**Curriculum Vitae for Luke Alphey**

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**Phone:** 01483-232441 **e-mail:** luke.alphey@pirbright.ac.uk **Nationality:** British

**Education:**

BA, MA Natural Sciences (Genetics); Christ’s College, Univ. of Cambridge (1981-1984)

PhD Department of Biochemistry; University of Dundee (1984-1988)
MBA The Open University (2010-2013)

**Current position:**

02/2014-present Group Leader, Vector-borne Viral Diseases, The Pirbright Institute

**Other positions held:**

02/2014-present Non-executive director, Oxitec Limited, UK

2011 – present Chairman, GeneFirst Ltd (molecular diagnostics SME)

2008 – 01/2014 Director and Chief Scientist, Oxitec Limited, UK

 Visiting Professor in Zoology, University of Oxford

2002 – 2008 Reader in Genetics at Dept. of Zoology, University of Oxford and Founder, Director and Chief Scientist, Oxitec Limited, UK

1997 – 2002 MRC Senior Research Fellow at Dept. of Zoology, University of Oxford

1994 – 1997 Lecturer in Biological Sciences at the University of Manchester.

1988 - 1994 Post-doctoral research at Imperial College London and Dundee University

**Other roles**

UK Medical Research Council (MRC) Advisory Board member 1998-2005; Member of the Royal Society working party on GM animals (report published 2001); Steering committee member for the Pew Initiative on Food and Biotechnology public conference “Biotech Bugs – a Look at Science and Public Policy Surrounding the Release of Genetically Modified Insects”; Member of WHO Scientific Working Group on Dengue 2006-; Member of North American Plant Protection Organization (NAPPO) Expert Working Group on RSPM 27 (“Importation and Confined Release of Transgenic Arthropods in NAPPO Member Countries”), 2006-; Member of WHO/TDR consortium developing best-practice guidelines for deployment of genetic control methods against mosquitoes 2008-; Panel member “LS9: Applied Biology and Biotechnology”, ERC Advanced Grants 2008-2011; Hearing Expert, European Food Safety Authority (EFSA) GM insects Working Group 2011-; UK industry representative, Strategic Advisory Board, ERA-SynBio 2013-; Member of UK Scientific Advisory Committee on Genetically Modified Organisms (Contained Use) [SACGM(CU)] 2014-16

**Awards and honours**

Selected as Technology Pioneeer 2008 by the World Economic Forum. Runner-up BBSRC Innovator of the Year 2009. Overall Winner & Best Green Technology, Martin & Audrey Woods Enterprise Awards 2009. Finalist, FT ArcelorMittal Boldness in Business Awards 2011. Overall Winner & Social Innovator of the Year, BBSRC Innovator of the Year Awards 2014. Winner, Entomological Society of America Innovation Award (Nan-Yao Su Award) 2014

**Publications**

Published >100 papers including *Cell*, *Science*, *Nature Genetics* and *Nature Biotechnology.*

Selected publications since 2010, as corresponding author:

Fu, et al (2010) A female-specific flightless phenotype for mosquito control. PNAS 107:4550-4

Alphey, et al. (2010) Sterile-insect methods for control of mosquito-borne diseases – an analysis. VBZD, 10:295-311

Wise de Valdez, et al. (2011). Genetic elimination of dengue vector mosquitoes. PNAS 108:4772-4775

Simmons, et al. (2011). Field performance of a genetically engineered strain of pink bollworm. PLoS One *6*, e24110

Harris, et al. (2011). Field performance of engineered male mosquitoes. Nature Biotech29:1034-7

Ant, et al. (2012). Control of the olive fruit fly using genetics-enhanced SIT. BMC Biology, 10:51

Harris, et al. (2012) Successful suppression of a field mosquito population by release of engineered male mosquitoes. Nature Biotech., 30:828-830

Lacroix et al. (2012). Open Field Release of Genetically Engineered Sterile Male *Aedes aegypti* in Malaysia. PLoS One, 7: e42771

Jin, et al. (2013). Engineered female-specific lethality for control of pest Lepidoptera. ACS Synthetic Biology, 2:160-166

Marinotti, et al. (2013). Development of a population suppression strain for a vector of human malaria, *Anopheles stephensi*. Malaria Journal,12:142

Tan, et al. (2013). A transgene-based, female-specific lethality system for genetic sexing of the beneficial insect, *Bombyx mori*. Proc. Nat’l Acad. Sci. (USA) 110:6766-70

Alphey, L.(2014). Genetic Control of Mosquitoes. Annual Review of Entomology 59:205-224