Frankenstein’s Cat: Cuddling Up to Biotech’s Brave New Beasts

Emily Anthes


Emily Anthes reexamines our age-old relationships with animals in the context of biotechnologies we use to modify them for companionship, food, pharmaceuticals, research, and war. Anthes never shies from the “troubled middle” stance humanity has taken on animals. Increasingly, humans demand and legislate animal rights in research and domestic settings, especially for primates and conventional pets, while unceasingly consuming food and medical products from their flesh and bodies.

Anthes immediately delves into the soft power of pets to sway opinions on new animal-modifying technologies. Humans imprecisely bred animals for thousands of years before unraveling the DNA code and finding ways to insert various genes, like green fluorescent protein. Creators of the popular aquarium pet GloFish were aware the red, green, and blue buddies, controversially debuted in 2004, could assuage negative to alarmist public opinion about genetic engineering. Scientists in the cloning world, seeking replicates of disease-resistant animals and animals at risk of extinction, felt similarly. The promise of never having to say goodbye to a family pet can ease the “yuck factor” reaction to unnatural creatures.

The author reports that only 27% of surveyed Americans believe the government should regulate genetic engineering entirely based on science. The majority, 63%, believe regulatory decisions should additionally be based on moral and ethical factors. Anthes explores genetic modification of animals for enhanced nutrition, to produce medication in milk, or to create organs for human transplant through lenses of animal rights philosophy and regulatory and governing bodies’ concerns about safety. Governments opposing the technologies may soon feel pressure from more enthusiastic governments aligned with some scientists’ visions for saving human life from disease and famine.

There is a setting in which modifying animals could make them partners in environmental conservation and climate change research, as opposed to instruments of human interests: tracking devices. Though some argue that the programs advance human control over nature and the environment, the procedure does cause the animals pain and the process of implanting trackers may modify animal behavior. Similarly, animal prosthetics, although altruistic, can also be fertile research ground for human prosthetics in which animals suffer. Animal cyborgs, particularly insects, are already here. Originally conceived for military espionage, their brains and nervous systems are ready to be controlled by any biohacker or interested amateur.

Frankenstein’s Cat is a wonderful read for science news and bioethics enthusiasts curious about the ways current biotechnology may impact our future alongside animals. Anthes lays bare the pace of human inventiveness for use of animals’ bodies, including improved lives for animals, as managed by humans. Inherently, readers are asked about their place in the troubled middle and whether or not the technologies discussed shift their positions on a myriad of animal modifications.

Reviewer: Elizabeth Schiavoni

Elizabeth Schiavoni is a graduate of Georgetown University in Global Health and holds a master’s degree in Genetics, Genomics, and Bioinformatics. She is a freelance writer and project manager in Buffalo, New York, working primarily in the nonprofit sector.

Practical Matters continued from page 130

17. Dogra S. Why your manuscript was rejected and how to prevent it. *Indian J Dermatol Venerol Leprol*. 2011;77(2):123-127.