

# **EXHIBIT 29**

**DECLARATION OF C. CYBELE RAVER, VANDERBILT UNIVERSITY**

I, C. Cybele Raver, Ph.D., declare as follows:

1. I am the Provost and Vice Chancellor for Academic Affairs at Vanderbilt University (“Vanderbilt” or the “University”) in Nashville, Tennessee. I have held that position since July 1, 2021. I previously served as deputy provost at New York University, and I have led my own federally funded research laboratory for more than twenty years; my research, some of which has been funded by the National Institutes of Health, focuses primary on early learning and development.

2. As Provost and Vice Chancellor for Academic Affairs, I have personal knowledge of the contents of this declaration, or have knowledge of the matters based on my review of information and records gathered by Vanderbilt personnel, and could testify thereto.

3. Vanderbilt receives substantial annual funding from the National Institutes of Health (“NIH”). In fiscal year 2024, Vanderbilt received a total of \$156 million in funding from NIH, including \$43.8 million in indirect costs. In fiscal year 2023, Vanderbilt received a total of \$150 million in funding from NIH, including \$40.9 million in indirect costs. In fiscal year 2022, Vanderbilt received a total of \$139 million in funding from NIH, including \$37.9 million in indirect costs. At present, Vanderbilt is authorized to conduct a total of \$599.6 million in research across 729 grants funded by NIH.

4. The funding Vanderbilt receives from NIH supports critical and cutting-edge medical research, which millions of Americans benefit from and depend on. For example:

- a. Vanderbilt researchers are conducting lung imaging studies to support early detection and treatment of lung cancer for U.S. Army soldiers at Fort Campbell who have suffered burn-pit injuries.

- b. Vanderbilt University School of Medicine researchers are engineering nanoparticles to more efficiently and safely deliver cancer immunotherapy to treat melanoma, breast cancer, and kidney cancer.
- c. Vanderbilt School of Engineering researchers are finding ways to improve management of Type 1 diabetes in children.
- d. Researchers in Vanderbilt's Peabody College of Education and Human Development are improving the lives of people with Down syndrome and autism spectrum disorder by understanding the causes of these disorders and developing and testing therapies tailored to each individual's needs.
- e. Vanderbilt's Warren Center for Neuroscience Drug Discovery designs novel therapeutics for the treatment of serious brain disorders including Alzheimer's disease, Parkinson's disease, and schizophrenia.
- f. Vanderbilt's Center for Addiction Research studies the circuits in the brain that underlie addiction, depression, and anxiety in order to develop effective interventions.
- g. Researchers in Vanderbilt's School of Engineering are using animal models to study potential treatments for Alzheimer's and age-related cognitive decline.

Indirect costs are essential for supporting this research. The NIH's proposal to cut indirect cost rates to 15% would end or seriously jeopardize all of the scientific research projects described in this paragraph 4 (as well as over 700 other scientific studies).

5. Indirect costs provide support to procure necessary equipment and to construct and maintain facilities, including state-of-the-art laboratory and other spaces required to conduct advanced scientific research. Indirect costs literally "keep the lights on" to the extent they pay for

electricity and other utilities, and they also support information technology infrastructure, as well as important safety and compliance functions. Indirect costs also support certain administrative staff, whose functions are centralized within the university to provide for efficient grants administration, compliance with federal and state regulations, and reporting. Without this equipment, physical space, and personnel, we cannot conduct this life-saving scientific research.

6. For example, with respect to the areas of research described in Paragraph 4:
  - a. Imaging studies to understand diseases like cancer and Parkinson’s disease require sophisticated staff and technical support, including information technology and computer system managers and electronic and mechanical engineers whose salaries are paid in part by indirect costs.
  - b. Many pharmaceutical studies begin with animal models involving mice and rats, where those animal colonies require specialized and continuous housing, feeding, and care. NIH-funded centralized scientific staff (including laboratory technicians and other scientific workers) are essential to the care of those animal colonies.
  - c. Research involving children is supported by administrative staff who ensure Vanderbilt is compliant with human subjects research and protection-of-minors protocols when using data from pediatric clinical trials and hosting minors on campus.
  - d. Researchers studying fetal development during pregnancy rely on sophisticated human imaging “core” facilities to conduct neuroimaging of pregnant women in the second and third trimesters and then follow their children to age 10.

e. Similarly, researchers studying personalized medicine rely on Vanderbilt Technologies for Advanced Genomics (VANTAGE), a genomics core laboratory funded by NIH, which accelerates discovery in genome sequencing through state-of-the-art equipment to perform DNA extraction and banking, among other specialized services.

7. Physical space costs are one of the largest components of indirect costs, and the amount of space available to researchers has a direct and obvious impact on the amount of research that can be done at Vanderbilt. If costs for physical office and lab space, including utilities, were not covered by indirect costs, Vanderbilt's leading scientists – especially promising junior faculty – will have limited or lower-quality space available to conduct their research, which will force them to reduce the scope of their research and as a result, miss milestones that were originally proposed to a funding agency. Vanderbilt's world-class scientists might be required to ration space and equipment, delaying their progress on groundbreaking research. Certain core facilities may be required to operate on reduced schedules due to limited staffing, resulting in delays or disrupting time-sensitive protocols.

8. In addition, indirect costs fund the administration of awards, including staff who ensure compliance with a vast number of regulatory mandates from agencies such as NIH.<sup>1</sup> These mandates serve many important functions, including protecting human and animal subjects involved in research; ensuring research integrity; preventing intellectual property, technologies, or national security expertise from being inappropriately accessed by foreign adversaries; properly managing and disposing of chemical and biological agents used in research; preventing financial

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<sup>1</sup> <https://grants.nih.gov/grants/policy/nihgps/nihgps.pdf>

conflicts of interest; managing funds; and providing the high level of cybersecurity, data storage, and computing environments mandated for regulated data.

9. Recovery of Vanderbilt's indirect costs is based on predetermined rates that have been contractually negotiated with the federal government.

10. Through fiscal year 2026, the predetermined indirect cost rates are 58.5% for on-campus organized research; 29.50% for off-campus organized research within 50 miles commuting distance of Vanderbilt; and 26.0% for off-campus organized research beyond 50 miles commuting distance of Vanderbilt.

11. The impact of a reduction in the indirect cost rate would be devastating. Of the \$444.9 million in NIH funding that Vanderbilt received in fiscal year 2022-2024, approximately \$322.3 million was allocated for direct costs and \$122.6 million for indirect costs. Similarly, in fiscal year 2025, Vanderbilt expects to receive \$118 million in NIH funding for direct costs, while \$44.8 million is allocated for indirect costs. And over the next five years, Vanderbilt anticipates receiving an average of \$137 million from the NIH for annual direct costs. Based on the predetermined indirect cost rate of 58.5%, which was agreed upon by the federal government as of May 6, 2021, the University thus expects to receive approximately \$53.4 million in indirect cost recovery on an annual basis.

12. If—contrary to what Vanderbilt has negotiated with the federal government—the indirect cost rate is reduced to 15%, that would reduce the University's anticipated annual indirect cost recovery by \$33 million, to \$12 million.

13. This reduction will have deeply damaging effects on Vanderbilt's ability to conduct research from day one. In fact, the February 7, 2025 Notice from NIH has already caused Vanderbilt's most accomplished scientists to express alarm that if the policy takes effect for

existing awards beginning February 10, 2025, as announced, they might be required to take some or all of the following steps:

- a. Shut down core research facilities;
- b. Euthanize animals;
- c. Terminate ongoing projects prematurely;
- d. Operate with inadequate staffing, exposing lab personnel to serious safety hazards;
- e. Freeze hiring of staff;
- f. Freeze recruitment of graduate students and undergraduate interns, including rescinding current outstanding offers;
- g. Lay off existing lab personnel; and
- h. Postpone the start of human trials.

The uncertainty prompted by the NIH Notice has interfered with Vanderbilt scientists' ability to budget, plan for the future, and properly execute the research they were contracted to conduct. Despite university leadership's best efforts to provide support, our nation's leading scientists have experienced confusion and budgetary uncertainty as they are not sure they will be able to rely on the continued availability of the space, equipment, services, and personnel supported by the indirect costs that NIH previously indicated would be paid for their projects.

14. Vanderbilt has for decades relied on the payment of indirect costs. And until now, we have been able to rely on the well-established process for negotiating indirect cost rates with the government to inform our budgeting and planning. Operating budgets rely on an estimate of both direct and indirect sponsored funding to plan for annual staffing needs (*e.g.*, post-docs, PhD students, and other research staff), infrastructure support (*e.g.*, IT networks, regulatory

compliance, and grant management support), and facility and equipment purchases. And in some cases, Vanderbilt has long-term obligations—for example, tenured scientist faculty salaries and support of PhD and other graduate students—and it relies on budgeted grant funding, including associated indirect cost recovery, to fulfill these commitments.

15. In addition to the immediate impacts and reliance interests described above, there are longer term negative impacts that are severe, cumulative, and cascading. For example, there is a very real risk that path-breaking clinical trials will be disrupted, delaying their ability to improve the lives of American patients. As an example, NIH-funded Vanderbilt research on “cholinergic Deep Brain Stimulation” has received FDA approval to launch a human pilot clinical trial seeking to improve cognitive function across a range of neurological disorders. With immediate budget cuts, that ground-breaking project and over 700 other scientific studies will be placed “on hold.” At many institutions with substantial NIH funding, this kind of widespread uncertainty will have severe effects on the biomedical workforce, which in turn will have a devastating economic impact on their families and the local communities where they live and may drive them to consider opportunities in other countries where research is a major source of investment. Where American academic research organizations including Vanderbilt have long been at the forefront of life-saving and life-improving discoveries, even short-term disruption will provide opportunity for other countries to challenge our collective leadership.

16. Disruptions to Vanderbilt’s research will also have negative effects in the greater Nashville and Middle Tennessee area, the state of Tennessee, and the broader region. Nearly 7,000 Tennessee residents are directly employed by Vanderbilt—and it collaborates with state and local partners to help solve regional challenges through joint research and innovation. Most notably, Vanderbilt researchers often collaborate closely with fellow researchers at Vanderbilt University



Medical Center (VUMC), which is a separate legal entity that is the largest non-governmental employer in Middle Tennessee, with nearly 40,000 staff. Vanderbilt's research also fuels spending in the regional economy, including by driving discoveries that launch new ventures, attract private investment, and make a positive social impact. A massive reduction in Vanderbilt's research budget would immediately and seriously jeopardize these contributions to the local region.

17. Finally, slowdowns or halts in research by Vanderbilt and other American universities will allow competitor nations that are maintaining their investments in research to surpass the United States on this front, threatening both our Nation's national security and its economic dominance. For example, disruption to NIH-funded research could create setbacks for Vanderbilt researchers' work on treatments for infectious disease, Alzheimer's disease, breast cancer, and Long COVID.

18. Nor can Vanderbilt cover the funding gap itself. While Vanderbilt maintains an endowment, it is neither feasible nor sustainable for Vanderbilt to use endowment funds or other revenue sources to offset shortfalls in indirect cost recovery, for several reasons:


- a. A significant portion of Vanderbilt's endowment—around 41.6%—is restricted to specific donor-designated purposes, such as scholarships, faculty chairs, and academic programs. Vanderbilt is not legally permitted to use those funds to cover research infrastructure costs.
- b. Even the portion of the endowment that is unrestricted is subject to a carefully managed annual payout, typically around 5.0%, to ensure long-term financial stability for the institution. This is consistent with the requirement to prudently manage the endowment under Tennessee law. Tn. Code Sec. 35-10-203

- c. As a non-profit, charitable educational institution, Vanderbilt reinvests nearly all of its revenue into mission-critical activities, leaving little margin to absorb unexpected funding gaps. In other words, unlike for-profit organizations, Vanderbilt does not generate significant surpluses that could be redirected without impacting core academic priorities such as educational programs and financial aid support for students.

19. Moreover, absorbing the cost of a lower indirect cost rate, even if it were possible, would create long-term budget pressures on Vanderbilt—which would in turn force catastrophic reductions in key investments supporting Vanderbilt’s faculty, students, staff, research, and teaching infrastructure, as well as other critical activities needed to maintain Vanderbilt’s academic excellence.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on February 10, 2025 at Vanderbilt University, Nashville, Tennessee.



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C. Cybele Raver