

# International

## INTERNATIONAL EXCHANGE PROGRAMME

One of the main purposes of the RSE International Programme is to award short-term travel grants to enable Scottish researchers to establish links with colleagues in other countries with a view to a long-lasting collaboration, through joint publications and joint applications for longer-term funds.

The RSE also supports longer-term collaborations through the Joint Project Scheme with the National Natural Science Foundation of China, which facilitates longer-term international collaboration between researchers based in Scotland and China by providing two years' worth of funding.

Following are excerpts from reports of International Exchange visits and Joint Projects supported by the RSE International Programme.

**Dr David Burslem, University of Aberdeen**

**Visited: Dr Peter Bellingham, Landcare Research, New Zealand**

This visit facilitated a collaboration in plant functional ecology that was initiated during Dr Burslem's sabbatical fellowship at the host organisation, Landcare Research, in 2009.

During the sabbatical Dr Burslem established an experiment to investigate the growth and survival of ten species of warm temperate trees in response to variation in light and nutrient supply. The purpose of this experiment was to determine whether observed differences in the distribution of these species in the forest could be explained by their physiological response to underlying variation in the physical factors that influence their growth. In July 2010 Dr Burslem visited Landcare Research in order to record measurements of tree seedling growth and survival, to present a seminar and to discuss plans for publishing the work.

During the visit plans were also made for a new phase of work focusing on the role of

frost tolerance in the patterns observed, working jointly with new partners at Canterbury University in Christchurch. This might involve a major application for research grant funding to sources in the UK and New Zealand, and recruiting a new PhD student jointly supervised between Aberdeen, Landcare Research and Canterbury.

On his return journey to Aberdeen Dr Burslem attended a conference of the Association for Tropical Biology and Conservation in Bali, where he presented a talk and contributed to the organisation of a symposium on the biology and ecology of Southeast Asian rain forest trees.

A student on the MRes degree in Ecology and Environmental Sustainability at Aberdeen (Jennifer Sjolund) travelled with Dr Burslem to New Zealand and assisted with the measurement and harvesting of the experiment. She subsequently used the data to write up her thesis which contributed to her degree, which was awarded with Distinction.



David Burslem standing next to a large Kauri (*Agathis australis*) tree growing in warm temperate rain forest in New Zealand

**Scottish-based Project Leader: Dr Jun Zou, University of Aberdeen (below)**

**China-based Project Leader: Dr Jun Chen, Institute of Hydrobiology, Chinese Academy of Sciences**

**RSE-NSFC Joint Project Scheme**



Over the last few years, with the support from the Royal Society of Edinburgh and the National Natural Science Foundation of China, the Scottish Fish Immunology Research Centre at University of Aberdeen has significantly enhanced research collaborations with the Institute of Hydrobiology, Chinese Academy of Sciences. A total of six researchers from Wuhan visited or worked in Aberdeen, which has led to several joint publications in peer-reviewed journals.

The chemokine work funded by the RSE has been productive and has generated a great deal of novel data regarding the roles of chemokines against viral and parasitic infection in fish. Such data have successfully led to a nine-month visiting fellowship awarded by the Leverhulme Trust to Dr Jun Chen, to continue working on chemokine functions in the Scottish Fish Immunology Research Centre (SFIRC). Based on this work, three manuscripts are being prepared and will be submitted for publication in the next few months. In addition, the RSE support has provided an excellent platform for scientists from Aberdeen to promote the research strength of SFIRC in Fish Immunology to the Chinese research community. Drs Zou and Chen plan to seek future support from the RSE or other UK agencies to further strengthen the good collaborations between the two institutions.