CHAPTER 17

Restricting Academic Freedom at Universities How Corporations Contribute to the Problem

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Introduction

Orporations can influence universities to restrict academic freedom in various ways. One of these ways involves the agreements they sometimes require researchers to sign to conduct studies about their products or services. These agreements frequently allow the funders the right to determine whether a study will be published. Although some scholars argue that industry funding is a valuable component of academic research because it contributes to scientific discoveries, critics argue that this trend has a corrupting effect on science.¹

Industry-funded research can harm consumers because corporations frequently prevent researchers from publishing studies showing that their

¹ Robert D. Atkinson, "Industry Funding of University Research: Which States Lead?" Information Technology & Innovation Foundation, January 2018, www2.itif.org/2018-industry-funding-university-research.pdf.

products or services are ineffective or harmful. If researchers break an agreement with a corporation, the corporation can sue them and their employers can fire them. Preventing researchers from publishing certain studies is incompatible with one of the main goals of many of today's universities. This goal is to encourage academic freedom to thrive. Allowing corporations to determine which studies get published prevents university researchers from achieving this goal because academic freedom includes the freedom to publish research results.²

Corporations can restrict academic freedom in other ways. For example, they can influence the design they want researchers to use to conduct a study. Corporations can also require researchers to sign agreements that allow the publication of only the findings showing that their products are beneficial.³ This practice is detrimental because it contributes to misleading studies. Unfortunately, it is not uncommon for some corporations, like pharmaceutical companies, to fund research designed to yield deceptive findings. Examples of methods some companies use to get the desired results include designing research that compares their drugs to treatments known to be ineffective or to drugs given at doses too low to work well. Other methods include comparing a favored drug to one offered at a dose high enough to produce toxic effects, making the favored drug seem less toxic.⁴

ACADEMIC FREEDOM

Understanding how academic freedom protects researchers from practices that contribute to the corruption of science and other harmful outcomes can help universities avoid participating in misleading industry-funded research. Being aware of how academic freedom originated is important for understanding how this principle needs to be applied at academic institutions.

Donna R. Euben, "Academic Freedom of Professors and Institutions," American Association of University Professors, May 2002, www.aaup.org/issues/academic-freedom/professors-and-institutions.

³ Lisa Bero, "When Big Companies Fund Academic Research, The Truth Often Comes Last," The Conversation, October 2, 2019, https://theconversation.com/ when-big-companies-fund-academic-research-the-truth-often-comes-last-119164.

⁴ Susanna Every-Palmer and Jeremy Howick, "How Evidence-Based Medicine Is Failing Due to Biased Trials and Selective Publication," *Journal of Evaluation in Clinical Practice*, 20 (2014): 910, https://doi. org/10.1111/jep.12147.

HISTORICAL BACKGROUND

Academic freedom in the United States originated over a hundred years ago when American academics made trips to notable German universities. When these academics compared the German universities to those in America, they started to feel that the mission of American universities needed to change in order to focus on advancing knowledge. At the start of the nineteenth century, Wilhelm von Humboldt reformed German universities based on two concepts: freedom to teach and freedom to learn.

In contrast to German universities, American universities were religious institutions during the first half of the nineteenth century and were designed to teach young men moral truths. In the twentieth century, however, a shift from a focus on religion to knowledge occurred. This change in the mission of universities was influenced by the academics who wanted institutions of higher learning to be more like German universities. The first American university to commit to the German model was Johns Hopkins, and others followed.⁷

The desire to make American universities similar to the German model was not the only factor that contributed to the development of academic freedom. In 1900, the firing of a professor for having unpopular views agitated the academic community. Jane Stanford, the widow of Stanford University's founder, requested Edward Ross, a professor of economics, to be fired for his views on labor, Asian immigration, and the gold standard. American professors began to wonder how they would be able to advance knowledge if a university member with more power but less expertise in their field could fire them.⁸

This concern was addressed in 1915 when a meeting was held to establish academic freedom for professors. John Dewey and Arthur Lovejoy organized this meeting, which resulted in the creation of the American Association of University Professors (AAUP). This meeting was crucial because it led to the formulation of the Declaration of Principles on Academic Freedom

⁵ Columbia Law School, "Free Speech and Academic Freedom," March 7, 2016, www.law.columbia.edu/ news/archive/free-speech-and-academic-freedom.

⁶ Shannon Dea, "A Brief History of Academic Freedom," *University Affairs*, October 9, 2018, www.universityaffairs.ca/opinion/dispatches-academic-freedom/a-brief-history-of-academic-freedom/.

⁷ Columbia Law School, "Free Speech."

⁸ Columbia Law School, "Free Speech."

and Academic Tenure. Some of the statements of these principles indicate that once professors are appointed, the appointing authorities have no moral right to intervene and that the professors' responsibilities are mainly to the public and to their profession.⁹

Today, many universities rely on a statement developed in 1940 for information about academic freedom. This statement was created by the AAUP and the Association of American Colleges and Universities. The statement created in 1940 was adapted from the one created in 1915. A conference was held in 1925 to shorten the 1915 statement. And in 1940, a restatement of the principles that were endorsed in 1925 was approved by the AAUP and the Association of American Colleges and Universities. The statement agreed upon in 1940 is known as the 1940 Statement of Principles on Academic Freedom and Tenure. 11

AREAS ACADEMIC FREEDOM COVERS

The 1940 Statement provides instructors the freedom not only to publish the results of their research but also to discuss subjects related to the areas involving the content they are assigned to teach. ¹² Academic freedom covers research, teaching, and public expression. In the area of research, it allows instructors to select the methodologies of their choice and to draw conclusions based on evidence. Instructors, however, are not protected from being critiqued for their claims. In teaching, academic freedom provides instructors the right to choose course content, create assignments, and evaluate students. Limitations related to teaching involve instructors who are incompetent, ignorant, or dishonest in their areas of expertise. Regarding freedom of expression, academic freedom allows instructors to share their areas of expertise through writing and speech. ¹³

⁹ Columbia Law School, "Free Speech."

¹⁰ Euben, "Academic Freedom of Professors."

[&]quot;1940 Statement of Principles on Academic Freedom and Tenure," American Association of University Professors, accessed December 19, 2022, www.aaup.org/report/1940-statement-principles-academic-freedom-and-tenure.

¹² Euben, "Academic Freedom of Professors."

¹³ Organization of American Historians, "Academic Freedom Guidelines and Best Practices," accessed December 19, 2022, www.oah.org/about/governance/policies/academic-freedom-guidelines-and-best-practices.

In 2010, Cary Nelson, a former president of the AAUP, clarified aspects of what academic freedom allows faculty to do and the conduct it does not protect. In addition to the aforementioned ways it protects faculty, he indicated that academic freedom maintains integrity in the education system, thereby serving the public good. Nelson stated that it provides faculty members with the right to request a hearing if they feel they have been denied their rights and protects them from retaliation for disagreeing with policies. He also discussed that academic freedom provides faculty members with substantial leeway in determining how they can teach the courses to which they are assigned. Regarding serious charges against faculty members, academic freedom guarantees that such allegations will be heard before a committee of their peers. In these situations, faculty have the right to challenge their accusers with the assistance of an attorney.¹⁴

Although academic freedom allows faculty members to challenge views, it is often confused with an individual's right to free speech. ¹⁵ Free speech applies to all people and covers all forms of speech, but academic freedom applies to how educators communicate their discipline and involves teaching, research, and publication. ¹⁶ One difference between free speech and academic freedom is that free speech is an individual right, but academic freedom applies to an academic institution's commitment to creating and disseminating knowledge. ¹⁷ In other words, unlike individual rights, academic freedom involves the right of the discipline and can be judged only by the professionals within the discipline. ¹⁸

For professionals within the discipline to have control of aspects involving research, teaching, and public expression, universities need to be autonomous. Institutional autonomy, however, has been increasingly under threat at institutions of higher education for various reasons, including pressure to accept funding that influences research priorities.¹⁹

¹⁴ Cary Nelson, "Defining Academic Freedom," *Inside Higher Ed*, December 21, 2010, www.insidehighered.com/views/2010/12/21/defining-academic-freedom.

¹⁵ Columbia Law School, "Free Speech."

¹⁶ Organization of American Historians, "Academic Freedom Guidelines and Best Practices,"

¹⁷ Columbia Law School, "Free Speech."

¹⁸ Columbia Law School, "Free Speech."

¹⁹ Judith Eaton and Stamenka Uvalic-Trumbic, "HE Institutional Autonomy Is under Siege across the World," *University World News*, June 26, 2021, www.universityworldnews.com/post. php?story=20210622133956498.

HARMFUL EFFECTS OF CORPORATE INFLUENCE

Since academic freedom involves freedom of expression and publication, any practice preventing university researchers from publishing their findings endangers this principle. Sadly, it is not uncommon for a corporation to fund a study and require researchers to sign agreements allowing the corporation to control the design of the research and to determine if the researchers can publish the results. When researchers break these agreements to reveal the dangers of a corporation's products, they may face repercussions, including the possibility of being dismissed.

Two Cases Involving the University of Toronto

Two cases that illustrate this problem occurred in Canada at the University of Toronto. The history of academic freedom in Canada is similar to that of the United States. For example, in the middle of the nineteenth century, the dominant approach in Canada was to protect religious orthodoxy.²⁰ Over a hundred years later, however, it became safer to express divergent views, although academics continued to be careful about expressing their beliefs about topics that might cause them to be perceived as troublemakers.²¹

One of the cases showing what can happen when someone reveals information that is threatening to a corporation involved Nancy Olivieri. Unfortunately, the poor administrative judgment associated with the Olivieri case may occur at institutions other than the one at which it happened. In addition to being fired, Olivieri's colleagues spread rumors that she slept with scientists who viewed her research favorably. Rumors that she stole money from her grants also spread.²²

Olivieri held an academic appointment at the University of Toronto's Faculty of Medicine and worked at the Hospital for Sick Children (HSC) where she conducted clinical trials. In the 1990s, she started to suspect that deferiprone, a drug she was testing for the treatment of thalassemia, might

²⁰ Michiel Horn, Academic Freedom in Canada: A History (Toronto: University of Toronto Press, 1999), 350.

²¹ Horn, Academic Freedom in Canada, 352.

²² Arthur Schafer, "Biomedical Conflicts of Interest: A Defence of the Sequestration Thesis—Learning from the Cases of Nancy Olivieri and David Healy," *Journal of Medical Ethics* 30 (February 2004): 8.

be ineffective and possibly toxic.²³ When she first became concerned about deferiprone, she contacted Apotex, the manufacturer of the drug sponsoring some of her research. But when she expressed concerns to Apotex and indicated that the existing consent forms would need to be amended, the company disputed her claims.²⁴ Olivieri then reported her concerns to the research ethics board at the hospital where she worked, and the board agreed with her evaluation. One of the reasons Olivieri expressed worries about the drug was her desire to inform the patients participating in the trial. After becoming aware of her concerns, the board authorized revising the consent form to inform the patients about the new fears associated with the drug.²⁵

When Apotex found out the consent forms had been revised, it terminated Olivieri's trial. The conflict worsened after Olivieri decided to break a confidentiality agreement with Apotex by publishing her results in the *New England Journal of Medicine*. Both HSC and the University of Toronto declined to offer Olivieri legal support when Apotex threatened to take legal action after learning she intended to publish her results. The reason offered for refusing to provide legal support involved breaking the disclosure agreement. Although prominent academic scholars quickly became aware of the controversy and wrote letters requesting the University of Toronto to intervene, their efforts did not lead to a favorable outcome for Olivieri. On January 6, 1999, she was dismissed from her position at HSC.²⁶

A report by the Canadian Association of University Teachers concluded that threatening to take legal action and stopping the trials was a violation of academic freedom. A representative from the university requested action to be taken to prevent researchers from having to worry that academic freedom and the ethical obligations they have would be undermined in this way again. Olivieri indicated that she experienced five years of harassment and vilification. She also felt the university and the hospital did not offer her support because they were expecting to receive substantial donations from Apotex.²⁷ Olivieri had a good reason for believing that the univer-

²³ Francoise Baylis, "The Olivieri Debacle: Where Were the Heroes of Bioethics?" Journal of Medical Ethics 30 (February 2004): 44.

²⁴ Baylis, "The Olivieri Debacle," 44.

²⁵ Jennifer Washburn, University, Inc. (New York: Basic Books, 2005), 123.

²⁶ Washburn, University, Inc., 123-124.

²⁷ David Spurgeon, "Report Clears Researcher Who Broke Drug Company Agreement," BMJ 323 (February 2004): 1085.

sity and the hospital did not treat her well because financial interests were involved in the controversy. Although representatives from the hospital and the university denied the way they handled the situation had to do with money, there was a potential conflict of interest. A story about the controversy in the *Canadian Medical Association Journal* revealed that both the university and the hospital were aspiring to benefit from sizable donations provided by Apotex. The story indicated that the director of communications at the university said her institution was hoping Apotex would make a large donation, perhaps as high as \$20 million so that the medical school could expand. In addition to the chance of making this donation, Apotex had offered to make a \$10 million donation to one of Toronto's teaching hospitals. Although the story indicated that there was insufficient evidence showing the negotiations involving the donations affected how Olivieri was treated, it stated that these are the kinds of situations that could potentially exert influence.²⁸

Unlike Olivieri's case, another one at the University of Toronto did not involve breaking a disclosure agreement. At the same time the Olivieri controversy was receiving attention, David Healy was planning to leave his position in Wales to start a new one in Canada. In 2000, he accepted a position as the director of the University of Toronto's Mood and Anxiety Disorders Clinic.²⁹ Later that year, before his new position was scheduled to start, he gave a speech at the center and expressed criticism about the failure of drug companies to investigate the link between antidepressants, including Prozac, and suicide. Healy was then informed that the offer to work as director had been revoked.³⁰

The email informing Healy about the rescindment indicated that members of the center felt he was not a good fit. Although a specific reason was not offered, it is easy to see how financial interests were involved. The center was receiving a considerable percentage of funding from corporate sources. Ely Lilly, the maker of Prozac, was providing \$1.5 million to the center. The

²⁸ Miriam Shuchman, "Legal Issues Surrounding Privately Funded Research Cause Furor in Toronto," Canadian Medical Association Journal 159 (October 1998): 986.

²⁹ Schafer, "Biomedical Conflicts," 12.

Janice Paskey, "U. of Toronto Settles Dispute with Psychiatrist Whose Appointment Was Rescinded," Chronicle of Higher Education, May 1, 2002, www.chronicle.com/article/u-of-toronto-settles-dispute-with-psychiatrist-whose-appointment-was-rescinded/?cid2=gen_login_refresh&cid=gen_sign_in.

center was also getting 52 percent of its funding from corporate sources.³¹ Healy sued the university for almost \$6 million, charging it with a few unjust acts, including breach of academic freedom.³²

CONCEALMENT OF RESEARCH ON ANTIDEPRESSANT DRUGS

Healy had good reasons for being critical of the lack of effort to reveal the risks of antidepressant drugs. Investigations on the category of antidepressant drugs referred to as selective serotonin reuptake inhibitors (SSRIs) concluded that the makers of these drugs had concealed their dangers and ineffectiveness. In the 1990s, the number of young people being given antidepressant drugs rose considerably. Most of the published academic literature corroborated offering SSRIs to treat young people with depression. However, a 2004 FDA review of all pediatric studies, including those that had never been published, showed that the majority of studies found that taking an SSRI caused no more improvement than did a placebo or a sugar pill.³³

In response to the suppression of this information, Eliot Spitzer sued GlaxoSmithKline (GSK), the maker of Paxil. Only one of the five studies GSK had funded on Paxil had been published. And the combined data from the studies indicated that taking Paxil increased children's risk of becoming suicidal more than taking a placebo. To make matters worse, other companies were withholding data revealing that antidepressants had caused the same outcomes.³⁴ Unfortunately, university scholars' names appeared in some of these studies. In fact, a large percentage of the authors of the Paxil studies were university scholars. One of the authors had received over a half million dollars from drug companies he endorsed at medical conferences and in journals. Although it was impossible to prove this case involved a causal relationship between distorted research and its funding sources, other scholars with ties to drug companies had published studies with distorted findings.³⁵

³¹ Washburn, University, Inc., 122-123.

³² Paskey, "U. of Toronto."

³³ Washburn, University, Inc., 113.

³⁴ Washburn, University, Inc., 113-114.

³⁵ Washburn, University, Inc., 114-115.

GHOSTWRITING

In addition to the chance an industry may try to suppress the publication of unfavorable results about its products is the possibility it may use the services of ghostwriters. Scientists sometimes accept money so that their names appear at the top of journal articles they do not write. In 2003, a story was published indicating that a high percentage of articles in medical journals are written by ghostwriters.³⁶ It is believed that there are even some cases involving scientists who are named as authors, although they have seen only the tables produced by a company without viewing the raw data.³⁷

The ghostwriting process usually conceals the involvement of drug companies. And it can be a lucrative method for corporations because doctors decide on which drugs to use to a great extent based on what is printed in medical journals. The process often starts when drug companies pay agencies who employ writers to author content to promote a drug company's products. The names of these writers are not revealed, and the researchers whose names appear on top of a paper are paid well so that industries can use their reputations.³⁸

Many journals and scholars have unfavorable views about ghostwriting because it can contribute to harmful consequences. One of the problems with this practice is that it conceals conflicts of interest. People who work for drug manufacturers may have participated in the design of a study, collected the data, performed the statistical analysis, and drafted an article without being listed as authors or mentioned in the acknowledgment sections. Such an approach can contribute to exaggerated results. It can also lead to the concealment of the risks associated with a product. Other deceptive practices, such as selective reporting, data manipulation, and inappropriate data analysis can occur.³⁹

³⁶ Antony Barnett, "Revealed: How Drug Firms 'Hoodwink' Medical Journals," *The Guardian*, December 7, 2003, www.theguardian.com/society/2003/dec/07/health.businessofresearch.

³⁷ Sarah Boseley, "Scandal of Scientists Who Take Money for Papers Ghostwritten by Drug Companies," The Guardian, February 7, 2002, www.theguardian.com/uk/2002/feb/07/research.health1.

³⁸ Barnett, "Revealed."

³⁹ Bryan Dotson and Richard L. Slaughter, "Prevalence of Articles with Honorary and Ghost Authors in Three Pharmacy Journals," American Journal of Health-System Pharmacy 68 (2011): 1732–1733.

WAYS TO PREVENT THE PROBLEM

Various methods can be implemented to prevent the harmful effects of corporate influence on university research. One of these involves supporting researchers who find problems with the drugs or other products of a corporation that funds a study. Other methods include increasing federal support for university research and implementing stronger disclosure requirements and a risk—benefit analysis.

More Support for Researchers to Conduct Trustworthy Research

Rather than threatening researchers with punitive consequences for breaking a confidentiality agreement, universities can support those who find a product to be ineffective or harmful. Such support was provided at the University of California at San Francisco (UCSF) when James Kahn made such a discovery. Kahn valued relationships between academic institutions and the private sector, believing these collaborations were complementary. However, in 1999, he found that his beliefs conflicted with those of the company funding his research after revealing his findings. Kahn concluded from his research that Remune, an AIDS drug, did not work. He wanted to publicize his findings so that patients could be aware of this problem. Although he had signed a confidentiality agreement, Kahn and the others he worked with submitted their findings to the *Journal of the American Medical Association*.⁴⁰

One important difference between the Kahn case and other cases like his involved how UCSF responded. Rather than threaten Kahn with punitive outcomes for doing something that would harm a sponsor, UCSF defended him. Immune Response Corporation (IRC) funded the study Kahn led and disagreed with Kahn's interpretation of the data. IRC claimed that some of the data about their drug showed positive results. But Kahn said the data IRC wanted to include were not part of the study he led. In response to the dispute, IRC demanded \$7–10 million in damages. A counterclaim was filed, asserting the data were wrongly withheld from the researchers. Fortunately

⁴⁰ Washburn, University, Inc., 103-107.

for Kahn and his colleagues, IRC settled without receiving any money for damages.⁴¹

More Federal Support for University Research

Since funding for independent research is not intended to serve the interests of corporations, this type of support would likely reduce the possibilities for biased studies. Increasing this type of funding is therefore an effective approach for dealing with corporate influence on university research. Allowing researchers to have more opportunities to conduct independent research appears to be the most effective strategy to prevent the negative outcomes associated with industry-funded research.⁴²

In the United States, President Joe Biden is planning to implement such an approach. The budget he is proposing for 2024 includes an increase in funds for many federal science agencies. For example, the National Science Foundation, which provides a significant amount of funding for US academic research, would receive a 19 percent increase in funds.⁴³

Another way to prevent the problem is by reducing the control corporations have over the research process. Universities can accept support from industries and still conduct authentic research that benefits consumers. For instance, the Massachusetts Institute of Technology (MIT) reduces possibilities for biased research by not accepting funding from corporations unless it has complete freedom to publish the results. This practice helps MIT maintain its reputation as one of the world's leading universities. Although such an approach should be praised, it has prevented this institution from benefiting from lucrative funding offers. Less prestigious universities may not be willing to accept such an approach.⁴⁴

⁴¹ Susan Haack, "Scientific Secrecy and 'Spin': The Sad, Sleazy Saga of the Trials of Remune," Law and Contemporary Problems 69 (2006): 60–61.

⁴² Hani Morgan, "Reducing Corporate Influence on University Research in America," *Policy Futures in Education* (2022): 11.

⁴³ Max Kozlov et al., "Biden Calls for Boosts in Science Spending to Keep US Competitive," Nature, March 23, 2023, 572-573.

⁴⁴ Paul Basken, "How to Protect Your College's Research from Undue Corporate Influence," Chronicle of Higher Education, February 25, 2018, www.chronicle.com/article/how-to-protect-your-colleges-research-from-undue-corporate-influence/?cid2=gen_login_refresh&cid=gen_sign_in.

STRONGER DISCLOSURE POLICIES

For universities that need to rely on accepting funding opportunities requiring the funder the right to control the publication process, stronger disclosure policies can be implemented to determine the extent to which a study may be biased. In 2018, the majority of public health journals were found to have no requirements on the reporting of important information such as nonfinancial conflicts of interest and the role of the funder.⁴⁵

In certain cases, university researchers conducting industry-funded research cannot disclose their conflicts of interest because of the nondisclosure agreements they sign with corporations. These agreements can prohibit researchers from disclosing the terms of the contract regarding their studies. Universities can take action to prevent researchers from signing such contracts, especially those with corporations likely to design misleading research. However, like the practice of accepting industry funding only if university researchers have the freedom to publish, refusing to sign agreements that ban researchers from revealing how a corporation may have influenced the research will likely lead to fewer partnerships with industries.

IMPLEMENTATION OF A RISK-BENEFIT ANALYSIS

Conducting a risk–benefit analysis is another approach that can be implemented. Such an analysis needs to focus on whether the influence of the sponsor may be harmful. This approach also needs to focus on whether a university's reputation may be harmed. In implementing this method, universities need to identify whether an industry's goals are replacing authentic commitments to advance science and avoid becoming involved if necessary. For example, some research institutions have banned accepting funds from tobacco companies.⁴⁶

The tobacco industry has been blamed for using pseudoscience to participate in deceptive campaigns that have misled the public. In the 1950s and 1960s, this industry suggested that their products were safe and withheld

⁴⁵ Karim N. Daou et al., "Public Health Journals' Requirements for Authors to Disclose Funding and Conflicts of Interest: A Cross-Sectional Study," *BMC Public Health* 18 (2018): 1.

⁴⁶ Morgan, "Reducing Corporate," 11.

evidence showing they were harmful. In later years, the industry continued to deflect the science showing its products were detrimental.⁴⁷

The guidelines the Canadian government recently released provide another example of how a risk-benefit analysis may be implemented. These guidelines are designed to prevent partnerships that could be harmful. Rather than protecting the reputation of individual universities from being harmed, however, these guidelines are designed to protect the entire nation. They were released in 2021, and universities are expected to follow them before submitting a grant application. The guidelines ask applicants to evaluate whether the companies or researchers they work with pose a security risk to the country. To ensure these new guidelines lead to the desired results, the government provided \$25 million to Canadian research universities so that they could hire security officers to help faculty adhere to the new rules.⁴⁸

In addition to the release of these guidelines, new rules were implemented requiring Canada's major research agencies to stop funding proposals viewed as problematic, such as those that benefit another nation's military. The United States, Australia, and other countries have also acted in ways to protect their national security.⁴⁹ In the United States, for instance, the Education Department requested some universities to supply records of their agreements and financial transactions with entities and governments in countries that frequently oppose American policies. This increased scrutiny resulted from new concerns about foreign influence consisting of economic espionage and interference in US elections.⁵⁰

Conclusion

Corporations can restrict academic freedom by requiring researchers to sign agreements banning them from publishing their results without the corporation's consent. This practice is antithetical to the ideas on which academic freedom is based. Academic freedom not only allows researchers to pub-

⁴⁷ Morgan, "Reducing Corporate," 11.

⁴⁸ Jeffrey Mervis, "Canada Moves to Ban Funding for 'Risky' Foreign Collaborations," *Science*, February 25, 2018, www.science.org/content/article/canada-moves-ban-funding-risky-foreign-collaborations.

⁴⁹ Mervis, "Canada Moves."

⁵⁰ Erica L. Green, "Universities Face Federal Crackdown over Foreign Financial Influence," New York Times, August 30, 2019, www.nytimes.com/2019/08/30/us/politics/universities-foreign-donations. html.

Restricting Academic Freedom at Universities

lish research results but also offers them the right to select the methodologies of their choice, to choose course content, and to share areas of expertise through writing and speech.

By controlling the research process, corporations can participate in misleading practices that harm consumers. Fortunately, corporate influence on academic institutions can be controlled. Some of the ways to accomplish this goal include increasing funding for independent research and implementing stronger disclosure practices. Universities can also refrain from forming partnerships with companies interested in conducting deceptive research that can harm consumers. Such strategies will make it harder for industries to collaborate with university researchers to create studies that contribute to the corruption of science.