The Basel Declaration: Standing up for Medical Progress

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Top European scientists have pledged to engage in more public dialogue, openness, and education about animal research. Concerned about threats to the future of medical research, the scientists met recently and drafted a declaration that affirms commitment to responsible research and animal welfare and calls for increased effort to facilitate public understanding of the essential role that animal studies play in contributing to scientific and medical progress. The call for "trust, transparency, and communication on animal research" was adopted by the first Basel conference. "Research at a Crossroads" November 29th. The Declaration can be found here, along with an invitation to sign up to it.

The Declaration underscores the importance of a wide range of animal research, from basic research that seeks to understand fundamental biological processes, to applied research that seeks to turn such knowledge into new medical treatments, and the critical ongoing need for this work:

"Over the last 100 years biomedical research has contributed substantially to our understanding of biological processes and thus to an increase in life expectancy and improvement in the quality of life of humans and animals. However, the list of challenges and new opportunities remains long.

Without research using animals, it will not be possible to overcome the social and humanitarian challenges posed by these problems. Despite new and refined alternative methods, animal experiments will remain essential in the foreseeable future for biomedical research."

The Declaration makes clear that:

"Biomedical research in particular cannot be separated into "basic" and "applied" research; it is a continuum stretching from studies of fundamental physiological processes to an understanding of the principles of disease and the development of therapies."
A Nature report on the meeting and accompanying editorial highlight the crucial considerations underlying the scientists’ call for action, including not only the actions of extremists, but also the broader consequences of failing to build understanding of animal research.

Biomedical scientists in Germany perceive a distant crisis—increasing legislative restrictions that make it more difficult to carry out animal experiments. Hearing this, the wider public tends to assume that animal experiments are an unnecessary evil, so politicians respond with more restrictions.

That problem was a major motivation for the Basel Declaration—drafted and signed at a meeting in Basel, Switzerland, last week (see June 7). It signed an pledge to engage in open debate with the public about their work on animal experiments, to stress the high ethical standards to which they adhere, and to explain why they have to do it. They intend, for example, to visit local schools or to mention that their research used animals when speaking to the press about new results.

Such efforts have already yielded dividends; the Nature report notes how a determined effort over the past decade by scientists in the United Kingdom to inform the public about the reality of animal research resulted in greatly increased support for it.

Speaking of Research applauds this effort and joins in urging others not only to sign on to the declaration, but also to act on the pledge to continue to increase efforts in outreach, education, and engagement.

In fact, there are many groups and sources for information and conversation to which scientists can refer for advice on outreach. They include advocacy groups and collaborative networks such as Understanding Animal Research, Americans for Medical Progress, United States for Biomedical Research, and the Foundation for Biomedical Research. They also include scientific societies such as the American Physiological Society, Society for Neuroscience, American Association for Laboratory Animal Science, and the Federation of American Societies for Experimental Biology.

Many academic institutions have created outreach and education programs that offer good models for others.

Speaking of Research also offers information, tools, and support for those who choose to contribute to public discussion of animal research. There are many resources and services to support individuals who want to learn more and identify a range of effective ways to contribute to the public discussion of animal research.

Before we finish, we’d like to draw your attention to an excellent example of the importance of basic animal research. Christina Agapian writes on the OsirisBlog blog about a fascinating study which used gene therapy to restore vision in blind mice.

This news comes only a few weeks after scientists in Germany reported that they had used a virus to contain light-sensitive elements in partially-ablated mice, who were blinded due to damage to the light-sensitive cells in their eyes. In an open access paper published in Proceedings of the Royal Society B, the team who carried out this important clinical study highlight the importance of in vivo studies in rats, cats, and pigs, and in vivo studies using isolated human retinas, in establishing both the theoretical basis for this study, and subsequently in determining the safety of the implant they developed. These advances in vision research suggest that devices available to help blind people see in the 21st century will soon eclipse those that Star Trek predicted for the 24th century.
This is of course exactly the kind of groundbreaking biomedical research that the Basel declaration seeks to defend.

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*The views expressed on this blog post are mine alone and do not necessarily reflect the views of my employer, Wake Forest University Health Sciences.