Proteins, membranes and cells: the structure–function nexus—ASB 2008

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While it is a common misconception that the laboratory is 'a quiet garden of Eden' for the introverted investigator it is nevertheless a stark difference from the hub-bub and buzz of a scientific meeting. The latter was also the case with the 32nd Annual Meeting of the Australian Society for Biophysics that took place at the Australian National University in Canberra from September 28th to October 1st, 2008.

In an era when many national and international conferences are arranged by professional meeting organisers, held in purpose-built convention centres, and employ multiple parallel sessions, it is refreshing to attend a smaller conference where all the lectures are held in a single auditorium. This is particularly true when such a conference encompasses the breadth of research covered by Biophysics, as it affords the opportunity to catch up with a lot of interesting ideas that one usually doesn't have the time to think about in today's busy schedules. The themes covered at the meeting that are reflected in the articles in this special edition, included Ion Channels, Fundamental Issues and Regulation of Membrane Transport, Protein Structure and Dynamics, Muscle Biophysics, Biophysical Characterisation Techniques, Plant Biophysics and Photosynthesis, Membrane Biophysics, General Biophysics, Cellular & Molecular Biophysics and Bioengineering, Biomolecules, Biomaterials and Biomimetics.

The first series of articles in this special issue are based on presentations given at a session held in memory of Professor

Alexander ("Alex") B. Hope and his work; Alex died in July 2008. He was one of the founders of biophysical research in Australia, so we were very fortunate that his first two PhD students, Professors Hans Coster and Peter Barry, both of whom are still active members of the society, presented lectures of appreciation in the session, along with Dr. Fred Chow who worked with Alex Hope for the last 20 years of his extraordinarily productive life. Alex Hope spent a considerable time working on the giant cells of the alga, *Chara*; and his work did much to popularise this species as a model system for electrophysiological studies of isolated cells. *Chara* is in active use today as evidenced by, for example, the article by Dr. Mary Beilby and colleagues. Alex Hope's work on the biophysics of membrane transport inspired generations of biophysicists in Australia and beyond; indeed biophysical studies of membrane transport has remained a strength of the Australian Biophysics community as is reflected in many of the articles in this special edition.

A traditionally informative feature of meetings of the Australian Society for Biophysics (and of course others) is the Poster Sessions: All poster presenters are invited to speak for 90 s in the poster hall, to introduce their work and entice closer scrutiny during the main poster sessions. This has been a very effective way of generating interest in the posters and stimulating questions and debate on site. We are also very pleased that 5 of the articles in this issue come from students; Asi Cohen (student oral prize winner), Sophia Goodchild (Poster prize winner), David Szekely (Poster prize winner), HanShen Tae and Karunasekara Yamuna. We hope that you the reader will find, in the following pages, amongst the fruit of the ASB garden, much that is of interest and relevance to your own study and work, in the area of membranes, membrane proteins and the structural and functional connections between these macromolecules and multimolecular assemblies.

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