to engage with more lab staff and other Green Labs representatives about the sustainable procurement of chemicals and energy efficient lab practices, such as shutting the fume cupboard sash when the device isn't in use.



## **Blair McEwan** *Herston Medical Research Centre*

As a Senior Technician managing two levels at the Herston Medical Research Centre, Blair McEwan is always hard at work facilitating important research in clinical health.

As a new member of the Green Labs program in 2013, Blair is motivated to reduce landfill waste, which he believes to be the greatest challenge across both the laboratory floors he facilitates. In particular, Blair is interested in finding new and innovative ways to procure more sustainable laboratory equipment, an initiative he hopes to introduce early next year.

Blair's favourite time of the week is a Friday afternoon, but not for the reasons you might think! He enjoys reflecting on the past week with his staff to impart a sense of accomplishment and pride in the work they have achieved. He carries this philosophy into his role as a Green Labs representative, always searching for new avenues to improve environmental performance.

# GREEN LABS ACTIVITIES

## New Green Labs Representative Training

New Representative Training welcomes new reps to the Green Labs program and is designed to educate and connect them with other UQ laboratory personnel who share a passion for sustainable laboratory practice.

Delivered by Jane Gaffel, who played an integral role in the development of the pilot program, the training sessions introduce new reps to the program's key objectives.

In 2013 the training program was revised following feedback received from pilot program participants, which saw the introduction of behavioural change training and an action planning activity to help reps identify key initiatives for implementation in their labs.

Three New Rep Training sessions were held throughout 2013.

## Green Labs Update Sessions

Update Sessions provide reps with the opportunity to network with each other while learning about one of UQ's key sustainability themes: biodiversity, built environment, environmental risk, purchasing, transport, water, recycling & waste, and energy.

In 2013 these sessions involved a presentation by a guest speaker who demonstrated how the theme pertained to laboratory practice and subsequently highlighted opportunities for improved environmental performance.

Two Update Sessions were held in 2013 on chemical management and energy.

### Chemical Management

Anthony Fowler, Radiation and Chemicals Manager for the Science Faculty, provided practical insights into correct chemical waste disposal and guided reps through the valuable resources available online, including UQ's chemical waste management procedures.

Some of the crucial information uncovered during the Q&A discussion included the new chemical barcoding system delivered by the UQ ChemStore and the time sensitivity of specific chemicals.

### Energy

With expert knowledge and experience in energy management at UQ, Chris Collins, Energy Manager with Property and Facilities, presented the facts and figures on energy consumption in UQ labs.

Representatives gained a greater understanding of the enormity of energy waste in labs, with the key message being that lab tenants play a crucial role in identifying opportunities and implementing appropriate behaviours to improve energy efficiency in labs, especially in relation to fume cupboard management, time scheduling, heating and cooling set points, and equipment upgrades.

## Green Labs and UQ Sustainability Promotions

Green Labs representatives were invited to participate in UQ's inaugural Sustainability Week activities in August, with the added incentive of receiving Fair Trade Chocolates.

Representatives were also invited to promote and participate in UQ's Sustainable Commuting Competition. The competition encourages UQ staff to walk, ride or catch public transport to the University to reduce their carbon emissions.



# GREEN LABS ASSESSMENTS

## ANNUAL ASSESSMENTS

Green Labs annual assessments enable existing representatives to track their lab's environmental performance over the course of a year. Conducted on a voluntary basis, these assessments are instruments which aim to encourage improved sustainable practice by exposing opportunities for improvement.

Generally, annual assessment scores are higher than baseline scores, because existing representatives have had the opportunity to improve environmental performance using the previous year's assessment report as a guide.

Five labs completed annual assessments in 2013, including 3 from St Lucia and 2 at Herston. Of these, 4 labs improved their performance compared to their baseline results recorded during the pilot program. Importantly, all labs completing annual assessments in 2013 improved their results for duty of care, with all labs achieving 100% on this mandatory component.

## Baseline Assessments

New Green Labs representatives conduct baseline assessments of their laboratories when they first join the program. These assessments, which are conducted in partnership with another Green Labs rep and with the optional assistance of the Green Labs Assistant, are designed based on the procedures in UQ's Environmental Management System (EMS).

With the aim of developing baseline data for the various labs across UQ, the assessments enable Green Labs reps to reflect on current environmental performance and monitor their progress in the areas of:

- Training
- Lighting
- Duty of care
- Housekeeping
- Sustainable procurement
- Water
- Energy
- Fume cupboards
- Chemical management
- Waste and recycling

Laboratories are assigned an overall Green Labs Rating, which is an average score resulting from the performance against a number of different components addressed during the assessment. The assessment is based on interviews with the Green Lab rep and other laboratory staff, as well as a walk-through survey of the lab area to observe actual practice. Overall ratings for both the baseline and annual Green Labs assessments completed in 2013 are shown in Figure 1.

Green Labs baseline assessments were conducted in nine new lab areas in 2013, with an overall average score of 73%. Seven of the new labs joined the program in late 2013, with their baseline assessments to be scheduled in early 2014.

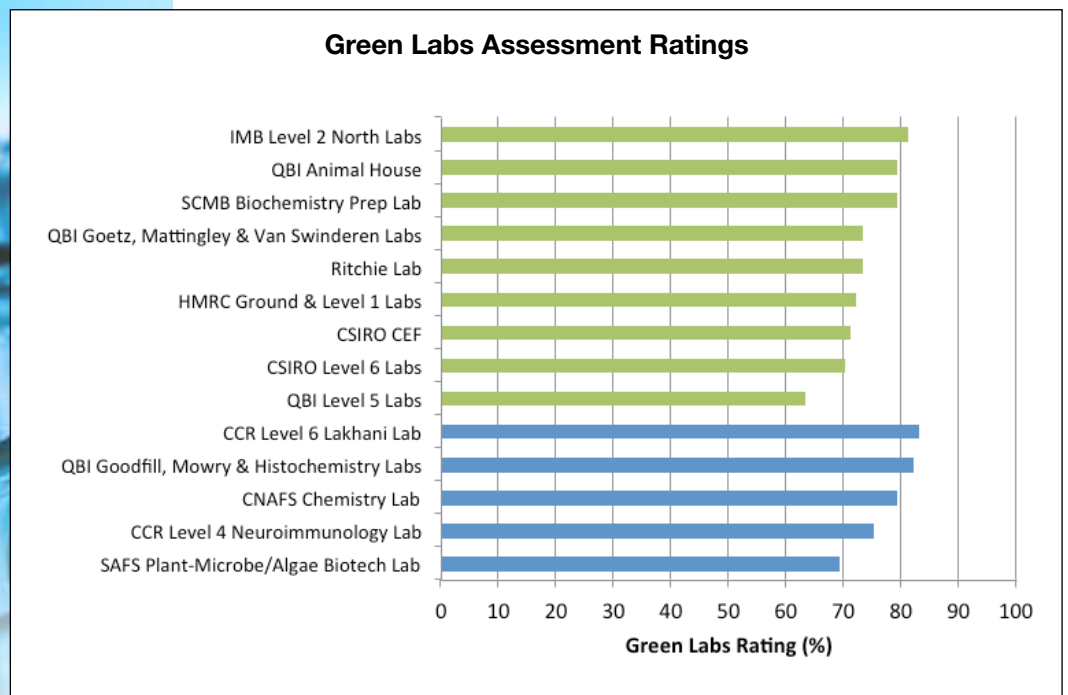


Figure 1: Overall Green Labs Rating for baseline (green) and annual (blue) assessments conducted in 2013.

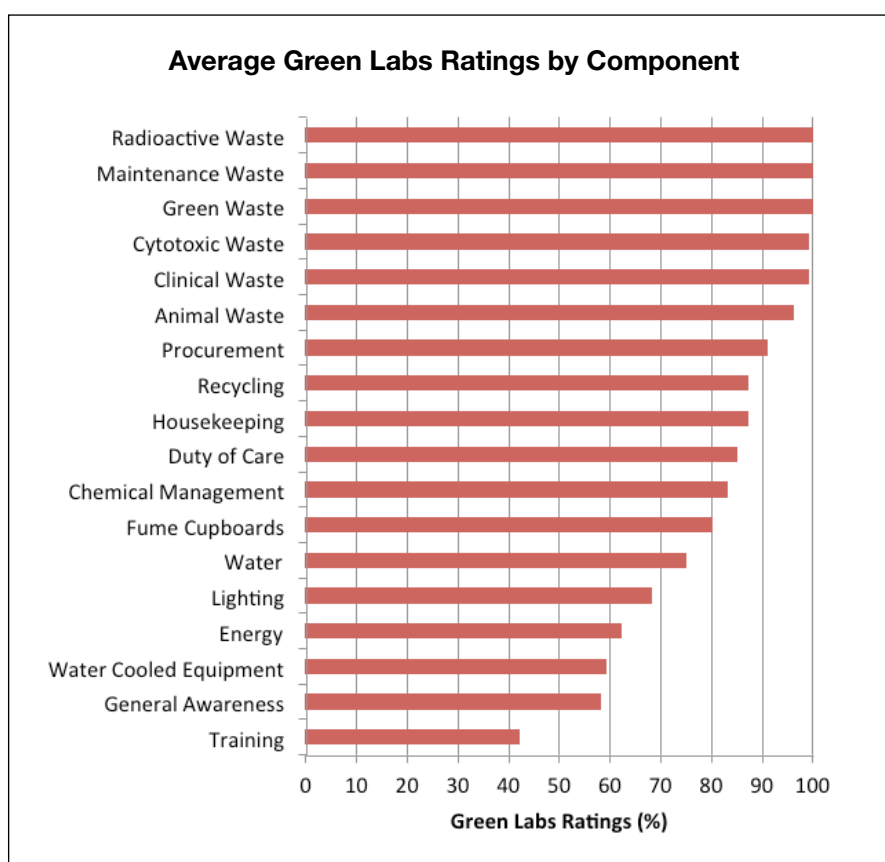
# GREEN LABS ASSESSMENT RESULTS

Green Labs participants should be congratulated for their performance in relation to waste management in 2013, with Green Labs Ratings for the animal, clinical, cytotoxic, green, maintenance and radioactive waste components scoring the highest of all components across both annual and baseline assessments, as can be seen in Figure 2.

The training component scored the poorest overall result with a rating of 42%, highlighting an opportunity for improvement. Further opportunities for improvement in UQ

labs are in the areas of general awareness, water cooled equipment, energy management and lighting.

Due to the program only being opened to the wider UQ community this year, there is limited data on which to draw conclusions from, with trends not yet apparent. There were also a number of changes to the Green Labs assessment tool following feedback received from the pilot program, which has likely implications for the comparative results of those labs completing annual assessments in 2013.



**Figure 2.** Average Green Labs Ratings by component for baseline and annual assessments conducted in 2013.



# GREEN LABS ANNUAL AWARDS

The Annual Green Programs Awards, held on 25 October 2013, recognised Green Labs and Green Office representatives for their efforts in advancing UQ's sustainability program.

Guests were treated to lunch and a presentation by Dr Thomas Sigler of the School of Geography, Planning and Environmental Management, about sustainability throughout the history of urban growth in Australia.

The luncheon event celebrated the success of the Green Labs program's inaugural year, with awards presented to the most outstanding representatives in the categories listed here.

## Best New Area

With a Green Labs Rating of 81%, the **Institute of Molecular Bioscience Level 2 North Lab** took out the *Best New Area Award*. The recipients of the award, Jacky Hung and Mikiko Miyagi acknowledge that their success is a result of enthusiasm for sustainability in the workplace.

One key initiative facilitated by Jacky and Miki this year was a chemical inventory audit which identified areas for improving chemical management procedures. This further incentivised the sharing of chemicals with other laboratory staff to minimise waste and enhance sustainable procurement.

## Most Motivated Representative/Team

**Casey Pfluger** from UQCCR's Neuroimmunology Lab was awarded the *Most Motivated Representative Award* for his outstanding contribution to the Green Labs program.

Casey is committed to raising environmental awareness across UQCCR through the provision of educational and promotional materials and he consistently seeks to improve laboratory processes to minimise environmental impacts through initiatives such as the digitisation of paper based assessments and the introduction of recycling in his lab.

## Best Initiative

The *Best Initiative Award* went to **Sally Stockwell** from the CSIRO Animal, Food and Health Sciences Lab.

Sally won this award for implementing 'clean' plastics and paper recycling in her PC2 lab by providing suitably raised bases to keep materials off the floor in order to comply with strict PC2 OH&S requirements.

Sally also created her own humorous poster series to encourage colleagues to switch off their lights when not in use.



Green Lab and Green Office Awards recipients from left: Kellie Kayser GO, Sally Stockwell GL, Donna Easton on behalf of Casey Pfluger GO & GL, Jenny Hall GO, Micheline Francois GO, Jacky Hung GL, Mikko Miyagi GL.