

Issue Brief: The Case Against Merging the National Eye Institute into a Broader Neuroscience and Brain Research Institute

Background

The National Eye Institute (NEI) has been a cornerstone of vision science since its establishment in 1968. It is the only National Institutes of Health (NIH) institute solely dedicated to understanding, treating, and preventing vision-related disorders. The proposal to integrate the NEI into a larger National Institute on Neuroscience and Brain Research raises significant concerns about the future of vision science. While proponents of the merger argue that it could foster interdisciplinary collaboration and streamline research priorities, the risks to the NEI's independence, funding, and specialized focus far outweigh these potential benefits.

The NEI has played a crucial role in advancing treatments for cataracts, glaucoma, diabetic retinopathy, macular degeneration, and other vision disorders. Its focus on vision science has facilitated groundbreaking discoveries, many of which have translated into life-changing therapies for millions of Americans. Merging the NEI into a broader neuroscience-focused institute would compromise its ability to deliver on this vital mission.

This issue brief outlines the key reasons to oppose the proposed consolidation and highlights the response from the National Alliance for Eye and Vision Research (NAEVR), which is actively advocating to maintain NEI's independence.

Key Concerns

1. Loss of Dedicated Focus

The NEI's singular focus on vision research has driven unparalleled advancements in the field. Merging the NEI into a larger entity would dilute this specialized focus, potentially relegating vision-specific projects to a lower priority in favor of broader neuroscience initiatives. This dilution risks stagnating progress in understanding and treating vision disorders.

2. Funding Vulnerabilities

A standalone NEI ensures dedicated funding for vision research. In a merged structure, financial resources could be diverted to high-profile neuroscience projects, leaving vision research underfunded. Diseases such as glaucoma, which affects millions, could see slower progress in treatment development, with funding potentially redirected to projects with broader neurological implications.

3. Disruption of Established Networks

The NEI's collaborations with academic institutions, hospitals, and private industry partners are critical to its success. These partnerships have built robust pipelines for translating research into clinical applications. Consolidation threatens to disrupt

these networks, delaying the development of new therapies and weakening existing research infrastructures.

4. Public Health Impact

Vision impairments are among the leading causes of disability globally, affecting quality of life, productivity, and independence. The NEI's specialized focus ensures continued progress in reducing the prevalence and severity of these impairments. Undermining the institute's work could lead to a public health crisis, increasing the burden on healthcare systems and delaying breakthroughs in treatment.

5. Economic Costs

Vision disorders result in billions of dollars in healthcare costs and lost productivity annually. Investments in vision research yield substantial economic benefits by reducing these costs and improving workforce participation. The NEI's independence is critical to ensuring that these economic returns continue.

6. Unique Scientific Needs

Vision science encompasses unique challenges distinct from general neuroscience, including the study of light-sensitive photoreceptors, eye-specific diseases, and ocular genetics. Merging the NEI into a broader institute risks sidelining these specialized needs, hampering progress in treating conditions such as retinal degeneration and inherited vision disorders.

7. Distinct Characteristics of Vision Science

The eye serves as a unique model for medical research due to its accessibility and connection to broader health issues. Non-invasive imaging, such as Optical Coherence Tomography (OCT), enables direct observation of cellular processes. The vascular network in the eye mirrors systemic conditions like diabetes and hypertension, offering insights into broader health issues. These distinctive characteristics make the NEI indispensable for both vision-specific and broader medical research advancements.

8. Impacts on Innovation

The NEI's independence has been pivotal for breakthroughs such as Luxturna, the first FDA-approved gene therapy for an inherited disease, and the integration of AI in vision diagnostics. These innovations demonstrate the critical importance of maintaining the institute's specialized focus and dedicated funding.

NAEVR's Response

NAEVR has taken a strong stance against the proposed merger, emphasizing the following:

- **Advocacy for Independence:** NAEVR argues that the NEI's independence is essential to sustaining its focus and ensuring continued progress in vision research.
- **Public Outreach:** NAEVR is engaging with policymakers, researchers, and patient advocacy groups to raise awareness about the risks of consolidation.

- **Research Collaboration:** NAEVR supports targeted initiatives to foster interdisciplinary research without compromising the NEI’s autonomy.
- **Economic Justification:** NAEVR highlights the economic returns on investment in vision research, arguing that NEI’s dedicated funding stream is critical to maintaining these benefits.

Recommendations

To protect the NEI’s independence and ensure continued progress in vision science, we recommend the following actions:

1. **Retain the NEI’s Independence:** Policymakers should oppose any proposals to merge the NEI into a broader institute, preserving its autonomy within the NIH framework.
2. **Foster Targeted Collaboration:** Encourage collaborative research between the NEI and other NIH institutes through specific initiatives, without requiring structural consolidation.
3. **Increase Vision Research Funding:** Advocate for increased federal funding to address the growing prevalence of vision-related conditions, ensuring that critical research is adequately supported.
4. **Engage Stakeholders:** Work with researchers, clinicians, patient advocates, and industry leaders to develop alternatives to the merger that balance interdisciplinary research with the NEI’s unique mission.
5. **Raise Public Awareness:** Launch advocacy campaigns to inform the public and policymakers about the importance of preserving the NEI’s specialized focus.

Conclusion

The National Eye Institute plays a vital role in advancing vision science, improving public health, and generating economic benefits. The proposal to merge the NEI into a broader neuroscience-focused institute jeopardizes this progress, undermining the unique focus required to address vision-related challenges effectively.

NAEVR strongly opposes this consolidation and calls on all stakeholders to advocate for the NEI’s continued independence. Policymakers must prioritize preserving the NEI’s autonomy to ensure that vision research continues to thrive, delivering critical advancements for patients and society as a whole.

Stakeholders are urged to contact their representatives, participate in public discussions, and join advocacy efforts to secure the NEI’s future as a standalone entity.