

### QUALIFICATIONS

BSc, University of Auckland, 1983  
 MSc, University of Auckland, 1985  
 PhD, University of Otago, 1992

### PROFESSIONAL AFFILIATIONS

Associate Investigator, Maurice Wilkins  
 Centre for Molecular Biodiscovery,  
 University of Auckland, N.Z.

Associate Investigator, Leigh Marine  
 Biology Laboratory, University of Auckland,  
 N.Z.

New Zealand Society of Endocrinology  
 Animal Behavior Society (U.S.)

### ROLE AT CAWTHRON

Andrew Fidler is an experienced molecular biologist who currently works on the population genetics and molecular evolution of tunicates and molecular genetic aspects of a Greenshell™ mussel (*Perna canaliculus*) selective breeding programme.

In addition, Andrew maintains his long-standing interest in animal behavioural genetics and associated conservation biology issues.

### SPECIAL INTERESTS

- Molecular genetics and biology of marine invertebrates
- Genetic influences on the behaviours of free-living animals
- Conservation biology

### SELECTED PUBLICATIONS

Smith KF, Stefaniak L, Saito Y, Gemmill CEC, Cary SC, **Fidler AE** 2012. Increased inter-colony fusion rates are associated with reduced COI haplotype diversity in an invasive colonial ascidian *Didemnum vexillum*. PLoS ONE (in press).

**Fidler AE**, Holland PT, Reschly EJ, Ekins S, Krasowski MD 2012. Activation of a tunicate (*Ciona intestinalis*) xenobiotic receptor orthologue by both natural toxins and synthetic toxicants. Toxicon 59, 365–372.

Smith KF, Cahill PL, **Fidler AE** 2010. First record of the solitary ascidian *Ciona savignyi* Herdman, 1882 in the Southern Hemisphere. Aquatic Invasions 5: 363 – 368. doi: 10.3391/ai.2010.5.4.05.



**Fidler AE** 2010. Personality-associated genetic variation in birds and its possible significance for avian evolution, conservation and welfare. In 'From Genes to Animal Behavior', Inoue-Murayama M. et al. (eds.) Primatology Monographs. pp 275 – 294. Springer Verlag (DOI 10.1007/978-4-431-53892-9\_13 / ISBN: 978-4-431-53891-2).

Steiger SS, **Fidler AE**, Mueller JC, Kempnaers B 2010. Evidence for adaptive evolution of olfactory receptor genes in nine bird species. Journal of Heredity 101, 325-333.

Steiger SS, **Fidler AE**, Kempnaers B 2009. Evidence for increases in olfactory receptor gene repertoire sizes in two nocturnal bird species with well-developed olfactory ability. BMC Evolutionary Biology 9,117.

Steiger SS, **Fidler AE**, Valcu M, Kempnaers B 2008. Avian olfactory receptor gene repertoires: evidence for a well-developed sense of smell in birds? Proceedings of the Royal Society Series B. 275, 2309-2317.

**Fidler A**, Lawrence SB, McNatty KP 2008. A hypothesis to explain the linkage between kakapo (*Strigops habroptilus*) breeding and the mast fruiting of their food trees. Wildlife Research 35, 1 -7.

Johnsen A, **Fidler AE**, Kuhn S et al 2007. Avian *Clock* gene polymorphism: evidence for a latitudinal cline in allele frequencies. Molecular Ecology 16, 4867 – 4880.

**Fidler AE**, van Oers K, Drent PJ, Kuhn S, Mueller JC, Kempnaers B 2007. *DRD4* gene polymorphisms are associated with personality variation in a passerine bird. Proceedings of the Royal Society B. 274, 1685 – 1691.