CURRICULUM VITAE: MARK JOHNSON

Google Scholar profile: 8864 citations, h-index 48

EDUCATION

1992 PhD Electrical Engineering, University of Auckland.
Topic: Adaptive control methods for active cancellation of machinery noise.
1986 BE (1st class honors) Electrical Engineering, University of Auckland

EMPLOYMENT

2020	Principal Research Fellow, Sea Mammal Research Unit / School of Biology, University of St. Andrews
2012-2020	Senior Research Fellow, Sea Mammal Research Unit / School of Biology, University of St. Andrews
2005-2011	Senior Engineer, Applied Ocean Physics and Engineering, Woods Hole Oceanographic Institution
1993-2005	Research Engineer, Applied Ocean Physics and Engineering, Woods Hole Oceanographic Institution
1992	Research Fellow, Acoustic Research Centre, University of Auckland

TECHNOLOGY DEVELOPMENT AND COMMERCIALIZATION

Co-invented the Micro-Modem underwater acoustic data communication device (https://acomms.whoi.edu/micro-modem).
Invented the DMON underwater sound recorder (www.dcs.whoi.edu).
Co-invented the SOUNDTRAP autonomous recorder (www.oceaninstruments.co.nz).
Invented the DTAG sound and movement recording tag (www.soundtags.org).
Developed open-source software tools to support the DTAG (www.soundtags.org).
Invented a miniature sound and movement tag for bats and birds.
Co-developed open-source software for analysing data from biologging tags (www.animaltags.org).
Invented a long duration sound and position monitoring tag for marine and land mammals.
Invented an active sonar tag for tracking aquatic predator-prey interactions.
Developed an open-source low power sound compression algorithm (www.soundtags.org/dtags/audio_compression).
Participated in knowledge exchange projects with industrial partners funded by NERC (UK Govt.) and ONR (US Govt.).
Co-owner of IP for underwater data communications commercialised by WHOI (USA).
Co-developed with University of Michigan a loan facility of biologging tags funded by ONR (USA).

GRANTS, SERVICE AND AWARDS

Principal investigator on numerous grants from U.S. government agencies and private foundations including: NOPP, ONR, NOAA, U.S. Navy, MMS, NFWF, Packard Foundation.
Chief scientist on more than 30 research cruises.
Visiting Professor, Dept. Bioscience, Aarhus University, Denmark, 6 months in 2018.
Visiting Fellow, International Campus of Excellence, University of La Laguna, Spain, 2019.
Fellow of the Acoustical Society of New Zealand.
Marie Curie Career Integration Grant, 2012-2015
W. M. Marquet Senior Technical Staff Award, Woods Hole Oceanographic, 2010.
Workshop organiser and scientific committee of several international conferences.
Member of committee defining best practice for cetacean tagging (ONR, US Government).

TEACHING AND STUDENT TRAINING

Teacher of graduate-level modules on biologging and bioacoustics.
Co-teacher of the South Denmark University 'Animal Communication' PhD short course.
Co-organiser and teacher of 'On-animal movement sensing' PhD short course (www.animaltags.org).
Supervisor/Co-supervisor of 7 PhD students.