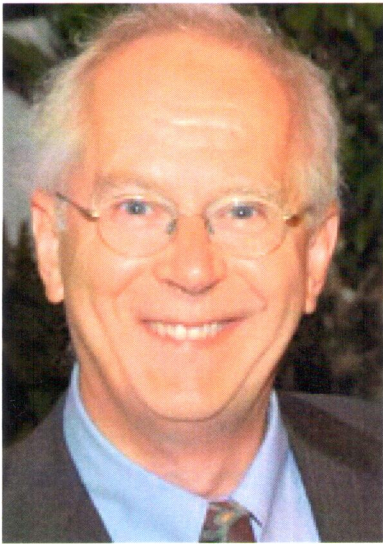


# INDIANA UNIVERSITY DEPARTMENT OF BIOLOGY

## THE SONNEBORN LECTURE 2007

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**DAVID BAULCOMBE**  
Cambridge University

### “The Biogenesis and Roles of Small Silencing RNAs”

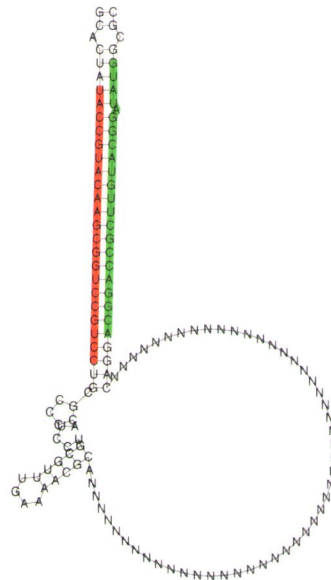
**Wednesday, Oct. 17  
4:00pm, Myers 130**

David Baulcombe is Professor of Botany at Cambridge University in the United Kingdom. He obtained his B.Sc. from Leeds University and his Ph.D. from the University of Edinburgh. He then performed postdoctoral research at McGill University in Montreal and at the University of Georgia in Athens, before becoming a project leader at The Plant Breeding Institute in Cambridge, UK. In 1988 he moved to The Sainsbury Laboratory in Norwich, UK, where he held the position of Senior Scientist until September of this year.

Dr. Baulcombe has earned numerous awards and honors, including the Massry Prize and Wiley Prize, both of which were shared with recent Nobel Laureates Craig Mello and Andy Fire. He is a Fellow of the Royal Society and a Foreign Associate Member of the National Academy of Sciences (USA). He has published over 150 research and review articles.

Dr. Baulcombe has wide interests in plant molecular biology. He has researched the effects of plant hormones on gene expression and pioneered the use of genetic modification to develop virus-resistant crop plants. Currently he works on RNA-silencing systems that protect against viruses and mobile elements of DNA. His group has identified many components of the RNA silencing machinery. A key discovery was the short RNAs that determine the specificity of RNA silencing. Dr. Baulcombe’s work in this area has emphasized the importance of plants as model systems for basic biology. His findings are highly relevant to RNA interference in animals and they have direct implications for biomedicine.

Dr. Baulcombe’s recent interests have focused on RNA silencing and its effects on growth, development and evolution in addition to its roles in defense. His research embraces a systems level analysis of RNA silencing and its influences – direct or indirect – on gene expression. These analyses are revealing a complex cascade of gene regulatory networks mediated by small silencing RNAs.



*Secondary structure plot of miRNA  
candidate from Chlamydomonas*

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A reception in the Jordan Hall atrium  
will follow the lecture.