



National Artificial Intelligence Research Institutes: AI for Biological Discovery

Program Solicitation NSF 26-512 · Replaces NSF 24-508

Full Proposal Deadline	February 3, 2026, 5:00 p.m. submitter's local time
Letter of Intent	Required — December 1, 2025
Award Size	\$16,000,000 – \$20,000,000 total, 5 years
Anticipated Awards	2 to 3
Cost Sharing	Not required

Synopsis

This program supports large-scale AI Research Institutes advancing foundational artificial intelligence in service of biological discovery. Topics of interest include foundation models for genomic sequence, machine learning for molecular and RNA structure, representation learning across multi-omic modalities, and AI-ready dataset infrastructure for the life sciences. Institutes are expected to couple methodological advance with sustained domain impact and to support a substantial education and workforce program.

Topic Areas

- Foundation models for genomic and transcriptomic sequence; sequence-to-function prediction at long context.
- Structure prediction and structural bioinformatics, including RNA secondary and tertiary structure.
- Three-dimensional genome organization and chromatin architecture.
- AI-ready datasets, benchmarks and evaluation infrastructure for biological ML.
- Agentic and autonomous systems for scientific discovery.

Eligibility Information

Who May Submit Proposals

Institutions of Higher Education (IHEs) accredited in and having a campus in the United States.

Limit on Number of Proposals per Organization

1. An organization may appear as lead on **no more than one (1) proposal** in response to this solicitation. Organizations intending to submit must coordinate internally; NSF will return without review all proposals in excess of this limit, in the order received. Prospective leads are strongly encouraged to contact their Office of Sponsored Programs no later than **October 2025**, as institutional down-select processes typically close well before the Letter of Intent deadline.

Limit on Number of Proposals per PI

An individual may serve as PI or co-PI on no more than one proposal.

Proposal Preparation

Letter of Intent (required)

A Letter of Intent is **required** and must be submitted by **December 1, 2025**. Proposals for which no Letter of Intent was received will not be accepted. The LOI must name the lead institution, the PI, and all co-PIs; the LOI roster is binding and may not be changed after submission except by written request to the cognizant Program Officer.

Full Proposal

Due February 3, 2026. Project Description limited to 25 pages.

Award Information

Item	Value
Estimated program budget	\$48,000,000
Anticipated number of awards	2–3
Award duration	5 years
Minimum institutional partners	3, across at least 2 states