







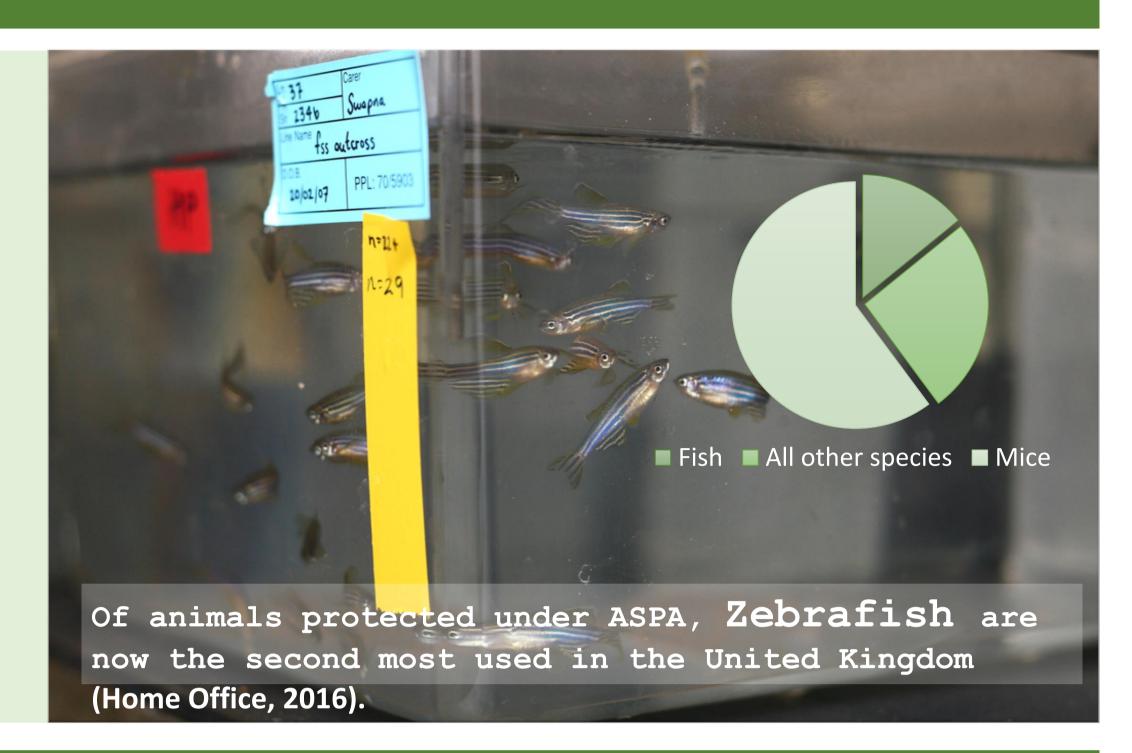
Accommodating new species in the animal research nexus

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In response to stakeholder interest (see Davies et al. 2016), this research strand seeks to explore the implications of animal care of using new and different species in animal research for established infrastructures, practices and experiences.

The explosion in popularity of zebrafish as a model organism raises many questions. There are uncertainties in our basic understanding of laboratory fish needs, and disagreements about the capacity of fish for sentience are ongoing and increasingly public in nature. Fish also occupy unique positions culturally, and engender different kinds of human-animal bonds. These factors all influence understandings of welfare, the delivery of care, and the formation and implementation of regulations.



Research question and preliminary findings

How does the introduction and spread of a new species, like zebrafish, shape and transform practices of ethical review, 3Rs, animal care, public engagement and understandings of animal

Our work began in October 2017. Preliminary findings include:

- Social attitudes towards fish vary depending on context, and both shape and are shaped by the status of fish in regulation
- The understanding of the welfare requirements of laboratory fish lags behind that of rodents
- Aquatic species present unique husbandry challenges for laboratory technicians, and challenge conventional thinking about care
- Fish husbandry practices vary considerably, raising questions about the need for standardisation
- There is no ethical consensus on whether the use of zebrafish embryos and larvae should be considered a refinement or a replacement for adult fish, or neither.

Questions for you

How can the social sciences contribute to understanding the development of standards in zebrafish husbandry and welfare?

How can we help facilitate debate and exchange around important issues in fish research, for example, discussions around fish sentience, concerns about reproducibility, or the onset of protected life stages in fish?

What can we learn from zebrafish about the broader challenges of introducing and accommodating new species in the laboratory?

Public engagement



the ways in which diverse actors - from neuroscientists to

anglers, animal technicians and artists - think about the mental

and emotional lives of fish.



#fishfeelpain

"Fish rights" is becoming a campaigning issue. Is this a symptom of changing public attitudes towards fish and other aquatic species?



References and credits

Gail Davies et al. (2016). 'Developing a collaborative agenda for humanities and social scientific research on laboratory animal science and welfare', Plos One 11(7): e0158791.

The Home Office (2016). *Annual Statistics of Scientific Procedures on Living Animals Great Britain* 2016. National Statistics, HC231.

Understanding Animal Research (https://flic.kr/p/dwDFuB); @letfishlive Twitter (letfishlive.org/); Bentley Crudgington

Most of all, we'd like to thank everyone who has agreed to be interviewed, guided us, and helped us in our research to date.