August 16, 2024

The Honorable Cathy McMorris Rodgers
Chair, Energy and Commerce Committee
2188 Rayburn House Office Building
Washington, D.C. 20515

The Honorable Robert Aderholt
Chair, Appropriations Subcommittee on L-HHS
266 Cannon House Office Building
Washington, D.C. 20515

Via Electronic Submission: NIHReform@mail.house.gov

Dear Representatives Rodgers and Aderholt:

The EveryLife Foundation for Rare Diseases is pleased to offer the following comments on the proposed National Institutes of Health (NIH) Reform to Committee Leadership.

On behalf of the estimated 30 million Americans living with rare diseases, we understand and appreciate the intent for reform and appreciate all efforts aimed at ensuring the highest quality of innovative research from the NIH with a focus on whole-person centered care. Our community feels intense urgency for research advancements that support therapy development for the estimated 10,000 rare diseases[1] and conditions, but most especially for the 95 percent of those within our community still awaiting their first FDA approval.

In reviewing the proposed NIH reform, our rare disease community offers the following areas of concern and comment:

- **Process for Consideration of Substantial NIH Reform**
- **Proposed Structural Reform - National Institute on Innovation and Advanced Research**
- **Elimination of Silos Between Entities**
- **Restoration of Congress's Role in Direct Funding**

Process for Consideration of Substantial NIH Reform

Among the demonstrated strengths of the Energy and Commerce Committee leadership has been the ability to convene thought leaders and key stakeholders from across the biomedical ecosystem to create lasting impact. The 21st Century

[1] National Center for Advancing Translational Sciences. (2023, February 24). Delivering Hope for Rare Diseases. https://ncats.nih.gov/sites/default/files/NCATS_RareDiseasesFactSheet.pdf

Cures Act yielded from thoughtful series of District Roundtables, Congressional Hearings, and comment periods that were accessible to patient communities, medical, clinical, scientific, and advocacy leaders. Significant changes to our nation's research, biomedical, and health infrastructure is deserving of transparent and open deliberation.

Proposed Structural Reform - National Institute on Innovation and Advanced Research

Of the proposed changes, the most significant impact on the rare disease community would be the creation of the National Institute on Innovation and Advanced Research yielding from the restructuring of the National Center for Advancing Translational Sciences (NCATS), National Institute of Biomedical Imaging and Bioengineering (NIBIB), Advanced Research Projects Agency for Health (ARPA-H), and the Common Fund, with a decreased budget of $973 million. Individually, each of these entities currently drives novel, life-saving research efforts. Their funding and scientific efforts serve to amplify one another. The restructuring and downsizing of these entities will reduce overall capacity, eliminate complementary efforts, and diminish their collective impact on our rare disease community and nation's health.

The following are a few examples of the critical value each of these entities have had on innovation in scientific research and therapy development:

National Center for Translational Sciences (NCATS)

The National Center for Translational Sciences (NCATS) has played a pivotal role in providing hope for the rare disease community since its establishment in 2011. By facilitating innovative collaborations and novel infrastructure, funding cutting edge research, and driving landmark therapy development, NCATS exemplifies its mission of working to deliver "more treatments, for all people, more quickly.[2]"

NCATS funding structures highlight the importance of collaborative interagency work, with input from scientific and community experts to maximize their impact. Focusing on issues such as shortening the time to diagnosis, spurring therapy and technology innovation, advancing clinical trials, and developing informational resources, NCATS convenes groups of experts to advance research and therapeutics.

Collaborative models driven by NCATS include:

- *The Rare Diseases Clinical Research Network (RDCRN),* [3] a national, research consortia representing over 200 rare diseases, funded collaboratively across the NIH to academic and patient advocacy partners throughout the nation to help progress research and develop therapies, such as the recently FDA approved therapy for acute intermittent porphyria[4].
- *The Bespoke Gene Therapy Consortium*, led by NCATS as a part of the Foundation for the National Institutes of Health (FNIH) Accelerating Medicines Partnership (AMP) Program, has

[2] U.S. Department of Health and Human Services. (n.d.-a). *NCATS: Our impact*. National Center for Advancing Translational Sciences. https://ncats.nih.gov/research/our-impact
[3] Ibid
[4] Ibid

convened stakeholders to support the development of gene therapies for rare genetic conditions, currently focusing on eight rare diseases identified in 2023[5].

- *The PaVe-GT pilot Project*, a partnership between NCATS, the National Human Genome Project Institute, and the National Institute of Neurological Disorders and Stroke (NINDS) that launched in 2019 to use a common gene therapy vehicle to create gene therapies for rare genetic conditions, with current trials targeting rare liver and neuromuscular conditions.[6].

Advanced Research Projects Agency for Health (ARPA-H)

ARPA-H has recently dedicated $48.3 million over 3-years to revolutionize drug repurposing[7] utilizing artificial intelligence technology through a collaboration with Every Cure, an organization founded by a Dr. David Fajgenbaum. This funding will allow Every Cure to develop an open-source drug repurposing database, create a portal for stakeholders to contribute repurposing ideas, and select drug candidates for advancement to address neglected diseases in neglected populations[8]. This cutting-edge project builds on the Biomedical Data Translator Program, previous research funded by NCATS and aimed at reviewing comprehensive information to better understand pathophysiology to improve identifying therapeutic interventions[9]. Every Cure is taking this project further into practice by utilizing AI data to mine available information and identify potential treatments with the goal of taking 25 treatments into clinical trials over the next 5-years[10].

The Common Fund

The Common Fund provides an avenue to fund innovative ideas that need time to develop into impactful programs. A key example of one such program with significant impact on the rare disease community was the Undiagnosed Disease Network (UDN). The UDN was a research study aimed to improve the level of diagnosis in rare and undiagnosed diseases in the United States initiated in 2014[11]. Since its launch, the UDN has led to confirmed diagnoses of 780 patients across 15 centers while providing genome sequencing, exome sequencing, RNA sequencing, and metabolic analyses[12]. This program is currently housed within the National Institute of Neurological Disorders and Stroke (NINDS)

---

[5]U.S. Department of Health and Human Services. (n.d.-a). *NCATS: Our impact*. National Center for Advancing Translational Sciences. https://ncats.nih.gov/research/our-impact

[6] Ibid

[7] *Every Cure to Receive $48.3M from ARPA-H to Develop AI-Driven Platform to Revolutionize Future of Drug Development and Repurposing*. Every Cure. (2024, February 28). https://everycure.org/every-cure-to-receive-48-3m-from-arpa-h-to-develop-ai-driven-platform-to-revolutionize-future-of-drug-development-and-repurposing/

[8] Ibid

[9] U.S. Department of Health and Human Services. (n.d.). *Translator frequently asked questions*. National Center for Advancing Translational Sciences. https://ncats.nih.gov/research/research-activities/translator/faqs

[10] *Every Cure to Receive $48.3M from ARPA-H to Develop AI-Driven Platform to Revolutionize Future of Drug Development and Repurposing*. Every Cure. (2024, February 28). https://everycure.org/every-cure-to-receive-48-3m-from-arpa-h-to-develop-ai-driven-platform-to-revolutionize-future-of-drug-development-and-repurposing/

[11] U.S. Department of Health and Human Services. (2024, April 12). *Undiagnosed diseases network (UDN)*. National Institutes of Health. https://commonfund.nih.gov/Diseases

[12] *Undiagnosed Disease Network- Facts and figures*. UDN. (2024, July 19). https://undiagnosed.hms.harvard.edu/about-us/facts-and-figures/

and receives input and assistance from 14 NIH Institutes and Centers to ensure lasting support for the UDN[13].

These are just a few examples of how these programs have contributed significantly to the advancement in scientific research and medicine in the rare disease space, both as individual centers and in tandem with one another. Impacts that our rare disease community fears would be significantly diminished through restructuring that diminished funding, mission, and focus of any respective entity.

While we understand the intent of the proposed restructuring and applaud leadership for looking to create efficiencies to promote a whole-person approach to research that ensures that all populations across their entire lifespan is subject to NIH research, we urge leadership support infrastructure that amplifies existing infrastructure.

Elimination of Silos Between Entities

The rare disease community appreciates the intent of ensuring appropriate collaboration between the entities to ensure funding and expertise are being appropriately employed through a biennial report. Our rare disease community appreciates efforts to increase transparency yet caution that such efforts should be additive, not duplicative of any existing requirements for public reporting that currently emphasize interagency collaboration. Reports on research developments and funding usage are commonly seen within The Triennial Report, Congressional Justification Reports, NIH Annual Reports, and Strategic Planning Notices with opportunity for public comments as required 21st Century Cures. We support leadership in their efforts to ensure the ICs and their research portfolios are aligned in their joint goals and fulfilling the mission of the NIH; however, we recommend searching for opportunities to create efficiencies in the existing reporting mechanisms rather than creating redundant reporting requirements without a full understanding of the impact of current IC reports.

We encourage leadership to continue searching for opportunities to ensure the ICs are aligned in their missions and the mission of the NIH, while allowing the ICs to retain their successful joint and individual endeavors.

Restoration of Congress's Role in Direct Funding

While we understand the desire for increased transparency between the NIH and Congress, increased Congressional oversight over direct funding will not enable the prioritization of innovation in response to the needs of underserved populations.

Since the passing of the Public Health Service Evaluation Set- Aside in 2007, the NIH has seen successes in both Congressionally directed research and responses to public concerns as led by NIH leadership. In the National Plan to Address Alzheimer's Disease, launched by Congress in 2012, Congress ultimately provided $25 million for Alzheimer's research through an omnibus package and continued directing

[13] U.S. Department of Health and Human Services. (2024, April 12). *Undiagnosed diseases network (UDN)*. National Institutes of Health. https://commonfund.nih.gov/Diseases

funding through a bypass budget[14]. This funding has resulted in accelerating research and the understanding of Alzheimer's today, with multiple, recent FDA approved therapies on the market. The Cures Acceleration Network, authorized by the Patient Protection and Affordable Care Act in 2010, enables the NIH to award grants of up to $15 million per year to "advance the development of high-need cures and reduce significant barriers between research discovery and clinical trials."[15] This legislation has advanced emerging technology programs for tissue chip for drug screening, biomedical data translators, and 3-D tissue bioprinting[16]. Most relevant to the rare disease community, the 21st Century Cures Act of 2016 directed $1.5 billion through FY 2026 to precision medicine, $1.5 billion through FY 2026 to brain and neurotechnology research, $1.8 billion through FY 2023 to advance cancer research, and $30 million through FY 2020 to advance regenerative medicine research in partnership with the FDA[17].

In addition to this ground-breaking research, the NIH responds to public need and interest to direct its funding and research goals through strategic planning efforts that engage diverse stakeholders, as well as ongoing grant opportunities to support research. NCATS alone has active funding for 597 projects, 179 clinical trials, and 63 patents that focus on social determinants of health, gene therapy, and therapy repurposing, in addition to their own consortium and research efforts[18]. The ability to fund and prioritize research by IC, allowing subject matter experts to direct attention to necessary and emerging initiatives, is a cornerstone of innovation at the NIH and ensures representation for all communities and areas of research. This representation in research is essential for the unrepresented rare disease community without FDA approved therapies.

The current funding structure of Congress allocating money to Institutes for scientific prioritization and while allowing the Agency to direct efforts of consequence, allows the best science and most promising innovations to rise to the top, while also protecting public interest of all communities. Maintaining this existing structure will ensure that the rarity or power of one community is not a barrier to funding. Thus, ensuring the agency's dollars are best allocated with the input of the many scientific and community experts to advise on therapeutic research needs. We recommend that leadership look to the opportunities for communication and direct involvement in guiding research with the Agency and ensure fruitful discussion and transparency, while allowing the NIH and the ICs to maintain expertise in scientific research and therapy development.

Conclusion

The EveryLife Foundation is grateful for the opportunity to provide comments for consideration on the proposed NIH reform and its potential to negatively impact innovations in rare disease biomedical research, therapy development, and health outcomes. We welcome the opportunity for direct

---

[14] Johnson, J., & Sekar, K. (2019, April 19). The National Institutes of Health (NIH): Background and Congressional Issues. https://crsreports.congress.gov/product/pdf/R/R41705

[15] Ibid

[16] Ibid

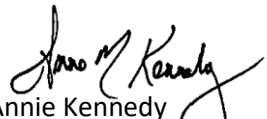
[17] Ibid

[18] U.S. Department of Health and Human Services. (n.d.). *NIH RePORT- NCATS*. RePORTER. https://reporter.nih.gov/search/JbRgAtchAUKHOoW2X1vObQ/projects?agencies=NCATS

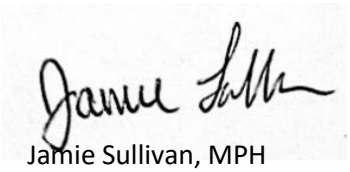
engagement with the Committee as we collectively enhance and advance policies that will improve the health and wellbeing of the 30 million Americans living with rare diseases.

Thank you for the chance to comment and for your commitment to addressing the unmet needs of the rare disease population. If we can provide additional information to support your process, please contact Dylan Simon, Senior Director of Policy, at dsimon@everylifefoundation.org.

Sincerely,



Annie Kennedy
Chief of Policy, Advocacy, & Patient Engagement



Jamie Sullivan, MPH
Vice President of Policy

Dylan Simon
Senior Director of Policy

CC: Michael Pearlmutter, Chief Executive Officer
Vicki Seyfert-Margolis, Board Chair
Frank Sasinowski, Board Vice-Chair