CENTER FOR CLINICAL AND TRANSLATIONAL SCIENCE

I-Corps Program at the UMCCTS
Mini Course Syllabus Spring 2017

Lead Instructors
Nate Hafer (nathaniel.hafer@umassmed.edu), Michelle Cote (michelle.cote@uconn.edu), and Karen Utgoff (klu@utgoff.com)

TA
Subbulaxmi (Subbu) Nambi (Subhalaxmi.Nambi@umassmed.edu)

Dates and Times

Kick-off Workshop	Friday, April 21, 2017	9:00 am – 2:00 pm	AC7-2072 Albert Sherman Center
Week 2	Friday, April 28, 2017	9:00 am – 12:00 pm	AC6-2072 and by WebEx Albert Sherman Center
Week 3	Friday, May 5, 2017	9:00 am – 12:00 pm	AC6-2072 and by WebEx Albert Sherman Center
Final Workshop	Friday, May 12, 2017	9:00 am – 1:00 pm	AC7-2072 Albert Sherman Center

Office Hours: Mandatory every week. See online signup sheet.

Basic Course Structure
- At least 5-10 interviews to be conducted every week that will help you design your business model canvas
- Live weekly presentations (10 minutes per team + 2 minutes feedback)
- Live weekly discussions (30 minutes)
- Weekly readings and supplemental "Special Topic" webinars to be completed/watched at your convenience

Texts
- *The Startup Owner's Manual* (SOM), Steve Blank and Bob Dorf
- *Business Model Generation* (BMG), Alexander Osterwalder and Yves Pigneur (free preview that includes all the reading required for this short course at https://strategyzer.com/books/business-model-generation)
- Giff Constable, *Talking to Humans*, free download available at http://www.talkingtohumans.com/download

Software (please check compatibility in advance)
Google Docs
Dropbox
Go To Meeting

Why Take This Class?
The **I-Corps Program at the UMCCTS**, a joint MassTERi/UMass Center for Clinical and Translational Science (UMCCTS) initiative, is designed to support the translation of biomedical research by providing training in state-of-the-art, early-stage commercialization methods and strategic guidance to faculty, staff and students during the ideation phase of technology development.

Designed specifically for the biomedical researcher at UMass, it guides interdisciplinary teams through a hands-on process of understanding the market for their technology utilizing a proven customer discovery methodology.

Course Description

This short course is a precursor to a selective and intense set of courses run by the NIH and NSF and known as I-Corps. The I-Corps Program at the UMCCTS is designed to give you a feeling if you, your team and your opportunity are ready to apply for the national classes held by NIH and NSF. We have kept the intensity but have limited the time commitment for this short course.

Customer Discovery is an iterative process of interviewing potential customers and stakeholders to understand problems and needs in the market and in society. These interviews lead to real-world learning and insights that validate or invalidate key components of the business model, often leading to pivots or refinements.

I-Corps will provide teams with a hands-on learning experience with customer discovery and successfully transferring knowledge into products and processes that benefit society. The entire team will engage with industry. You and your team will spend your time talking to and learning from customers, partners and competitors, and learning how to deal with the chaos and uncertainty of commercializing innovations and creating ventures.

I-Corps is about getting out of the building. It is not about the lectures. You will be spending a significant amount of time outside the building, talking to customers and testing your hypotheses about what they want in products and services. We will spend our limited class time on what you learned from talking to customers, not what you already knew coming into the course.

Class Culture

This program was developed by entrepreneurs. We have limited time and we push, challenge, and question you to make maximum use of our limited time together. We will be direct, open, and tough – just like the real world. We hope you can recognize that these comments aren't personal, but part of the process. We also expect you to question us, challenge our point of view if you disagree, and engage in a real dialog with the teaching team.

Course Goals:

1. Provide aspiring entrepreneurs an experiential learning opportunity to help determine the commercial readiness of their technology. For a biomedical product, this often means defining the lead indication.

2. Connect investigators to the tools and resources needed to successfully commercialize their technology.

3. Develop an understanding of the commercialization process, increasing your ability to lead and play an active role in advancing your technology. This information can inform future SBIR/STTR applications or presentations to potential industry/VC/angel investors.

Detailed Program Schedule and Assignments

Week 1: Friday April 21, 2017

DUE BEFORE CLASS

The pre-course work (readings and videos) should be completed. During the kickoff, we will do a workshop to create your ecosystem map, evaluate your value propositions, pains and gains, which will then be reflected into your future presentations and office hours.

Schedule 10 in-person interviews to start your customer discovery
- Come prepared with 10 in-person interviews that you will do in the following the first class. These should be related to testing your business model hypotheses around value propositions and customer segments. Please DO NOT conduct any interviews prior to class.

Read
- BMG: pp. 14-49
- Giff Constable, "*Talking to Humans*"

Watch (all videos ~50 minutes)
Pre-Planning Customer Discovery
Pre-Planning Pt. 1 (4:55)

Customer Discovery Interviews
Interviews Pt. 1 (5:40)
Interviews Pt. 2 (3:49)

Outside the Building
Asking the Right Question (2:37)
Death by Demo 1 (2:18)
Death by Demo 2 (1:45)
Assuming You Know what the customer wants (1:56)
Understanding the Customer Problem (the wrong way) or Death by PowerPoint (1:42)
Understanding the Problem (the right way) (3:22)
Customers Lie (2:37)
The Distracted Customer (3:12)
Engaging the Customer (3:37)
Customer Empathy (2:25)
The User, the Buyer & the Saboteur (2:24)
Multi-Person Interview (2:03)
B-to-B to C (2:15)
Public Interviews (2:11)

Prepare and upload your team presentation
- 3-minute presentation, 2-minute Q&A
- A pdf of your presentation should be uploaded to the class Dropbox by **04/21/17, 7:00 am EDT** in PDF format. Use this naming convention: *TeamLeadName_Date, e.g. Smith_9-22-16*

Slide 1:	Team member names and photos; Company name; Team number; Company business thesis (*Who is the customer? What is the product? Why will they buy it?*)
Slide 2:	Tell us about the first 10 customer interviews you have scheduled. (*Why did you choose these people and what do you want to learn from them?*)
Slide 3:	Your Business Model Canvas filled in – Customer Segments and Value Propositions ONLY
Slide 4:	Tell us about the next 5 interviews you have proposed. (*Why did you choose these people and what do you want to learn from them?*)

In class time – April 21, 2017	
8:30-9:00	Check-in and breakfast
9:00-9:30	Instructor introductions and program overview
9:30-10:30	Team presentations (3 minute presentations + 2 minutes instructor comments)
10:30-11:30	Customer segments/value proposition lecture with workshop: Who are your customers? Why do they care?
11:30-12:00	Ecosystem mapping
12:00-1:30	Working lunch, Customer Discovery with workshop-asking good questions
1:30-2:00	What's next; get out of the building!

Week 2: Friday April 28, 2017

DUE BEFORE CLASS

Customer Discovery Interviews
- Continue to interview 5-10 customers during the week.
- Log your interviews in the Google spreadsheet.

Office Hours
- Schedule and attend office hours with at least 1 instructor. Sign up using the Google spreadsheet.

Prepare and upload your team presentation
- 10-minute presentation, 2-minute Q&A
- A pdf of your presentation should be uploaded to the class Dropbox by: **04/28/17, 7:00 am** in PDF format. Use the following presentation template:

Slide 1:	Team member names and photos; Company name and logo; Team number; Company business thesis (*Who is the customer? What is the product? Why will they buy it?*)
Slide 2:	What did you learn about your customer segments and talking to your customers? (*What we thought? What we did? What we found? What are we going to do next?*)
Slide 3:	Ecosystem diagram
Slide 4:	Updated business model canvas – Customer Segments and Value Propositions ONLY
Slide 5:	Interviews lined up for next week. (*Who are you going to talk to? What are you going to ask them?*)

Read
- SOM: 22-97, 189-199

Watch
- Steve Blank class on Udacity (requires free email sign up)
  Lesson 2: Value Proposition (all videos ~35 minutes)
  https://www.udacity.com/course/how-to-build-a-startup--ep245

In class time – April 28, 2017	
9:00-9:15	Welcome back and review
9:15-11:15	Team presentations
11:15-11:45	Review customer segments, value proposition, customer discovery
11:45-12:00	Next steps

Week 3: Friday May 5, 2017

DUE BEFORE CLASS

Customer Discovery Interviews
- Continue to interview 5-10 customers during the week.
- Log your interviews in the Google spreadsheet.

Office Hours
- Schedule and attend office hours with at least 1 instructor. Sign up using the Google spreadsheet.

Prepare and upload your team presentation
- 10-minute presentation, 2-minute Q&A
- A pdf of your presentation should be uploaded to the class Dropbox by: **05/05/17, 7:00 am** in PDF format. Use the following presentation template:

Slide 1:	Team member names and photos; Company name and logo; Team number; Company business thesis (*Who is the customer? What is the product? Why will they buy it?*)
Slide 2:	What did you learn about your customer segments and talking to your customers? (*What we thought? What we did? What we found? What are we going to do next?*)
Slide 3:	Ecosystem diagram
Slide 4:	Updated business model canvas – Customer Segments and Value Propositions ONLY
Slide 5:	Interviews lined up for next week. (*Who are you going to talk to? What are you going to ask them?*)

Watch
- Steve Blank class on Udacity (requires free email sign up)
  Lesson 3: Customer Segments (all videos ~50 minutes)
  https://www.udacity.com/course/how-to-build-a-startup--ep245

In class time – May 5, 2017	
9:00-9:15	Welcome back and review
9:15-11:15	Team presentations
11:15-11:45	Review customer segments, value proposition, customer discovery
11:45-12:00	Next steps

DUE BEFORE CLASS

Customer Discovery Interviews
- Continue to interview 5-10 customers during the week.
- Log your interviews in the Google spreadsheet.

Office Hours
- Schedule and attend office hours with at least 1 instructor. Sign up using the Google spreadsheet.

Prepare and upload your team presentation
- 10-minute presentation, 2-minute Q&A
- A pdf of your presentation should be uploaded to the class Dropbox by: **05/12/17, 7:00 am** in PDF format. Use the following presentation template:

Slide 1:	Team member names and photos; Company name and logo; Team number; Company business thesis (*Who is the customer? What is the product? Why will they buy it?*)
Slide 2:	What did you learn about your customer segments and talking to your customers? (*What we thought? What we did? What we found? What are we going to do next?*)
Slide 3:	Ecosystem diagram
Slide 4:	Updated business model canvas – Customer Segments and Value Propositions ONLY
Slide 5:	Future plans – What do we still need to know?

In class time – May 12, 2017	
9:00-9:15	Welcome back and review
9:15-11:15	Team presentations
11:15-11:45	The rest of the BMC and where do we go from here?
11:45-1:00	Lunch with panel, local ecosystem and resources for entrepreneurs