# The University of Texas at Austin **TEXAS BIOLOGICS**

# 2026 CHARLES W. SMITH JR. GRADUATE FELLOWSHIP IN ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING FOR BIOSCIENCES REQUEST FOR APPLICATIONS

Submission Deadline: October 13, 2025, 5:00PM CT

## **DESCRIPTION**

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

The 2026 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.

2026 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 documents 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** (2 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 (1 page) 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)
     Briefly describe your research objectives and your progress to date.
  - c. Participating Researchers (0.5 page)
    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. **Short-form 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 Letter of Support:** Each research advisor must provide an email or letter of support. This should not be a reference letter but rather it is to assure the 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 emails/letters or a single co-signed email/letter.

#### APPLICATION SUBMISSION INSTRUCTIONS

Proposals must be submitted to Texas Biologics via email at <a href="mailto:biologics@utexas.edu">biologics@utexas.edu</a>. All application components listed above should be combined and emailed as a **single pdf** by the application deadline.

## **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**

In coordination with a public Texas Biologics or BioML Society event or symposium, the award recipient may present an oral and/or written report at the end of year one. Consideration will be given to avoid public disclosure of patentable IP.

#### **KEY DATES**

Submission window opens: September 2, 2025

Submission deadline: October 13, 2025

Announcement of awardees: December 2025

Award start date: After January 1, 2026 and before August 16, 2026

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

# **CONTACT INFORMATION**

Program and application questions should be directed to Texas Biologics: biologics@utexas.edu