Postgraduate studies at SCRI

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SCRI this year hosted over 70 postgraduate students, working on a wide range of problems in plant science, agriculture and the environment. We encourage an open interactive environment, which allows access to all the skills and facilities available at the Institute. The University of Dundee Plant Science Division is housed on site and this further enhances interaction with our postgraduate students and University students. This opens opportunities for the development of interdisciplinary research essential for modern biological research.

Students are monitored throughout their study time at SCRI to encourage and maintain progress. Through this process, students are not only supported by their direct supervisors but benefit from a postgraduate team that gives positive critical scientific assessment and pastoral support as required, under the auspices of the Institute's University Interactions Committee. Ultimately, the aim of the studentship is to train and produce postdoctoral workers with positive enquiring minds and the intellectual and technical tools to develop their own interests and science programmes.

In addition to their research training, SCRI encourages further training to expand generic knowledge and understanding of important skills required for success in their chosen field. In the past, we have supported meetings that allow students to gain information and advice from senior experienced Institute staff. In the coming year, this will be formalised with the development of a Postgraduate School on Academic Skills with topics and skills directly relevant to completion of a PhD and future postdoctoral positions. All students have further access to Dundee University Generic Skills training that expands their existing activities and will be useful in a variety of employment destinations after their studentship is completed.

Jane Shaw describing the role of Cajal bodies and the nucleolus in plant virus infection and Susan Breen describing Avr2, an RXLR effector from *Phytophthora infestans* won our annual postgraduate student competition. Both went on to represent the Institute at the annual Scottish Research Institutes Postgraduate Student competition at the Rowett Institute at Aberdeen University. Susan came home with the runner-up place at this competition and further won the University of Dundee, College of Life Sciences annual poster competition, which represents a tremendous achievement.

We hosted the SCRI/Dundee University Master of Research (MRes) course titled 'Crops for the Future' for the first time over the past year. This course provides advanced study in practical and theoretical aspects of crop bioscience through lectures and practical, technically demanding projects.

Successful PhD Submissions

Brown, E. (nee Coates) 2010. Anti-cancer effects of soft fruit phytochemicals. *University of Ulster*, PhD Thesis.

Campbell, R. 2010. Determining the genetic and molecular control of carotenoids in potato tubers. *University of Dundee,* PhD Thesis.

Clark, E.L. 2010. Molecular characterisation of the bacterial communities in cabbage aphid (*Brevicoryne brassicae*) and their associated fitness effects. *University of Dundee,* PhD Thesis.

Clark, K. 2010. Does mother know best? Is host plant selection by above ground insects influenced by below ground herbivores. *University of Sussex,* PhD Thesis.

Foito, A. 2010. A metabolomics-based approach to study abiotic stress in *Lolium perenne*. *University of Dundee,* PhD Thesis.

Hochshartner, G. 2010. Revealing the past: The potential of a novel small nucleolar RNA (snoRNA) marker system for studying plant evolution. *University of St Andrews,* PhD Thesis.

Loades, K.W. 2010. Quantifying the role of fibrous roots on soil reinforcement. *University of Dundee,* PhD Thesis.

Thorsen, M.K. 2010. Biological mechanisms involved in stabilizing sandy soils of the Machair. *University of Aberdeen,* PhD Thesis.

Wojciechowski, T. 2010. Root development in semi dwarfing lines of wheat and barley. *University of Reading,* PhD Thesis.

Xiao, H. 2010. Mechanisms by which natural polyphenols regulate expression of cytoprotective genes. *University of Dundee,* PhD Thesis.