'No one over here has had the pluck to do [this]': International intercommunity collaboration and the investigation of canine inherited disease

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In 1920s colonial India, an enthusiastic group of expatriate British officials occupied themselves by breeding Bull Terriers. However, these breeders complained that many of the dogs they imported from 'Home' subsequently proved to be congenitally deaf, or to produce deaf puppies. They claimed that many British breeders were knowingly exhibiting, breeding and exporting deaf dogs, even though such dogs were supposedly banned from the show ring. Although breeders in both countries knew that pure white Bull Terriers, which they generally preferred, were more likely to be deaf, there was no consensus on how to tackle the problem. An impassioned debate between fanciers in Britain and India came to a head in 1921. While some fanciers in India wanted to stop breeding from deaf dogs altogether, others urged instead for scientific research into the cause of the deafness, suggesting that Adair Dighton, a medically qualified Bull Terrier breeder in Britain, would be ideally placed to lead the project.

By 1923, a three-way research partnership was established, involving fanciers and scientists across two continents in the first organised international intercommunity investigation into canine inherited disease. The research was commissioned and funded by the Bull Terrier Club of India. Dighton sourced deaf and hearing Bull Terriers from breeders around Britain and worked with FAE Crew, another doctor, who had founded an experimental animal breeding unit to investigate Mendelian genetics at the University of Edinburgh. Dighton and Crew aimed to investigate the inheritance and pathology of deafness in Bull Terriers, both for the benefit of dogs and their breeders and, through collaboration with other medical researchers working on human diseases, as a model for congenital deafness in people. Although the project did not succeed in its aims and was soon abandoned, for many decades it was remembered within the dog fancy as an exemplar of successful cooperation between communities, inspiring other more successful collaborative health investigations thereafter.

The impetus that fuelled this pioneering initiative stemmed from the synergy that developed between the geographically separated but culturally connected Bull Terrier communities in Britain and India, which, by pooling epistemological, financial, biological and motivational resources drawn from different locations, successfully overcame various barriers to the project. This pattern was repeated in the late twentieth century, when the new technology of the Internet similarly helped global communities to come together, thus catalysing the development of gene tests for various inherited diseases in many different breeds of dog. Drawing together veterinary experts, diseased dogs, breed activists and funding from wherever they could be found, these initiatives accelerated advances in molecular genetics, with real impact on canine health, that would otherwise have been far slower to develop.

Historical accounts of the international construction and circulation of scientific and veterinary knowledge often exclusively focus on professional networks, but the serendipitous links that form through common interest in particular dog breeds or canine diseases readily bridge both geographical and disciplinary boundaries, as these examples show. By drawing attention to these multiple interactions between breeders and researchers, I suggest that international pedigree dog health projects offer particular insight into the co-construction of knowledge within and beyond the academy, through emphasising the pivotal significance of breeder-scientists, such as Adair Dighton in my first example, in driving these complex initiatives. By deploying their technical knowledge and scientific/medical networks to further the investigation of disease in the dogs they bred recreationally, these liminal actors drove (and drive) innovative projects that would otherwise develop more slowly, if at all.

These collaborations demonstrate veterinary care beyond the veterinarian and science beyond the professional scientist. Yet, despite the commitment and knowledge of the human participants in these initiatives, their success ultimately remains constrained by the biological attributes of the very canine bodies that first catalysed their creation. While some of these endeavours have led to major advances in understandings of canine health, those investigating congenital deafness in white dogs have been less fortunate. Even today, deafness in Bull Terriers remains a largely unsolved problem, a century after its first systematic investigation.