Contact:

Professor Richard M. K. Saunders
School of Biological Sciences
The University of Hong Kong
Pokfulam Road
Hong Kong, China

E-mail: saunders@hkucc.hku.hk
Tel.: (852) 2299 0608
Fax: (852) 2517 6082
Website: www.hku.hk/~saunders/rmks.htm

Research focus areas:

Descriptive systematics: species-level classifications
Comprehensive morphological taxonomic revisions of plant taxa, including descriptions of species new to science. Research is currently focused on the family Annonaceae, which is ecologically important in tropical lowland forests.

Phylogenetic reconstruction
Reconstruction of the patterns and rates of evolutionary diversification based on DNA sequence data using diverse methods. Molecular phylogenies are used as a conceptual framework for interpreting data from various disparate areas of research, including: functional morphology and the evolution of key innovations; evolutionary diversification and convergence in floral morphology; and biogeographical distribution patterns.

Developmental and functional interpretations of morphology
Evolutionary interpretation of morphological development and function, including: functional adaptations of floral and pollen morphology that influence pollination ecology; evolutionary consequences of changes in floral development, including disruptions to the homeotic control of organ identity; and the evolution of unisexual flowers.

Evolutionary plant reproductive biology
Determination of pollination systems based on observations of floral phenological changes, floral visitors and floral scent chemistry. Field-based controlled-pollination experiments and lab-based molecular studies enable the associated breeding system to be determined. Evolutionary shifts in pollination and breeding system are assessed using molecular phylogenies.

Historical biogeography
Relaxed molecular clock methods and ancestral area reconstructions are used as a basis for understanding spatio-temporal changes in taxon distributions. Hypotheses of long-distance dispersal events, vicariance and other processes which underlie biodiversity patterns are investigated by correlating phylogenies, molecular divergence ages and ancestral area reconstructions with available palaeogeographical and palaeoclimatic data.
International collaboration & fieldwork:

The Plant Systematics & Phylogenetics research group is actively involved in international collaboration with 25 institutions in 15 countries (Australia, Austria, Brunei, Hong Kong, Malaysia, Netherlands, New Caledonia, Papua New Guinea, PRC, Singapore, Sri Lanka, Taiwan, Thailand, UK and USA).

Fieldwork is undertaken throughout Southeast Asia, with longer-term field studies (for pollination ecology) in Australia, Brunei, Sri Lanka, Hainan and Hong Kong.

MPhil & PhD Opportunities

Graduates with good quality degrees (1st class honours or equivalent) are encouraged to apply for MPhil or PhD degrees. Prospective students should initially contact Prof. Saunders by email with a copy of their CV and details of their research interests. For entry from September 2013, the main round deadline for applications is 1st December 2012 (with a clearing round deadline on 30th April 2013). Details on application procedures and sources of postgraduate funding are available online at http://www.hku.hk/postgrad/

Financial support for MPhil/PhD:

Hong Kong Postgraduate Fellowship
The HKPF provides each awardee with a monthly scholarship of HK$20,000 and a conference and research related travel allowance of HK$10,000 per year for a period up to three years. Intended for students with an outstanding academic record and international applicants in particular.

University Postgraduate Fellowship
The UPF provides HK$70,000 per annum on top of the standard Postgraduate Scholarships (described below). Intended for students with an outstanding academic record and international applicants in particular.

University Postgraduate Scholarship
Full-time MPhil and PhD students who hold a first degree with 2nd class honours first division (or equivalent) or above are considered eligible to receive a Postgraduate Scholarship. The basic level of the studentship is HK$13,600 per month.

Additional information:

The 2-year MPhil programme begins on 1st September, and the 3- or 4-year PhD programmes on the first day of any month from 1st September. Overseas applicants who wish to know more about living in Hong Kong and studying at The University of Hong Kong can find useful information online at http://www.hku.hk/rss/pp2009/overseas_app.html