Managing laboratory commodities: sourcing, moving, and caring for animals

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The research context

- Reproductive biotechnological advancement
- Increasing availability of biobanks to cryogenically store life
- Societal concern towards animal research interrupting supply routes for live research animals
- Seeking opportunities to rehome animals
- Recognition of emotional burden of culling ‘waste’ animals.

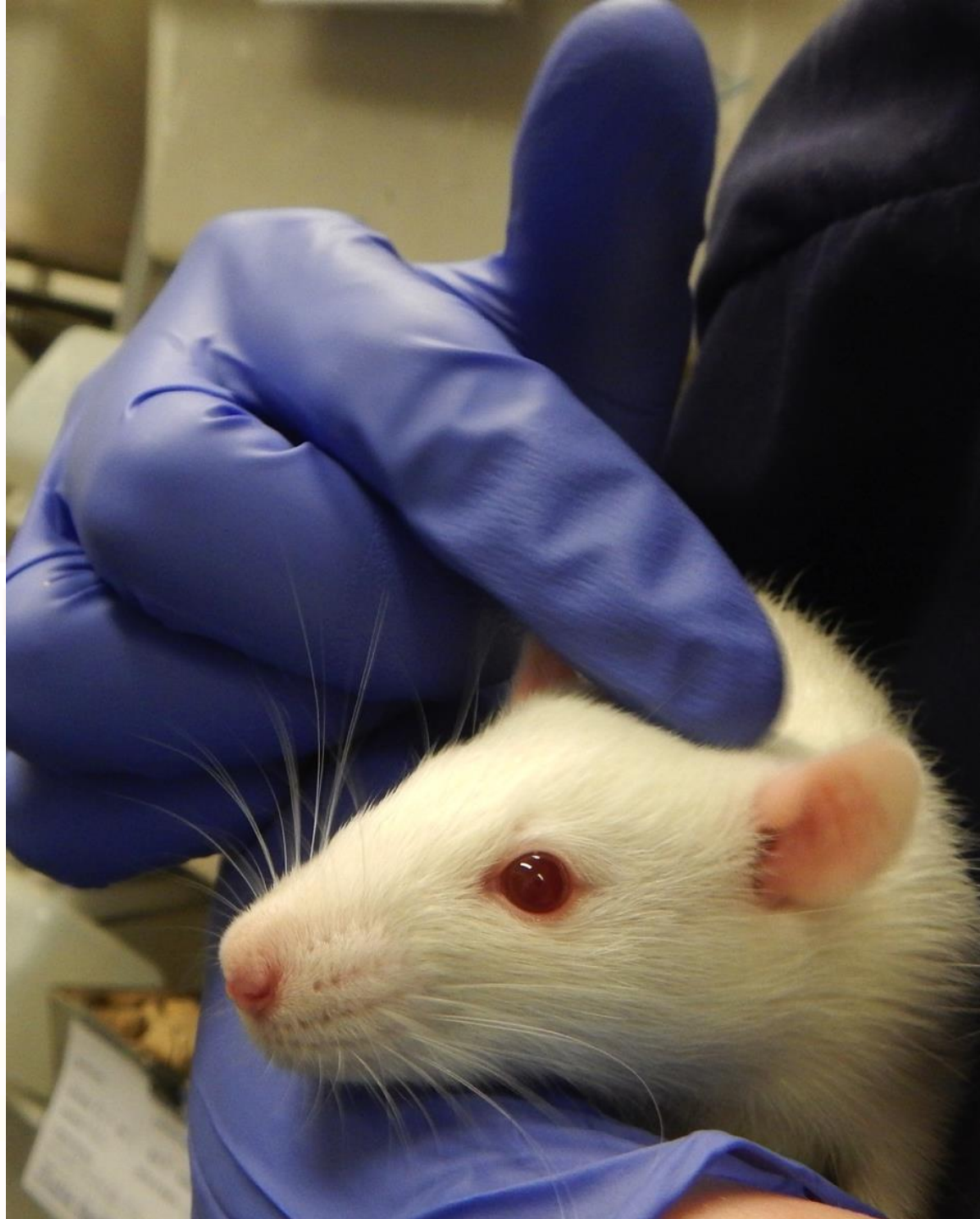
Cultural economic approach

- Not studying the economy solely as a product of rational thought and capital-generating logic

…BUT to instead study the economy as also a product of changing cultural emphasizes and emotions.

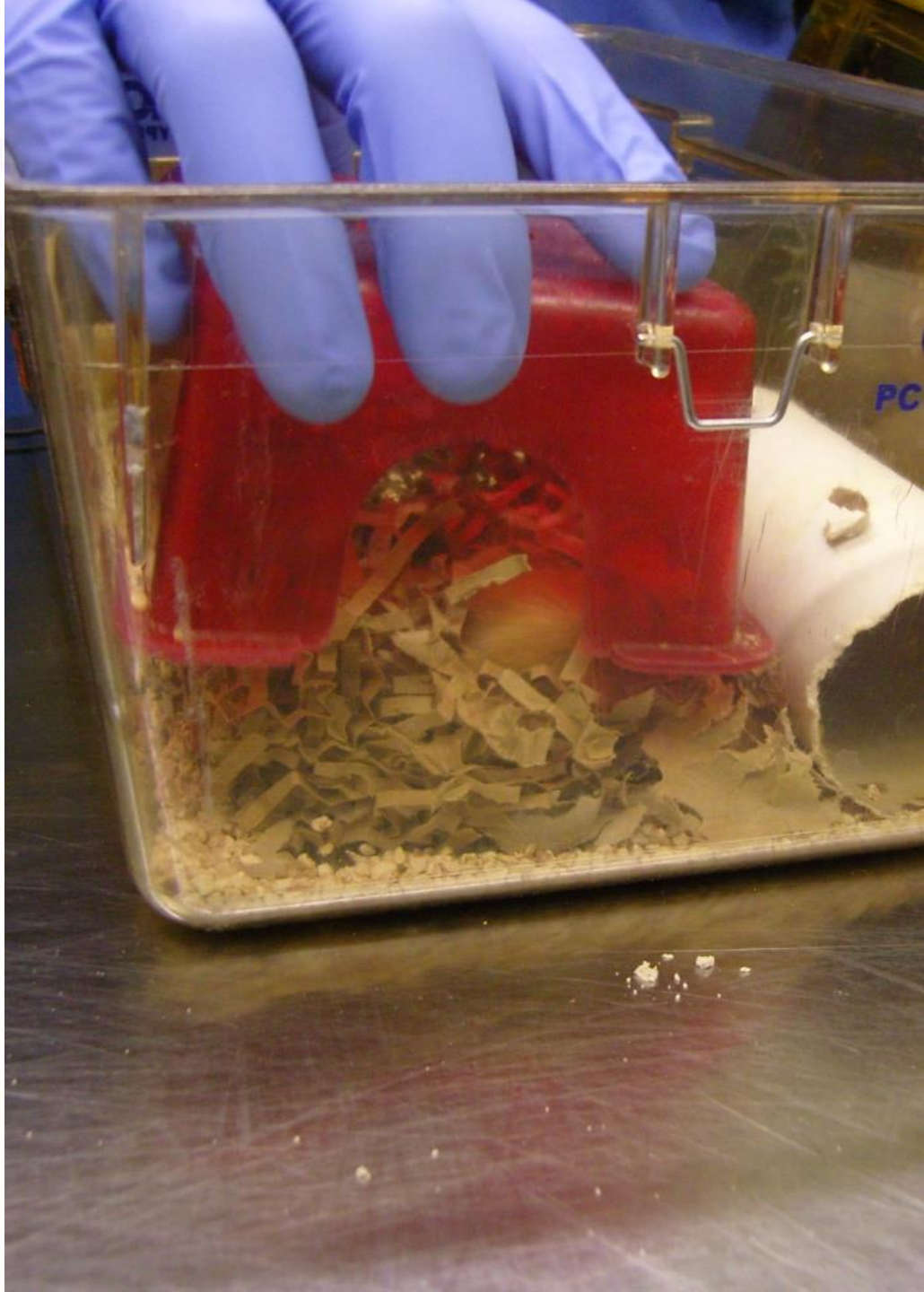
- Placing the research animal at the centre of the story, not solely as research object/tool

…BUT as a sentient, relating being that is worked WITH (albeit with some activity imposed).



Fieldwork and data collection

- Interviews with 27 participants (some of whom interviewed in pairs)
- These participants worked across 9 UK facilities involved in the breeding, supply and procurement of research animals.
- Participants included animal care technicians, facility managers, named veterinary surgeons (NVSs), and researchers, and those with experience both within and outside of the commercial contract research industry.
- 2 short (five days in each location) periods of ethnographic participant observation with staff involved in animal care, administration and research.



Avoidable and unavoidable waste 1/2

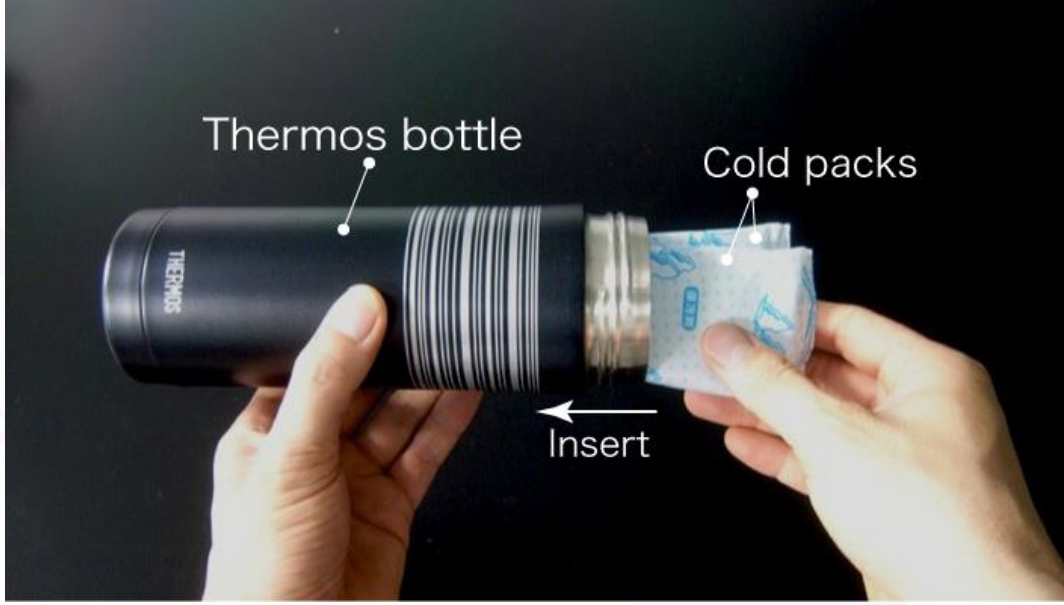
you need to distinguish between bad planning, where people don't think it through, and they don't want to waste time, and therefore they always want to have animals on the ground ready to use, and … genetic altered strains where you … will always have a percentage of mice that are unsuitable for the research. ….but you cannot avoid having this wastage or surplus because to produce the suitable animals you will automatically produce the non-suitable animals. (Gretchen, NVS, university sector, interview, 2019)

Avoidable and unavoidable waste 2/2

- The ‘emotional division of labour’ separates those who bear the emotional cost of caring for research animals and those carry out experiments and assume the economic costs of research.
- ASPA’s guidelines on reducing waste animals does not detail the ‘culture of care’ as a vehicle to achieve this.
- NCR3’s definition of Reduction – maximising efficiency.
- A life spent in the laboratory is not considered a ‘good life’ for an animal, so it is important that human benefits are realised from laboratory animal use and breeding.

Moving research animal strains.

- Two forms in which strains travel either as live sentient animals or as non-sentient, non-living embryos and gametes. They have different mobilities.
- When the strain is gifted, shared, bought, and sold it therefore perpetuates the making of values associated with it as both a sentient living animal and as a scientific tool, yet never solely its capital exchange value.
- As strains travel cultures meet, technology travels, knowledge is exchanged not only scientific but also around animal welfare and biosecurity expectations.
- scientific infrastructures that maintain high-level biosecurity and address negative animal welfare associated with travel, most closely, for example rederivation facilities, do create new infrastructural barriers to strain access



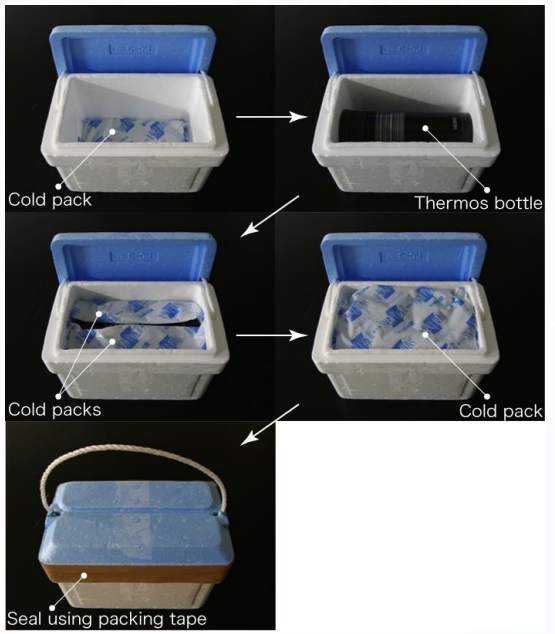


Photo from: http://card.medic.kumamoto-u.ac.jp/card/english/sigen/manual/lowtempt ransp.html

Conclusions

- Our analytical approach across this project has been to closely study the cultural economic practices that surround the sentient relating research animal, and its proxies.
- We have listened to the feelings as much as the reasoning to understand how the social contract around animal research is threatened by research animal breeding and supply practices.
- Adopting a similar approach, *The Mouse Exchange* engagement activity (a colony on this photo), places participants in the role of being the maker and carer of a research mouse. It explores what it might feel like to be in that role, as the research mouse in their hands shapes thinking and conversations.

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