

David Baulcombe

Dept. Plant Sciences, University of Cambridge, Downing Street, Cambridge CB2 3EA

phone: (44)(0) 1223 339386

fax: (44)(0) 1223 339953

email: dcb40@cam.ac.uk

website: www.plantsci.cam.ac.uk/research/davidbaulcombe.html

- **Personal and Higher Education**

British citizen; married with four children; interests include music, sailing and hill walking

1970 - 1973 University of Leeds B.Sc (I) - Botany

1973 - 1977 University of Edinburgh Ph.D - Botany

- **Career**

Jan. 1977 - Nov. 1978 McGill University, Montreal, Canada; Post-doctoral Fellow

Dec. 1978 - Dec. 1980 University of Georgia, Athens, GA; Post-doctoral Fellow

Dec. 1980 - Aug.1988 Plant Breeding Institute, Cambridge, UK; Higher Scientific Officer (from April 1986 Principal Scientific Officer)

Aug.1988 - Aug. 2007 The Sainsbury Laboratory, Norwich, UK; Senior Research Scientist and Head of Laboratory (from 1990-1993 and 1999-2003), Professor of University of East Anglia (2002-7)

Sep. 2007 – onwards University of Cambridge, Cambridge UK; Regius Professor of Botany, Royal Society Research Professor and Head of the Department of Plant Sciences.

- **Professional Interests**

Much of my current research follows from the discovery in my Norwich laboratory of a novel type of regulatory RNA - siRNA. Current projects in the laboratory focus on the mechanisms of siRNA-mediated regulation and their influence on natural variation. In this respect, my work links with JS Henslow who was Professor of Botany in the nineteenth century and who influenced Darwin. I am also interested in the influence of siRNA on heritable effects that do not involve changes to the sequence of the genome. Understanding these 'epigenetic' effects is central to any discussion about nurture and nature.

Outside the laboratory I promote the use of plant biotechnology for crop improvement. I am particularly interested in technologies addressing problems in developing countries and participate in a consortium that addresses sweet potato virus disease. I plan to initiate other projects on strategies for developing disease resistant germplasm. These strategies include but are not restricted to GM technologies.

- **Honours and Awards**

Fellow of the Academy of Medical Sciences (elected 2010); **Wolf Prize for Agriculture** (2010) Wolf Foundation Israel; **Harvey Prize in Science and**

Technology (2009) Technion Israel Institute of Technology ; **Knight Bachelor**, (Queens Birthday Honours list 2009); **Fellow, Trinity College Cambridge** (elected 2009-); **Albert Lasker Award for Basic Medical Research** (2008) Lasker Foundation (shared with Ambros and Ruvkun); **Honorary Doctorate** (2008) Wageningen University, The Netherlands; **Benjamin Franklin Medal in Life Science** (2008) Franklin Institute, Philadelphia (joint with Ambros and Ruvkun); **Special Achievement Award** (2008) Miami Winter Symposium; **Royal Medal** (2006) The Royal Society; **Massry Prize** (2005) Massry Foundation – University of Southern California (shared with Fire and Mello); **Foreign Associate Member of the National Academy of Sciences (USA)** (elected 2005); **M.W. Beijerinck Virology Prize** (2004) Royal Netherlands Academy of Arts and Sciences; **Wiley Prize in Biomedical Science** (2003) (Wiley Foundation – Rockefeller University - shared with Fire, Mello and Tuschl); **Academia Europaea**, Member (elected 2002); **Ruth Allen Award**, American Phytopathology Society (2002); **Kumho Science International Award in Plant Molecular Biology and Biotechnology** (2002) Kumho Cultural Foundation, Korea; **Fellow of the Royal Society** (elected 2001); **President** International Society of Plant Molecular Biology (2003-2004); **Honorary Professor**, University of East Anglia (1998-2002); **European Molecular Biology Organisation**, Member (elected 1997); **Prix des Cerealiers de France** (1990) for work on hormonally regulated genes of cereals

- **Current and recent miscellaneous activity**

Editorial: Faculty of 1000 (Head of Section Plant Genetics and Gene Expression (2001-); EMBO Journal (1999-) and EMBO Reports (Editorial Board) (1999-); Genome Biology (2005-); Cell Host and Microbe (2005-); Cell (2009-); Proceedings of the National Academy (2009-); Silence (2009-)

Scientific Advisory and other Boards: National Institute for Biological Sciences, Beijing (2006-2009); College of Life Sciences University of Dundee (2008-); Lawes Agricultural Trust (2009-); National Institute of Agricultural Botany (Board Member, 2009-); Pepsico Science Advisory Board (2010-); Danforth Centre, St Louis (2011-);

Panel and Committee member: Royal Society study group on contributions of science to food crop production (2008-2009); Biotechnology and Biological Sciences Research Council (Member, 2009-2013) and Strategy Advisory Board (Member 2010 -2013)

- **Current grant funding**

BBSRC/DFID BB/F004028/1 How resistant plant varieties avoid suppression of RNA silencing by viruses as exemplified by sweetpotato: Better food security through virus control (Joint with groups in UK, Uganda and Peru) (2008 – 2011)

BBSRC BB/E006981 'SIROtyping: siRNA and miRNA profiles of tomato' start 1-3-2007 until 30-09-2010 £684K

EUFP6 EU Integrated grant 'SIROCCO' start 1-1-2007 – 31-09-2012 E11.7M (Consortium grant with groups through Europe and in Singapore (approximately E600K to Baulcombe laboratory) <http://www.sirocco-project.eu/>

EU FP7 Small or Medium Scale Focussed Research Project 'AENEAS' 1-3-2009 to 28-3-2012 Acquired Environmental Epigenetics Advances: from Arabidopsis to maize (E350K) <http://www.aeneas-a2m.eu/>

ERC-2008-Advanced Investigator Grant (233325) 'REVOLUTION' 1-3-2009 28-2-2014 (RNA mediated regulation in growth, development and evolution (E2.3M))
Gatsby Charitable Foundation – RNA silencing in plants (2007-)