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It might seem that medical researchers have enough to do dealing with the illnesses of people without considering animal diseases too. But our well-being is intertwined with the health of the world's creatures — especially the dogs, cats and other companion animals that share our homes (see page S42).

The relationship is one of give and take: pets are dependent on people for their survival, but in return they bestow health benefits on their owners. Babies brought up in households with dogs are, thanks to the contributions of microbes that live in pets' guts, less prone to asthma and obesity (S48).

Pets can easily pick up parasites. For dogs, the situation has taken a worrying turn as one of the more common and deadly parasites, heartworm, has started to develop resistance to once-effective drugs (S50). But the news is better for cats: improved understanding of the co-evolution of humans, cats and their common parasite, *Toxoplasma gondii*, is yielding clues about how to manage the infection (S52).

Humans, pets, livestock and wildlife depend on each other and on the global environment — and are all threatened by climate change. Diseases once found only in tropical areas have migrated north (S44). Even Arctic-dwelling species are facing new health threats (S54). In Africa, outbreaks of Ebola in humans have been linked to large numbers of deaths among gorillas living nearby, and these animals could benefit from human vaccines under development (S56). One theme that permeates all these stories is that animals and humans are in this together, and health researchers would do best to take a holistic view (S47).

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Herb Brody

Chief supplements editor

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