



Kath Weston

Animalia – the critical importance of animals in medical history

Animals have been studied by humans for thousands of years. Their traits helped early humans identify how to exploit them for food and other products important for human survival. Throughout the ages, animals have been linked to human medicine – consider the long history of the leech in medicine; the Rhesus macaque; the myriad medicinal effects of honey; and pig insulin. In more recent centuries, animals have been employed as test subjects for new medications, procedures or treatments. Primates, rodents, dogs and cats have been integral to early advances in medicine such as in organ transplantations and invitro fertilisation. The scientific community is, to some extent, now investigating non-animal alternatives for use in medical research, but the list of animals critical to medicine and our health goes on – sentinel flocks of chickens provide alerts for avian influenza and Murray Valley encephalitis; animal models provide insights into ageing and genetic manipulation; and many species are predictors of climate change.

The ecological bridges between humans and animals are narrowing. Deforestation, loss of habitat, and increased human population density have brought humans into closer contact with some species. The dire impact of humans encroaching on the natural world may be a looming disaster in terms of the potential loss of non-human species and any novel treatments and approaches to medicine they may inspire.

This paper will reflect on some of the past medical advances that would not have been possible without animals, and the continued potential of animals in human medicine.

This potential is so important that our attention should turn to protecting as many

species as possible on the planet, learning about their habitats, ecology and characteristics, not to eat them, but to learn about and from them, and protect their importance in the ongoing history of medicine.