

## **PROFESSOR AWD LARKUM**

**Professor Emeritus, Plant Sciences, School of Biological Sciences, University of Sydney, NSW 2000.**

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### **Degrees**

B.Sc. (Special) Imperial College, London University 1961.

Associate of the Royal College of Science 1961.

D.Phil. Wadham College, Oxford University 1966.

### **Date of Birth**

3rd March 1940

**Marital Status:** Married with two children.

### **Academic Career**

1961-1962

Research Associate with Professor H. Lundegardh,  
University of Upsala, Sweden.

1962-1966

Agricultural Research Council Research Graduate Scholarship,  
Wadham College, Oxford.

1965-1968

Research Fellow, Christ's College, Cambridge, U.K. and  
Science Research Council Postdoctoral Fellowship,  
Biophysics Unit, Botany School, University of Cambridge  
(with Prof. E.A.C. MacRobbie, FRS).

1968-1969

U.S. National Science Foundation Postdoctoral Fellowship,  
Johnson Foundation for Biophysics, University of  
Pennsylvania (with Prof. Britton Chance).

1969-1994

Lecturer, Senior Lecturer, Associate Professor in Plant Physiology,  
University of Sydney.

• 1994-2000

Personal Chair in Plants Sciences, University of Sydney.

2001-2003

Professorial Fellow, Plant Sciences, University of Sydney.

2003-

Emeritus Professor, University of Sydney

### **Major Themes of research:**

- *Photosynthesis and Light Harvesting in natural and artificial systems*
- *Marine Algae and Cyanobacteria*
- *Coral Reef and Seagrass Ecosystems*

- *Global climate change and natural photosynthesis*
- *Evolution of photosynthesis*
- *Bioinformatics – DNA-based Phylogenetic Analysis of Cyanobacteria and Algae*
- *Charles Darwin and Alfred Russel Wallace*

### **Editorial Boards**

Trends in Plant Sciences  
Limnology and Oceanography  
Phycologia

### **Professional Societies**

Australian Marine Sciences Association  
Australian Society of Phycology and Aquatic Botany  
International Photosynthesis Society  
International Coral Reef Society

### **Publications**

Over 200 articles in refereed scholarly journals

#### **10 most important publications plus their citations**

- Larkum, A.W.D. and Barrett, J. 1983. Light harvesting processes in algae. *Advances in Botanical Research* 10, 1-219. Academic Press, New York. **(112 citations)**
- Hatcher, B.G. and Larkum, A.W.D. 1983. An experimental analysis of factors controlling the standing crop of the epilithic algal community on a coral reef. *J. exp. mar. Biol. Ecol.* 69, 61- 84. **(76 citations)**
- Larkum, A.W.D. and Anderson, J.M. 1982. The reconstitution of a photosystem II protein complex, P-700-chlorophyll *a* -protein complex and light harvesting chlorophyll *a/b* protein. *Biochim. Biophys. Acta* 679, 401- 421. **(48 citations)**
- Lockhart, P, Howe, C.J. . Beanland, T.J. and Larkum, A.W.D. 1992b. Sequence of *Prochloron didemni atpB/E* and the inference of chloroplast origins. *Proc. Natl Acad Sci (US)* 89, 2742-2746. **(44 citations)**
- Lockhart, P.J., Larkum, A.W.D., Steel, M.A, Wardell, P. and Penny, D. 1996 Evolution of chlorophyll and bacteriochlorophyll: the problem of invariant sites in sequence analysis. *Proc. Natl. Acad. Sci. (US)* 93, 1930-1934. **(49 citations)**
- Larkum, A.W.D. and Wood, W.F. 1993. The effect of UV radiation on photosynthesis and photosystem II activity of phytoplankton, benthic algae and seagrasses. *Photosynthesis Research*, 36, 17-23. **(68 citations)**
- Lockhart, P, Howe, C.J. Bryant, D.A. Beanland, T.J. and Larkum, A.W.D. 1992. Substitutional bias may preclude phylogenetic inference of chloroplast origins. *J. Mol Evol.* 34, 153-162. **(59 citations)**
- Larkum, A.W.D. 1976. The ecology of Botany Bay. 1. Growth of *Posidonia australis* (Brown) Hook *f.* in Botany Bay and other bays of the Sydney basin. *Aust. J. mar. Freshwater Res.* 27, 117-127. **(50 citations)**

- Borowitzka, M.A. and Larkum, A.W.D. 1976. Calcification in the green alga *Halimeda*. 3. The sources of inorganic carbon for photosynthesis and calcification and a model of the mechanism of calcification. *J. exp. Bot.* 27, 879-893. (**39 citations**)
  - West, R.J. and Larkum, A.W.D. 1979. Leaf productivity of the seagrass *Posidonia australis* in Eastern Australian waters. *Aquatic Bot.* 7, 57-65. (**34 Citations**)
- Total citations: 559**