

2021 Stanford Biodesign GFIT Program Overview

The Global Faculty In Training Program (GFIT) is an intensive educational experience offered by Stanford Biodesign. Its purpose is to instruct faculty members from universities outside the United States on the [biodesign innovation process](#), how it's taught, and how we manage our programs so that they may help launch similar initiatives at institutions around the world.

Given travel and other restrictions due to Covid-19, the 2021 GFIT program will be fully remote in winter and spring 2021, with an optional in-person visit to Stanford in autumn 2021.

GFIT will learn the biodesign innovation process through a combination of didactic and project-based learning delivered via Zoom. Through virtual participation in the graduate-level Biodesign Innovation course, they will get a step-by-step introduction to the process from Stanford Biodesign's core faculty, as well as guest speakers from the Silicon Valley health tech community. In parallel, they will apply what they're learning to a real-world health technology innovation project with their fellow GFITs. The purpose of the project is to give them the opportunity to practice the steps in the process and understand first-hand the challenges that students will experience along the way. The Stanford Biodesign GFIT faculty team will guide them through their project in small-group, custom coaching sessions.

Additionally, the GFIT will learn techniques for teaching the biodesign innovation process by observing Stanford Biodesign's core faculty as they coach students on their projects in the graduate Biodesign Innovation course.

New for 2021, the GFIT program will also involve a more robust curriculum focused on what's required to set-up, launch, and manage a Biodesign-like program. Key topics covered will include gaining sponsorship/support, fundraising, building a faculty team, trainee recruiting, curriculum development, operations management, and program evaluation, among others. These sessions will be taught in a small group format by the leaders of the Stanford Biodesign center.

More detail on program activities from January to June 2021 is provided in the appendix below.

As noted, the GFIT will be invited to visit Stanford in the autumn of 2021 (exact timing to be determined based on university policy), to meet the Biodesign team in person and complete their training. Highlights of this visit include:

- Introduction to the Silicon Valley health tech innovation ecosystem and visits to select Biodesign start-ups
- Workshop on teaching the biodesign innovation process
- Workshop on program development
- Networking events with Stanford Biodesign faculty, staff, and trainees

Participants should expect to devote a minimum of 25 hours per week to the GFIT program and this time should be protected from other job responsibilities. They should also expect to be available remotely during business hours at Stanford University, although every effort will be made to devise a schedule that works as well as possible for their time zone.

The program fee for one participant is \$50,000, including the two weeks in-person visit. Lodging, health insurance, airfare, food and other living costs while at Stanford are not included in this program fee.

Appendix: Remote Learning from January to June 2021

- Weekly Schedule
 - 2-3 hours of project coaching from the GFIT faculty
 - 1-2 hours of expert mentorship on the project from Silicon Valley health tech professionals
 - 10-12 hours of teamwork to complete project deliverables between coaching sessions
 - 4-6 hours to attend class sessions
 - 1-2 hours of instruction on set-up and managing a Biodesign-like program from Stanford Biodesign leaders
- Academic activities
 - Team project – The primary goal of the team project is to provide participants with an intensive and practical introduction to the biodesign innovation process for inventing and developing new medical technologies. GFITs will be divided into project teams and guided by Stanford Biodesign faculty through the process.

The table below provides a rough estimate of what to expect:

Timing	Textbook Chapters	Topics	Key Deliverables
Early Jan	1.1, 1.2	Orientation, Preparing for Clinical Immersion	Clinical lectures completed
Late Jan	1.3	Needs Finding	Begin clinical immersion in local hospital; record observations
Early Feb	2.1 to 2.5	Needs Research and Validation, Need Statement Development	Perform need research; iterate need statements
Late Feb	2.1 to 2.5	Needs Research, Screening, and Selection	Final need statements; Filter to top needs
Early Mar	3.1, 3.2	Concept Generation	Begin brainstorming; conduct additional need research as required
Late Mar	3.1, 3.2	Concept Generation; Initial Concept Selection	Continue brainstorming; filter to top concept through initial concept selection
Early Apr	4.1 to 4.5	Concept Screening	Research concepts; begin prototyping
Late Apr	4.1 to 4.5	Final Concept Selection	Filter to top concept(s); Develop more robust prototypes
May	Stage 5 & 6	Strategy Development + Planning	Develop operating model and financial plan; create final presentation
Early June		Final Presentation	Complete final presentation

- Clinical Immersion
 - Clinical lectures taught by Stanford faculty
 - Clinical immersion at GFITs' home institutions (guided by Biodesign faculty)
 - Solution review and need validation interviews with clinicians from both Stanford and home institutions
- [Biodesign Innovation Course](#)
 - Participate in this graduate level course in both winter and spring quarter
 - Observe course faculty as they teach in the class and join the business coaching sessions on class team projects
 - The class meets twice a week for approximately 2 hours
- [Technology Assessment and Regulation Course](#)
 - Participate in this course in spring quarter
 - The class meets once a week for approximately 1 hour
- Expert mentorship
 - Design thinking workshop
 - Prototyping workshop
 - Team dynamics
 - Project check-in meetings
- Program development sessions
 - Weekly meeting with Biodesign leaders; topics include fundraising, operation, fellowship program recruitment, academic program planning, etc.
 - Meet with Stanford Biodesign leadership to discuss the topics on creation of a Biodesign program