

June 12, 2024

Re: Ensuring Scientific Review Is Not a Barrier to Advancing NAMs; June 13-14, 2024 Advisory Committee to the Director (ACD) Meeting Written Comment

Sent via email to shawcy@od.nih.gov

Dear Director Bertagnolli and members of the ACD:

On behalf of the Physicians Committee for Responsible Medicine, a 501(c)(3) nonprofit organization supported by nearly one million members and supporters worldwide working for effective, efficient, and ethical medical research and product testing, thank you for the opportunity to comment on this meeting.

The Physicians Committee commends the great progress to advance human-specific, nonanimal research at the National Institutes of Health (NIH), including the following efforts toward the broader development and use of NAMs in biomedical research. The ACD Working Group on Catalyzing the Development and Use of Novel Alternative Methods to Advance Biomedical Research made its final set of recommendations in December 2023,¹ which were then accepted by the agency in February 2024.² The newly approved Complement Animal Research in Experimentation (Complement-ARIE) Common Fund Program will soon begin implementing some of the Working Group's recommendations.³ These efforts will improve translation and clinical outcomes, reduce and replace the use of animals, and increase efficiency of the drug development economy.⁴

¹ Advisory Committee to the Director Working Group on Catalyzing the Development and Use of Novel Alternative Methods to Advance Biomedical Research. Catalyzing the Development and Use of Novel Alternative Methods. Published online December 2023. https://www.acd.od.nih.gov/documents/presentations/Working_Group_Report.pdf.

² Statement on catalyzing the development of novel alternative methods. National Institutes of Health (NIH). Published February 1, 2024. Accessed April 24, 2024. <https://www.nih.gov/about-nih/who-we-are/nih-director/statements/statement-catalyzing-development-novel-alternatives-methods>.

³ Complement Animal Research In Experimentation (Complement-ARIE) Program. NIH Office of Strategic Coordination–The Common Fund. Accessed June 7, 2024. <https://commonfund.nih.gov/complementarie>.

⁴ Ingber DE. Human organs-on-chips for disease modelling, drug development and personalized medicine. Nat Rev Genet. Published online March 25, 2022:1-25. doi:10.1038/s41576-022-00466-9; Lucy Meigs et al, "Animal testing and its alternatives - the most important omics is economics," ALTEX. 35, no 3 (July 9, 2018): 275-305, <https://doi.org/10.14573/altex.1807041>.

scientific review groups (including as *ad hoc* or external input and by allowing potential reviewer recommendations from non-scientific society nonprofit groups⁷), (2) creating NAMs-specific funding streams so that NAM-based proposals are not competing with animal-based proposals, (3) ensuring NAM-based proposals are not held to different standards than animal-based proposals, and (4) training reviewers to identify, address, and report incidences of animal methods bias. CSR is already working to implement this last measure by expanding its Bias Awareness and Mitigation Training for reviewers, chairs, and Scientific Review Officers to include information and vignettes about scientific bias—the preference for one’s own science or approach—an umbrella concept under which animal methods bias can be considered.⁸

Also relevant to these efforts is a plan to communicate the value of translational science laid out in the draft NCATS Strategic Plan for 2024–2029 (Objective 4-4).⁹ We support this goal and underscore how it relates to scientific review: when researchers participating in scientific review groups do not adequately understand the value of highly relevant and translatable NAMs, they may not provide fair or objective assessments, which can present a barrier to advancing NAMs and translational science. We encourage NCATS (1) to clarify the important role of scientific review in advancing NAMs and translational science in its Strategic Plan for 2024–2029, and (2) to include specific measures like those described above to help reduce translational science roadblocks. **As other ICOs update their strategic plans, and especially as the NIH soon begins thinking about the agency-wide Strategic Plan for 2026-2030, we encourage the inclusion of these measures to help the agency address review-related barriers to the broader use of NAMs in a high-level, coordinated manner.**

Finally, we commend NCATS and the Common Fund in their recent innovative and exemplary strategic planning activities, which have comprehensively engaged federal and non-federal stakeholders. We encourage other ICOs, programs, and the NIH-Wide Strategic Planning staff to engage in similar efforts. In preparation of the NCATS Strategic Plan for 2024–2029, the center has demonstrated open and comprehensive strategic planning, with stakeholder input spanning the earliest stages: first through virtual roundtable discussions, then a request for information on a draft

⁷ Recommending Potential Reviewers. NIH Center for Scientific Review. Accessed June 11, 2024. <https://public.csr.nih.gov/ForReviewers/BecomeARewriter/RecommendingPotentialReviewers>.

⁸ CSR Initiatives to Address Bias in Peer Review. NIH Center for Scientific Review. Accessed December 18, 2023. <https://public.csr.nih.gov/AboutCSR/Address-Bias-in-Peer-Review>; Reviewer Surveys — Feedback on CSRs’ Bias Awareness and Mitigation Training. NIH Center for Scientific Review. Published March 8, 2022. Accessed May 14, 2024. https://public.csr.nih.gov/sites/default/files/2022-04/Reviewer_Bias_Training_Survey_Report_2022-01_Council_Round_final.pdf.

⁹ Draft NCATS Strategic Plan for 2024–2029. NIH National Center for Advancing Translational Sciences. Accessed May 17, 2024. <https://ncats.nih.gov/sites/default/files/2024-05/NCATS-Draft-Strategic-Plan-508.pdf>.

strategic plan framework, and most recently a request for feedback on the draft strategic plan. Similarly, the Common Fund hosted a series of listening sessions to gather broad stakeholder input on the goals and structure of the forthcoming Complement-ARIE Program.¹⁰ The Common Fund also hosted a crowdsourcing competition for innovative ideas NAMs as part of the strategic planning process to refine the Complement-ARIE program concept.¹¹ This Complement-ARIE Challenge prize competition offered \$1,000,000 in total prize money to diverse teams with ideas for new ways of using NAMs to conduct basic research, uncover disease mechanisms, and translate knowledge into products and practice. These exercises help NCATS and Complement-ARIE to understand diverse research perspectives and to integrate practical strategies for overcoming barriers and maximizing research impact. We encourage NCATS and Complement-ARIE to share the success of these approaches with other ICOs, programs, and the NIH-Wide Strategic Plan team to inspire similar efforts.

We appreciate your attention to these comments and welcome further dialogue to aid their implementation.

Sincerely,

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¹⁰ Executive Summary of the NIH Listening Sessions on the Complement-ARIE Program Concept. National Institutes of Health (NIH). Published March 14, 2024. Accessed May 14, 2024.

<https://commonfund.nih.gov/complementarie/strategicplanning/listeningsessions>.

¹¹ Complement-ARIE Challenge Prize Winner Summaries. National Institutes of Health (NIH). Published May 8, 2024. Accessed May 14, 2024. <https://commonfund.nih.gov/complementarie/challengewinnersummaries>.