

Congress of the United States

Washington, DC 20515

April 24, 2026

The Honorable Jay Bhattacharya, M.D., Ph.D.
Director
National Institutes of Health
U.S. Department of Health and Human Services
Building One, Room 244
One Center Drive
Bethesda, Maryland 20892

Director Bhattacharya,

We applaud National Institutes of Health's (NIH) [Request for Information](#)¹ (RFI) seeking public comment on reducing or ending the use of human embryonic stem cells for research. This is an area with clear and dramatic need for modernization on the part of NIH to reverse previous unethical policies and to bring NIH funding priorities into better alignment with developments in stem cell research. **To this end, we urge the NIH to end permanently all applications for new human embryonic stem cell (hESC) lines, shut down the NIH Human Embryonic Stem Cell Registry (Registry), and completely stop all funding for hESC research.**

This research is unethical, it has not yielded good results, and there are ethical alternatives available that have already provided treatments and cures.

The NIH policy on funding hESC research and maintaining the Registry, which currently lists more than 500 hESC lines, has been a moral blot on NIH. This research relies on the death of human embryos.² It is repugnant to treat any human life as disposable for so-called "medical research purposes." There is no such thing as a "spare" human being, and the U.S. government should not be facilitating or funding research that depends on killing and harvesting cells from human beings in their youngest form.

As an additional consideration, despite enormous research investment in hESC, it has not even yielded good results for patients. By way of background, embryonic stem cells are pluripotent, which means that the cells can differentiate to become different organs and tissues. Over twenty years ago, proponents of hESC research argued that this pluripotency could be harnessed to restore damaged organs and tissues.³ Supporters, like actor Christopher Reeve, predicted "biological miracles," which have never materialized. More than 25 years of research have not yielded any FDA-approved hESC therapies on the market.⁴ Yet, year by year, the federal government continues to fund this outdated, unethical research (between Fiscal Years

¹ NIH Pause on New Submissions to the NIH Human Embryonic Stem Cell Registry and Request for Information on Reducing Reliance on Human Embryonic Stem Cells in NIH-Supported Research. Notice Number: NOT-OD-26-031. <https://grants.nih.gov/grants/guide/notice-files/NOT-OD-26-031.html>

² Ibid.

³ Tarne, Eugene. "Human Embryonic Stem Cell Research 25 Years On." October 30, 2023. <https://lozierinstitute.org/human-embryonic-stem-cell-research-25-years-on/>.

⁴ Ibid.

2021-2024 alone, NIH spent over \$1.2 billion on hESC research⁵) rather than focusing resources on more promising, less ethically compromised areas of research.

Meanwhile, ethical stem cell research, such as that conducted with adult stem cells, umbilical cord blood, and induced pluripotent stem cells (iPSCs), already offers treatments and cures for millions of patients worldwide with additional studies seeking to unlock future potential.

Adult Stem Cells. Adult stem cell transplants using stem cells found in blood and bone marrow have been used to treat numerous hematopoietic conditions ranging from blood cancers and blood disorders to certain immune and metabolic disorders, and even select solid tumors.⁶ Between 2012 to 2016, the number of patients treated with these transplants jumped from 1 million to 1.5 million.⁷ By today, well over 2 million patients would have been treated.⁸ The University of Notre Dame’s Center for Stem Cells and Regenerative Medicine also notes that adult stem cells, including those found in tissues other than bone marrow, may also have the potential to treat still more conditions, including “type 1 diabetes (providing insulin-producing cells), heart attack (repairing cardiac muscle), and neurological disease (regenerating lost neurons in the brain or spinal cord).”⁹ In recent years, adult stem cells have shown evidence of effectiveness in treating a range of conditions, including cardiovascular, cerebrovascular, and autoimmune diseases, as well as graft-versus-host disease and the growth of new corneas for sight recovery.^{10,11}

Umbilical Cord Blood. Blood from umbilical cords is another promising source of stem cells. This “cord blood,” typically discarded after labor and delivery, is rich with stem cells that can be used in research, regenerative medicine, and transplantation.¹² Umbilical cord blood has so far been used to treat over 75 diseases, including leukemia, lymphoma, and sickle cell disease.¹³ Patients with a wide range of conditions have seen their lives transformed due to these treatments.¹⁴

⁵ NIH Categorical Spending Table. Accessed February 26, 2025. <https://report.nih.gov/funding/categorical-spending/>, searching on term “embryonic - human”

⁶ Snowden, John A. et al. “Indications for haematopoietic cell transplantation for haematological diseases, solid tumours and immune disorders: current practice in Europe, 2022.” *Bone Marrow Transplantation* 57, 1217–1239, 2022. doi: [10.1038/s41409-022-01691-w](https://doi.org/10.1038/s41409-022-01691-w)

⁷ Gratwohl A et al; Worldwide Network for Blood and Marrow Transplantation (WBMT). One million haemopoietic stem-cell transplants: a retrospective observational study. *Lancet Haematol.* 2015;2:e91–e100. doi: [10.1016/S2352-3026\(15\)00028-9](https://doi.org/10.1016/S2352-3026(15)00028-9). <https://www.ahajournals.org/doi/full/10.1161/CIRCRESAHA.118.313664>

⁸ Niederwieser D et al., One and a half million hematopoietic stem cell transplants: continuous and differential improvement in worldwide access with the use of nonidentical family donors. *Haematologica* 107, 1045-1053, 2022. <https://haematologica.org/article/view/haematol.2021.279189>

⁹ Center for Stem Cells and Regenerative Medicine. “Adult Stem Cells.” University of Notre Dame. Accessed February 26, 2025. <https://stemcell.nd.edu/research/alternative-stem-cell-sources/adult-stem-cells>.

¹⁰ Prentice DA, Adult Stem Cells: Successful Standard for Regenerative Medicine, *Circulation Research* 124, 837-839, 2019; doi: [10.1161/CIRCRESAHA.118.313664](https://doi.org/10.1161/CIRCRESAHA.118.313664)

¹¹ Acharya S et al., Stem cell therapies in the clinic, *Bioengineering and Translational Medicine* 10(3) e70000, May 2025, doi: <https://doi.org/10.1002/btm2.70000>

¹² Sander Lee, Tara, Ph.D. Written Testimony. Subcommittees on Healthcare, Benefits, and Administrative Rules and Government Operations for the Committee on Oversight and Government Reform "Exploring Alternatives to Fetal Tissue Research" December 13, 2018. <https://oversight.house.gov/wp-content/uploads/2018/12/Sander-Lee-Testimony-HCBAR-GO-Fetal-Tissue-12.13.18.pdf>

¹³ National Marrow Donor Program. “The Cord Blood Donation Process and FAQs.” Accessed February 26, 2025. <https://www.nmdp.org/get-involved/join-the-registry/donate-cord-blood/cord-blood-donation-process>

¹⁴ Stem Cell Connect. <https://stemcellresearchfacts.org/success-stories>

The federal government has long recognized the life-saving potential of umbilical cord blood. In 2005, Rep. Chris Smith authored the Stem Cell Therapeutic and Research Act of 2005¹⁵ (P.L. 109-129), ground-breaking legislation that connects patients needing treatment with genetically matched cord blood stem cells, providing new opportunities for patients to access cures. It was reauthorized by Congress in 2010, 2015, and 2020.^{16,17} In the past, virtually every placenta and umbilical cord was discarded as “medical waste.” Today, doctors have turned this “medical waste” into medical miracles, and it holds significant promise for future stem cell research.

Induced Pluripotent Stem Cells (iPSCs). Yet another ethical source of stem cells, iPSCs are “reprogrammed” adult somatic (body) cells, induced to create pluripotent stem cells that resemble embryonic stem cells—without involving human embryos at all.¹⁸ iPSC technology revolutionized biological research and has been used in applications such as disease modeling, regenerative medicine, and drug discovery studies.¹⁹ Dr. Shinya Yamanaka, who received the Nobel Prize in 2012 for his groundbreaking discovery of iPSCs, said his work was inspired by looking down a microscope at a human embryo.²⁰ He said, “When I saw the embryo, I suddenly realized there was such a small difference between it and my daughters... I thought, we can’t keep destroying embryos for our research. There must be another way.”²¹ iPSCs have since become widely used, including in such areas as cardiac disease monitoring, neural disorders like Alzheimer’s disease, liver disease, and spinal cord injury, with early results showing marked successes, including restoring movement for paralyzed patients.^{22,23}

The proven effectiveness of these ethical sources of stem cells contrasted with the dismal record of hESC research reveals the urgent need for NIH to modernize its funding strategy for stem cell research. The NIH should never have allowed research that relies upon and incentivizes the destruction of human life to be funded with billions of taxpayer dollars. It certainly should refrain from continuing to do so, especially after that great expense has delivered so little benefit for patients.

In conclusion, the NIH should take this opportunity to end permanently all reliance on hESCs for research—including the cessation of all NIH funding for hESC research, maintenance of the Registry, and any applications for new hESC lines—and redirect those resources towards research using ethical alternatives, such as adult stem cells, umbilical cord blood, and iPSCs, that

¹⁵ Congress.gov. H.R.2520 - Stem Cell Therapeutic and Research Act of 2005.

<https://www.congress.gov/bill/109th-congress/house-bill/2520/text/statute?statuteId=42387&s=2&r=20>

¹⁶ Congress.gov. H.R.2820 - Stem Cell Therapeutic and Research Reauthorization Act of 2015.

<https://www.congress.gov/bill/114th-congress/house-bill/2820/text?s=2&r=10>

¹⁷ Congress.gov. H.R.3520 - Stem Cell Therapeutic and Research Reauthorization Act of 2019

<https://www.congress.gov/bill/116th-congress/house-bill/3520>

¹⁸ Tarne, Eugene. “Human Embryonic Stem Cell Research 25 Years On.” Charlotte Lozier Institute *On Science Series* 15, October 2023.

<https://lozierinstitute.org/human-embryonic-stem-cell-research-25-years-on/>

¹⁹ Sayed, Nazish, MD, PhD and Joseph C Wu, MD, PhD. “Translation of Human-Induced Pluripotent Stem Cells: From Clinical Trial in a Dish to Precision Medicine.” *Journal of the American College of Cardiology* 67, 2161-2176, 2016.

<https://www.sciencedirect.com/science/article/pii/S0735109716010263>

²⁰ The Nobel Prize. “Shinya Yamanaka: Facts.” <https://www.nobelprize.org/prizes/medicine/2012/yamanaka/facts/>

²¹ Fackler, Martin. “Risk Taking Is in His Genes.” *New York Times*. December 11, 2007.

<https://www.nytimes.com/2007/12/11/science/11prof.html?pagewanted=print>

²² Aboul-Soud, M.A.M.; Alzahrani, A.J.; Mahmoud, A. Induced Pluripotent Stem Cells (iPSCs)—Roles in Regenerative Therapies, Disease Modelling and Drug Screening. *Cells* 2021, 10, 2319. <https://doi.org/10.3390/cells10092319>

²³ Mallapaty, Smriti, “Paralysed man stands again after receiving ‘reprogrammed’ stem cells.” *Nature News* 24 March 2025, <https://www.nature.com/articles/d41586-025-00863-0>

are already providing treatments for millions of patients, and which hold much greater promise for new breakthroughs and cures.

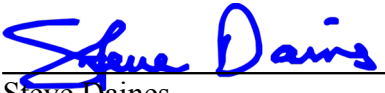
Sincerely,



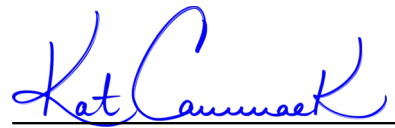
Roger F. Wicker
United States Senator



Christopher H. Smith
Member of Congress



Steve Daines
United States Senator



Kat Cammack
Member of Congress



Charles E. Grassley
United States Senator



Andy Harris, M.D.
Member of Congress



Ted Budd
United States Senator



Robert F. Onder, Jr.
Member of Congress



Jim Banks
United States Senator



Sheri Biggs
Member of Congress



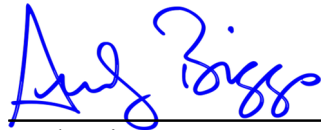
Robert B. Aderholt
Member of Congress



Ron Estes
Member of Congress



Michael Guest
Member of Congress



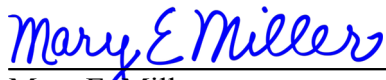
Andy Biggs
Member of Congress



Eric A. "Rick" Crawford
Member of Congress



Warren Davidson
Member of Congress



Mary E. Miller
Member of Congress



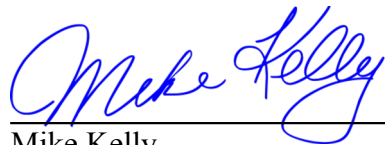
Pete Ricketts
United States Senator



John J. McGuire III
Member of Congress



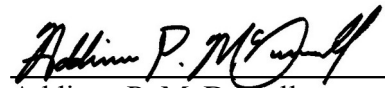
Ben Cline
Member of Congress



Mike Kelly
Member of Congress



Robert E. Latta
Member of Congress



Addison P. McDowell
Member of Congress