May 24, 2021

Susan Rice, Director
Domestic Policy Council
The White House
1600 Pennsylvania Ave. N.W.
Washington, DC 20500

Via e-mail: srice@who.eop.gov

Dear Director Rice,

We are delighted to hear that you will be working with the Department of Health and Human Services (HHS) and the National Institutes of Health (NIH) to end the well-documented systemic racism affecting the biomedical research community at all levels. Thank you for advising and supporting Dr. Collin and other HHS leaders as they begin the long overdue but necessary work to remedy the multifaceted and compounded racial biases having a negative impact on opportunities available to Black scientists and health advances for Black Americans.

**Funding Disparities**

As you know, while NIH leadership has been well aware of this problem for more than a decade, it has yet to make the system-level changes necessary in its research priorities, hiring practices, and grant review processes to ensure that Americans of all backgrounds have equal access to NIH resources. Recent studies by Erosheva *et al.* and Hoppe *et al.* report that the funding disparity with regard to research proposed by Black versus white investigators is still glaringly apparent. In addition to identifying biases in the likelihood that a grant proposal from Black investigators would even be reviewed, let alone funded, compared to white investigators, the authors of the Hoppe *et al.* study found that topic choice was a partial contributor to the differences in funding outcomes for Black and white investigators. More specifically, they discovered that applications from Black investigators were more likely to focus on health disparities, prevention, and patient intervention than those of white investigators, and were significantly more likely to involve research with human participants rather than animals. The authors concluded that there are “shared, broadly held views on the relative scientific value of different areas of research.” In other words, NIH isn’t prioritizing the sort of human-based research that would help address health disparities or evaluate and improve current prevention or intervention strategies.
Failure to Translate
Unfortunately, NIH has a history of dedicating too many resources to “basic science” research projects that have a history of failing to lead to benefits for humans. For example, NIH currently dedicates nearly 47% of its annual budget to laboratories conducting experiments on animals that have no clinical relevance. The data on the failure of animal models of disease are abundantly clear: Ninety-five percent of new drugs deemed safe and effective in animals do not turn out to be safe and effective in humans. Animal tests fail to detect potential side effects of drugs in humans 81% of the time. Ninety percent of basic research fails to lead to any human therapies within 20 years. Data from up to 89% of experiments cannot be reproduced across different laboratories, resulting in approximately $28 billion a year spent on preclinical research that may be inaccurate or misleading. The failures of animal experiments in specific disease areas paint an even grimmer picture: Treatments for stroke and sepsis tested on animals have had a devastating 100% failure rate in humans. Alzheimer’s disease treatments developed in animals fail 99.6% of the time. Oncology drugs have a success rate of only 3.4%. Decades of harmful and expensive experiments infecting monkeys and other animals with HIV and similar viruses have yet to produce an effective vaccine for humans. Crucial differences in physiology between species, the unnatural environment of the laboratory, and the negative effects of captivity and chronic stress on laboratory animals’ physical and psychological health all lead to an abject failure of animal experimentation to translate into safe and effective human treatments or cures.

As just one example of both the racial biases inherent in NIH-funded projects and the limitations of animal studies to translate into meaningful human health benefits, you can review the National Institute on Minority Health and Health Disparities funded project “The Influence of Structural Violence and Individual Behavior and Health on the Gut Microbiome and Colorectal Cancer Risk.” This study exposes mice to episodic aggression, forcing them to fight each other, with the justification that this mimics inner city violence and will somehow lead to novel strategies to reduce racial disparities in colorectal cancer. Forcing laboratory mice to fight each other cannot mimic the complex and compounded life experiences of Black Americans and will not result in any useful information to help the Black community.

Shifting priorities to ensure equitable and effective disbursement of funding support
The NIH leadership is well aware of the failure of animal experiments to yield meaningful health benefits for humans. However, the agency has been reluctant to shift its priorities to ensure that the tax dollars with which it is entrusted are equitably and effectively disbursed. As you may be aware, in 2011, the Institute of Medicine (IOM) released a landmark report concluding that “most current biomedical research use of chimpanzees is not necessary.” A subsequent report by NIH further determined that “research involving chimpanzees has rarely accelerated new discoveries or the advancement of human health for infectious diseases.” Until that point, NIH had widely funded, conducted, and advocated for experiments on chimpanzees. The findings of both the IOM and NIH reports indicated that NIH was continuing to approve, conduct, and fund experiments on chimpanzees that were ultimately deemed “unnecessary.”
In 2015, several multimillion-dollar maternal deprivation experiments conducted on infant macaques by NIH’s Stephen Suomi were halted after PETA called their cruelty, cost, scientific merit, and necessity into question. Dr. Collins admitted that the scientific merit of these experiments did not justify their cost, yet they were allowed to continue unchecked by NIH for more than three decades, resulting in millions of wasted taxpayer funds and hundreds of psychologically damaged monkeys. NIH is currently exhibiting similar reluctance to end a series of costly, harmful, and completely irrelevant brain experiments on monkeys at the National Institute of Mental Health, despite the urging from numerous primatologists, clinicians, bioethicists, neuroscientists, and animal welfare experts.

**Conclusion**

While the problem of systemic racism at NIH is multilayered and widespread, one obvious way to help combat the issue of underfunding of Black investigators and their important but neglected research interests is for NIH to revamp its current research priorities. **NIH needs to commit to supporting younger, more racially diverse investigators committed to conducting the most innovative, clinically relevant research available. This means funding fewer animal experiments and funding the sort of research that Black scientists are asking for: human-based studies directed at identifying health disparities in minorities and the best prevention and intervention methods available.**

Best of luck! I am happy to help in any way I can. You can contact me at the phone number and e-mail listed below.

Sincerely,

Katherine V. Roe Ph.D.

Senior Research Associate
Labo...


