

Dr. Andrew L. Miller

Andrew got both his BSc and PhD degrees in Botany from the University of Dundee, Scotland. For his PhD, he studied the electrical control of root development.

He then had post-doc positions, first in the Dept. of Cell & Molecular Biology at the University of Aberdeen, Scotland, where he continued to be a botanist, and then at the Marine Biological Laboratory, Woods Hole, USA, where he changed his field of research from plants to animals and started to investigate the role of Ca^{2+} ions in the early development of a variety of different biological systems, including squid eggs, Medaka fish embryos and *Xenopus* embryos, using the bioluminescent Ca^{2+} reporter, aequorin.

After completing his second post-doc, Andrew stayed on at the MBL, first as an Assistant Scientist and then as a Principal Investigator.

Andrew moved to Hong Kong in 1995, when he joined the faculty of the Dept. of Biology at HKUST. His research interests still involve using aequorin to investigate the role played by Ca^{2+} ions in the signal transduction pathways orchestrating embryonic development. The main animal models that he uses now are zebrafish and *Xenopus*. He is also keenly interested in developing the microscopy and image processing techniques required to collect and visualize ultra-low levels of photon emission from living cells and embryos.