March 13, 2024

Office of Data Science Strategy National Institute of Health 9000 Rockville Pike Bethesda, MD 20892

RE: Comments on the National Institutes of Health (NIH) Strategic Plan for Data Science 2023-2028

The American Society for Biochemistry and Molecular Biology is an international nonprofit scientific and educational organization that represents more than 12,000 students, researchers, educators and industry professionals. The ASBMB strongly advocates for strengthening the science, technology, engineering and mathematics (STEM) workforce, supporting sustainable funding for the American research enterprise, ensuring diversity, equity and inclusion in STEM, and addressing emerging issues in the scientific enterprise.

databases essential to the fields of structural biology, and the emerging field for structure prediction, are not shuttered.

Recommendation 2: Opportunities for NIH to partner to achieve these goals

To achieve the first goal set in the strategic plan, the NIH should partner with stakeholders in the scientific community, such as scientific societies, and organizations leading in FAIR data standards, such as the Core Trust Seal. Scientific societies are in unique positions to relay important information directly to investigators during annual meetings and monthly programming. Partnering with societies, such as the ASBMB, to facilitate training resources through monthly newsletters and programming or collaborating with societies, such as the African Society for Bioinformatics and Computational Biology, to scale up current NIH programs, such as the Omics Codeathon, would create multiple avenues to conduct outreach and disseminate data-management and training resources.

Moreover, the NIH must take stance on acceptable global standards for repositories, for example by partnering with international organizations, such as the <u>Core Trust Seal</u>, <u>FAIRsharing</u>, <u>Crossref</u>, and <u>Metadata 20/20</u>. Not only will this show NIH as a leader in data science, but it will also give investigators clarity on approved data repositories. The ASBMB recommends that NIH develop trainings with these organizations as well as a seal of approval for investigators who complete the trainings.

Recommendation 3: Emerging research needs and opportunities that should be added to the plan

Artificial intelligence requires ongoing discussion. To ensure that standards are met for utilizing AI in research, the ASBMB recommends that the NIH establish a working group on emerging research needs for data science that reports quarterly on new AI standards and developments. The working group should include scientists, representatives of scientific societies and scientific journals.

Recommendation 4: Any other topic the respondent feels is relevant for NIH to consider in developing this strategic plan

The ASBMB