Enabling entrepreneurs

Healthcare is an increasingly exciting area for innovative ventures and startups. Here, Stephanie Marrus speaks to *International Innovation* about how she is working to implement diverse and far-reaching initiatives for early-stage entrepreneurs in the realm of life sciences.
Can you summarise the main functions of the University of California, San Francisco (UCSF) Entrepreneurship Center?

Let me set the stage. UCSF is a graduate institution based exclusively on life science and healthcare. It is one of the premier institutions in the world for this: the University has five Nobel laureates, is ranked the third best US medical school and is a top 10 US medical centre. The Entrepreneurship Center was formed to help these accomplished clinicians and scientists start companies to bring innovative technology forward to help patients.

We have created a suite of programmes and courses to train entrepreneurs interested in commercialising their technology. Furthermore, the region has an extensive entrepreneurial ecosystem, which comprises the UCSF community alongside the Silicon Valley businesses whom our people can learn from and network with. We are fortunate to be located in one of the best regions in the world for entrepreneurship.

What does your role as Director of the Center involve? To what extent do you have the opportunity to work ‘hands on’ with scientists and clinicians looking to commercialise their research?

My work is very hands on! The Center is not an academic department – we teach experiential entrepreneurship, which is the way entrepreneurship is taught at universities such as Stanford and Berkeley. We help entrepreneurs create collaborations, develop a business plan and manage team dynamics, just as if they were the CEO of a startup. I teach alongside people I bring in from the business community and personally lead a group of high-potential entrepreneurs who are serious about forming a startup and have come to our attention through a class or the network. I mentor in my ‘spare time’, as well as connecting teams with mentors from the venture and business communities.

How did the idea for the Lean LaunchPad programme come about? In what ways have you worked with tech entrepreneur Steve Blank to adapt his nationally respected course to suit the life sciences and healthcare audience at UCSF?

I have a broad set of connections both in life science and in the tech world, and so I was aware of Lean LaunchPad – a business model development programme for early-stage entrepreneurs – and I had met Steve Blank a few times. I saw Lean LaunchPad being taught at Berkeley and Stanford, and realised that it was exactly what we were missing at UCSF. Soon after I joined the University, I went to Stanford to meet with Steve Blank and asked him to come and teach at UCSF. At first he turned me down, pointing out that he was a ‘tech guy, not a life science guy’, and so I had to convince him that the two sectors are fundamentally not that different. Over the course of a few months, I introduced him to my network of life science experts in areas such as therapeutics, medical devices and digital health, and finally he said ‘let’s do this!’ Together, we created a life sciences version of Lean LaunchPad that has now been piloted by the US National Institutes of Health (NIH) in Washington. Steve continues to be a supporter.

What are the key components of Lean LaunchPad that make it a success?

Lean LaunchPad has been recognised as the next wave of entrepreneurship education. It is supported by the US National Science Foundation and has been adopted by 120 institutions that have trained over 500 teams throughout the US. The course is becoming known globally. It involves intensively researching the market by conducting a large number of interviews, usually 100 over the course of 10 weeks. Instead of attending regular lectures, teams access teaching material online to learn core concepts such as value proposition and customer segments. The main focus is on going out and talking to people in their marketplace, ‘customers’ in some sense. Interviewees can include physicians, hospital purchasing personnel, insurers/payers, regulatory authorities like the US Food and Drug Administration (FDA), and pharmaceutical companies. The teams test their hypotheses about interest in their product idea, who the customers are and the value they are delivering. Each week, the teams decide on their next course of action based on the new knowledge they have gleaned from the interviews. After the 10 weeks, it is a rare team that stays with their initial business model; almost all pivot to a new model based on market reality.

To what extent is Lean LaunchPad particularly valuable in the UCSF context?

We have many brilliant scientists and clinicians at UCSF who typically assume that everyone else will be excited about their idea. Unfortunately, this is far from reality! These entrepreneurs may ask their peers for an opinion but don’t venture beyond the institution for data. Lean LaunchPad steps into this gap and helps them to discover if their idea is viable in the commercial marketplace. At the end of the course, students provide feedback such as: ‘I wish I had done this class five years ago and not wasted my time on something no one will pay for’, or ‘I’ve never learned so much in such a short period of time’.

In which ways does Lean LaunchPad complement the other learning programmes and support offered by the Entrepreneurship Center?

Lean LaunchPad is a core offering that has intensive market focus. To balance it, we have offered another team-based course that uses guest speakers from the business community and is more focused on life sciences content. These experts speak about topics such as the competitive landscape, the regulatory environment, how venture capital works, how to pitch an investor and what it’s like to start a company. Another course focuses solely on finance sources, a perennial problem for life science ventures. We also run workshops on specific topics such as intellectual property, negotiation and building a startup team. We bring in high profile speakers – CEOs and investors from Silicon Valley – to talk about what they do and how they do it. We have an Entrepreneurs Club where new CEOs from UCSF, Berkeley or Stanford describe what it’s like to leave the lab and start a company.

How does UCSF’s proximity to Silicon Valley contribute to the opportunities and success of budding entrepreneurs from the Center?

We are extremely fortunate to be part of the Silicon Valley ecosystem and I draw on this rich resource all the time. The Silicon Valley culture can be summed up as follows: try something new and don’t worry if it doesn’t work. The mantra is ‘Fail fast and fail often’. We applaud trying new things; as long as you learn from the experience, it’s valuable.

The Valley has a well-developed venture capital community, there are angel groups that invest early and provide seed funds. Digital health is attractive to tech investors since it is the interface of healthcare and technology. There is a lot of money around – it’s just a question of matching the source to the venture.

What are the next steps for you at the UCSF Entrepreneurship Center?

We are now seeing our entrepreneurs compete and win competitions both in the US and internationally – a good measure of the quality of ventures we are nourishing. We have the opportunity to change human health and quality of life from these inventions. I’m looking for impact!

https://ita.ucsf.edu/entrepreneurship-center