AIDS and the Untenable Animal Model: The Cost and Ethics of U.S. HIV/AIDS Research with Chimpanzees, 1983–2000

BRIGID PRIAL

SUMMARY: As AIDS activists voiced their demands for "drugs into bodies" in the late 1980s, American scientists injected drugs into the body of a highly controversial research animal—the chimpanzee. This paper examines the controversy over the use of chimpanzees in U.S. HIV/AIDS research that led to the decline of chimpanzees as laboratory animals. The author suggests that the AIDS epidemic raised the public profile of laboratory chimpanzee research, heightening its preexisting financial and ethical problems. The scientific and lay debate sparked by chimpanzee AIDS research demonstrates the intersection of ethics and economics in shaping laboratory research practices and disease politics in the late twentieth century. As animal advocates constructed laboratory chimpanzees as close human relatives, innocent of the imagined sins of people with AIDS, researchers working with chimpanzees confronted their ambiguity as an HIV animal model and the long-term costs of maintaining HIV-infected animals. By the late 1990s, an animal that had been a promising AIDS model became a public relations headache and a major expense for biomedical research. The pushback to the use of chimpanzees in AIDS research helps scholars understand how American scientists, activists, and animal advocates have made sense of the enmeshed concerns of human and animal welfare in a time of epidemiological crisis.

KEYWORDS: HIV/AIDS research, laboratory animals, activism, anti-vivisection

"AIDS could very well be a threat to the human race. What do we do? Do we proceed with the chimp or not proceed with the chimp?" Congressman Roger C. Smith's question about chimps in HIV/AIDS research might have seemed tangential in the U.S. House of Representatives hearing on endangered species, but it was an urgent matter for infectious disease researchers, animal advocates, and AIDS activists at the time.<sup>2</sup> Throughout the 1980s and into the 1990s, the use of chimpanzees in HIV/AIDS research in the United States created turmoil for biomedical research institutions weighing the costs and benefits of utilizing this research animal and generated widespread public backlash. The chimpanzee appeared to many Americans as an ethically unacceptable experimental subject for researching AIDS, a highly stigmatized disease. Proceeding with chimpanzees in HIV/AIDS research or not held different meanings for the various human beings invested in this issue; while biomedical researchers saw hope for an AIDS vaccine in chimp research, animal protectionists decried the suffering of chimpanzees for an unsympathetic illness. AIDS activists, too, often voiced their disagreement with this research practice. The U.S. AIDS epidemic brought unprecedented scrutiny to the experimental use of chimpanzees and exposed the economic and ethical volatility of laboratory chimpanzee research.

-

<sup>&</sup>lt;sup>1</sup> Roger Smith, Technologies for Conserving Species: Saving the Endangered Rhinoceros: Hearing Before the Subcommittee on Natural Resources, Agriculture Research, and Environment of the Committee on Science, Space, and Technology, U.S. House of Representatives, One Hundredth Congress, Second Session, June 22, 1988 (Washington, D.C.: Government Printing Office, 1988), 26.

<sup>&</sup>lt;sup>2</sup> This discussion of the chimpanzee arose in the hearing as part of a wider debate on whether wildlife should be preserved for its utility to humans or for its inherent value. Smith pointed out the paradox in the utilitarian preservation argument by discussing how biomedical research demand contributes to chimpanzee endangerment. For a history of approaches to wildlife extinction, see Mark V. Barrow, *Nature's Ghosts: Confronting Extinction from the Age of Jefferson to the Age of Ecology* (Chicago: University of Chicago Press, 2009).

Previous scholarship on the history of AIDS activism in the United States has demonstrated how people with AIDS redefined and negotiated their relationship to biomedical experimentation. Facing the apathy of the Reagan administration in the early years of the epidemic, AIDS activists urged the federal government to support research into the disease.<sup>3</sup> In subsequent years, as histories of ACT UP and other groups have shown, activists scrutinized practices of biomedical clinical research and demanded that it be more responsive to the needs of people with AIDS who sought increased treatment access.<sup>4</sup> Few historical studies have examined the politics of animal research during the AIDS epidemic, although activists have often utilized the figure of the laboratory animal to articulate their own dynamic relationship to biomedical experimentation—invoking "lab rats" to describe their feeling of being replaceable data points or offering to be "guinea pigs" for access to experimental treatment. Focusing specifically on AIDS laboratory research with chimpanzees, this paper illuminates how animal advocates and AIDS activists' understandings of chimpanzees as laboratory animals figured into the politics of U.S. AIDS research.<sup>5</sup> Biomedical researchers and institutions, managing chimpanzees as a promising

\_

<sup>&</sup>lt;sup>3</sup> Jennifer Brier, *Infectious Ideas: U.S. Political Responses to the AIDS Crisis* (Chapel Hill: University of North Carolina Press, 2009); Tasleem J. Padamsee, "Fighting an Epidemic in Political Context: Thirty-Five Years of HIV/AIDS Policy Making in the United States," *Soc. Hist. Med.* 33, no. 3 (2020): 1001–28. <sup>4</sup> Steven Epstein, *Impure Science: AIDS, Activism, and the Politics of Knowledge* (Berkeley: University of California Press, 1996); Mark Harrington, "AIDS Activists and People with AIDS: A Movement to Revolutionize Research and for Universal Access to Treatment," in *Tactical Biopolitics: Art, Activism, and Technoscience*, ed. Beatriz da Costa and Kavita Philip (Cambridge, Mass.: MIT Press, 2013); David France, *How to Survive a Plague: The Inside Story of How Citizens and Science Tamed AIDS* (New York: Knopf, 2016).

<sup>&</sup>lt;sup>5</sup> Primates have figured into the history of AIDS through theories about HIV's origin as zoonotic crossover through human-primate contact. The pervasive "cut hunter" or bushmeat hypothesis, popularized by Pepin's The Origin of AIDS, posits an exchange of blood between chimpanzees and humans to have generated the HIV pandemic as a primate retrovirus crossed species. Gabriel Rosenberg has demonstrated how this narrative of zoonotic disease transfer is racialized, constructing an

animal model, an expensive resource, and a source of profound public criticism, calibrated whose interests would shape federal research response to the epidemic.

In the 1980s, opposition to the use of animal laboratory experimentation was incorporated into a new framework of animal rights, distinct from the anti-vivisection movements of the past hundred years. Victorian and early twentieth-century American anti-vivisectionists, often part of the broader animal welfare movement, had emphasized kindness to animals as marker of moral refinement, a sign of civilized societies, and a method for preventing

inappropriate species relationship between African men and chimpanzees. Rosenberg identifies the "selective problematization of interspecies intimacy" as one shaped by racial capitalism. This problematization creates ideas of pathological, illicit human-animal contact in the Global South while exempting spaces of dangerous zoonotic fluid exchange like Western laboratories and slaughterhouses. Infectious disease researchers in the 1980s and 1990s recognized HIV's resemblance to primate retroviruses, but the conception of wild chimpanzees as the source of HIV does not enter the discussions of laboratory chimp's suitability as an HIV model. Some animal rights material from the time posited "lab leak" theories in which primate experimentation itself was the cause of the epidemic. Although this paper focuses on the U.S. scientific and public controversies surrounding the use of chimpanzees as experimental animals for HIV/AIDS research, the chimpanzee's role in the origin of HIV is a rich topic for further scholarship. Gabriel Rosenberg, "On the Scene of Zoonotic Intimacies: Jungle, Market, Pork Plant," Transgender Stud. Quart. 7, no. 4 (2020): 646-56. Megan Glick has examined the racialized moral panic generated by theories that West African bushmeat consumption created the HIV pandemic. Glick, "Of Sodomy and Cannibalism: Disgust, Dehumanization, and the Rhetorics of Same-Sex and Cross-Species Contagion," in Infrahumanisms: Science, Culture, and the Making of Modern Non/personhood, (Durham, N.C.: Duke University Press, 2018). For critical evaluations of Western biomedical perspectives on human and African ape zoonoses, see Stephanie Rupp and Tamara Giles-Vernick, "People, Great Apes, Disease, and Global Health in the Northern Forests of Equatorial Africa," in Global Health in Africa: Historical Perspectives on Culture, Epidemiology, and Control, ed. Tamara Giles-Vernick and J. Webb (Athens: Ohio University Press, 2013), 117–37; Stephanie Rupp, Philippe Ambata, Victor Narat, and Tamara Giles-Vernick, "Beyond the Cut Hunter: A Historical Epidemiology of HIV Beginnings in Central Africa," Ecohealth 13, no. 4 (2016): 661-671. See also Gregg Mitman's work on the ramifications of colonial resource extraction for human-primate disease transfer and biomedical research in the Upper Guinean Forest.

animal cruelty from spilling into human violence.<sup>6</sup> The new animal rights ideology, by contrast, developed from the philosophical work of Peter Singer and Tom Regan alongside association with the environmentalist and feminist movements of the 1960 and 1970s.<sup>7</sup> This movement centered on the concept that certain animal species should be endowed with the legal rights afforded to humans. A related movement, animal liberation, demanded an end to all animal exploitation and endorsed direct actions to that end. Groups such as People for the Ethical Treatment of Animals and the Animal Liberation Front emerged in the late 1970s and 1980s that conducted laboratory surveillance and occasionally broke into labs to bring evidence of scientific animal cruelty to light, as in the case of the Silver Spring monkeys.<sup>8</sup> Though animal rights/liberation remained a small movement, in the late 1980s and early 1990s broad swaths of the American public expressed their disagreement with a specific laboratory animal practice—the use of chimpanzees in HIV/AIDS research.

This paper examines how the issue of chimpanzee experimentation intersected with the disease politics of HIV/AIDS and elicited different visions of the proper relationship between

\_

<sup>&</sup>lt;sup>6</sup> Harriet Ritvo, *The Animal Estate: The English and Other Creatures in the Victorian Age* (Cambridge, Mass.: Harvard University Press, 1989); Susan E. Lederer, *Subjected to Science: Human Experimentation in America before the Second World War* (Baltimore: Johns Hopkins University Press, 1997); Diane L. Beers, *For the Prevention of Cruelty: The History and Legacy of Animal Rights Activism in the United States* (Athens: Ohio University Press, 2006); Janet Davis, *The Gospel of Kindness: Animal Welfare and the Making of Modern America* (New York: Oxford University Press, 2016).

<sup>&</sup>lt;sup>7</sup> Peter Singer, *Animal Liberation: A New Ethics for Our Treatment of Animals* (New York: New York Review, 1975); Tom Regan, *The Case for Animal Rights* (Berkeley: University of California Press, 1983): James M. Jasper and Dorothy Nelkin, *The Animal Rights Crusade: The Growth of a Moral Protest* (New York: Free Press, 1991); Gonzalo Villanueva, "The 'Bible' of the Animal Movement: Peter Singer and Animal Liberation, 1970–1976, *Hist. Australia* 13, no. 3 (2016): 399–414.

<sup>&</sup>lt;sup>8</sup> Robert G. W. Kirk, "The Silver Spring Monkey Controversy: Changing Cultures of Care in Twentieth Century Laboratory Animal Research," *J. Hist. Sci. Technol.* 13, no. 2 (2019): 31–59.

human-animal ethics in biomedical research. Responses to the use of chimps in HIV/AIDS research demonstrate the heterogeneity of the category of "animal," as well as "human," in the context of this epidemic and the ways in which AIDS moral policing spilled over species boundaries. Scholars of HIV/AIDS in the United States have demonstrated how moral policing and differences in race, class, and sexuality shaped public discussions of people with AIDS, from gendered respectability politics in Black American communities to the beatification of Ryan White. Distinguishing the guilty from the innocent and the vectors from the victims created figures who were deserving of sympathy and those who were not from a diverse group of people suffering from the same disease. This paper demonstrates the way a nonhuman animal, laboratory chimpanzees, entered and affected the discourse of moral policing during AIDS, a discourse steeped in judgments about race, class, gender, and sexuality. In turn, the AIDS epidemic changed the practice of laboratory chimpanzee experimentation. The waning acceptability of laboratory experimentation with chimpanzees in the 1980s and 1990s was constituted by the biomedical research economy of HIV/AIDS research and the figure of the AIDS patient.

<sup>&</sup>lt;sup>9</sup> Aishah Scott, "Erased by Respectability: The Intersections of AIDS, Race, and Gender in Black America," *Women, Gender, and Families of Color* 10, no. 1 (2022): 71–99; Paul Renfro, *The Life and Death of Ryan White: AIDS and Inequality in America* (Chapel Hill: University of North Carolina Press, 2024); Richard A. McKay, "Patient Zero': The Absence of a Patient's View of the Early North American AIDS Epidemic," *Bull. Hist. Med.* 88 (2014): 161–94; Jason Chernesky, "'The Littlest Victims': Pediatric AIDS and the Urban Ecology of Health in the Late-Twentieth-Century United States" (Ph.D. diss., University of Pennsylvania, 2020); Cathy J. Cohen, *The Boundaries of Blackness: AIDS and the Breakdown of Black Politics* (Chicago: University of Chicago Press, 1999); Paula Treichler, *How to Have Theory in an Epidemic: Cultural Chronicles of AIDS* (Durham, N.C.: Duke University Press, 1999).

Following discussions of the laboratory chimpanzee in HIV/AIDS research brings together actors who understood the epidemic in vastly different ways: ambitious researchers hoping to break new scientific ground on a timely problem, university administrators assessing if chimp AIDS research would benefit their institutions, animal advocates for whom HIV/AIDS research was a threat to innocent chimpanzees, and gay activists for whom chimpanzee research was a waste of precious time and resources. In the early years of the HIV/AIDS crisis, infectious disease researchers believed that chimpanzees could serve as a valuable animal model for the disease. As time wore on and chimpanzee research produced little but laboratory management and public relations problems, public opposition to the HIV/AIDS research with chimpanzees grew. This opposition comprised animal rights activists, animal protectionists, and many others who did not object to animal experimentation in general but found HIV/AIDS research with chimps to be an ethical overstep. Additionally, people with AIDS voiced their disagreement with chimpanzee experimentation. AIDS activists criticized chimpanzee experimentation as a wasteful, unethical practice that demonstrated the National Institutes of Health's (NIH) antiquated responses to the epidemic. Through internal laboratory management problems and public criticism from heterogeneous groups, AIDS made the sixty-year-old scientific practice of laboratory experimentation with chimpanzees newly unacceptable. 10

-

<sup>&</sup>lt;sup>10</sup> Systematic scientific inquiry with laboratory chimpanzees began in the United States in the late 1920s, through the efforts of Yale psychologist Robert Yerkes to make chimpanzees available to American scientists on a large scale. While uses of chimpanzees and other primates occurred earlier in scientific setting around the world, as with Elie Metchnikoff's 1903 work at the Pasteur Institute and Rosalía Abreu's activities on her Cuban estate, I use the 1929 establishment of the Yale Laboratories of Primate Biology as the starting point for the institutionalization of chimpanzees as lab animals in the United States.

I begin by discussing how AIDS research with chimpanzees created scientific and financial problems for laboratory research, despite chimpanzees' early promise as AIDS animal models. Even among lab scientists, chimpanzees occupied a unique moral position that exacerbated the costs and long-term responsibilities of doing AIDS research. In the next section, I examine how public opposition to chimpanzees' use in AIDS research relied on constructions of chimpanzees as humanity's closest cousins. This perception separated the issue of chimpanzee research from other animal rights and research ethics debates, making opposition to laboratory chimpanzee research seem like a commonsense, apolitical position. Following this section, I explore how animal advocates and AIDS activists understood chimpanzees' role in the politics of AIDS research and in relation to the human beings with AIDS. Many advocates for chimpanzees believed that chimps should not suffer on behalf of people with AIDS, revealing the troubling hierarchies of humanness that shaped animal advocacy. The paper concludes by showing how the federal government began transitioning chimpanzees out of biomedical laboratories in ways that preserved their status as ethically exceptional research subjects and confronted familiar questions about the relationship between human and animal welfare.

## Costly Research Subjects

For infectious disease researchers tackling the scientific problem of AIDS in the early 1980s, chimpanzees initially appeared to be promising animal models.<sup>11</sup> In this section, I examine how

<sup>11</sup> Although chimpanzees were intended to model the progression of the HIV virus, I do not consider them model organisms in this context. Rachel Ankeny and Sabina Leonelli have described model organisms as beings that "have been standardized to fit an integrative and comparative mode of research" and emphasize their distinction from the wider category of experimental organisms. Due to myriad difficulties

chimpanzee biology and their unique moral status in the laboratory rendered AIDS research with these animals a costly investment for labs. Projecting that chimpanzees would provide important breakthroughs in the development of an AIDS vaccine, researchers infected chimpanzees with the HIV-1 virus. But when chimpanzees failed to provide impactful research data, researchers and administrators worried about the long-term costs of maintaining HIV-infected animals that could live for decades in the lab.

Initially, the AIDS epidemic gave extra urgency to federal plans for chimpanzee breeding that had already been discussed in the late 1970s. American researchers in infectious disease, reproductive biology, neurological disease, and other fields who worked with lab chimpanzees had urged the NIH to support and structure chimpanzee breeding for years, as both buying and breeding chimps were expensive endeavors for individual laboratories. <sup>12</sup> In the 1970s, U.S. lab

with breeding and sourcing, laboratory researchers were not able to standardize chimpanzees. The case of HIV/AIDS research presents one example of how chimpanzee biology clashed with the infrastructures and practices of laboratory research, where the lack of standardized control over animal bodies is apparent. Chimps were unstable laboratory organisms whose scientific value was frequently contested by the practical problems of laboratory management that they generated. Rachel A. Ankeny and Sabina Leonelli, "What's So Special about Model Organisms?," Stud. Hist. Philos. Sci. 42 (2011): 313–23. <sup>12</sup> In the late twentieth century, laboratories purchased wild chimpanzees from companies such as Charles River Laboratories and from connections with animal dealers based in West and Central Africa. In both cases, the legal provenance of the chimpanzees could be fabricated. Fearing increased conservation scrutiny and population depletion in the future, researchers hoped to create a robust population of captive breeding chimpanzees. Chimp researchers sought federal support for this because chimpanzee breeding was typically challenging for individual labs, draining time and resources from scientific research. To illustrate the difficulties in captive chimpanzee breeding, the 1980 report of the Ad Hoc Task Force to Develop a National Chimpanzee Breeding Program stated that out of about 1,000 chimpanzees used for biomedical research, the breeding population was 208. Of the 208, only 18 were captive born themselves, indicating a troubling dependency on wild-born chimps for reproduction. The project of captive chimpanzee breeding was an attempt to assert American scientific control over an African natural resource, especially after the changes to formerly colonial trade networks after decolonization in West and Central African countries. Scholars Tara Suri, Thaddeus Sunseri, Neel Ahuja, Marion Thomas, and Donna Haraway have written about the multiple forms of coloniality in the primate trade for biomedical

chimp researchers felt that domestic and international wildlife trade regulations were restricting their access to wild chimpanzees, though they were more concerned with chimpanzees' disappearance from laboratories than from the wild.<sup>13</sup> To address this supply problem, the NIH's 1978 Task Force on the Uses and Needs for Chimpanzees made recommendations that eventually formed the National Chimpanzee Breeding Program (NCBP).<sup>14</sup> The NIH launched the program in 1986, offering grants to laboratories to breed chimpanzees for the country's future research needs. When AIDS emerged as a public health crisis, laboratory chimpanzee researchers

\_

research. Tara Suri, "Between Simians and Cell Lines: Rhesus Monkeys, Polio Research, and the Geopolitics of Tissue Culture (1934–1954)," *J. Hist. Biol.* 55, no. 1 (2022); Thaddeus Sunseri, "Mobile Monkeys and Modified Microbes: Medical Experimentation between Metropolitan and Colonial Laboratories, 1880–ca. 1925," *Bull. Hist. Med.* 98, no. 1 (2024): 26–60; Marion Thomas, "Entre Paris et les Tropiques, le rôle inattendu des Instituts Pasteur dans la naissance de la psychologie animale pendant la période coloniale," *Rev. primatol.* 8 (2018); Neel Ahuja, *Bioinsecurities: Disease Interventions, Empire, and the Government of Species* (Durham, N.C.: Duke University Press, 2016); Donna Haraway, *Primate Visions: Gender, Race, and Nature in the World of Modern Science* (New York: Routledge, 1989).

<sup>&</sup>lt;sup>13</sup> In 1976, chimpanzees were listed as "threatened" under the Endangered Species Act, meaning that the import, export, sale, and purchase of chimpanzees for commercial activity were illegal. However, chimps and a handful of other "threatened" primates were subjected to a special rule, known as a split listing. The designation of threatened, and the legal restrictions accompanying it, pertained only to wild populations of chimpanzees. The captive chimpanzee population in the United States, their offspring, and the offspring of any chimps that had been imported legally into the country in the past would not be considered threatened and could be bought, sold, and utilized accordingly. This was an accommodation for biomedical research laboratories. "Special Rules—Mammals," *Federal Register* 41, no. 76 (April 19, 1976): 16469.

<sup>Report of the Task Force on the Use of and Need for Chimpanzees of the Interagency Primate Steering Committee, National Institutes of Health, Bethesda, Md., May 22 and July 24, 1978 (Washington, D.C.: U.S. Department of Health, Education, and Welfare, Public Health Service, National Institutes of Health, 1978); Report of the Ad Hoc Task Force to Develop a National Chimpanzee Breeding Program of the Interagency Primate Steering Committee, Tanglewood, North Carolina, June 2–3, 1980 (Bethesda, Md.: U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, 1982).</sup> 

saw the epidemic as a demonstration of the need for a large population of research chimpanzees and the NCBP as the method of creating that population.<sup>15</sup>

In the early 1980s, NIH immunologists who had utilized chimpanzees in studies on hepatitis B suspected a blood-transmissible disease agent for AIDS based on similarities in immune responses to the two diseases and turned to the chimpanzees. <sup>16</sup> In November 1984, virologist Harvey J. Alter and colleagues from the NIH and the private Southwest Foundation published in *Science* that their experimental inoculation of chimpanzees with material from human AIDS patients had established chimps as an animal model for AIDS. <sup>17</sup> After the paper's triumphant announcement of the chimpanzee animal model, some biomedical researchers considered chimps as valuable resources for the creation of an AIDS vaccine. The National Academy of Sciences' 1986 volume *Confronting AIDS* stated that chimps "will be indispensable in the development of HIV vaccines," confident that chimpanzees' value would become evident in future research breakthroughs. <sup>18</sup> In a presentation to congressional staffers on the use of chimpanzees in AIDS research, Peter Fischinger, AIDS coordinator for the Public Health Service, endorsed chimpanzees as the best available animal model. Fischinger surveyed AIDS

\_

<sup>&</sup>lt;sup>15</sup> Many proponents of the utility of laboratory chimpanzees saw AIDS as an excellent demonstration of the scientific necessity of lab chimps, reflecting one of the cultural narratives about AIDS identified by Paula Treichler that viewed the disease as "a golden opportunity for science and medicine." Treichler, *How to Have Theory in an Epidemic* (n. 9), 13; Tom Wolfe and Milton April, "The US Chimpanzee Breeding and Research Program," in *The Role of the Chimpanzee in Research*, ed. G. Eder, E. Kaiser, and F. A. King (Basel: Karger, 1994), 84.

<sup>&</sup>lt;sup>16</sup> Harvey Klein interviewed by Victoria Harden and Dennis Rodrigues, January 29, 1993.

<sup>&</sup>lt;sup>17</sup> Harvey J. Alter et al., "Transmission of HTLV-III Infection from Human Plasma to Chimpanzees: An Animal Model for AIDS," *Science* 226 (November 2, 1984): 549–52.

<sup>&</sup>lt;sup>18</sup> National Academy of Sciences, *Confronting AIDS: Directions for Public Health, Health Care, and Research* (Washington, D.C.: National Academy Press, 1986), 205.

vaccine development efforts, stating that "there are several helpful things that have already been accomplished, and again let me preface, that only the chimpanzee was helpful in telling us." <sup>19</sup>

But the peculiarity of disease expression across species threw into question chimpanzees' utility as an AIDS animal model. Although chimpanzees could be infected with the same HIV virus that caused AIDS in humans, they did not develop AIDS symptoms.<sup>20</sup> The establishment of chimpanzees as an AIDS animal model, as announced in Alter et al., derived from chimpanzees' immune responses to HIV-1. Their blood showed the production of antibodies against the virus and the reversal of helper T cell ratios that were characteristic of HIV infection in humans, but no chimpanzees in the late 1980s and early 1990s had developed the opportunistic infections that defined human AIDS.<sup>21</sup> Proponents of the chimp AIDS animal model believed that AIDS would eventually develop in chimps after a long incubation period.<sup>22</sup> Macaques and other monkey species had been shown to contract simian immunodeficiency virus (SIV), as cats did with the feline immunodeficiency virus (FIV). The severe combined immunodeficiency disease mouse, genetically modified to have almost no immune system, was another possible animal model.

<sup>1.0</sup> 

<sup>&</sup>lt;sup>19</sup> "An Informal and Incomplete Transcript of the February 19, 1988 Briefing on Chimpanzees in AIDS Research," box 4-067, Animal Welfare Institute Records, Archives and Special Collections, North Carolina State University. Other examples of biomedical optimism surrounding chimpanzee's role in HIV/AIDS research: "Optimism for AIDS Vaccine," *Prog. Biomed. Res.* (September 1986); Jan Moor-Jankowski, "The First Successful AIDS Vaccine: Immunization of Chimpanzees Confers Protection Against Challenge with Human Immunodeficiency Virus," *J. Med. Primatology* 20, no. 1 (1991): 47–48. <sup>20</sup> The difference between infection with HIV and having AIDS echoes Paula Treichler's work on the cultural constructions of AIDS and its meaning. Given the profoundly social dimensions of the disease, could chimpanzees ever get "AIDS"?

<sup>&</sup>lt;sup>21</sup> Alter et al., "Transmission of HTLV-III Infection" (n. 17).

<sup>&</sup>lt;sup>22</sup> Patricia Fultz, "Hearing on Research, Feb. 18–20, 1988," Presidential Commission on the Human Immunodeficiency Virus Epidemic, 1987–1988, National Commission on Acquired Immune Deficiency Syndrome Records, National Library of Medicine, 105.

AIDS research was conducted with all of these animals, with various drawbacks from the point of view of researchers looking for the most direct applicability to humans. Macaques seemed to experience a similar disease progression to that of AIDS when exposed to SIV, but the researchers weighed the value of the full disease expression against studies with chimpanzees that responded to the same HIV virus that affected humans. William Gay, the NIH's director of animal resources, commented that "there is a group of people who are very disappointed because there is not an animal into which you can put HIV and get AIDS."<sup>23</sup>

Hearings about HIV/AIDS research problems in February 1988, convened under the President's Commission on the Human Immunodeficiency Virus Epidemic, reflected some AIDS researchers' dissatisfaction with the chimpanzee model. Speaking about the challenges of testing an HIV vaccine, Dr. Mary Jane Potash argued that chimpanzee vaccine trials produced not actionable knowledge about AIDS but research ethics dilemmas. She described how a vaccine approved for human trials by the FDA had not prevented HIV infection when tested on chimpanzees.<sup>24</sup> Human trials could still continue, according to Potash, to help scientists understand the difference between human and chimpanzee HIV infection and evaluate the chimp's value as an HIV model. But Potash raised the ethical issues of human trials conducted for the purpose of evaluating chimps as an HIV model, which would give little hope of HIV prevention to human subjects and make them ineligible for future drug trials. She stated that

\_

<sup>&</sup>lt;sup>23</sup> William Gay interviewed by Victoria Harden, July 15, 1992, https://history.nih.gov/display/history/Gay%2C+William+1992.

<sup>&</sup>lt;sup>24</sup> Mary Jane Potash, "Hearing on Research, Feb. 18–20, 1988," Presidential Commission on the Human Immunodeficiency Virus Epidemic, 1987–1988, box 1, folder 5, National Commission on Acquired Immune Deficiency Syndrome Records, National Library of Medicine, 104.

launching this human trial "calls into question the very basis of trust between the scientific community and people at risk." She concluded by emphasizing that vaccine research needed animal models that experienced the entire progression of the disease, gesturing to macaques and SIV.

Despite the lack of AIDS in chimpanzees, many chimps infected with HIV remained chronic HIV carriers. This problem of chronic carriers exacerbated the costs of a common practice of chimpanzee laboratories—researchers' reluctance to "sacrifice," or kill, chimpanzees after experimental use. In *Confronting AIDS*, the authors complained that "there is a convention among researchers against sacrificing chimpanzees for complete pathologic or virologic studies, which impedes the progress of animal research related to human disease." For the authors, this convention against sacrifice made the internal ethics of lab chimpanzee research into another hurdle for work with an already challenging animal. For the institutions that housed chimpanzee laboratories, the ambiguous AIDS research value of chimpanzees and their enormous maintenance costs prompted reflection. In 1990, New Mexico State University (NMSU) president James Halligan conferred with directors at other chimpanzee laboratories to plan the future of the NMSU chimpanzee laboratory. Halligan asked colleagues about the

\_

<sup>&</sup>lt;sup>25</sup> Ibid., 105.

<sup>&</sup>lt;sup>26</sup> National Academy of Sciences, *Confronting AIDS* (n. 18), 205.

<sup>&</sup>lt;sup>27</sup> For further discussion of the practice of animal "sacrifice" in laboratories, see Lynda I. A. Birke, Arnold Arluke, and Mike Michael, *The Sacrifice: How Scientific Experiments Transform Animals and People* (West Lafayette, Ind.: Purdue University Press, 2007).

<sup>&</sup>lt;sup>28</sup> According to the administration of the Primate Research Institute (PRI) at NMSU, \$51,000 would cover the costs of caring for one chimpanzee for forty years. PRI, the largest chimpanzee laboratory in the United States, was responsible for over 400 chimpanzees. "Chimpanzee Lifetime Care Endowment Program," Primate Research Laboratory UA 2004-034, PRI Correspondence, New Mexico State University Library Archives and Special Collections (hereafter NMSU).

expected need for chimps in AIDS research. John Speck, of the Southwest Foundation for Research and Education, predicted that monkeys would become the most popular AIDS animal model due to cost considerations. Speck informed Halligan, "Many of my conclusions concerning chimpanzees are based on the fact that it is unethical and unthinkable to kill them when they are no longer required or usable in research." The internal laboratory ethic of avoiding sacrifice with chimpanzees expanded their costs as experimental animals. The Public Health Service's Committee on the Long-Term Care of Chimpanzees noted how chimpanzees differed dramatically from the typical laboratory animal. Minutes from their May 1990 meeting read, "The biomedical research community is accustomed to working with short-lived animals—i.e., animals are 'used up' (terminated), and animal colonies are restocked with new (younger) animals."

Working with chimpanzees contradicted biomedical research's epistemic and physical infrastructures as each experimental animal could not be new, clean, and disposable. In previous decades, in different scientific disciplines, the reusability of chimpanzees was an open question in laboratory management. In their management of the Yerkes chimpanzee laboratory in the 1930s and 1940s, psychologist Robert Yerkes and neuropsychiatrist Karl Lashley took two different positions on this question. Yerkes hoped to preserve lab chimpanzees' reusability by utilizing them in psychology experiments, and Lashley believed that experimental neurosurgery was the most valuable scientific use of chimpanzees even if it compromised the animal's future

<sup>&</sup>lt;sup>29</sup> John T. Speck to James Halligan, February 8, 1990, Records of the Office of the President, box 4, NMSU.

<sup>&</sup>lt;sup>30</sup> Minutes of the Ad Hoc Committee on Long Term Care of PHS Chimpanzees, May 10, 1990. Records of the Office of the President, UA2004-034, box 1, NMSU.

utility.<sup>31</sup> While both of these kinds of experiments surely impacted individual chimpanzees emotionally and physically, they weren't rendered virologically dangerous and researchers still found creative uses of the chimps as scientific material. The issue of contamination by previous experiments became much more literal when immunology research intensified with chimpanzees in the late 1970s, focusing on hepatitis. Research with HIV, a lifelong infection that did not typically become lethal for chimpanzees, augmented the lab's problem of unkillability. Interacting with a chimpanzee previously infected with the virus endangered human researchers and other laboratory chimpanzees. Additionally, the media attention on AIDS research highlighted this problem of infected chimpanzees as a moral and financial excess.

What should laboratories do with chimpanzees infected with HIV? Researchers did not consider HIV-infected chimpanzees good research subjects in the future, as their infected status would cloud results gathered for other studies of disease. For biosafety, laboratories needed to house these chimps separately from the other, "clean" chimps to prevent the virus's spread. The Primate Research Institute at NMSU sought NIH compensation for infecting long-lived animals through federal AIDS research contracts, as these chimps would be considered "non-income producing" in the future. They agreed that the NIH would provide an endowment of \$30,000 per chimpanzee that had been infected with HIV in NIH-sponsored studies, although according to NMSU, this sum would cover only about fifteen years of a chimpanzee's care and not the total

<sup>&</sup>lt;sup>31</sup> Robert Yerkes to Glen Finch, December 4, 1937, box 18, folder 324, Robert Mearns Yerkes Papers (MS 569) (RMY Papers), Manuscripts and Archives, Yale University Library, New Haven, Conn.; Karl Lashley, "Program for Research at the Station for Primate Biology," 1941, box 109, folder 2038, RMY Papers.

lifetime costs.<sup>32</sup> In an internal memo about the financial risk and responsibility for their chimpanzees, NMSU officials posed the questions, "It is logical to assume that whoever makes the decision to breed a given species must be responsible for the offspring. Was the decision to breed chimpanzees made by NMSU/PRI, or NIH, or FDA? Having made a decision to breed, must the breeder then meet standards of ethics determined by another organization, particularly that euthanization of surplus and diseased chimpanzees is not ethical?"<sup>33</sup> Having bred chimpanzees under the federal NCBP and infected chimpanzees with HIV as part of NIH contracts, NMSU administrators felt unfairly stuck with the financial burden of long-lived, diseased animals that they weren't allowed to kill.

## **Innocent Cousins**

Beyond concerns about the chimpanzee's biomedical value in HIV/AIDS research and the costs of this research for laboratories, chimpanzee experimentation struck large swaths of the American public as ethically wrong.<sup>34</sup> As media coverage and animal advocacy publicized the use of chimpanzees in HIV/AIDS research, opposition to this practice grew from a variety of rationales. Some animal rights groups saw chimpanzee research in AIDS and animal experimentation more broadly as proof of American biomedicine's perverse priorities and lack of

<sup>&</sup>lt;sup>32</sup> Memorandum, February 23, 1990, Records of the Office of the President, box 4, NMSU.

<sup>&</sup>lt;sup>33</sup> Financial Risk and Responsibility Regarding Lifetime Care of Non-Supported and Non-Income Producing Chimpanzees, Records of the Office of the President, box 2, NMSU.

<sup>&</sup>lt;sup>34</sup> In "Bodies at War," Ryan Shapiro notes the complex array of historical circumstances that transform previously niche animal issues into more public concerns through the case of military experimentation with beagles. Shapiro, "Bodies at War: National Security in American Controversies over Animal & Human Experimentation from WWI to the War on Terror" (Ph.D. diss., MIT, 2018).

accountability to its constituents, concerns shared by many AIDS activists. Others objected to the use of chimpanzees specifically, and only in AIDS research, but did not oppose experimentation with other animals. One of the most common themes in animal advocacy material was the emphasis on chimpanzees as close cousins or relatives of humanity, as understood through their genetic proximity.

HIV/AIDS research set in motion an unusual success in animal advocacy, in which advocates used a variety of arguments against chimpanzee experimentation and constructed antichimp experimentation as a "commonsense" position distinct from other kinds of animal research ethics. Though perceptions of a unique relationship between primates and human beings had existed for decades, if not centuries, animal advocates utilized new genetic data to articulate a special proximity between humans and chimpanzees that should preclude chimpanzees' use in medical research. A consequence of this insistence on a unique human-chimpanzee kinship, intended by some groups and unintended by others, was the separation of chimpanzees from other animal species involved in biomedical research. At times, chimpanzee advocates also framed these ideas of human obligation to "innocent" chimpanzee relatives in contrast to human victims of AIDS.

Organizations lobbying for the end of chimpanzee laboratory research publicized a special relationship between humans and chimpanzees. The International Primate Protection League sent petition cards to their members to sign and mail to their representatives. The cards featured a picture of a wide-eyed baby chimpanzee and a description of how laboratory

chimpanzees suffered from a life in the lab.<sup>35</sup> They ended by declaring that alternative ways to study AIDS must be found that do not further harm long-suffering lab chimps. British animal advocacy group FRAME (Fund for the Replacement of Animals in Medical Experimentation) sent a newsletter about the use of chimps in American lab research. Under the heading "Chimpanzees Are Special," FRAME wrote, "Chimpanzees and human beings are anatomically, physiologically, neurologically and genetically more similar to each other than they are to any other animals." A news release from the Humane Society on chimps in AIDS research led with an appeal to human-chimp kinship: "As humankind's closest relative, the chimpanzee is a symbolic link between our species and the rest of the natural world." Although these efforts were eventually influential in changing the practices and legislation of animal research, they also constructed kinship in an exclusive way that upheld a human-chimpanzee relatedness at the expense of other animals and other human beings.

The terms "cousin" and "relative" filled animal advocacy material alongside the invocation of genetic similarity. In an article for the National Anti-Vivisection Society, NAVS director Donald Barnes wrote, "Why should anyone applaud the infliction of such a dire disease on our nearest genetic cousin, an endangered species with shares 98.6 percent of our DNA,

<sup>&</sup>lt;sup>35</sup> These petition cards are present in many of the AIDS TRACER correspondence files in 1983 and 1984. "Save the Doomed Chimpanzees," Series 1: AIDS TRACER, 1/11/1984–4/25/1984, 101637321X13, box 2, folder 7-10, AIDS correspondence (TRACER) archives, MS C 607, Archives and Modern Manuscripts Collection, History of Medicine Division, National Library of Medicine, Bethesda, Md. (hereafter NLM). <sup>36</sup> FRAME, "The Use of Chimpanzees as Laboratory Animals: A Step Too Far," box 4-068, folder 1, Animal Welfare Institute Records, Special Collections Research Center, North Carolina State University Libraries, Raleigh, N.C. (hereafter NC State).

<sup>&</sup>lt;sup>37</sup> "HSUS Works to Prevent the Taking of Chimpanzees from the Wild," HSUS News 1988, box 4-068, folder 2, Animal Welfare Institute Records, NC State.

especially when there are many humans afflicted with AIDS who are eager to serve as 'guinea pigs' for further research?"<sup>38</sup> In a report on captive chimpanzee care, psychologist Frans de Waal wrote, "The purpose of this section is to introduce the species (both *Pan troglodytes* and *Pan Paniscus*), and to demonstrate that we are not talking about *just an animal*, but about 'a cousin' with whom we share a large number of mental, psychological and social characteristics, some of which are relevant in connection with animal suffering."<sup>39</sup> De Waal expressed his view that chimps are not "just animals" but in a category of their own for research ethics.

Animal advocacy groups utilized figures from new genetic studies on chimpanzee DNA to repeat that humans and chimpanzees share approximately 98 percent of their genes.

Anthropologist Jonathan Marks has observed, "In the 1990s, we routinely heard that we are just 1 or 2% different from chimpanzees genetically, and therefore . . . what?" For those opposed to chimpanzee lab research, this statistic meant that animals so similar to human beings should not be subjected to experimentation. Marks points to the emptiness of these genetic measures of relatedness, suggesting that they confirm what we already know—that humans and chimpanzees have many similarities—without offering new insights or explanations into the mechanisms of difference. These genetic statistics and language about chimpanzee-human closeness are fixtures

\_

<sup>&</sup>lt;sup>38</sup> "Announcement of Chimp with AIDS Draws Fire from Former Air Force Primate Researcher," National Anti-Vivisection Society, May 6, 1996, box 19, folder 6, PsyETA, NC State.

<sup>&</sup>lt;sup>39</sup> Frans de Waal, "Outline for Captive Chimp Guidelines Report," box 86, folder 12, PETA, NC State, emphasis added.

<sup>&</sup>lt;sup>40</sup> Jonathan Marks, *What It Means to Be 98% Chimpanzee: Apes, People, and Their Genes* (Berkeley: University of California Press, 2003), 40.

in scientific discourse about chimpanzees in the 1990s.<sup>41</sup> But genetic statistics were simply overlaid on preexisting debates about lab research with chimpanzees, not transforming them as much as offering another way of expressing the idea of chimpanzees as too similar to humans to be lab animals.

Biomedical researchers working with chimpanzees shared this conviction that chimpanzees had a unique proximity to human beings. For proponents of laboratory research with chimps, proof of genetic closeness was further justification of chimpanzees' research value for experimentation that couldn't be done with human subjects. An article in the *NIH Reporter* stated that chimpanzees' "unique physiologic and genetic similarities to humans make them the only known animal models for some of the most devastating human diseases." Both biomedical researchers and people opposed to the use of chimpanzees in AIDS research perceived chimpanzees as having a special relatedness to humans but drew different conclusions about the moral affordances and scientific value this kinship generated.

The construction of chimpanzees as uniquely deserving protection from HIV/AIDS research is evident in the views of people who suggested swapping other research animals for chimpanzees. Field primatologist Thomas Struhsaker wrote to the NIH's Department for Health and Human Services to share his dismay at the use of chimpanzees in AIDS research and to suggest that rhesus macaques be used instead: "I wonder why the use of chimpanzees has been

<sup>&</sup>lt;sup>41</sup> Dorothy Nelkin and Susan Lindee argue that genetic findings become popular resources because they complement existing cultural beliefs. Dorothy Nelkin and M. Susan Lindee, *The DNA Mystique: The Gene as a Cultural Icon* (Ann Arbor: University of Michigan Press, 2004).

<sup>&</sup>lt;sup>42</sup> "Successful Breeding Program Benefits Chimpanzee Conservation and Research," *NIH Reporter*, box 86, folder 10, PETA Collection, NC State.

authorized when a much cheaper research animal, the rhesus macaque, has, I understand, already demonstrated its ability to contract the disease," referencing laboratory outbreaks of simian immunodeficiency virus. <sup>43</sup> In his letter, Struhsaker mentioned cost and the endangered status of wild chimpanzees as reasons for utilizing other animals in AIDS research. Conservationist and chimpanzee ethologist Jane Goodall was a vocal critic of importing wild African chimps for U.S. lab research on AIDS and against individual chimpanzee caging in labs but objected to accusations that she opposed lab animal research broadly. Quoted in the *Washington Post*, Goodall said, "There seems to be a campaign that Jane Goodall is against all animal research. I'm not, and I've never said that ever anywhere." Selective, exclusionary empathy for chimpanzees as a special case among animals was a popular viewpoint.

Though many Americans who opposed chimpanzee research in AIDS were not troubled by the use of other animals in laboratory experiments, biomedical researchers tended to discuss animal rights as a cohesive movement of radical anti-research sentiment. Researchers muddied the waters in their worries about animal rights' impact on research—had animal rights gained a powerful mainstream audience, or was widespread criticism of animal experimentation concentrated around individual issues, such as chimpanzee research? In a 1992 oral history, NIH historian Victoria Harden asked director of animal resources William Gay if animal rights had impacted the kind or number of animal models that biomedical researchers used. Gay responded, "They have not had any effect on the kinds and numbers of models available. But they have had

<sup>&</sup>lt;sup>43</sup> Thomas T. Struhsaker to Edward N. Brandt Jr., November 22, 1983, series 1: AIDS TRACER, 12/2/1983–12/30/1983, 101637321X12, box 2, folder 5-6, AIDS correspondence (TRACER) archives, MS C 607, Archives and Modern Manuscripts Collection, NLM.

<sup>&</sup>lt;sup>44</sup> Sandy Rovner, "Humans, Chimps, and AIDS: Matters of Survival," Washington Post, June 14, 1988.

an impact on animal use and it has become infinitely more expensive to use animals because of all the regulations."<sup>45</sup> He understood animal welfare concerns as contributing to the costs of animal research, which encumbered animal use, but had not impacted researchers' choice of animal models. In 2004, virologist Paul Brown assessed the impact of animal rights differently. He told an interviewer, "The animal rights people did sensitize, big time, the NIH with respect to all forms of animal experimentation, but particularly primate and even more particularly chimpanzees."<sup>46</sup> Chimpanzees, then, had become recognized as a distinct success in anti–animal research efforts.

Separating chimpanzees from other issues in animal experimentation helped create the sense that opposing lab chimp research was a commonsense position. In a 1991 opinion for *Nature*, Barbara Culliton voiced a common worry among biomedical researchers—that animal rights groups achieved a concerning foothold in the United States. <sup>47</sup> She worried about growing participation in a movement that had previously been fringe. One published response to Culliton's opinion piece in a later issue of *Nature* responded enthusiastically and agreed that mainstream participation in animal rights was growing. <sup>48</sup> But a second response to Culliton's piece took a different angle. Mathematician T. E. Forster wrote to *Nature* to highlight that AIDS research with chimpanzees played a major role in the increased animal advocacy. But for Forster, this was an entirely reasonable position that did not indicate widespread agreement with the

\_

<sup>&</sup>lt;sup>45</sup> William Gay interviewed by Victoria Harden, July 15, 1992,

https://history.nih.gov/display/history/Gay%2C+William+1992.

<sup>&</sup>lt;sup>46</sup> Paul Brown interviewed by Maya Pointe, February 20, 2004, https://history.nih.gov/display/history/Brown%2C+Paul+2004.

<sup>&</sup>lt;sup>47</sup> Barbara J. Culliton, "Can Reason Defeat Unreason?," Nature 351, no. 6327 (June 13, 1991): 517.

<sup>&</sup>lt;sup>48</sup> Mark Matfield, "The Animal Rights Question," *Nature* 352 (July 4, 1991): 9.

broader animal rights agenda: "Part of the reason is that thoughtful members of the public troubled by—say—the use of chimpanzees in AIDS research can always hope that some sensible synthesis can be made of the animal rightist nonsense and medical establishment nonsense (of which the article in question is an excellent example). You do not need to be a philosopher or a theologian to know that there is something very dodgy about sacrificing chimpanzees for purely human purposes." This letter to *Nature* suggested that what agitated researchers interpreted as the rise of militant animal rights was actually disagreement with one specific animal research practice. Ethical expertise wasn't required to come to this conclusion about chimpanzees—anyone could see that AIDS experimentation with chimpanzees was simply wrong.

## Drugs into (Human) Bodies

While animal advocates constructed chimpanzees as humanity's closest cousins who should be protected from experimental harm, they also invoked chimpanzees' relationship to the disease politics of AIDS. For many of those passionately opposed to HIV/AIDS experimentation with chimpanzees, AIDS's status as a "gay disease" made HIV research a highly unsympathetic cause. As members of humane societies, animal protectionist groups, and other Americans expressed their opposition to the use of chimps in this research, they often invoked an AIDS patient who was gay or used drugs to emphasize that they deserved their disease, while chimpanzees did not. 50 Scholars Dana Luciano and Mel Y. Chen have described how sexual

<sup>&</sup>lt;sup>49</sup> T. E. Forster, "The Animal Rights Question," *Nature* 352 (July 4, 1991): 9.

<sup>&</sup>lt;sup>50</sup> Some of the sources I have used in this research provide more generalizable information than others about the people who opposed chimpanzee experimentation for HIV/AIDS research, making it difficult to characterize them as a cohesive political group beyond their shared disagreement with chimp HIV/AIDS

norms have constituted and regulated hierarchies of humanness—painfully evident in chimpanzee advocates' implicit and explicit claims that chimps did not engage in anal sex.<sup>51</sup> In her writing on AIDS and sexual difference, Catherine Waldby suggests that official AIDS discourse "holds that only the heterosexual masculine is fully equivalent with the human and the normal." For some chimpanzee advocates, chimps' presumed sexual habits rendered them both more normal and more human than their imagined figure of a promiscuous gay man with AIDS. Historians of HIV/AIDS have shown how the popular understanding in the early 1980s of HIV as a disease of white gay men erased other communities powerfully impacted by HIV, particularly communities of color. This assumption about the identity of the HIV positive person is reflected and reiterated by many of the chimpanzee advocates who appear in this paper. Those who contrasted the innocence of chimpanzees against the guilt of people with AIDS named drug use and homosexual intercourse as the hallmarks of a person with AIDS.

More radical animal rights groups and some AIDS activists saw a different, less oppositional relationship between people with AIDS and experimental animals. These groups

research. Many of the animal rights documents I rely on were written anonymously. Most letters to the Department of Health and Human Services that express many Americans' opposition to the use of chimpanzees in AIDS research were written by citizens who do not otherwise cross my historical research. Figures like Shirley McGreal, however, who directed the International Primate Protection League and worked for decades advancing primate welfare issues, do allow for further description. McGreal's form of advocacy for primates echoes older traditions of white-women-led animal protectionist movements that villainized socially marginalized groups (immigrants, the working class) in order to elevate the status of animals. With the issue of chimps in the 1980s and 1990s, people with AIDS bore the brunt of this stigmatization.

<sup>&</sup>lt;sup>51</sup> Dana Luciano and Mel Y. Chen, "Has the Queer Ever Been Human?," *GLQ* 21, no. 2–3 (2015): 183–207.

<sup>&</sup>lt;sup>52</sup> Catherine Waldby, *AIDS and the Body Politic: Biomedicine and Sexual Difference* (New York: Routledge, 1996), 9.

criticized chimpanzee AIDS research as a waste of money and a form of medical research bureaucracy that ignored the voices of people with AIDS and what they considered to be research priorities. Opposition to the use of chimpanzees in HIV/AIDS research created strange bedfellows, from humane society directors who viewed AIDS as a moral problem thrust on innocent chimpanzees to radical AIDS activists who saw chimp experimentation as the practice of a broken medical system that prolonged the suffering of both people and animals.

Among conservative animal advocacy groups, beliefs that chimpanzees deserved protection from AIDS relied on notions of chimpanzee innocence and the popular, stereotyped notions of AIDS as a disease of gay men and drug users. A constituent of Colorado congressman Ken Kramer wrote to voice his opposition to the use of chimpanzees in HIV/AIDS research and stated that "an induced disease is totally different than one that evolves, by improper living habits, over a period of time." The rhetoric of AIDS as a moral failure of promiscuous gay men and intravenous drug users was contrasted against the purity of chimpanzees, animals who did not "deserve" to suffer the way human AIDS patients did. Letters such as these implied that other kinds of diseases would be more justified in the use of chimpanzees than AIDS. Another letter to the Department of Health and Human Services (DHHS) warned that "the humane community in the United States will not condone this unspeakable atrocity to perfectly innocent animals" and proclaimed that "chimps should not have to pay for human social

<sup>-</sup>

<sup>&</sup>lt;sup>53</sup> George Pelton to Representative Ken Kramer, December 7, 1983, MS C 607, AIDS correspondence (TRACER) Archives, 1982–1990, Archives and Modern Manuscripts Collection, National Library of Medicine, https://collections.nlm.nih.gov/catalog/nlm:nlmuid-101637321-root?leaf=101637321X64.

problems!!!!!!"<sup>54</sup> Shirley McGreal, director of the International Primate Protection League, wrote to the DHHS to state that "chimpanzees, who do not practice anal homosexual relations or take drugs, should not have to pay the price for humanity's folly."<sup>55</sup> In McGreal's work with the IPPL, she consistently villainized the lifestyle of people with AIDS in her advocacy for laboratory chimpanzees. For these opponents of chimpanzee experimentation, there was no question about who deserved care and protection between chimpanzees and people with AIDS.

For more radical animal rights groups and AIDS activists, HIV/AIDS research with chimpanzees demonstrated how bureaucratized biomedical research failed to address the needs of marginalized human patients. Animal liberation group Dews Ex Machina released a flyer in April 1988 about the NIH's use of chimpanzees that enumerated ways to address AIDS that were more impactful to people with AIDS. The flyer stated that "research protocols involving chimpanzees can only serve to prolong the suffering of those humans with AIDS, and impede the development of a cure and a vaccine." Dews Ex Machina listed the patient-centered projects that could be funded with the seven million dollars of AIDS funding used by the NIH's chimpanzee breeding program, such as a year of hospital care for 200 people with AIDS, housing for 2,900 people with AIDS for a year, and one year of AZT treatment for 700 people. The flyer closed with the assertation that only human trials would make progress in AIDS

<sup>5.</sup> 

 $<sup>^{54}</sup>$  Mrs. Charles M. Lucas to National Institutes of Health, October 9, 1983, AIDS correspondences (TRACER), NLM.

<sup>&</sup>lt;sup>55</sup> Shirley McGreal to New Mexico State University President, October, 1983, Primate Research Laboratory UA 2004-034, JEH PRI Correspondence 1980–1987, Archives and Special Collections, NMSU.

<sup>&</sup>lt;sup>56</sup> Dews Ex Machina, "World Laboratory Animal Liberation Day," box 5-27, folder 6, Argus Archive Records, NC State.

research. "With tens of thousands of AIDS sufferers," it read, "there are no doubt many who are willing and able to participate immediately in AIDS research and testing. Many people are now demanding that opportunity." <sup>57</sup>

Many AIDS activists similarly called for the NIH and FDA to incorporate AIDS patients' willingness to try experimental drugs into the slow and rigid governmental research protocols. Larry Kramer, of the New York City branch of ACT UP, wrote in the *New York Times* that "AIDS sufferers, who have nothing to lose, are more than willing to be guinea pigs." A 1988 story in *Bravo! Newsmagazine* described how San Diego–based activist Lance Clem "offered himself as a human 'guinea pig' to the National Institutes of Health" for an AIDS vaccine trial. The article read, "Pointing out that a laboratory can spend up to \$50,000 for a research chimpanzee, Clem jokes, 'I'm a lot cheaper for them." Historian Susan Lederer has written that the idea of human guinea pigs conjures "disturbing images of men, women, and children exploited in the name of medical science." And yet activists such as Kramer and Clem, on behalf of many people with AIDS, demanded to be researched upon and cast this as opportunity, not exploitation.

AIDS activists' urging the biomedical establishment to get drugs into human bodies constructed their relationship to experimental animals in novel ways that reflected their relatively

<sup>&</sup>lt;sup>57</sup> Ibid.

<sup>&</sup>lt;sup>58</sup> Larry Kramer, "The F.D.A.'s Callous Response to AIDS," New York Times, March 23, 1987.

<sup>&</sup>lt;sup>59</sup> Mark Gabrish Conlan, "Clem 'Guinea Pig' in Vaccine Test," *Bravo! Newsmagazine* 1, no. 39 (February 4–10, 1988).

<sup>&</sup>lt;sup>60</sup> Lederer, Subjected to Science (n. 6), 2.

privileged positionality in the world of health care and medicine.<sup>61</sup> White AIDS activists who addressed chimpanzee experimentation directly and offered themselves up in the animal's stead hardly represented the views of most people with AIDS. For a majority white-led organization like ACT UP, members volunteering to serve as experimental animals represented a distinct historical relationship with science and medicine. Scholar Jayna Brown reminds us that "while privileged bodies enjoy life-enhancing scientific processes such as vaccines, organ transplants, and other sophisticated medical procedures, other, often racialized bodies become useful as raw sources and labor, valued for their biological capacities." Brown refers to the exploitation of Henrietta Lacks and her "immortal cell" line, and numerous historical examples from experimental surgery to vaccination highlight the material dangers for Black people's association with laboratory animals. Though Kramer and Clem undoubtedly faced stigma for their AIDS

\_

framework of "drugs into bodies" centers the perspectives of white AIDS activists, while people of color and feminists offered broader critiques of the inequalities of U.S. health care. This dynamic is clear in white activists' provocation to replace laboratory chimpanzees in experiments with themselves as a form of accessing treatment. Jennifer Brier, Julio Capó Jr., Christina Hanhardt, and Dan Royles, "HIV/AIDS in U.S. History: A Conversation about Early Popular Histories of HIV/AIDS," Organization of American Historians, https://www.oah.org/tah/august-4/hiv-aids-in-u-s-history-a-conversation-about-early-popular-histories-of-hiv-aids/; Jonathan Bell, Darius Bost, Jennifer Brier, Julio Capó Jr., Jih-Fei Cheng, Daniel M. Fox, Christina Hanhardt, Emily K. Hobson, and Dan Royles, "Interchange: HIV/AIDS and U.S. History," *J. Amer. Hist.* 104, no. 2 (2017): 431–60. Royles has shown that Black AIDS activists often employed different strategies from white activists to promote AIDS awareness, drawing on connections between American anti-Blackness and the structural impacts of poverty on health. Dan Royles, *To Make the Wounded Whole: The African American Struggle Against HIV/AIDS* (Chapel Hill: University of North Carolina Press, 2021).

<sup>&</sup>lt;sup>62</sup> Jayna Brown, "Being Cellular: Race, the Inhuman, and the Plasticity of Life," *GLQ* 21, no. 2 (2015): 322.

<sup>&</sup>lt;sup>63</sup> Dierdre Cooper Owens, *Medical Bondage: Race, Gender, and the Origins of American Gynecology* (Athens: University of Georgia Press, 2017); Susan Reverby, *Examining Tuskegee: The Infamous Syphilis Study and Its Legacy* (Chapel Hill: University of North Carolina Press, 2009); Jeannette Vaught, "Materia

diagnosis, their insistence on becoming guinea pigs (or laboratory chimpanzees) was about access to cutting-edge treatment and facilitated their identification with these primates without the historical legacy of systemic medical racism and animalization.

Gay newspapers in the late 1980s and early 1990s received op-eds from readers expressing their beliefs about the ethics of chimpanzee AIDS research. In the view of gay Australian activist Peter Tatchell, chimpanzee and other animal experimentation with AIDS was a form of exploitation akin to homophobia. Tatchell wrote several op-eds that disavowed the use of chimps in AIDS research. In the London *Gay Times* Tatchell asked readers, "Am I alone in my sense of moral revulsion at the way chimpanzees are being abused in the name of scientific research to combat Aids?" In another piece in *The Pink Paper*, Tatchell argued that those oppressed by homophobia were in a position to better understand animal oppression: "As lesbians and gay men who know the pain of homophobia, we have a special duty to speak out

\_

Medica: Technology, Vaccination, and Antivivisection in Jazz Age Philadelphia," *Amer. Quart.* 65, no. 3 (2013): 575–94.

<sup>&</sup>lt;sup>64</sup> Dell Richards, "Chimp Model Hinders AIDS Research," *Outlines* 2, no. 1 (June 1988); Lela Schuster, "Killing Chimpanzees for AIDS Research," *Gay Commun. News* 16, no. 4 (January 1989).

<sup>65</sup> Scholarship in queer studies and animal studies has explored the intersections of these identities, alongside the categories of race and disability. Mel Y. Chen's concept of animacy describes how a hierarchy of liveliness, race, sexuality, ability, environment, and national concerns maps on to who and what has agency. Chen, *Animacies: Biopolitics, Racial Mattering, and Queer Affect* (Durham, N.C.: Duke University Press, 2012). In *Beasts of Burden*, Sunaura Taylor argues for an entwined relationship between disability and animal activism, examining how comparisons between animals and disabled people have historically functioned as a form of degradation. Taylor, *Beasts of Burden: Animal and Disability Liberation* (New York: New Press, 2017). Dylan McCarthy Blackston examines LGBTQ+ issues and great ape conservation as the two philanthropic focuses of the Arcus Foundation, describing how the foundation problematically fixes both these categories even as it seeks justice for them. Blackston, "Monkey Business: Trans\*, Animacy, and the Boundaries of Kind," *Angelaki* 22, no. 2 (2017): 119–33.

66 Peter Tatchell, "AIDS and Animal Rights," *Gay Times*, January (London, 1990), 28.

against the exploitation of animals in HIV research."<sup>67</sup> In 1984, a gay caucus formed in the animal rights organization People for the Ethical Treatment of Animals. An article in the *Washington Blade* included interviews with several gay men involved in its organizing who opposed the use of primates in AIDS research. Denny Hartzell told the paper that "I've become increasingly aware of how closely tied other issues are. I think cruelty to other humans begins with the ease with which we express cruelty towards animals."<sup>68</sup> These gay men identified a shared marginalization in their experiences of homophobia and in the utilization of animals in HIV research, but this was certainly not shared by all gay AIDS activists or other communities heavily impacted by AIDS. Jeff Getty, who had received an experimental bone marrow transplant from a baboon to help treat his AIDS, wrote in the *Wall Street Journal*, "You can't be for AIDS, breast cancer and diabetes research and also support militant animal rights groups."<sup>69</sup> For Getty, the interests of laboratory animals and those of people with AIDS were diametrically opposed.

## Conclusion

Infectious disease researchers in the 1980s had expected chimpanzees to be effective models in HIV/AIDS research because of their previous utility in hepatitis research and because they could be infected with human immunodeficiency virus. More intangibly, biomedical researchers may have also been motivated by the belief that chimpanzees' genetic, anatomical, and psychological

<sup>&</sup>lt;sup>67</sup> Peter Tatchell, "Animal Rights and HIV Research," *The Pink Paper*, June 8, no. 178 (1991).

<sup>&</sup>lt;sup>68</sup> "Gays Form Caucus of Animal Protection Group," *Washington Blade*, Doris Day Animal League Records, box 9, folder 2, NC State Special Collections Library.

<sup>&</sup>lt;sup>69</sup> Jeff Getty, "The Tragic Hypocrisy of 'Animal Rights," Wall Street Journal, June 13, 1996.

resemblances to humans must have a scientific payoff in this time of epidemiological crisis. But enrolling chimpanzees in HIV/AIDS research did not produce the advancements in AIDS treatment that researchers had envisioned. Instead, it exposed the scientific uncertainties of working with such a species-specific virus and opened the practice of chimpanzee experimentation up to a wider critical audience than ever before.

The diverse public audiences that objected to the use of chimps in HIV/AIDS research utilized several different arguments against this biomedical practice. Most chimpanzee advocates shared the belief of biomedical researchers that chimpanzees were uniquely related to humans but leveraged this relatedness to demand special moral consideration for chimps. Some chimpanzee advocates pushed their moralistic arguments further, constructing chimpanzees as innocent victims of experimentation by contrasting them against homophobic stereotypes of a people with AIDS as promiscuous gay men and drug users. In turn, a subset of gay AIDS activists equally denounced HIV/AIDS chimpanzee research as a practice of a slow bureaucratic NIH that was unconcerned with expanding access to treatments. Within biomedical research institutions, HIV-infected chimpanzees produced little usable research and were becoming long-term financial liabilities for laboratories under scrutiny.

By the time the first laboratory chimpanzee developed AIDS-like symptoms in the mid1990s, most laboratories and institutions that had utilized chimps in AIDS research were seeking
to get rid of them. Animal advocates had put a spotlight on AIDS research with chimpanzees,
leaving institutions that hosted chimp AIDS research unable to discreetly deal with the future of
these animals. With no other chimpanzees developing AIDS, no vaccine, and millions of dollars
of research funding spent, chimps were no longer considered promising animal models of the

disease. However, the NCBP that began funding breeding ten years earlier succeeded in producing a few hundred new chimpanzee research subjects. This dissonance between the fixed timescales of chimpanzee reproduction and capriciousness of biomedical research demand left the NIH with a chimpanzee surplus. More chimpanzees to feed and house existed than were needed for research, in addition to the expensive population of HIV-infected, nonproductive chimpanzees. Animal advocates continued to bring attention to the surplus chimpanzees as a demonstration of the excess and waste generated by animal research, rendering the chimpanzees a public relations liability as well as a financial liability for the NIH.

In 1997, the Air Force divested itself from its large chimpanzee colony in a process that generated another kind of animal institution—the chimpanzee retirement sanctuary. Animal advocacy groups, funded by donations and requesting federal dollars, drew up plans to provide long-term care for chimpanzees that had be used in laboratory research. The Air Force's divestiture, however, sent the majority of chimpanzees to a private toxicology company and only a few to sanctuaries—demonstrating the institution's main concern as off-loading the

\_

<sup>&</sup>lt;sup>70</sup> In "How Experiments Age," Brad Bolman has explored the history of a control group of beagles and shown another way that researchers deal with the problem of "extra" life. Rather than considering the animals "surplus," Bolman's actors enrolled beagles into a long-term study on gerontology and transformed the dogs' aging into another scientific product. Bolman, "How Experiments Age: Gerontology, Beagles, and Species Projection at Davis," *Soc. Stud. Sci.* 28, no. 2 (2018): 232–58.

<sup>71</sup> Julietta Hua and Neel Ahuja's ethnography of a chimpanzee sanctuary provides a rich description of the gendered labor carried out in those spaces. They described retired chimpanzees as "unkillable wards of the state," echoing the words of John Speck's assessment of the long-term cost of chimpanzees for whom euthanasia was "unthinkable." In her insightful ethnography of a great ape sanctuary, Juno Salazar Parreñas terms the Bornean orangutan refuge she is studying a "hospice for a dying species," an apt description for former laboratory chimp sanctuaries as well. Hua and Ahuja, "Chimpanzee Sanctuary: 'Surplus' Life and the Politics of Transspecies Care," *Amer. Quart.* 65, no. 3 (2013): 619–37; Parreñas, *Decolonizing Extinction: The Work of Care in Orangutan Rehabilitation* (Durham, N.C.: Duke University Press, 2018).

chimpanzees' financial and ethical baggage. In 2000, Congress passed the Chimpanzee Health Improvement, Maintenance and Protection (CHIMP) Act to retire "surplus" chimpanzees from laboratories to the newly established Chimp Haven sanctuary in Keithville, Louisiana. Since the creation of Chimp Haven, several other laboratory chimpanzee sanctuaries emerged, absorbing the slow stream of lab chimp retirement that began in the early 2000s. In 2015, the federal government officially ended their support of biomedical chimpanzee research.

Congressional debates about the passage of the CHIMP Act in 2000 reflect many of the same concerns voiced in the controversy about HIV/AIDS research with chimpanzees—namely, if human and chimpanzee interests were a zero-sum game. Some members of the House of Representatives considered the sanctuary system for chimps to be an inspiring analogy to the future of care for humans. Texas's Ralph Hall stated that the CHIMP Act was "an excellent animal model for future health care legislation for all American citizens." Others balked at the provisioning of such comprehensive long-term care for nonhumans. Sherrod Brown of Ohio expressed that "providing chimpanzees with housing in a protected environment that is sensitive to their social needs, along with long-term health care and medications, is all well and good for the chimps. However, America's human citizens also deserve these benefits. It is time for this Congress to examine the public health policies it is legislating for animals . . . and use them as models for caring for our most valued resource, America's human citizens." Brown's discomfort with providing chimpanzees with housing and health care that many Americans

<sup>&</sup>lt;sup>72</sup> Chimpanzee Health Improvement, Maintenance, and Protection Act, Pub. L. No. 106-551, December 20, 2000.

<sup>&</sup>lt;sup>73</sup> Ralph Hall (TX), "H.R. 3514," Congressional Record, House, October 24, 2000, H10550.

<sup>&</sup>lt;sup>74</sup> Sherrod Brown (OH), "H.R. 3514," Congressional Record, House, October 24, 2000, H10550.

didn't have access to demonstrates the enmeshed concerns about human and animal welfare that animated much of the controversy over the experimental use of chimps in HIV/AIDS research.

Brown did not consider "legislating for animals" to be his job and prodded his fellow representatives to reflect on whom exactly they were providing with health care and housing.

But the passage of the CHIMP Act and the historical developments that led to its passage reflect the sentiment of American animal advocates in the 1980s and 1990s that chimpanzees were not like other animals and indeed were more deserving of protection than many groups of humans. In addition to Brown's main plea that animals should not be afforded the kinds of governmental care that humans didn't yet have, an economic argument underlies his speech.

Calling America's human citizens "our most valued resource," Brown framed chimp retirement as a poor investment in chimpanzees that would not produce anything for the nation again.

As demonstrated in the HIV/AIDS chimpanzee research controversy, chimpanzees brought a set of messy questions to bear on the economics and ethics of laboratory animal research. And like other bioethical debates, the controversy over chimpanzees as laboratory animals foregrounded some ethical questions while submerging others. Hopes in the late 1980s that chimpanzees might provide unmatched insight into combatting AIDS and meet the research needs of the future dwindled as chimps became financial drains on labs and a major source of criticism from the public. The end of the chimpanzee's popularity as a research animal, however, was not a radical reshaping of attitudes about scientific knowledge production's relationship to human and animal lives. Instead, animal advocates depicted chimpanzees as the most deserving of protection from experimentation by distancing them from issues of other laboratory animals and research ethics and emphasizing their innocence against the guilt or responsibility of people

with AIDS. In the late 1990s, infectious disease researchers confronted chimps' lack of utility as an animal model and their cost in the lab, rendering the end of chimpanzees as laboratory animals and alignment between the circumscribed efforts of animal advocates and the bottom line of laboratory economics.

\*

BRIGID PRIAL is a doctoral candidate in the History and Sociology of Science department at the University of Pennsylvania; <a href="mailto:brigidp@sas.upenn.edu">brigidp@sas.upenn.edu</a>.

ACKNOWLEDGMENTS: I am grateful for the time and attention of Robby Aronowitz, Susan M. Lindee, Etienne Benson, Sebastián Gil-Riaño, Sam Schirvar, Caroline Weschler, the editorial board of *BHM*, the insightful anonymous reviewers, and the participants in the University of Pennsylvania's History and Sociology of Science Monday workshop for their help in developing this paper. Thank you to Gregg Mitman, Shadrach Kerwillain, Tari Suri, Catherine Mas, and Marion Thomas for providing a community for thinking deeply about primates in the history of science. The archivists at New Mexico State University provided invaluable guidance and access to rich primary sources. This research was supported by grant G-2023-21025 from the Alfred P. Sloan Foundation.