

JAMES RENNIE BEQUEST – REPORT

Hélène Citerne

The award was given for attending the '11th International Antirrhinum Meeting' organised by members of the Genetics Department at the University of Milan, and held in Gargnano, Italy from the 2nd to the 6th of May. Participants included members of the research groups at the John Innes Centre in Norwich, the Max Planck Institute in Koeln, the Institute of Cell and Molecular Biology at the University of Edinburgh, the School of Biochemistry and Molecular Biology at the University of Leeds, the Instituto Biologia Molecular Celular Plantas in Valencia, and the Department of Biology at the National University of Ireland in Maynooth.

43 presentations were given over two days. They covered a wide range of topics including developmental genetics of the model organisms *Antirrhinum* and *Arabidopsis*, developmental modelling, gene transfer, and the role of developmental genes in comparative systems. I described my work on homologues of the gene *cycloidea*, first described in *Antirrhinum* and controlling floral symmetry in this taxon, in the family Leguminosae. My presentation was complementary to that of Da Luo, of the Shanghai Institute of Plant Physiology, who first isolated two *cycloidea* homologues in the model legume *Lotus japonicus*, and has carried out some expression studies of these homologues. His results indicate that the two *cycloidea*-like genes in *Lotus* are expressed asymmetrically in the developing flower and inflorescence, and suggest that these genes are good candidates for the control of floral symmetry in legumes. During the conference, I presented for the first time my preliminary results which suggest that I have found the orthologues of the two *Lotus* genes using a phylogenetic approach in more basal legume taxa with unusual floral morphology. Other groups present at the meeting are also working on *cycloidea* homologues in other flowering plant families: Solanaceae (Karine Coenen, University of Edinburgh), Asteraceae (Amanda Gillies, University of St Andrews), and Scrophulariaceae (Wesley Beardon and Jacqueline Nugent, National University of Ireland).

My approach to the study of developmental genes in a comparative system was different from most of the case studies presented at the conference. By presenting

my work, I was then able to exchange ideas with molecular biologists who work on model organisms, and who emphasise functional similarity of genes rather than phylogenetic relationships.