Better surveillance systems for disease threat identification
Portable technologies will help fill the void in information about the movement and emergence of livestock diseases throughout the world. For example, pilot studies have shown how farmers, health workers and veterinarians in developing countries can use smartphone apps to share images and data from sick livestock – this can accelerate the ability to identify and report diseases.

New technologies will improve how we treat animal disease
Satellite data has been used to map rainfall across huge expanses of territory to help predict future patterns of disease such as Rift Valley fever, heavily influenced by local climatic conditions. Researchers in parts of the world where livestock are ranched over large areas are exploring the use of ‘Smart’ ear tags – these small devices continuously broadcast an animal’s movements and can provide warnings of impending disease outbreak as sick animals become less active.

Greater emphasis on animal welfare
If animals kept by people for food or companionship are to enjoy a reasonable quality of life, then efforts to maintain their health is a necessary component of improved animal welfare.

Greater collaboration between public and private sectors
Recent incidents of bluetongue and Schmallenberg in animals, and the Ebola virus in humans have shown that progress can be made when public research institutions’ knowledge and the product development skills of the private sector are combined.

More treatments available for all species
Humanity’s growing appetite for animal protein may mean the health of minor species becomes ever more important. Finding new medicinal products and better quality environments for fish farming operations will become crucial.