

Targeting environmental and genetic aspects affecting life history traits

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Curriculum Vitae

Curriculum Vitae

Egon was born on December 9th 1978 in Rotterdam, the Netherlands as Egon Alexander Baldal. He followed elementary school in the small village of Poortvliet at O.B.S. De Eevliet. After finishing this in 1991, he hurried to the Mollerlyceum, a Catholic high school in Bergen op Zoom, where he graduated in 8 disciplines, including the exact sciences and Dutch, English and Geography. Swiftly, he went to Groningen in 1997 to study Biology where he finished his propaedeuse in one year and graduated in 4 and half years, in March 2002, as a biologist with specializations in marine biology and population genetics. He acquired evolutionary genetic research experience on conditional lethals in *Drosophila melanogaster*. This was followed by a minor research project on nitrogen fixation in marine Cyanobacteria at the NIOO-CEME (Yerseke). On May 1st, labour day, 2002 he commenced his Ph.D. project on the genetics of starvation resistance in *Drosophila* in Leiden.

There he got involved in scientific research on a wide variety of disciplines, varying from molecular and quantitative genetics, via physiology to environmental manipulation and experimental evolution. In this project he worked with epidemiologists and gerontologists of the LUMC and industrial partners. He attended courses in Bioinformatics (EMBO, Maynooth Ireland), Life history theory (Graduate school Functional Ecology), Analysis of micro arrays (Medical Genetic Centre - Zuidwest), Patenting and intellectual property (IOP), Introduction to policy making, and Introduction to Management (PAO). He also attended a workshop on Environmental stress (Ronbjerg, Denmark). He presented his work at meetings in Leeds (2003, ESEB X, United Kingdom, poster), Texel (2003, Verweij meeting, poster), Utrecht (2003, 3rd annual fly meeting, oral presentation), Wageningen (2005, Dutch entomologists day, oral presentation) and Sandbjerg (2004, ESEB workshop on stress and evolution, Denmark, oral presentation). Furthermore, he organised and hosted a symposium on "Biology and ageing; an integrative approach" at the 2005 ESEB meeting in Krakow, Poland.

During his Ph.D. he trained four master students; Wouter Teunissen (on the effects of age on glycogen and fat content in *Drosophila melanogaster*), Jung van der Meulen (on the effects of dietary additives on longevity in two species of *Drosophila*), Wishal Baktawar (on the environmental dependence of life history advantages in the long-lived mutant *methuselah*) and Jamie Graham (on quantitative Real-Time PCR of candidate longevity genes in *Drosophila*). Also, he trained an MLO-3 technician, Hamda Mohamad Ali (various work on *methuselah*). He participated in teaching the second year evolutionary biology course at Leiden University, lecturing molecular evolution and participated in the master course on ecology and evolution, lecturing on ageing, tradeoffs and the pitfalls of genetic correlations.

His extracurricular activities consisted of membership of the IBL institution's council for two years and being member of the financial control committee of GeNeYouS. He also participated in the Grenspost (Museon, Den Haag) and Klokhuis 750 vragen (NEMO, Amsterdam) educational projects for elementary school pupils.

Currently he is employed as a lecturer in Biology at the Roosevelt Academy in Middelburg and as an ecological advisor for the National Institute for Coastal and Marine Management (Rijkswaterstaat, RIKZ) in The Hague.

Publications

Publications

Published

- Baldal, E.A., P.M. Brakefield, and B.J. Zwaan. (2006). Multitrait evolution in lines of Drosophila melanogaster selected for increased starvation resistance: the role of metabolic rate and implications for the evolution of longevity. Evolution 60(7): 1435-1444.
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- Mooijaart, S. P., B. W. Brandt, E. A. Baldal, J. Pijpe, M. Kuningas, M. Beekman, B. J. Zwaan, P. E. Slagboom, R. G. J. Westendorp, and D. van Heemst. 2005. *C. elegans* DAF-12, nuclear hormone receptors and human longevity and disease at old age. Ageing Research Reviews 4:351-371.

In press

Baldal, E. A., W. P. Baktawar, P. M. Brakefield, and B. J. Zwaan. Experimental Gerontology, in press. *Methuselah* life history in a variety of conditions, implications for the use of mutants in longevity research

Submitted

Baldal, E. A., R. G. J. Westendorp, P. M. Brakefield, and B. J. Zwaan. submitted. A test of the thrifty phenotype hypothesis in *Drosophila melanogaster*.