

## CURRICULUM VITAE

G.A. HORRIDGE, M.A., Ph.D., Sc.D., F.A.A., F.R.S.

- Born Dec 1927** Married Audrey (née Lightburne), 4 children, Mark, Alison, Naomi, Rebecca.
- 1946** Open Scholarship at St. John's College, Cambridge England, from King Edward VII School, Sheffield, England.
- 1950** First Class Honours in Natural Sciences Tripos, Cambridge.
- 1953-54** Scientific Officer and then Senior Scientific Officer at Department of Structures at the Royal Aircraft Establishment, Farnborough.
- 1954-56** Research Fellowship at St John's College, Cambridge. Senior Award from the Commissioners for Exhibition of 1851.
- 1956-69** Lecturer then Reader in Zoology, St Andrews University.
- 1959-60** Visiting Associate Professor at University of California, Los Angeles, and Fellow at Center for Advanced Study in the Behavioral Sciences, Stanford, California, USA.
- 1960-69** Director, Marine Laboratory, St Andrews University, U.K.
- 1965** Visiting Full Professor, Yale University.
- 1965-69** Numerous lecture tours. Periods of work in marine laboratories especially Plymouth, Millport, Naples, Port Royal (Jamaica), Friday Harbor (British Columbia), Ghardaga (Red Sea) and Lizard Island, Great Barrier Reef. including 2 summers working at Wood's Hole Marine Lab, Mass, U.S.A.
- 1969** Fellow of the Royal Society of London.
- 1969** Professor of Behavioural Biology, Australian National University, Canberra, Australia. Subsequently name changed to Neurobiology Department.
- 1970** Fellow, Australian Academy of Science.
- 1973-74** Visiting Fellowship, Balliol College, Oxford. UK.
- 1975** Chief Scientist, U S Research Ship. Alpha Helix, in the Moluccas, with base camp at Banda with American scientists and crew.
- 1976-77** Visiting Fellow, Churchill College, Cambridge. UK
- 1972-76-80-84** Examiner in biology, University Sains, Penang, and University of Malaya, Kuala Lumpur, Malaysia.
- 1987-1990** Executive Director, Centre for Visual Sciences Australian National University (Topics range over artificial seeing systems, mechanisms of visual processing, neural nets, modeling, and electrophysiology of vision in a variety of animals).
- 1992** Royal Society Visiting Professorship to work on Vision in monkeys, with Dr D. Perrett, University of St Andrews, Scotland, for 4 months June - September.

1993-4 Visiting Fellow, Churchill College, Cambridge, UK.

1993-present University Fellow, then Emeritus Professor and Visiting Fellow, Australian National University.

## RESEARCH INTERESTS

- a) Broad interest in the nervous basis of behaviour, sense organs and brains, as studied by the techniques of electrophysiology, anatomy and behaviour.
- b) Physics and physiology of the eye as a pattern for artificial seeing systems. Insect Models of visual systems. Vision in man.
- c) Pattern Vision of the Honeybee. An experimental study started in 1993 and continuing through 2004.
- d) The history, distribution, uses, anthropology, engineering structures and rigs relating to the traditional boats of Island Southeast Asia and the ethnology of maritime societies in SE Asia.

## BOOKS

- a) (With T H Bullock). The Structure and Function of the Nervous Systems of Invertebrates. 2 Volumes. Freeman, San Francisco, 1965.
- b) Interneurons. Freeman, San Francisco, 1968.
- c) The Compound Eye of Insects. (Edited) Oxford, 1975.
- d) The Prahau, Traditional Sailing Boat of Indonesia. Oxford in Asia, Kuala Lumpur, 1981, 2nd edition, 1986.
- e) Sailing craft of Indonesia. Oxford in Asia, 1986.
- f) Outrigger Canoes of Bali and Madura, Indonesia, Bishop Museum Press. Honolulu 1987.
- g) Natural and low-level seeing systems (joint ed.) Oxford Univ Press 1993.
- h) Several books in preparation, notably one on Vision.

## PAPERS

220 papers on Sciences  
20 titles on Indonesian Prahau  
10 titles on other topics

Science

## SOCIETIES

Fellow, Royal Society of England  
Cambridge Philosophical Society  
Society for Experimental Biology  
Society for Nautical Research  
Fellow, Australian Academy of

## COMMITTEES

For 10 years, 1959-69, on the Council of the Scottish Marine Biological Association which governed three marine laboratories.  
1975-80 Member covering Science on the German Ambassador's Committee for exchange fellowships with Australia.  
1977-80 Minister of Science's Committee for Queen's Fellowships in Marine Sciences.  
1973-76 Member of Vice-Chancellor's Policy Committee, ANU.  
1981-3 Large Equipment Committee. Australian National University.  
1990 Industry Forum of the Academy of Sciences  
1991-3 Chairman of Section 7 Committee, Australian Academy of Sciences

## OTHER INTERESTS

Problems of development as related to biological sciences in South East Asia.  
Languages, photography and drawing essential for travel and research.  
Current research program on vision of the honeybee.

Centre for Visual Sciences  
Research School of Biological Sciences  
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Australia.  
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### Experience

Head of a Research Department - more than 32 years  
St Andrews 1959-1969  
Institute of Advanced Studies, ANU - 1969 - 1991

Concerned with planning research and getting it done.

### Training in Research

Supervised more than 45 PhD students personally over the years.  
A total of about 80 research workers at various levels have trained under my responsibility, 20 of them now full Professors, 7 are Fellows of the Royal Society, about 10 are in USA.

### Relations with Industry and other universities - 1990 onwards

Dept of Industry and Technology grant for artificial vision  
FUJITSU (Japan) support for insect and robot vision  
Project with Royal Guide Dogs for the Blind  
Industry Forum of the Academy of Sciences  
Dept. of Electr. & Electronic Engineering Univ. of Adelaide (chip construction)

### Research Aims

2-way interaction between pure research and applications in Vision.

