Opportunity Title: FDA Focus Towards More Efficient Factor VIII Drug Products to Improve the Treatment of Hemophilia A
Opportunity Reference Code: FDA-CBER-2026-0039

Organization U.S. Food and Drug Administration (FDA)

Reference Code FDA-CBER-2026-0039

How to Apply ***Connect with ORISE...on the GO!*** Download the new ORISE GO mobile app in the Apple App Store or Google Play Store to help you stay engaged, connected, and informed during your ORISE experience and beyond!

A complete application consists of:

- An application
- Transcripts – Click here for detailed information about acceptable transcripts
- A current resume/CV, including academic history, employment history, relevant experiences, and publication list
- A cover letter including career goals (upload in the writing sample section)
- One educational or professional recommendations

All documents must be in English or include an official English translation.

If you have questions, send an email to ORISE.FDA.CBER@orau.org. Please include the reference code for this opportunity in your email.

Application Deadline 5/29/2026 3:00:00 PM Eastern Time Zone

Description ***Applications will be reviewed on a rolling-basis.**

FDA Office and Location: A research opportunity is currently available with the Office of Therapeutics Proteins (OTP) at the Center for Biologics Evaluation and Research (CBER), U.S. Food & Drug Administration (FDA) in Silver Spring, Maryland.

Research Project: The project will focus on investigating the biochemical mechanisms of blood coagulation to enhance the safety and efficacy of drug products that treat blood coagulation disorders. The selected participant will study mechanisms of plasma clearance of blood coagulation factor VIII (FVIII), particularly the respective molecular interactions, and will learn various methodologies to model and test these interactions in vitro.

Learning Objectives: Under the guidance of the mentor, you will learn:

- The mechanisms of blood coagulation and respective in vitro assays modeling this process.
- The mechanisms of FVIII plasma clearance and master respective protein interaction assays modeling relevant processes in vitro.
- Gene/construct design, recombinant protein expression, purification, and testing.
- Various structural and functional assays modeling the biomolecule interactions in vitro.

The most recent publications below provide examples of the research performed in our group:

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1. Shi B et al (2025) Mutations of six amino acid residues in a B domain-deleted blood coagulation factor VIII have a cumulative effect for Increasing its secretion. Res. Pract. Thromb. Haemost. 10(1):103325.

2. Sarafanov AG (2023). Plasma clearance of coagulation factor VIII and extension of its half-life for the therapy of hemophilia A: a critical review of the current state of research and practice. Int. J. Mol. Sci. 24: 8584.

3. Chun H, et al (2022) Blood coagulation factor VIII and LRP1 interact dynamically via switching alternative canonical bivalent and non-canonical electrostatic contacts. J. Thromb. Haemost. 20(10):2255-69.

Mentor: The mentor for this opportunity is Andrey Sarafanov (Andrey.Sarafanov@fda.hhs.gov). If you have questions about the nature of the research, please contact the mentor.

Anticipated Appointment Start Date: **2026.** Start date is flexible and will depend on a variety of factors.

Appointment Length: The appointment will initially be for one year, but may be renewed upon recommendation of FDA and is contingent on the availability of funds.

Level of Participation: The appointment is full-time.

Participant Stipend: The participant will receive a monthly stipend commensurate with educational level and experience.

Citizenship Requirements: This opportunity is available to U.S. citizens and Lawful Permanent Residents (LPR) only.

This program, administered by ORAU through its contract with the U.S. Department of Energy to manage the Oak Ridge Institute for Science and Education, was established through an interagency agreement between DOE and FDA. The participant will receive a monthly stipend commensurate with educational level and experience. Proof of health insurance is required for participation in this program. Participants do not become employees of FDA, DOE or the program administrator, and there are no employment-related benefits.

Completion of a successful background investigation by the Office of Personnel Management is required for an applicant to be on-boarded at FDA. OPM can complete a background investigation only for individuals, including non-US Citizens, who have resided in the US for a total of three of the past five years.

FDA Ethics Requirements

If an ORISE Fellow, to include their spouse and minor children, reports what is identified as a Significantly Regulated Organization (SRO) or prohibited investment fund financial interest in any amount, or a relationship with an SRO, except for spousal employment with an SRO, and

the individual will not voluntarily divest the financial interest or terminate the relationship, then the individual is not placed at FDA. For additional requirements, see FDA Ethics for Nonemployee Scientists.

FDA requires ORISE participants to read and sign their FDA Education and Training Agreement within 30 days of his/her start date, setting forth the conditions and expectations for his/her educational appointment at the agency. This agreement covers such topics as the following:

- Non-employee nature of the ORISE appointment;
- Prohibition on ORISE Fellows performing inherently governmental functions;
- Obligation of ORISE Fellows to convey all necessary rights to the FDA regarding intellectual property conceived or first reduced to practice during their fellowship;
- The fact that research materials and laboratory notebooks are the property of the FDA;
- ORISE fellow's obligation to protect and not to further disclose or use non-public information.

Qualifications

The qualified candidate should be currently pursuing or have received a master's or doctoral degree in the one of the relevant fields.

Preferred skills/experience:

- Skill in in biochemistry and molecular biology, such as designing and cloning plasmid constructs, bacterial and tissue cultural techniques, recombinant protein expression and purification, PAGE/Western blot protein analysis and performing respective functional/binding assays is desirable.
- Knowledge of chemical kinetics and surface plasmon resonance technique is also desirable.

Point of Contact

Ashley

Eligibility Requirements

- **Citizenship:** LPR or U.S. Citizen
- **Degree:** Master's Degree or Doctoral Degree.
- **Discipline(s):**
  - **Chemistry and Materials Sciences** (12 👁)
  - **Life Health and Medical Sciences** (48 👁)

Affirmation

I am a U.S. citizen, or I have lived in the United States for at least 36 out of the past 60 months. (36 months do not have to be consecutive.)
and
I have read the FDA Ethics Requirements.