

Bioeconomy Standards Scholars-in-Residence White Paper Template

Submission Process Summary

The purpose of this white paper is to ensure that the suggested project aligns with the priorities and capabilities of the National Institute of Standards and Technology (NIST) for development of bioeconomy standards, across the following priority objectives: 1) Develop machine-readable code for one or more standardized protocols, 2) Develop biological or physical objects that enable calibration and/or benchmarking, 3) Enable artificial intelligence-ready data standardization and integration, and 4) Other (jointly identified by the applying Scholar and NIST).

Proposers must submit a white paper (800-word maximum) to NIST outlining the proposed project to the following email address (synbiostandards@nist.gov).

This paper should be accompanied by a biographical sketch of the applicant in the standard U.S. National Science Foundation [format](#). If the potential scholar applicant is a postdoctoral fellow or graduate student who is not an [NSF-eligible principal investigator \(PI\)](#), then both a biographical sketch of their NSF-eligible PI mentor and of the potential scholar should be submitted. The white paper should also indicate how the residency will be structured.

The purpose of this white paper is to ensure that the suggested project aligns with the priorities and capabilities of NIST before a full proposal is submitted. Proposers are strongly encouraged to contact NIST prior to submission of a white paper. Based on the review of this white paper, NIST will supply the applicant with a letter of invitation.

Proposers should submit the white paper to NIST prior to February 1, 2026 to allow adequate time for NIST to review the submission for alignment with priorities and for the proposer to then develop a full proposal for submission to NSF prior to April 1, 2026.

Submissions to NIST at synbiostandards@nist.gov must include the following:

Cover Sheet

- a. Project Title: [Enter the title of the project.]
- b. Names and affiliation of applicant(s)
[I.e., Name(s), Title(s), Organization(s)]
- c. Budget and Duration Estimates:
[I.e., a brief top-line estimate of costs and time.]

Project Narrative (800 words)

- a. Summary of the Proposed Work:

[Summarize the proposed work and its justification.]

b. Deliverables, and Impact:

[Briefly describe expected deliverables and anticipated impacts.]

c. Alignment with Priorities, Mode of Validation, and Dissemination of Standards:

[Explain how the work aligns with priority objectives identified in the Dear Colleague Letter. Explain briefly how standards will be validated and disseminated.]

d. Summary of Resources and External Infrastructure Associated with Standard Development, Validation, and Dissemination:

[Describe access to resources that will enable external organizations to validate NIST-developed standards.]

Biographical Sketch of Participant(s)

The biographical sketch of the applicant must be in the standard NSF [format](#).

If the participant is a postdoctoral fellow or graduate student who is not an NSF-eligible PI, both the participant and the NSF-eligible mentor should submit a biographical sketch.