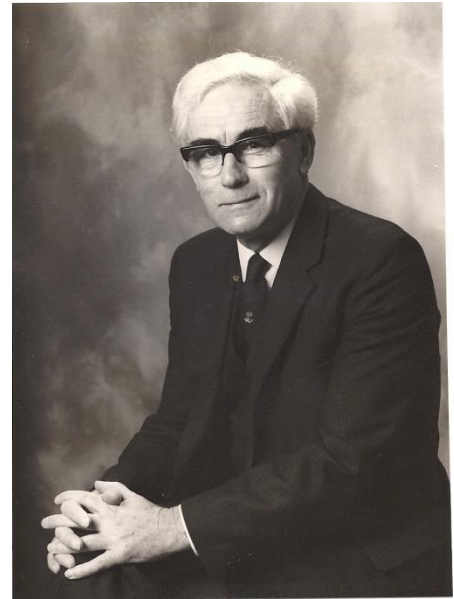


**Roland Stanley Glover**  
**9 June 1922 – 22 November 2014**

Roland Stanley Glover (nicknamed "Ro" by close friends) was born in Manchester on 9 June 1922. He was educated at Leeds and Manchester Grammar Schools and went on to Manchester University where he was awarded a BSc in Zoology, Botany and Chemistry in 1944. This was followed by war-time studies into insect infestation of imported food grains carried out under C. E. Lucas (later Sir Cyril Lucas) at the University College Hull (1944-1946). His research was recognised by appointments first as Scientific Officer then as Honorary Lecturer in the Departments of Oceanography and Zoology at Hull. Ro Glover was then recruited in 1950 to the Edinburgh Oceanographic Laboratory (EOL) of the Scottish Marine Biological Association (SMBA), to work on Sir Alistair Hardy's Continuous Plankton Recorder (CPR) surveys. The CPR is an automated plankton sampler that has been towed behind commercial vessels and weather ships since 1931 (now operated by the Sir Alister Hardy Foundation for Ocean Science (SAHFOS) in Plymouth).



In the 1960s, Ro Glover oversaw an expansion of the CPR survey into the Atlantic and new developments of the CPR, which transformed the towed mechanical CPRs into undulating servo-powered samplers, that obtained vertically integrated (10-70m) samples of plankton. This resulted in new collaboration with US oceanographers, and an expansion of the Edinburgh staff from 12 to 36 scientists and engineers. In 1966 he was promoted to Director. Soon after, he made a strategic redirection of research at Edinburgh by integrating both experimental and field observations in marine biology and oceanography. This enabled a better understanding of the structure, function and performance of marine ecosystems. Together with his Edinburgh colleagues (J. M. Colebrook & G. A. Robinson), Ro Glover successfully applied this "systems ecology" approach to the CPR time series yielding a quantitative understanding and insight of phytoplankton, zooplankton and commercial fish larvae in the North Sea and the North Atlantic Ocean. The resultant biogeographic time series, which today comprises ~500 species of phyto- and zooplankton were found to be strongly coupled to large scale climate variability such as the El Niño and the North Atlantic Oscillation.

The success of this approach convinced the Natural Environment Research Council (NERC) and its Chairman Prof V.C Wynne-Edwards to set up a new Institute for Marine Environmental Research (IMER) in 1970 to also tackle shelf and estuarine ecosystems and marine pollution. At first it seemed possible that IMER might be established on the new campus of Heriot Watt but NERC decided in favour of Plymouth so as to promote new synergies with the fundamental research conducted at the Marine Biological Association (MBA). The relocation controversy was settled only after the involvement of the Secretary of State for Scotland and the UK Minister of Education and Science (Mrs Margaret Thatcher). NERC compensated Edinburgh with a new research unit from its Institute of Terrestrial Ecology.

Throughout the 1970s, Ro Glover worked tirelessly to enhance and relocated the CPR team from Edinburgh to Plymouth, and to integrate them with young marine biologists, physicists, chemists and computer specialists who were recruited and temporarily housed in converted premises. Thereafter he meticulously planned and supervised the construction of the new IMER research and experimental laboratories and ensured that they were equipped with the latest experimental, analytical, shipborne and computing facilities with a capacity for 160 staff. The new laboratory overlooking Plymouth Sound was finally inaugurated in 1977 by Dr David Owen MP and was his crowning glory.

In the following years he astutely identified several large scale marine themes which attracted 'core strategic' funding from NERC and from Government Departments. These included (1) the effects of climate variability on ocean plankton ecosystems, (2) the impact of a proposed tidal barrage on the Bristol Channel ecosystem, (3) The dynamics, fate and ecotoxicology of estuarine pollutants, (5) the complex ecophysiology of mussels in aquaculture and as water quality bioindicators.

Ro Glover insisted that IMER's commissioned research reports to UK Government were underpinned by peer-reviewed publications and citations ; this impressed NERC's visiting Review Groups, and laid the foundation for further growth within the European Framework Programmes launched in the 1990s.

Ro Glover's management was traditional and meticulous. He concentrated his energies on administrative and operational issues ensuring that IMER was well supported and resourced from NERC and Government. He deployed his considerable financial acumen, scientific reasoning and political links to the full. This made him a formidable, well-informed and razor-sharp member of NERC and Government research committees. His scientists were able to devote their efforts to creative research in the labs. and at sea, giving seminars and writing publications. However, all manuscripts had to pass his editorial check and were invariably returned with detailed comments in red pen and dated 25 December! Ro took a genuine curiosity in new oceanographic methods (e.g. HPLC analysis of phytoplankton pigments) and technological innovations, particularly novel acoustic and bioptical sensors, which were proudly fabricated in-house and 'marinised' on CPR tows to ensure years of real-time mapping of oceanic parameters in parallel with the plankton.

Ro Glover served as council member of the MBA, SMBA, and BES and as a Director of SAMS and SAHFOS. He served on the editorial boards of Marine Ecology Progress Series, Marine Biology, Journal of Applied Ecology and Journal of Plankton Research. He authored 86 publications, reports and reviews, many in top journals. He was elected a Fellow of the Royal Society of Edinburgh in 1960 and of the Institute of Biology (now the Society of Biology) in 1971.

Ro Glover's legacy is that he laid down, in Plymouth, the UK foundations for large scale marine ecosystem observation, experiments and their synthesis using simulation modelling. This ecosystem legacy lives on in the two highly successful organisations that followed on from IMER: the Plymouth Marine Laboratory (PML) and the Sir Alister Hardy Foundation for Ocean Science (SAHFOS). They continue to make substantial contributions to our understanding of the functional biodiversity of plankton, of global marine pollution, and of the global biogeochemical cycling of carbon, nitrogen and greenhouse gases, all of vital importance to Global Change Programmes eg SCOR, IGBP and IPCC.

Following his retirement in 1983, Ro Glover joined the Royal Society of Arts and took up oil and canvas to depict his beloved ocean. Thereafter, he shunned visits to his marine laboratory not wishing to 'shadow' his eminent successors. He died on 22 November 2014, aged 92, in Bournemouth. His wife Joyce (musician) predeceased him in 1995 and he is survived by two daughters, Celia (Schools administrator) and Judith (Emeritus Professor of Employment Studies).

**Professor (Emeritus) R Fauzi C Mantoura BSc PhD FRSC  
Former Director, Plymouth Marine Laboratory**

Roland Stanley Glover BSc, FSB, FRSE. Born 9 June 1922. Elected FRSE 1960. Died 22 November 2014.