

NIH I-Corps

Lean LaunchPad for Life Sciences

SBIR Phase I Grantee Cohort

Frequently Asked Questions (FAQ)

Why Take This Class?

After teaching hundreds of teams how to commercialize their research we now know how to make startups in therapeutics, diagnostics and devices fail less, increasing their odds for commercial success.

Goal of SBIR Cohort

This cohort has two explicit goals. First, to substantially increase team's knowledge and understanding of their market opportunities. This is a learning outcomes goal and is primarily achieved through interviews with customers. Second and equally important, to move the teams towards further funding success. Funding may be through further SBIR Phase II grants, customer funding or equity-based funding.

That's what this Lean LaunchPad class does – it provides real world, hands-on learning on how to reduce commercialization risk in early-stage therapeutics, diagnostics and device ventures.

The class helps teams rapidly

- define clinical utility before spending millions of dollars
- understand their core and tertiary customers, and the sales and marketing process required for initial clinical sales and downstream commercialization
- assess intellectual property and regulatory risk before they design and build
- know what data will be required by future partnerships/collaboration/purchases before doing the science
- identify capital requirements and financing vehicles before you need them

Team Structure

- I-Corps is only open to NIH affiliated teams who fit the requirements outlined in the solicitation by the NIH.
- Each team must have three team members. The primary three team members are responsible for doing all the work for the team and will make all the presentations.
- We encourage teams to recruit any and all resources to their teams. Non-students can serve as extra members of the teams.

Your Slides Will Be Public

- Your weekly and final slide decks should not contain any proprietary information.
- They should focus on your business model and what you learned in customer discovery.
- You will learn from looking at past classes and those to come will learn from yours.

Attendance and Participation

- You may not miss any of the class sessions. In extreme circumstances you may ask permission to miss a WebEx session by requesting that from your NIH program sponsor.
- If you anticipate missing more than one remote lecture, we recommend that you wait to apply to the I-Corps when you can commit the time.

Getting out of the building is what the class is about. It's not about the lectures. If you can't commit the time to talk to customers, don't take the class.

Class Strategy

This is a practical class – essentially a lab, not a theory or “book” class. Our goal, within the constraints of a classroom and a limited amount of time, is to help you to build a company with substantially less money and in a shorter amount of time than using traditional methods. The class uses the Lean Startup method. Rather than engaging in months of business planning, the method assumes that all you have is a series of untested hypotheses—basically, good guesses about clinical utility, who the customer is, payers, regulation, intellectual property, clinical trial requirements and objectives, etc. And that regardless of how elegant your plan, the reality is that most of it is wrong. You need to get out of your building to search for the facts that validate or invalidate your hypotheses, and ultimately enable you to pursue strategies that will accelerate the launch and development of your business.

Our class formalizes this search for a business model. We do it with a process of hypothesis testing familiar to every scientist and clinician. In this class you'll learn how to use a business model canvas (a diagram of how a company will create value for itself and its customers) to frame your hypotheses.

Second, you'll “get out of the building” using an approach called Customer Development to test your hypotheses. You'll run experiments with customers/partners and collect evidence about whether each of your business hypotheses is true or false. That means that every week you'll be talking to customers, partners, regulators, payers and competitors outside the lab testing your assumptions about clinical utility, partners, IP, regulatory issues, product features, pricing, and distribution channels. (You'll talk with at least 100 of them during the class.)

Finally, based on the customer and market feedback you gathered, you will use agile development to rapidly iterate your product or concept to build/design something customers would actually buy and use. This class requires you to be nimble and fast; you'll iterate on hypotheses and rapidly assemble minimum viable products (MVPs) and immediately elicit customer feedback. Then, using those customers' input to revise your assumptions and hypotheses, you'll start the cycle over again, testing redesigned offerings and making further small adjustments (iterations) or more substantive changes (pivots) to ideas that aren't working.

Some teams may make even more radical changes. For example, when one team in a prior course discovered the "right" customer, they changed the core technology (the basis of their original idea!) used to serve those customers. Another team reordered their device's feature set based on customer's stated needs.

Instructional Method

The class uses eight teaching methods that may be new to you.

1. Experiential Learning

This class is not about the lectures. The learning occurs outside of the classroom through conversations with customers. Each week your team will conduct a minimum of 10 customer interviews focused on a specific part of the business model canvas.

2. Team-based

This class is team-based. Working and studying will be done in teams of three; a C-level executive, Principal Investigator, and Industry Expert. You will be admitted as a team. Admission is based on NIH criteria and an interview with the teaching team. The commitment of the entire team to the effort and necessary hours is a key admission criterion. Each and every team member should participate in customer discovery activities (out of the building hypotheses testing), talking with customers and partners. You cannot delegate customer discovery. Teams will self-organize and establish individual roles on their own. There are no formal CEO/VP's, just the constant parsing and allocating of the tasks that need to be done.

3. The Flipped Classroom

The core material will be yours to study outside of the classroom and will be reinforced during short weekly sessions. Your team will work outside of the classroom and present your findings to your peers and instructors during class time.

4. Domain Specific Lectures

Online lectures are supplemented by deep-dive in-class lectures and discussions tailored to your specific market: therapeutics, diagnostics and devices.

5. You Present Your Progress Weekly

Each week all teams will present an 10-minute summary of what you learned testing specific hypotheses. The teaching team will provide feedback, advice and guidance.

6. Team Teaching and the Inverted Lecture Hall

Faculty sit in the back of the classroom, students are in the front in an inverted format. The teaching team are experienced instructors and Industry Experts who've built and/or funded world-class startups and have worked with hundreds of entrepreneurial teams in therapeutics, diagnostics and devices. While the comments may be specific to each team, the insights are almost always applicable to all teams. Pay attention.

7. Observing Other Teams and Providing Constructive Feedback

The class is a learning cohort. It is your responsibility to help each other and learn from one another's experiences. This form of collaborative learning will accelerate your team's progress. Each week, when other teams are presenting, you will be logged into the class on-line management tool, Innovation Within, where you will provide feedback, ideas, helpful critiques and suggestions for each team as they present.

8. Keeping Track of Your Progress: Innovation Within

Each week as you get out of the building and talk to customers we have you summarize what you learned using an online tool called Innovation Within. The tool automatically collects and displays your current hypotheses and the ones you've invalidated. This allows you to share what you've learned with the teaching team and your industry experts. This, along with your weekly presentations, is how we monitor your progress.

Class Culture

The teaching team will be relentlessly direct with everyone in the class. In the short time we have everyone needs to be focused in effort and thought. We will push, challenge, and question you to get you to learn fast. The directness is the same as in the real world. The learning is about this class and our mutual goals - rapid progress towards legitimate outcomes. The class pushes many people past their comfort zone and into an area of rapid personal and business learning.

Amount of Work

Expect to spend up to 20 hours per person each week on course activities. The majority of that time will be setting up, conducting and debriefing interviews. All teams are to conduct more than 100 interviews. If you believe you're too busy already running your company (rather than learning how to make it successful) do not take this class. You cannot delegate the customer interviews to anyone else.