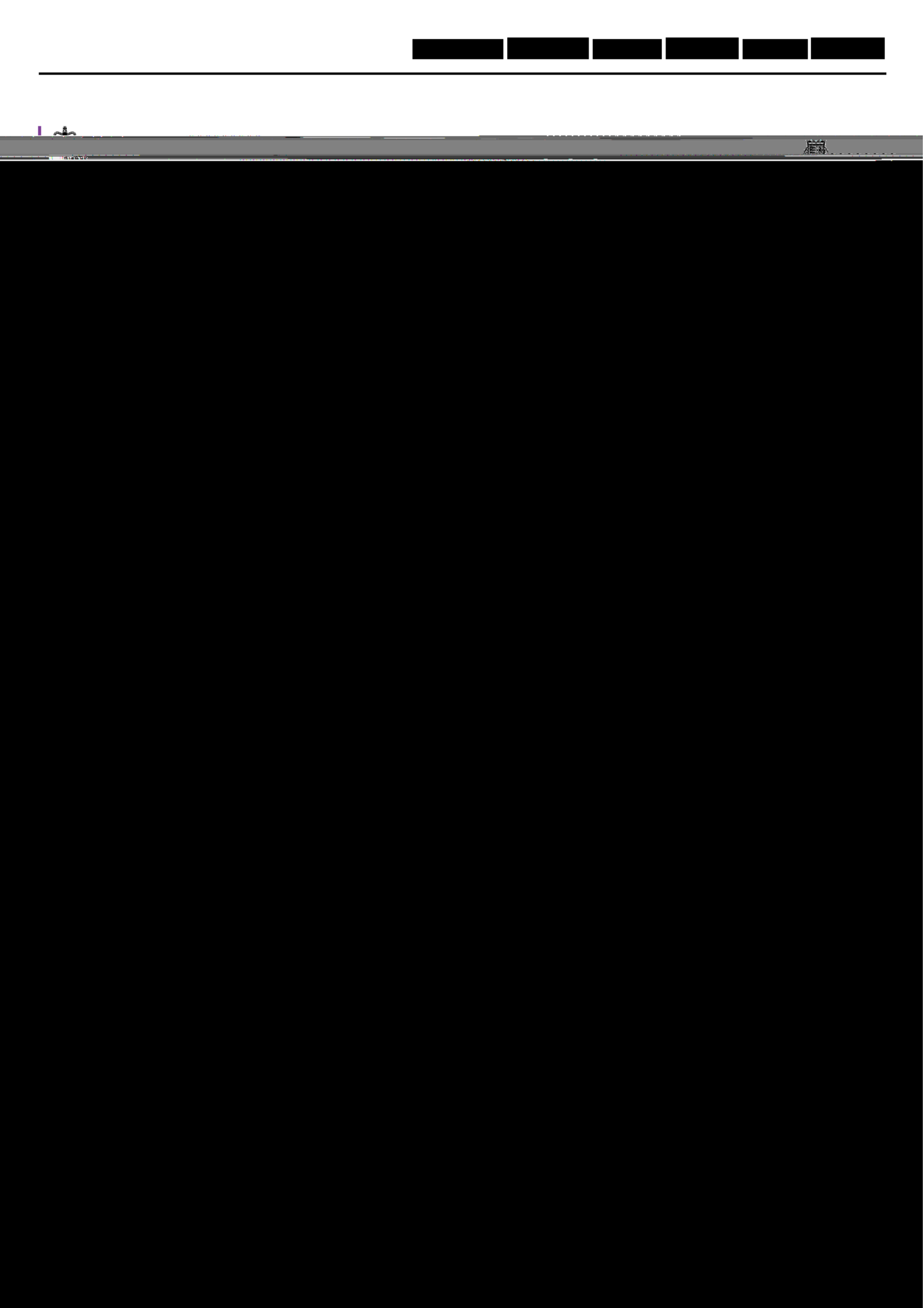

tissues from the same mouse.

We also cannot use early stage mouse embryos because the adaptive immune system does not develop until late stages of embryogenesis.

Although some species including C elegans are established models of ageing, their lack of an adaptive immune system makes them unsuitable for our studies.

We are mindful of increased possibility of welfare costs as mice age, and we have implemented a programme of increased frequency of observation of these mice. We have developed a detailed checklist of possible age related changes, and procedures for monitoring and treatment, which informs our decisions. We will gather data from these studies to further refine best practice.

We will implement any refinements developed by our animal house staff, who have a long history of innovative practice, including environmental enrichment.

We will follow published best practice guidance from NC3Rs, LASA and the Home Office.

We will stay informed about advances in the 3Rs during this project via the monthly NC3Rs e-newsletter, NC3R workshops and webinars, and our annual Institute 3Rs seminar. We will avail of Home office advice made available to us through our dedicated Home Office Liaison.

To implement advances effectively, we will follow advice from our local AWERB. Our animal facility also has a dedicated Strategy Committee and a User group, on which we are represented. Both groups discuss and make collective decisions about advances in the 3Rs and advise on how they can be implemented, both across the organisation, and by individual groups.