



## Rationale for *Drosophila* outreach

There is important rationale for *Drosophila* outreach and science communication at many levels.

First, public engagement benefits our own research, as it often improves the ways we think about it and how we sell it to grant panels and in publications. Furthermore, it helps students and young postdocs see the bigger picture including fly history and, through this awareness, make better use of *Drosophila*. This is important especially in times where the arsenal of tools, techniques and knowledge for fly research is constantly improving and the field of Genetics has entered a new era. Awareness of the historical roots of the classical genetics we daily apply in our laboratories and capitalising on its wealth of information and ideas will help maintain *Drosophila* research at its full potential.

Second, promoting awareness of *Drosophila* as an important pillar in the process of scientific discovery will have long-term impact on science policies and help sustain funding for fly research. As fly researchers, we tend to know the essential reasons, have learned about the pioneering contributions of the fly to the many fields of biology, and we directly experience how a powerful body of knowledge grown for >100 years accelerates our work enormously. But how clear is all this to non-fly researchers and clinicians, especially in times where "omics" approaches and human genetics produce ever more relevant genes and processes crying out for explanations? Is the general public aware of the prolific yet cost-saving nature of fly research, in times where state budgets shrink and public opinion has increasing impact on funding policies?

Third, regarding costs, are those on a low budget, including disadvantaged countries, aware of the fact that flies offer realistic opportunities to perform state-of-the-art science? Underdeveloped regions need high-quality science and scientists with strong backgrounds in genetics and cell biology to study the biological bases of health problems and develop affordable solutions to solve them. *Drosophila* research can aid this process and, in the long run, help improve higher education and have further beneficial input into the economic development of those countries.

Fourth, we need to make better use of *Drosophila* as a teaching tool in schools, thus spreading awareness of its importance in most powerful ways. There is hardly any animal in which fundamental biology is conceptually better understood, and experiments with flies are cheap and straightforward. This makes *Drosophila* a rich and entertaining teaching tool to address a wide range of biology topics in schools, far beyond its classical uses as a substitute for Mendel's peas. Using *Drosophila* in this way helps teachers and it also provides a fantastic means to bring our scientific subjects into schools and promote their understanding.

Finally, active science outreach and communication promoting the importance of *Drosophila* research is a sensible way to serve the request of funding organisations for public engagement and other impact-generating side activities, whilst supporting the fly community and its longstanding collaborative tradition.

For further information see [www.flyfacility.ls.manchester.ac.uk/forthepublic](http://www.flyfacility.ls.manchester.ac.uk/forthepublic)