Affibody is a Swedish biotech company focused on developing next generation biopharmaceuticals based on its unique proprietary technology platforms: Affibody® molecules and Albumod® half-life extension technology.

In the research operations department, we develop and characterize new Affibody® molecules. The ones with the most interesting properties are then selected as CD (Candidate Drug). In the spring of 2026, we are planning a 30 credits degree project with the preliminary title:

Development of fluorescence labeled HSA assays for visualization of cell-binding Affibody® molecules

Background

Affibody AB runs several early discovery projects aimed at identifying novel, clinically relevant Affibody® molecules. Candidate molecules are subjected to a broad spectrum of *in vitro* pharmacology studies to characterize their activity. A key aspect to support Affibody's innovative radiopharmaceutical pipeline is to identify Affibody® molecules with strong and specific binding to cellular receptor targets.

Execution

Cell binding assays are commonly used to identify molecules that can bind to tumor cell targets. If the targeting molecule is a monoclonal antibody there are several commercially available reagents for detection of bound antibodies. With Affibody® molecules an extra staining step with proprietary antibody reagents are currently needed. The project aims to develop an alternative way of visualizing cell-bound Affibody® molecules by utilizing the strong interaction between the albumin-binding domain (ABD), often fused to Affibody® molecules for half-life extension, and human serum albumin (HSA).

Key features included in the project:

- Evaluate different fluorophores and techniques for labeling HSA.
- Perform routine cell culture in sterile environment.
- Develop and optimize cell staining protocols for different tumor *in vitro* cell models.
- Analyze stained cells with flow cytometry and in plate reader.
- Quality testing of final new protocol.

Optional activities:

- Evaluate stained cells with fluorescence microscopy and image analysis.

Supervisor

Lotta Tengroth, PhD. If you have any questions, please contact: lotta.tengroth@affibody.se. Affibody AB, Scheeles väg 2, 171 65 Solna.

Application

If you are interested, send your personal letter and CV to jobs@affibody.se latest November 14th, 2025 and mark your application with **EX049**.