Animal Testing, New Horizons

Corporate Legal Influence on the Testing of Products on Non-Human Animals

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About the Critical Corporate Theory Collection

The Critical Corporate Theory Collection is part of the *Systemic Justice Journal*, published by the Systemic Justice Project at Harvard Law School. The Collection is comprised of papers that analyze the role of corporate law in systemic injustices. The authors are Harvard Law students who were enrolled in Professor Jon Hanson's Corporations course in the spring of 2021.

The Collection addresses the premise that corporate law is a core underlying cause of most systemic injustices and social problems we face today. Each article explores how corporate law facilitates the creation and maintenance of institutions with tremendous wealth and power and provides those institutions a shared, single interest in capturing institutions, policies, lawmakers, and norms, which in turn further enhance that power and legitimates its unjust effects in producing systems of oppression and exploitation.

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Contents

ABSTRACT

The testing of cosmetics, chemicals, and medicine on non-human animals is conventionally justified as scientific advancement without regard to the suffering of these animals. This paper examines how corporate legal theories have contributed to the prevalence of this practice and slowed the adoption of more ethical alternatives. By encouraging profit maximization, corporate law directs companies to continue conventional testing practices and discourages promotion and funding of alternatives. International laws requiring animal testing enable companies to choose profits over ethics, and companies consistently ignore ethical considerations in favor of gaining access to international markets for their products. Moreover, outdated regulations and limited consumer access to, and understanding of, industries like the chemical industry limit consumers' purchasing power and delay change.

Industry influence has also hampered efforts to regulate laboratory animal testing, both in the legislative sphere and in the administrative agency context. Powerful and wealthy industry groups have not only discouraged regulation in the first place but have also successfully influenced regulating agencies in ways that allow the industry to selfregulate with little meaningful oversight. This aversion to government regulation results in inadequate protections for laboratory animals, with many animals excluded altogether from certain federal legal protections. Industries also manipulate and exploit consumer motivations with misleading labeling practices. Due to a lack of legal definitions for terms like "cruelty-free" and "not tested on animals," consumers are unable to make informed choices about their purchases. This confusion allows corporations to continue profiting off of the suffering of non-human animals.

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I. INTRODUCTION

From cosmetics to medical research, testing products on non-human animals results in the suffering of sentient creatures. This practice is a consequence of the voicelessness of non-human animals (who are treated as property by the American legal system)¹ and the convergence of the erasure of these animals as worthy of legal and moral concern in our political processes,² their lack of standing,³ their lack of representation on corporate boards, and their lack of wealth. Although corporations also lack a traditional "voice," they are granted legal standing and legal personhood while non-human animalsⁱ are not.⁴ Furthermore, by only offering protections for shareholders, and ignoring other stakeholders,⁵ corporate law contributes to the prevalence and entrenchment of animal testing.

Winston is an American bulldog mix.⁶ He was purchased from a shelter and sold to a laboratory facility (a practice known as "pound seizure" which is still legal in 32 states).⁷ His face is now marked by burns and scars, thought to be the result of chemical burns from the cosmetics that were tested on him.⁸

Igor the gibbon spent 26 years of his life in two different laboratories.⁹ While at the Laboratory for Experimental Medicine and Surgery in Primates, Igor lived in a colony of gibbons used for "basic blood research."¹⁰ In connection with this research, Igor was injected with a toxic compound, used to trigger an immune response.¹¹ Despite knowing

ⁱ Henceforth in this paper, for the sake of brevity, the term "animal" will be used to refer to non-human animals.

that this compound causes inflammation and tissue damage in nonhuman primates, Igor was injected three times in the same location.¹² When he arrived at the International Primate Protection League's sanctuary, it became apparent that Igor had become a self-mutilator – an indication of severe psychological distress.¹³ Further investigation revealed that Igor's biting was centralized around the injection site on his arm and was triggered by the sight of other gibbons.¹⁴ Consequently, Igor had to be housed in a separate area, with visual barriers between himself and the other rescued gibbons.¹⁵ It took many years at the sanctuary for Igor to recover from his trauma enough that the barriers could be removed and he could begin socializing.¹⁶

An estimated 100 million animals are used in testing and research in the United States every year.¹⁷ Annually, 500,000 animals suffer and die worldwide in cosmetics tests alone.¹⁸ In 1966, the federal Animal Welfare Act ("AWA") was passed "to insure that animals intended for use in research facilities . . . are provided humane care and treatment."¹⁹ However, an estimated 93% of animals used in research are *not* covered by the protections of the AWA²⁰ (which excludes birds, rats, and mice bred for research from its coverage).²¹

The moral and ethical implications of animal testing are readily apparent, as are the species-ist considerations: we subject non-human animals to situations that we would never condone for human testing. Even if we ignore these considerations, we must also acknowledge that animal testing can lead to bad science.²² In 2004, the FDA reported that 92% of drugs fail clinical trials, despite the use of animal testing in preclinical tests. As of 2013, that number appears to have increased to 96%,²³ suggesting that successful animal trials are a poor indicator of the efficacy of drugs in humans. Furthermore, captivity changes how animals react to testing, and the trauma and stress of captivity and testing can change research results, calling into question the conclusions drawn from such research practices.²⁴ As one publication explains:

If our goals to improve human health do justify our means of using research animals, then we should be very concerned that animals raised in captivity do not fare well in their natural environments and are hypersensitive to experimental manipulations. These inadvertent effects may impose huge costs for biomedical research as laboratory animals are often sensitive to drug treatments that are later found to be ineffective in human trials . . . To improve our understanding of human health, we must attend to the wellbeing of our animal models.²⁵

II. THE CURRENT NARRATIVE: ANIMAL TESTING IN LABORATORIES IS NECESSARY.

The conventional explanation to justify animal testing posits that we need to test on animals (1) to ensure that cosmetics, chemicals, and medicines are safe for human usage and (2) to find cures to diseases. Under such justification, the suffering of animals is considered a small price for such advancements. As Stanford Medicine explains on their website:

- Animals are biologically very similar to humans. In fact, mice share more than 98% DNA with us!
- Animals are susceptible to many of the same health problems as humans – cancer, diabetes, heart disease, etc.
- With a shorter life cycle than humans, animal models can be studied throughout their whole life span and across several generations, a critical element in understanding how a disease processes and how it interacts with a whole, living biological system.²⁶

This conventional explanation ignores alternatives by insisting that animal studies are necessary and un-substitutable,²⁷ and relies on incremental change to solve any associated problems, e.g. by incrementally improving the conditions of animals being tested on in laboratory settings. Despite the fact that alternatives to animal testing are often actually *less* expensive,²⁸ animal tests are consistently referred to as the "gold standard,"²⁹ and scientific progress is widely considered to trump any concern regarding animal welfare.³⁰ Proponents of animal testing contend "animals cannot be considered morally equal to humans," thus justifying their suffering for human advancement.³¹ The US Guide for the Care and Use of Laboratory Animals, published by the National Research Council, provides for "the avoidance or minimization of discomfort, distress, and pain," of laboratory animals but *only* "when consistent with sound scientific practices."³²

Corporations operate in a world of shareholder primacy, wherein concerns of stakeholders such as laboratory animals are outside the realm of what should be considered when making business decisions.³³ This legal tenet plays a particularly large role for companies making decisions about whether to sell their products in international markets where animal testing is required.³⁴ Shareholder primacy, and its consequent profit-maximizing directive, allows companies to avoid committing to animal testing alternatives if doing so would block access to a certain market. Furthermore, ignoring the ethical implications of animal testing helps companies justify continued reticence to fund research into alternatives in areas where such alternatives are not yet viable, including the medical research space. As a result, "flinancial investments in the study of alternative testing methods pale in comparison with investments in animal experimentation."³⁵ This is especially noteworthy given that scientific research using animals is supposedly guided by the three R's: replace (replacing animals with alternatives), reduce, and refine.³⁶ Yet, without further funding of research into alternatives, the first R can never be fully realized. Thus, while it is true that some alternatives, particularly in the medical sphere, lag behind available alternatives for the cosmetics industry, this is "not sufficient justification for continuing a misguided research paradigm."37 As neurologist Aysha Akhtar explains: "this line of thinking prevents us from any true commitment to finding or improving existing alternative testing methods. It will cause us to continue to waste years and precious research dollars on sub-par methods, place humans at risks [and continue to] cause suffering in animals."³⁸

III. ANIMAL TESTING AND CORPORATE POWER: CORPORATE LAW HAS SLOWED ADOPTION OF ALTERNATIVES, PREVENTED EFFECTIVE REGULATION, AND CONTRIBUTED TO CONSUMER CONFUSION.

A. Corporate legal influence on the adoption of alternatives.

The interplay of corporate influence and the adoption of alternatives to animal testing has played out differently in different sectors: In some areas, industry support has actually furthered research into alternatives, whereas, in other cases, corporate structures have allowed industrial players to continue animal testing without fear of accountability. In 1981, the Johns Hopkins Center for Alternatives to Animal Testing (CAAT) was founded to promote research on *in vitro* tissue culture work as an alternative to live animal testing.³⁹ CAAT's mission was to develop alternatives that met regulatory needs and could be implemented by industry at a reasonable cost.⁴⁰ The cosmetics industry was the first to express interest, and proactively reached out to CAAT, with some companies expressing a desire to speed up the process to find alternatives.⁴¹ Of primary motivation was public relations: companies were starting to feel pressure from their customers to end animal testing and adopt ethical alternatives.⁴² Unlike cosmetics companies, however, the chemical industry was extremely hesitant to embrace alternative methods. The reason why is intricately linked to corporate law.

Corporate law embodies a macro script that states that consumers are "better off... if profit is the sole corporate goal."⁴³ The script explains, "consumers are protected by markets and contracting. If consumers don't like a product, they can simply not purchase it."⁴⁴ At first glance, CAAT's story appears to be an affirmance of this narrative: consumers were exercising their purchasing power to put pressure on cosmetics companies in a way that encouraged those companies to invest in alternatives to animal testing. This notion of consumer sovereignty, however, is founded in part upon the idea that consumers actually have access to the relevant markets. While this is largely true in the cosmetics industry,⁴⁵ such notion fails in the context of the chemical industry.

Toxicity testing of chemicals involves exposing animals to high doses of a certain chemical to ascertain the risks of exposure to human populations.⁴⁶ Historically, the chemical industry's reliance on such testing has not been the subject of consumer pressure.⁴⁷ After all, how could a consumer campaign even begin to advocate for boycotting "XYZ Chemicals"? The vast majority of consumers never purchase directly from such a company and have no insight into how to exercise their socalled consumer sovereignty in such a context. Consequently, initial efforts to convince the chemical industry to adopt animal testing alternatives moved slowly.⁴⁸

Another impediment to the widespread adoption of alternatives was the existence of contract research firms.⁴⁹ Industry relied heavily on these firms' services. In turn, these firms lacked *in vitro* capabilities, were hesitant to invest in such capabilities, and thus advised their clients that adopting alternatives was not feasible.⁵⁰ Especially at the end of the twentieth century, widespread skepticism of the science from both scientists and regulators viewed *in vitro* alternatives as akin to science fiction.⁵¹ The idea that cells could be grown outside of the body was a

novel and shocking suggestion for toxicologists and regulators who had spent decades relying on animal testing. 52

In recent years, there has been some movement towards widespread adoption of alternatives across different industries, including within the chemical industry.⁵³ *In vitro* tests are now accepted alternatives, but still face pushback from claims that they are "a long way from anything representing a connected human body."⁵⁴ With corporate law unwilling to address the illusion of consumer freedom of choice,⁵⁵ proponents of alternatives must rely on their gradual adoption by companies hoping to foster goodwill. Furthermore, the regulatory sphere lags behind scientific advancement with some regulations *requiring* animal toxicity testing, and with only incremental changes over the years to move regulatory requirements away from animal testing.⁵⁶

Moreover, many companies see the adoption of alternatives to animal testing as a choice between a cruelty-free public relations campaign and profit maximization. While alternatives to animal testing are not more expensive in and of themselves,⁵⁷ some countries, most notably China, *require* animal testing before a product can be sold in physical stores.⁵⁸ China represents the second largest market for cosmetics products in the world,⁵⁹ so companies choosing to forego sales in this jurisdiction are consequently foregoing significant profits. Thanks to the "profit-first (or profit-only) norm animating corporate theory,"⁶⁰ corporate law forces companies to sell in countries like China and ignore any ethical implications of required animal testing.

Fortunately, at least with regard to Chinese law, recent changes will make it harder for companies to argue that they have no choice in the matter. Starting May 1st of 2021, ordinary cosmetics that are imported into China, including skincare, haircare, nailcare, makeup, and fragrance products, will no longer be required to be tested on animals.⁶¹ While this is an important first step, certain cosmetics considered "special use," such as hair dyes, deodorants, and sunscreens will *not* be exempt, and companies will have to take affirmative steps to avoid having even ordinary products tested on animals.⁶² Nevertheless, this change allows some companies to have the option of bypassing animal tests, allowing for companies to avoid animal testing while still reaping the benefits of sales in the Chinese market.⁶³

B. Corporate Capture of the Animal Welfare Act

1. Legislative Capture

The AWA sets standards for the "humane care and treatment" of "animals intended for use in research facilities."⁶⁴ Regulations established pursuant to the AWA provide protections for these animals, including requirements for facilities to "provide their animals with adequate housing, sanitation, nutrition, water and veterinary care" and "protect their animals from extreme weather and temperatures."⁶⁵ Under the current provisions of the AWA, however, the term "animal" specifically *excludes* birds, rats, and mice "bred for use in research."⁶⁶ⁱⁱ This exclusion was added as a rider to a Farm Bill in 2002,⁶⁷ via a series of events most accurately described as representing industry capture of the legislation. The amendment was championed by North Carolina Senator Jesse Helms whose motivations were attributed to "pressure from the medical research industry."⁶⁸

The medical research industry framed this exclusion as an important step in avoiding "unnecessary and expensive regulation" 69 – a prime example of the classic corporations meta script that markets are good and regulation is bad.⁷⁰ The amendment was a direct response to a lawsuit, originally filed in 1998, challenging the U.S. Department of Agriculture's (USDA) Animal Welfare Act-implementing regulations which contained these precise exclusions.⁷¹ In 2000, after a federal court allowed an animal advocacy group to move forward with their suit,⁷² the USDA agreed to begin regulating birds, mice, and rats used in research.⁷³ Concerned by the USDA's capitulation, the research community, in the form of the National Association of Medical Intervention, unsuccessfully attempted to intervene in the lawsuit.⁷⁴ By September 2001 it became clear that the industry group would be unable to convince a federal court to allow them to intervene in legal proceedings,⁷⁵ and by February 2002, less than six months later, Senator Helms was defending his proposed amendment on the floor of

ⁱⁱ Note that laboratory animals *are* covered under the federal Health Research Extension Act, which functions very differently from most legislation, relying on the implementation of a series of policies, rather than standard "command-and-control" regulations. *See* Gilly Griffin & Paul Locke, *Comparison of the Canadian and US Laws, Regulations, Policies, and Systems of Oversight for Animals in Research*, 57 Inst. for Lab'y Rsch. 271, 275, 282 (2016).

the Senate:

the medical research community was astonished the U.S. Department of Agriculture, weary and browbeat into submission by numerous lawsuits and petitions by the so-called "animal rights" crowd, gave notice of its intent to add rats, mice, and birds under the regulatory umbrella . . . If USDA is allowed to move forward with their new rules, it is estimated that the additional reporting requirements and paperwork will cost the researchers up to \$280 million annually. So instead of searching for cures for breast cancer, cystic fibrosis, heart disease, and diabetes, USDA will force researchers out of the laboratory to spend their time filling out countless forms for yet another federal regulator. . . A rodent could do a lot worse than live out its life span in research facilities."⁷⁶ⁱⁱⁱ

The influence of the medical research industry on Helms' statement is apparent, as is the blatant affirmation of the "regulation bad"⁷⁷ meta script. As a consequence of the Helms amendment's success, the USDA never moved forward with promulgating regulations to govern birds, mice, and rats used in research.⁷⁸

2. Agency and Regulatory Capture

While some laboratory animals are beyond the reach of AWA protections, other animals used in research and testing, for example non-human primates, are well within the bounds of the legislation. However, effective enforcement of the AWA, and its associated regulations, is hampered by industry capture of the regulatory space and industry's outsize influence over the USDA.

AAALAC (the Association for Assessment and Accreditation of Laboratory Animal Care International⁷⁹) is a private, industry-led⁸⁰ accreditation group.⁸¹ Currently, more than 1,000 organizations are AAALAC accredited,⁸² including "all major U.S. pharmaceutical companies and the commercial laboratories that breed animals for research as well as government laboratories, biotechnology companies,

ⁱⁱⁱ Senator Helms goes on to claim that rodents in laboratories are far better off than if they ended up "up as a tiny bulge being digested inside an enormous snake."

and contract research organizations."⁸³ A 2014 study found that, despite being considered the "gold standard" of accreditation, AAALACaccredited sites were cited over 35% more for non-compliance with the AWA, when compared with non-AAALAC accredited facilities.⁸⁴ This statistic is unlikely to shock the original drafters of the AWA, who enacted the legislation, in part due to "the shocking failure of selfpolicing" by industry.⁸⁵ The AWA's legislative history reveals that one senator commented, "I never saw a situation more inclined to the cliche that you are setting a fox to watch the chicken coop," referring specifically to a proposal that AAALAC regulate the industry.⁸⁶

Nevertheless, in 2017 and 2018, the USDA solicited public comments on whether they should defer AWA inspections to third-party accreditation services, such as AAALAC.⁸⁷ After receiving over 35,500 comments, the "vast majority" of which were not in favor of the proposal, the USDA publicly announced that it would *not* "establish new criteria for recognizing third-party inspection and certification programs when determining the Agency's own inspection frequency."⁸⁸ In other words, a facility's accreditation status with third-party services, such as AAALAC, was to have *no bearing* on how often and how thoroughly the USDA would inspect a facility for compliance with the USDA.

In March 2021, via a Freedom of Information Act request, the Harvard Law School's Animal Law and Policy Clinic uncovered never-before public information, revealing that the USDA had adopted a secret policy to implement the very process the agency had publicly announced they would *not* move forward with. In documentation conveniently left out of official inspection guides, and labeled "For Internal Use Only," the USDA instructed its inspectors that they would no longer be *allowed* to conduct full inspections of AAALAC-accredited facilities.⁸⁹

The AWA directs that the USDA "shall inspect each research facility at least once each year."⁹⁰ Under this new policy, however, inspectors are instructed *not* to inspect the entire facility, the animals, *and* the required documentation and instead only focus on *either* the animals, the facility, *or* the paperwork.⁹¹ Internal guidance states that regulated facilities "have worked hard to be AAALAC accredited" and therefore "have a right" to one of these so-called "focused" inspections.⁹² Inspectors are further instructed *not* to reveal that focused inspections are being done on AAALAC-accredited facilities and, if asked about the change, to instead "tell them that we introduced focused inspections for certain research facilities because of their compliance history and record of animal care."⁹³

This policy is not only a potential violation of the AWA's statutory mandate to inspect research facilities but also represents blatant capture of the regulatory process, and the administrative agency itself, by the regulated industry. By failing to complete full annual inspections of AAALAC-accredited facilities, the USDA is effectively allowing the industry to self-regulate. Moreover, the agency is abdicating its responsibility to ensure the welfare of the animals that are being tested on in these facilities, despite evidence that these facilities are actually *worse* for animal welfare, rather than better.⁹⁴

C. Consumer Confusion: What does Cruelty-Free mean?

Despite a lack of regulatory oversight of many laboratory animals, the general public remains skeptical of animal testing, particularly in the cosmetics context.⁹⁵ Consequently, the savvy consumer may prioritize purchasing products with labels proclaiming, "Cruelty Free" or "Not Tested On Animals!" But what do these terms actually mean?

Per the U.S. Food and Drug Administration: "The *unrestricted* use of [phrases like "cruelty free" and "not tested on animals"] by cosmetic companies is possible *because there are no legal definitions for these terms.*"⁹⁶ This lack of legal definition leads to widespread misleading labeling practices. Companies can claim their *finished* product is not tested on animals (even if the components are), companies can claim a *certain product* is cruelty free (even if the company engages in animal testing for other products), and companies can even claim they don't test on animals but footnote the disclaimer "except when required by law." The end result is that even consumers who desire to use their purchasing power to support companies who align with their moral concerns are misled about who those companies actually are. More broadly, this deception falls into a category known as "humane-washing," with companies labeling products as "humane" or "ethical" when there is no evidence or standards to substantiate such claims.⁹⁷

While federal agencies could conceivably address this issue with enforcement actions alleging false advertising, "there has never been a proceeding about misleading 'cruelty-free' claims."⁹⁸ Without a clear path for change, advocates have turned to reflexive law approaches: advocating for corporations to internalize social norms and voluntarily enroll in programs, such as third-party certifications that standardize what it means to be "cruelty free."⁹⁹ As corporations are functioning in a world of shareholder primacy, however, advocates must advance the claims that such voluntary actions provide companies with some competitive advantage¹⁰⁰ in order to attain corporate buy-in.

D. Potential Solutions

The injustices resulting from animal testing have far-reaching consequences, and there is no single solution to the problem. Nonetheless, a successful, multi-pronged approach to change might include the following proposals:

- 1. Widespread adoption of alternatives to animal testing, particularly in the chemical and medical industries. This will require further research, increased funding for research into alternatives, and lobbying to bring regulatory agencies on board with the use of animal alternatives in *all* areas, not just in the cosmetics sphere.
- 2. Increased regulation and legislation, including expanding coverage of the AWA by removing the Helms amendment that excludes laboratory rats, mice, and birds from the AWA protections. This will require the promulgation of concrete, enforceable regulations from the USDA, with careful oversight to ensure such regulations avoid capture by the regulated industries. It will also require updating regulations across the board to remove requirements for testing on animals, e.g. for toxicity testing, when viable alternatives are available.
- 3. *Promulgation of Federal labeling requirements.* "Congress, the FDA, and the Federal Trade Commission (FTC) have the authority to issue standards regulating the use of 'crueltyfree' claims. The FTC has issued guidelines regulating the use of terms such as biodegradable, compostable, recyclable, and ozonefriendly on labels."¹⁰¹ A similar approach could be taken to standardize labeling of products that are not tested on animals, in order to mitigate consumer confusion.¹⁰²

IV. CONCLUSION: CORPORATE LAW ENABLES THE CONTINUED SUFFERING OF ANIMALS IN LABORATORY SETTINGS AND HINDERS EFFORTS TO ENSURE THIS INJUSTICE IS RECTIFIED.

The fiduciary obligations and psychological dissonance-reducing effect of shareholder primacy enables the continuing practice of testing on animals. By choosing to test on animals – the easy option that allows access to international markets – many corporations are acting in ways that they arguably have to, or should, within the bounds of the law, to make their companies more profitable for shareholders. What corporate law is *not* doing is enabling or promoting adoption of ethical alternatives. And even if corporations want to voluntarily engage with third parties, e.g. to get third party certifications that their products are not tested on animals, corporate law constraints mean they can only do so if such action can be justified within the lens of increasing profits.

Furthermore, industries are actually manipulating consumer protections and exploiting consumer motivation – people want to purchase products that are not tested on animals, but the industry is promoting confusion with misleading labeling practices. This is a classic example of consumers being harmed because corporate law protections extend only to certain groups (namely shareholders and creditors) that are considered sufficiently "vulnerable".

Finally, corporate law has allowed for industry capture over the various regulators. Industry capture has influenced the very text of the AWA, thereby constraining what can even be regulated. By promoting the meta script of "markets good" and "regulation bad" corporations have successfully delayed change and ensured a lack of legal barriers for their continuing experimentation on sentient animals.

ENDNOTES

¹ Rebecca Dresser, *Respecting and Protecting Nonhuman Animals: Regan's The Case for Animal Rights*, 1984 AM. BAR FOUND. RSCH. J. 831, 831 (1984).

 2 Id.

³ See, e.g., Christopher D. Stone, Should Trees Have Standing?–Toward Legal Rights for Natural Objects, 17 (1974).

 4 Id.

⁵ See Ronald Chen & Jon Hanson, *The Illusion of Law: The Legitimating Schemas of Modern Policy and Corporate Law*, 103 MICH. L. REV. 315, 356 (2004) (explaining corporate law's "macro script of shareholder primacy – that is, profit maximization is good and social responsibility is bad").

⁶ WINSTON, https://bfp.org/winston/ (last visited, Mar. 15, 2021).

7 Id.

⁸ Id.

⁹ FAREWELL TO IGOR. https://www.ippl.org/gibbon/blog/farewell-igor/ (last visited Mar. 15, 2021).

 10 *Id.*

 11 *Id.*

 12 *Id.*

- 13 *Id.*
- 14 *Id.*
- 15 *Id.*

 16 *Id.*

¹⁷ THE HUMANE COSMETICS ACT (FEDERAL), https://aldf.org/project/the-humane-cosmetics-act-federal/ (last visited Mar. 15, 2021).

¹⁸ ENDING COSMETICS ANIMAL TESTING, https://www.humanesociety.org/all-our-fights/ending-cosmetics-animal-testing (last visited Mar. 15, 2021).

¹⁹ Animal Welfare Act, 7 U.S.C. § 2131(1).

²⁰ WHICH ANIMALS ARE USED, https://aavs.org/animals-science/animalsused/#:~:text=Nearly%2040%25%20of%20AWA%20regulated,research%20experience d%20pain%20and%20distress.&text=Since%20fish%20and%20rats%2C%20mice,are %20excluded%20from%20the%20AWA. (last visited Mar. 15, 2021).

²¹ Animal Welfare Act, 7 U.S.C. § 2132(g).

²² See generally Garet P Lahvis, Point of View: Unbridle Biomedical Research from the Laboratory Cage, ELIFE (June 29, 2017) https://elifesciences.org/articles/27438.

²³ John J. Pippin, Animal Research in Medical Sciences: Seeking a Convergence of Science, Medicine, and Animal Law, 54 S. TEX. L. REV. 469, 497–98 (2013).

²⁴ See Lahvis, supra note 22.

 25 Id.

²⁶ WHY ANIMAL RESEARCH?, https://med.stanford.edu/animalresearch/why-animal-research.html (last visited Mar. 15, 2021).

 27 Id.

²⁸ See Costs of Animal and Non-Animal Testing, Humane Society International, https://www.hsi.org/news-media/time_and_cost/ (last visited April 20, 2021) (comparing the costs of animal and non-animal tests, showing that animal testing is consistently more expensive).

²⁹ See, e.g., Aysha Akhtar, Animals and Public Health : Why Treating Animals Better Is Critical to Human Welfare 150 (2012).

³⁰ See id. at 156.

³¹ Stephanie Liou, *The Ethics of Animal Experimentation*, Huntington's Outreach Project for Education, at Stanford (July 6, 2010) https://hopes.stanford.edu/animal-research/.

³² NATIONAL RESEARCH COUNCIL, GUIDE FOR THE CARE AND USE OF LABORATORY ANIMALS 200 (8th ed. 2011).

³³ See Chen & Hanson, supra note 5, at 356.

³⁴ See Elizabeth Siegel, *Why Beauty Brands Still Test Their Products on Animals* Allure (Oct. 20, 2017) https://www.allure.com/story/why-beauty-brands-still-test-on-animals (blaming China's animal testing requirements for the continued testing of cosmetics on animals).

³⁵ Akhtar, *supra* note 29, at 162.

³⁶ *See, e.g., The 3Rs and Animal Welfare*, Understanding Animal Research, (Feb. 24, 2021) https://www.understandinganimalresearch.org.uk/animals/three-rs/.

³⁷ Id.

³⁸ Id.

³⁹ Telephone Interview with Alan Goldberg, Founding Director and current Chairman of The Board of the Johns Hopkins Center for Alternatives to Animal Testing (Mar. 11, 2021).

 40 Id.

 41 *Id.*

 42 Id.

⁴³ Chen & Hanson, *supra* note 5, at 358.

⁴⁴ Id. at 367.

⁴⁵ Telephone Interview with Paul Locke, Associate Professor at Johns Hopkins Bloomberg School of Public Health (Mar. 19, 2021) (explaining also that the cosmetics industry felt pressure from consumers because their products were not essential).

⁴⁶ NATIONAL RESEARCH COUNCIL, TOXICITY TESTING IN THE 21ST CENTURY: A VISION AND A STRATEGY, 35 (2007).

⁴⁷ See Interview with Alan Goldberg, supra note 39.

⁴⁸ Id.

⁴⁹ *Id.*

 50 Id.

 51 Id.

 52 *Id.*

⁵³ See Interview with Paul Locke, supra note 45.

⁵⁴ Emma Bryce, *What are the Alternatives to Animal Testing*, Live Science (May 4, 2019) https://www.livescience.com/65401-animal-testing-alternatives.html.

⁵⁵ See Chen & Hanson, supra note 5, at 444.

⁵⁶ See EPA Finalizes Guidance to Waive Toxicity Tests on Animal Skin, U.S. Environmental Protection Agency (Jan. 19, 2021), https://www.epa.gov/newsreleases/epa-finalizesguidance-waive-toxicity-tests-animal-skin; see also Interview with Paul Locke, supra note 45 (characterizing the regulatory system as "stuck in the 1980's").

⁵⁷ See Humane Society International, *supra* note 28.

⁵⁸ See Suzana Rose, The Truth About China Ending Mandatory Animal Testing This

May, Cruelty-Free Kitty (March 29, 2021) https://www.crueltyfreekitty.com/news/china-ends-mandatory-animal-testing-may/.

⁵⁹ China Exempts Almost All Imported Cosmetics from Animal Testing, Business of Fashion (March 5, 2021) https://www.businessoffashion.com/news/china/china-exempts-almost-all-imported-cosmetics-from-animal-testing.

⁶⁰ Chen & Hanson, *supra* note 5 at 34.

⁶¹ See Business of Fashion, supra note 59; Rose, supra note 58.

⁶² Rose, *supra* note 58.

 63 *Id*.

⁶⁴ Animal Welfare Act, 7 U.S.C. § 2131(1).

⁶⁵ Animal Welfare Act, Animal and Plant Health Inspection Service, U.S. Department of Agriculture (Jul. 23, 2020) https://www.aphis.usda.gov/aphis/ourfocus/animalwelfare/SA_AWA.

⁶⁶ Animal Welfare Act, 7 U.S.C. § 2132(g).

⁶⁷ 2002 Legislative Review, 9 ANIMAL L. 331, 338 (2002).

⁶⁸ *Id.*; see also Hal Herzog, *Congress Should Declare Mice Are Animals* — *Now!*, HUFFPOST (Apr. 22, 2015, 1:13 PM), https://www.huffpost.com/entry/congress-should-declare-mice-are-animals-now_b_7103092 (described Helms as serving "the wishes of Big Pharma and some major research universities.").

⁶⁹ 2002 Legislative Review, supra note 67, at 338.

⁷⁰ Chen & Hanson, *supra* note 5, at 325.

⁷¹ Alternatives Rsch. & Dev. Found. v. Glickman, 101 F. Supp. 2d 7, 9 (D.D.C. 2000).

 72 *Id.* at 11 (upholding standing for the plaintiff organization in the lawsuit, thereby allowing the suit to move forward).

⁷³ Alternative Rsch. & Dev. Found. v. Veneman, 262 F.3d 406, 407 (D.C. Cir. 2001) (discussing a stipulation between the parties, whereby the USDA would begin to develop regulations covering brids, mice, and rats used in research).

 74 Id. at 407–08 (discussing the industry group's motion to intervene and vacate the stipulation between the parties).

⁷⁵ See generally id. (Appellate court denial of industry group's motion to intervene).

⁷⁶ 148 Cong. Rec. at S616–17 (Feb. 12, 2002) (statement of Sen. Helms).

⁷⁷ Chen & Hanson, *supra* note 5, at 325.

⁷⁸ See Herzog, supra note 68.

⁷⁹ AAALAC INTERNATIONAL HISTORY, https://www.aaalac.org/about/history/ (last visited April 19, 2021).

⁸⁰ See AAALAC COUNCIL ON ACCREDITATION, https://www.aaalac.org/about/council/ (last visited April 19, 2021) (listing the members of AAALAC's Council on Accreditation, consisting primarily of representatives from industry and universities with large animal research programs).

⁸¹ AAALAC INTERNATIONAL ABOUT, https://www.aaalac.org/about/what-is-aaalac/ (last visited April 19, 2021).

⁸² AAALAC INTERNATIONAL ACCREDITATION PROGRAM, https://www.aaalac.org/accreditation-program/what-is-aaalac-accreditation/ (last visited April 19, 2021).

⁸³ Justin R. Goodman, Alka Chandna, & Casey Borch, *Does Accreditation by the Association for Assessment and Accreditation of Laboratory Animal Care International (AAALAC) Ensure Greater Compliance With Animal Welfare Laws?* J. APPLIED ANIMAL WELFARE SCI. 1, 2 (2014).

⁸⁴ See id. at 6, Tab. 1.

⁸⁵ 112 CONG. REC. 13,893 (1966) (statement of Sen. Monroney).

⁸⁶ Animal Dealer Regulation: Hearing on S.232, S.309, and S.3138 Before the S. Comm. on Commerce, 89th Cong. 202 (1966) (statement of Sen. Joseph H. Clark).

⁸⁷ See USDA Announces It Will Not Recognize Third-Party Inspections and Certifications, USDA (May 25, 2018 1:00 PM) https://content.govdelivery.com/accounts/USDAAPHIS/bulletins/1f27bf1#:~:text=Was hington%2C%20D.C.%2C%20May%2025%2C,and%20certification%20programs%20w hen%20determining.

⁸⁸ Id.

⁸⁹ Documentation from USDA Freedom of Information Act Request, *USDA APHIS Animal Care Update*, 21–25, 82–89, 99–104 (2019) (on file with author).

⁹⁰ Animal Welfare Act, 7 U.S.C. § 2146(a).

⁹¹ Documentation, *supra* note 89, at 22, 85.

⁹² Id. at 22.

⁹³ Id. at 21.

⁹⁴ See Goodman, Chandna, & Borch, supra note 83, at 6.

⁹⁵ Cruelty Free International, Ending Cosmetics Testing on Animals in the USA, 2, (Aug. 2019) 17 $https://www.crueltyfree international.org/sites/default/files/USA\%20 cosmetics\%20 animal\%20 testing\%20 poll_0.pdf.$

⁹⁶ U.S. Food and Drug Administration, "Cruelty Free"/"Not Tested on Animals", FDA, (Feb. 24, 2000) https://www.fda.gov/cosmetics/cosmetics-labeling-claims/cruelty-freenot-tested-animals (emphasis added).

⁹⁷ Anne Brainard, *Companies Are Labeling Their Products 'Humane,' but Most Are Far From It*, People for the Ethical Treatment of Animals (April 25, 2018) https://www.peta.org/blog/do-not-be-fooled-by-humane-washing/.

⁹⁸ Delcianna J. Winders, *Combining Reflexive Law And False Advertising Law To Standardize "Cruelty-Free" Labeling Of Cosmetics*, 81 N.Y.U. L.REV. 454, 468 (2006).

99 Id. at 476-77.

 100 Id.

¹⁰¹ Delcianna J. Winders, *supra* note 98, at 463.

 102 Id.