

The University of Texas at Austin

TEXAS BIOLOGICS

2027 CHARLES W. SMITH JR. GRADUATE FELLOWSHIP IN ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING FOR BIOSCIENCES REQUEST FOR APPLICATIONS

Submission Deadline: October 12, 2026, 5:00PM CT

DESCRIPTION

The University of Texas at Austin's [Texas Biologics](#), in collaboration with the [Biology & Machine Learning \(BioML\) Society](#) and the [Center for Generative AI](#), are pleased to announce the second annual grant competition for the Charles W. Smith Jr. Graduate Fellowship in Artificial Intelligence and Machine Learning (AI/ML) for Biosciences.

The 2027 Charles W. Smith Jr. Graduate Fellowship in AI/ML for Biosciences will fund up to **two** doctoral candidates pursuing dissertation research on any topic related to AI/ML as applied to the fields of biologics or biosciences. The purpose of the fellowship is to develop the fellows' skillset in BioML to help them become a leader in the emerging field of AI/ML for biosciences. Additionally, this fellowship program intends to build collaboration between research groups, where the fellow brings experience in BioML and/or bioinformatics and the collaborating lab brings research questions that could be advanced through the application of AI/ML. We encourage proposals consisting of interdisciplinary teams from any school affiliated with Texas Biologics and BioML, including the College of Natural Sciences, Dell Medical School, the College of Pharmacy, and the Cockrell School of Engineering.

2027 Charles W. Smith Jr. Graduate Fellows in AI/ML for Biosciences will receive the following:

- A 12-month stipend of \$40,000
- Full tuition and fees for the one-year appointment
- Health insurance
- A \$7,500 allowance for research and travel expenses
- An initial allocation of 5,000 SUs from the Center for Generative AI (Additional SUs can be made available once the initial allocation is utilized.)

ELIGIBILITY & QUALIFICATIONS

Applicants must demonstrate a record of intellectual distinction and scholarly achievement, as evidenced by publications in peer-reviewed scientific journals, presentations at national or international scientific meetings, or other similar accomplishments. Successful applicants should also demonstrate independence and creativity in their proposed research projects.

An ideal applicant will have a general background in bioinformatics, have used modern BioML models (AlphaFold, Boltz, RFdiffusion, ProteinMPNN, ESM, Foldseek), and have an intuition on how to apply them to the problem at hand. Proposed projects may include modifications to established

BioML models and are not required to include new model development. Applicants are not required to have a computer science or engineering background.

Applicants must meet the following eligibility criteria:

- Applicants must be doctoral students within the College of Natural Sciences, the College of Pharmacy, or the Cockrell School of Engineering.
- Applicants must have completed their first year of their doctoral program at the time of submission.
- Applicants must be engaged with the BioML Society currently or include plans for future engagement.
- Applicants should propose an interdisciplinary project, where the applicant brings the AI/ML experience and the collaborating research group brings specific subject matter expertise in biologics or biosciences. Project teams must be interdisciplinary but are not required to be interdepartmental or intercollegiate.
- Eligible applicants may participate in only one application per cycle.

APPLICATION COMPONENTS

All application components should be formatted using 1-inch margins and no smaller than 11-point font. Recommended fonts are Aptos, Arial, Georgia, Helvetica and Times New Roman. The following components are all required and must be submitted by the application deadline:

1. **Lay Summary:** In 200 words or less, describe for a general audience the proposed project and its potential impact on your research.
2. **Proposal** (3 pages maximum): Organize the proposal in the specified order using the section headings and content guidelines below. The review panel may not be experts in the field; please write this section to an audience of non-experts.
 - a. *Research Project Description (2 pages maximum)*
Briefly describe your proposed collaborative BioML research project and the research activities that will be undertaken during the fellowship year. Explain the innovative nature of the proposed research and describe the potential impact to the scientific field(s).
 - b. *Past Projects (0.5 page maximum)*
Briefly describe your research objectives and your progress to date.
 - c. *Participating Researchers (0.5 page maximum)*
List participating team members including the applicant, the applicant's research advisor, the collaborating research group, and any research personnel from the collaborating research group who will engage with the fellow. Provide a clear explanation of each team member's role in the collaboration. Proposals should clearly explain what makes the project team and the nature of the research interdisciplinary.
3. **Bibliography/References** (no page limit): List sources in a document separate from your project description.

4. **Professional Curriculum Vitae** (2 pages maximum): Include a list, with dates and appropriate citations for all publications, talks and presentations at conferences, or talks at other institutions. Provide a list of research, academic, and professional awards and honors, including dates. Provide a list of community engagement and other activities that demonstrate evidence of scientific creativity, productivity, and commitment to leadership and service.
5. **Research Advisor Reference Letter(s)**: Each research advisor must provide a reference letter for the applicant. This serves to assure the TXBio Executive Committee that the advisor supports this work and is aware of the proposed scope. If there is more than one advisor, research advisors may provide separate letters or a single co-signed letter.
Reference letters must be submitted confidentially per the Instructions for Reference Letters section below.

INSTRUCTIONS FOR REFERENCE LETTERS

Reference letters are required from the applicant's research advisor(s). **The applicant is responsible for communicating submission instructions and deadlines to referees.**

Referees should address an applicant's:

- progress toward completing dissertation or ongoing post-doctoral work
- qualifications, training, and interests
- independence and ability of applicant to anticipate and mitigate challenges
- creativity and/or novelty of the proposed project

Referees should submit reference letters directly to Texas Biologics via email to biologics@utexas.edu. Reference letters must be received by the application deadline. Reference letters should remain confidential, and the applicant must not be copied on this email.

APPLICATION SUBMISSION INSTRUCTIONS

Combine all required documents into a single PDF (except for the reference letter) and upload it through the Competition Space link below by the submission deadline. To apply:

1. Visit <https://utexas.infoready4.com/#competitionDetail/2017867>
2. Click the "Apply" button.
3. Login using the "University of Texas Web Login" option and your UT EID and password.
4. Complete the online application, upload the required materials, and click "Submit Application". You may save a draft and return later to submit your application by the deadline.

First-time users of Competition Space: Before applying, you must first affiliate with the College. Log in with your EID and password, click "Hello, [Name]" in the top right, then go to your user profile. Under "Primary School or Department" select "Natural Sciences, College of" and click "Save Changes" at the bottom.

REVIEW CRITERIA

Applications will be reviewed by a panel of researchers, some of which may not be experts in the field. Proposals should be written in a manner accessible to non-experts. The following evaluation criteria will be used:

1. **Evidence of Research Accomplishments:** Consider publications, presentations at scientific meetings, reports, and other achievements and contributions to research.
2. **Research Project:** The proposed project is innovative, novel, and creative. Consider the potential impact of the proposed research project.
3. **Merit, Rationale, and Scope:** The scientific merit and rationale of the proposed project are sound. The scope of the proposal is feasible for the performance period.

POST-AWARD REQUIREMENTS

Awardees will be required to submit a final report upon completion of the project. Reports are due no later than 30 days after the end of the reporting period unless a later date has been approved. Reports may be submitted prior to award expiration in the event the project is completed ahead of schedule. Prior approval is not required for early submission. Awardees may be asked to describe the results of this project at a future Texas Biologics or BioML Society event or symposium. Consideration will be given to avoid public disclosure of patentable IP.

KEY DATES

Submission window opens: September 8, 2026

Submission deadline: October 12, 2026

Announcement of awardees: December 2026

Award start date: Spring 2027 (January 1), Summer 2027 (May 16), or Fall 2027 (August 16)

Award end date: Up to one (1) year from award start date

CONTACT INFORMATION

Program and application submission questions should be directed to Texas Biologics:

biologics@utexas.edu