Survey Questions for I-Corps Longitudinal Collection

ID#	Logic		Item	Freq.	Response Scale	Variable type/Da ta entry format	Question Item Source Material	Output or Outcome Assessed
1			These questions are focused on the [PROJECT NAME] project, [AWARD NUMBER] to [PI NAME] at [INSTITUTION] in [DATE OF AWARD]. Please confirm if you were a member of this I-Corps team.		Binary: Yes/No		Historical database warehoused at VentureWell	N/A (Demographics)
2			Is the information on your I-Corps team above correct?		Yes/No	Binary		N/A (Demographics)
3		Only asked if Answer to question above was	Please update your team's correct information here:		Team name at time of program: Cohort: Institution affiliation at time of program:	Text Box		N/A (Demographics)
4			What was your role on your I-Corps team?		A. Principal Investigator B. Entrepreneurial Lead C. Mentor	Radio Button		N/A (Demographics)
5			At the end of your I- Corps Course, which of the following topical clusters best describes your research or technology?		 Advanced Materials and Instrumentation (MI) Advanced Manufacturing and Nanotechnology (MN) Biological Technologies (BT) Chemical and Environmental 	Radio button selection and text box		N/A (Demographics)

6	How confident are you in your categorization above?	Technologies (CT) 5. Electronic Hardware, Robotics and Wireless Technologies (EW) 6. Educational Technologies and Applications (EA) 7. Information and Communication Technologies (IC) 8. Semiconductors (S) and Photonic (PH) Devices and Materials 9. Smart Health (SH) and Biomedical Technologies (BM) 10. Other: Please Specify Extremely Confident Very Confident Somewhat Confident Slightly Confident Not at all Confident	Radio button	N/A (Demographics)
7	In this survey we will ask you about your experiences with the X cohort. Have you participated in I-Corps as a mentor, principal investigator, or entrepreneurial lead more than once?	Yes/No	Binary	N/A (Demographics)
8	Briefly describe your role(s) on past team(s), the team name(s), and the date and location	Text Box		N/A (Demographics)

		1				
			of course(s) you			
			attended.			
9	Commerciali zation		At the end of your I- Corps course, which of the following best described the status of your project in terms of its commercialization readiness?	 A. Our research was ready for commercialization B. Our research was not yet ready for commercialization C. We weren't yet sure if our research was commercializable D. None of the Above 		Output: Commercialization of product or service is evaluated
10	Commerciali zation	If answered "D"	Please describe the status of your project at that time in your own words.	Text Box		Output: Commercialization of product or service is evaluated
11	Commerciali zation		How confident are you in your categorization of your project's commercialization readiness in the question above?	A. Extremely confidentB. Very confidentC. Somewhat confidentD. Slightly confidentE. Not at all confident		Output: Commercialization of product or service is evaluated
12		If they aren't involved with the course anymore, participant only got the (1) resource and network and (2) course impact	After the I-Corps course ended, did you continue to be involved with the I-Corps project? (If you continued involvement, please describe how you were involved in the comment box.)	Yes, I continued to be involved with the project No, I stopped being involved with the project. Make a comment on your choice here: Text Box		N/A (Demographics)

		sections					
13		Only asked if not still involved in project.	Who is the most knowledgeable person to contact about the project right now?	 A. Entrepreneurial Lead on the original I-Corps team B. Mentor on the original I-Corps team C. Principal Investigator on the original I-Corps team D. Other person not on the original I-Corps team 	Multiple Choice	I-Corps Indicators & Monitoring System ¹	N/A (Demographics)
14			If possible, please provide details below:	Name Institution Current role in project Email Phone number	Text Boxes		N/A (Demographics)
15		Only asked if still involved in project.	Is this project still active?	A. Yes B. No C. Uncertain	Multiple choice	I-Corps Indicators & Monitoring System ¹	N/A Routing Question
16	Commerciali	Only asked if answer is uncertain in previous question	Select any of the reasons listed below that explain why you are uncertain.	 A. We have not yet identified a large enough market for our product/technology B. The time to get the technology into market may be too great C. We are encountering difficulties with our technology itself D. We have not yet obtained needed financing/investment to continue E. We are having problems with intellectual property F. We are having problems 			Immediate Outcomes: Viability of products and services

17	Commerciali zation	Only asked if project is not active	Why is this project no longer active?		with our team G. Other A. We successfully commercialized our project B. We decided to discontinue pursuing commercialization for our project C. Other			Immediate Outcomes: Viability of products and services
18	Commercialization	Only asked if member of project team and project is not active.	Did you decide to discontinue pursuing commercialization for your project for any of the following reasons?		 A. We were not able to identify a large enough market for our product/technology B. The time to get the technology into market was too great C. We had problems with our intellectual property D. We encountered difficulties with the technology or product E. We could not obtain necessary financing/investment to continue F. The company was acquired G. We had problems with our team 	Multiple Answers, with text box to describe "other"	I-Corps Indicators & Monitoring System ¹ ; SBIR Common Questions	Immediate Outcomes: Viability of products and services
19	Business Creation		After the I-Corps course ended, did you?		A. Create a business B. Dissolve a business			Intermediate Outcomes: Subset of I-Corps teams initiate start-up businesses
20	Business Creation	There is a note on this question stating that	To your knowledge, has a company been incorporated based on this I-Corps project?	Annually , if answer in		Binary: Y/N	SBIR Common Questions	N/A Routing Question

21	Business Creation	if you are "unsure" respond "no" Only asked if a company has been	Who is the CEO of your company? If you would like to explain your answer further, please use the comment box.	previous year was No	The I-Corps PI The I-Corps EL The I-Corps Mentor Other Text box			Intermediate Outcome: Business Creation
22	Business Creation	incorporate d Only asked if a company has been incorporate d and respondent checked "Other"	Please indicate what industry or type of business the CEO is from.		Text box			Intermediate Outcome: Business Creation
23	Business Creation	Only asked if member of the NSF-funded project team and company has been incorporate d	What is the name of this company? If you are unsure, please type "unsure".	This may be redunda nt after year 1		Text: open	Kauffman Firm Survey ² ; I-Corps Indicators & Monitoring System ¹ & SBIR Common Questions	Intermediate Outcome: Business Creation
24	Business Creation	Only asked if member of the NSF- funded project	When was the company incorporated? (mm/dd/yyyy)		Text box		Kauffman Firm Survey ² ; I-Corps Indicators & Monitoring System ¹	Intermediate Outcome: Business Creation

		team and company has been incorporate d						
25	Business Creation	Only asked if member of the NSF-funded project team and company has been incorporate d	Which of the following best describes how the business was started.	Only ask when a new compan y is reporte d	 A new business, branch or subsidiary owned by an existing business A business inherited from someone else A new, Independent business created by a single person or a team of people The purchase of an existing business The purchase of a franchise An organization designed for social and charitable objectives and legally established as a not-for-profit Other: 	Multiple choice	Kauffman Firm Survey ² ; I-Corps Indicators & Monitoring System ¹	Intermediate Outcome: Business Creation
26	Business Creation	Only asked if member of I-corps team and company has been incorporate d	Since the start of your I-Corps course, which form of legal status did your business have?	Only ask when a new compan y is reporte d	 Sole Proprietorship: A type of business ownership in which a business is owned and managed by one individual and no subchapter S-corporation or C-corporation has been established. Limited Liability Company: A cross between a corporation and a partnership, and 	Multiple Choice	Kauffman Firm Survey ² ; I-Corps Indicators & Monitoring System ¹	Intermediate Outcome: Business Creation

	offering some of the benefits
	of both. Similar to S
	corporations, income
	produced by a limited liability
	company flows through the
	owners (known as
	"members") who pay their
	own taxes as individuals.
	Unlike S corporations,
	however, limited liability
	companies are not subject to
	as many government
	restrictions.
	Sub-chapter S-Corporation:
	Corporations in which all
	profits and losses are passed
	through to shareholders, just
	as they are passed through
	to legal partners in a
	partnership.
	• C-Corporation: Legal entities
	·
	separate from their owners
	that may engage in business,
	make contracts, own
	property, pay taxes, and sue
	and be sued by others.
	General Partnership: An
	association of two or more
	people who co-own a
	business for the purpose of
	making a profit and no sub-
	chapter S-corporation or C-
	Corporation has been
	established.

				Limited Partnership: A partnership in which one or more partners who manage the business and others are limited partners who invest in the business but forgo any right to manage the company. Other:		
27	Business Creation	Only asked if company has been incorporate d	Thinking back to before you participated in the NSF-funded project/program, were the business operations of [NAME BUSINESS] being conducted under one of the other legal forms listed below?	Binary: Y/N	Kauffman Firm Survey ² ; I-Corps Indicators & Monitoring System ¹	Intermediate Outcome: Business Creation
28	Business Creation	Only asked if company has been incorporate d	Which form of legal status did the business have before your I-Corps Course?	Sole Proprietorship: A type of business ownership in which a business is owned and managed by one individual and no subchapter S-corporation or C-corporation has been established. Limited Liability Company: A cross between a corporation and a partnership, and offering some of the		Intermediate Outcome: Business Creation

	benefits of both. Similar
	to S corporations,
	income produced by a
	limited liability company
	flows through the
	owners (known as
	"members") who pay
	their own taxes as
	individuals. Unlike S
	corporations, however,
	limited liability
	companies are not
	subject to as many
	government restrictions.
	Sub-chapter S-
	Corporation:
	Corporations in which all
	profits and losses are
	passed through to
	shareholders, just as
	they are passed through
	to legal partners in a
	partnership.
	C-Corporation: Legal
	entities separate from
	their owners that may
	engage in business,
	make contracts, own
	property, pay taxes, and
	sue and be sued by
	others.
	General Partnership: An
	association of two or
	more people who co-

29	Business Creation	Only asked if company has been	Is this company still operational?	own a business for the purpose of making a profit and no subchapter S-corporation or C-Corporation has been established. • Limited Partnership: A partnership in which one or more partners who manage the business and others are limited partners who invest in the business but forgo any right to manage the company. • Other: Binary Y/N	Kauffman Firm Survey ²	Immediate Outcome: Subset of I-Corps teams
		incorporate d				initiate start-up businesses
30	Business Creation	Only asked if company has been incorporate and is no longer operational	Approximately when did this company close or dissolve? (mm/yyyy)	Text Box		Immediate Outcome: Subset of I-Corps teams initiate start-up businesses
31	Business Creation	Only asked if company has been incorporate d and is no longer	Why did the company close/dissolve?	 A. We were not able to identify a large enough market for our product/technology B. The time to get the technology into market 		Immediate Outcome: Subset of I-Corps teams initiate start-up businesses

		operational		was too great C. We had problems with our intellectual property D. We encountered difficulties with the technology or product E. We could not obtain necessary financing/investment to continue F. The company was acquired G. Other		
32	Business Creation		Which companies do you consider to be your major competitors and why?	Text Box		Immediate Outcome: Subset of I-Corps teams initiate start-up businesses
33	Business Creation		What sector best describes the industry of your major competitors?	 Agriculture Education Energy & Materials Environment Healthcare/Medical Information Technology and Communication Infrastructure/Building Sanitation/Water Other 		Immediate Outcome: Subset of I-Corps teams initiate start-up businesses
34	Business Creation		Which company size best describes your major competitors?	 1-10 employees 11-50 employees 51-200 employees 201-500 employees 501-1000 employees More than 1000 employees 		Immediate Outcome: Subset of I-Corps teams initiate start-up businesses

					Other			
35	Job Creation	Only asked if company has been incorporate d	Since participation in I- Corps, how many individuals or entities owned shares in the business.			Numerical: open	Kauffman Firm Survey ² ; I-Corps Indicators & Monitoring System ¹	Long Term Outcome: Subset of I-Corps teams raise funding
36	Job Creation	Only asked if company has been incorporate d	Of the owner or owners since participation in I-Corps, how many owners actively helped to run the business? [By" helped to run the business" we mean that they provided regular assistance or advice with day-to-day operations of the business, rather than providing only money or occasional operating assistance.]		Text Box	Numerical: open	Kauffman Firm Survey ² ; I-Corps Indicators & Monitoring System ¹	Long Term Outcome: Job Creation
37	Job Creation	Only asked if company has been incorporate d	Not counting owner(s), how many people currently work for the business?	Annual	Full time employees*** Part time employees *** Full time: working 35 hours or more per week. Please exclude contract workers who work for the business either full- or part-time but are not on	Numerical: open	Kauffman Firm Survey ² ; I-Corps Indicators & Monitoring System ¹	Long Term Outcome: Job Creation

					the business' official payroll.			
38	Outputs: Licensing		After the I-Corps course ended, did you engage in any licensing activities?		Binary Y/N			N/A Routing Question
39	Outputs: Licensing		If your business has licensing activities, how many employees work in areas related to product development or other activity arising from your I-Corps participation?	Annual		Numerical: open	I-Corps Indicators & Monitoring System ¹	Intermediate Outcome: Licensing
40	Outputs: Licensing	Only asked if answer to routing question was "yes"	How many of the following does the business have? Enter zero if none.		Numerical: open for each option Inventions Disclosed Licensing Agreements Patent Applications Patents Granted Patents in Use Inventions Producing Royalties Software Copyrights Company Trademarks Non-disclosure Agreements (NDA) Materials Transfer Agreements (MTA)		Kauffman Firm Survey ² ; I-Corps Indicators & Monitoring System ¹	Intermediate Outcome: Translation of fundamental research
41	Outputs: Licensing		Since participation in the NSF-funded project, how many of the following has the business licensed out?*** Enter zero if none.	Needed ?	Patents Copyrights Trademarks Trade Secrets	Numerical: Open for each option	Kauffman Firm Survey ² ; I-Corps Indicators & Monitoring System ¹	Intermediate Outcome: Licensing

		*** Licensing out is licensing patents, copyrights, or trademarks owned by the business to other parties under a licensing agreement.					
42	Outputs: Licensing	How many patents, copyrights, or trademarks has the business licensed in ** since participating in the NSF-funded project? Enter zero if none. ** Licensing in is acquiring the right to use intellectual property such as patents, copyrights, or trademarks created by someone outside the business through a licensing agreement.	Annual (do we want to limited to the NSF- funded project or expand to the person?	Patents Copyrights Trademarks Trade Secrets	Numerical: Open for each option	Kauffman Firm Survey ² ; I-Corps Indicators & Monitoring System ¹	Intermediate Outcome: Licensing
43	SBIR Funding	After the I-Corps course ended, did you seek any additional funding (e.g., an SBIR award, equity financing from a venture capitalist, state grant,		Binary Y/N			Intermediate Outcome: A subset of teams are funded through SBIR or receive other funding

			or personal investment?			
44	Outside Funding	Only asked if member of I-Corps team and company has been incorporate d	Please indicate the number of NSF awards you applied for based on your I-Corps project [during or after the I-Corps course].	Small Business Innovation Reseach (SBIR) Small Business Technology Transfer Program (STTR) Accelerating Innovation Research/Partnership for Innovation (PFI:AIR) Engineering Research Center (ERC) Grant Opportunities for Academic Liaison with Industry (GOALI) Science and Technology Centers (STC)	Matrix For each option: Total submitted, In process (outcome unknown), Declined, Funded	Intermediate Outcome: A subset of teams are funded through SBIR or receive other funding
45	Outside Funding		Please enter as much information as you can about your funded NSF proposals:	Date Awarded (mm/yyyy) Amount Awarded Proposal Number Title PI name Company name (if applicable)	Text Boxes	Intermediate Outcome: A subset of teams are funded through SBIR or receive other funding
46	Outside Funding		Please indicate the number of Non-NSF SBIR or STTR awards you applied for based on your I-Corps project [during or after the I-Corps course].	Department of Agriculture Department of Commerce Department of Defense Department of Education Department of Energy Department of Health and Human Services Department of Homeland Security Department of Transportation Environmental Protection Agency	For each option: Total submitted, In process (outcome unknown), Declined, Funded	Intermediate Outcome : A subset of teams are funded through SBIR or receive other funding

47	Outside		Please enter as much	National Aeronautics and Space Administration National Institute of Standards and Technology National Oceanic and Atmospheric Administration Date Awarded (mm/yyyy)	Text Boxes	Intermediate
	Funding		information as you can about your funded non-NSF proposals:	Amount Awarded Proposal Number Title PI name Company name (if applicable)		Outcome : A subset of teams are funded through SBIR or receive other funding
48	Outside Funding	Only asked if member of I-Corps team and company has been incorporate d	Did you acquire any other type of additional government funding for your I-Corps project during or after the I-Corps course (that is any time after the award)?	Binary Yes/No		Intermediate Outcome: Translation of fundamental research
49	Outside Funding	Only asked if member of I-Corps team and company has been incorporate d	[If Yes] Please Explain.	Text: Open		Intermediate Outcome: Translation of fundamental research
50	Business Creation		Since your participation in I-Corps, did you put any of your own money into the business in return for an ownership share?	Binary Y/N		Intermediate Outcome: Business Creation

51	Business Creation		Please do not include any money borrowed from others or from credit cards. Approximately how much?		Numeric Field		Intermediate Outcome : Business Creation
52	Business Creation	Only asked if a member of the I-Corps team and if company has been incorporate d	Since your participation in I-Corps, how much of their money did other owners put into the business?		Numerical Open		Intermediate Outcome : Business Creation
53	Business Creation	Only asked if a member of the I-Corps team and if company has been incorporate d	Since your participation in I-Corps, did the business obtain equity financing from any of the following sources? How much?	fir [N	or all sub-questions: Equity hancing [yes/no]; How much? Jumerical: open] Spouses or life partners of wners of the business (don't clude spouses or life partners ready named as owners) Parents, inlaws, or children of the owners, excluding venture apitalists Other companies Venture capitalists Other sources		Intermediate Outcome : Business Creation
54	Business Creation	Only asked if a member of the I- Corps team	Have you used any other types of debt financing to finance the operation of the	fir [N	or all sub-questions: Equity nancing [yes/no]; How much? Jumerical: open]] Personal credit cards for		Intermediate Outcome: Business Creation

		and if company has been incorporate d	business? If yes, how much?		business-related purpose Personal loans from a bank or other financial institution, such as a mortgage or home equity loan used for the business Business or corporate credit cards issued in your name Personal loans from any family or friends Personal loans from any other individuals not associated with the management of the business Other sources?			
55	Technology Developme nt	Only asked if company has been incorporate d	Are there any products, services, or processes in the market, market ready, or awaiting regulatory approval whose commercialization you can attribute (to some degree) to your participation in I-Corps?	Annual		Binary: Y/N	SBIR Common Questions; PFI:BIC Logic Model & Indicators ³ ; I- Corps Indicators & Monitoring System ¹	Intermediate Outcome: Translation of fundamental research
56	Sales	Only asked if company has been incorporate d	[If Yes] Please enter the following information about products, services or processes.		Multiple textboxes – for each row: - Describe Product - Status - Number of units sold (if any) - Amount of sales in last fiscal year - Amount of sales since commercialization			Output: Sales generated by products, services, or processes in most recent fiscal year

57	Technology Developme nt		Did the experience with original technology and I-Corps result in spin-offs or new ideas or products?	a. Spin-off companyb. New product idea(s)	Binary: Y/N:	SBIR Common Questions	Intermediate Outcome: Translation of fundamental research
58	Licensing		After your I-Corps course ended, was licensing revenue generated from the product, service or process you developed?	Binary Yes/No			Intermediate Outcome : Licensing
59	Licensing		Please estimate the amount of licensing revenue generated from products, services or processes.	Numeric field			Intermediate Outcome: Licensing
60	Licensing		Please estimate the percentage of total revenue gained from licensing.	Numeric Field			Intermediate Outcome: Licensing
61		Only asked if identified as PI	Rate the following statements: Participation in I-Corps continues to influence my approach to mentoring. Participation in I-Corps continues to influence my approach to teaching.	Very positive Positive Neither positive nor negative Negative Very negative N/A	Likert Scale		Intermediate Outcome: Subset of teams begin to share I-Corps training knowledge

		Participation in I-Corps continues to influence my approach to research. Participation in I-Corps continues to influence my approach to my career.			
62		Please explain how participation in I-Corps has negatively or positively influence your mentoring, teaching, research, or career.	Text Box		Intermediate Outcome: Subset of teams begin to share I-Corps training knowledge
63	Only asked if identified as an EL	Rate the following statements: Participation in I-Corps influences my approach to learning. Participation in I-Corps influences my approach to research. Participation in I-Corps influences my approach to my career.	Very positive Positive Neither positive nor negative Negative Very negative N/A	Likert Scale	Intermediate Outcome: Subset of teams begin to share I-Corps training knowledge
64		Please explain how participation in I-Corps has negatively or positively influence your learning, research,	Text Box		Intermediate Outcome: Subset of teams with begin to share I-Corps training knowledge

		or career.			
65		Since participating in the I-Corps course, have you developed any entrepreneurial curricula?	Binary Y/N		Intermediate Outcome: Subset of teams begin to share I-Corps training knowledge
66	Only asked if answer was "yes" to question above	information on the course (if possible)	Course Number Course Title Organization/Institution course taught at Course Description	Text boxes	Intermediate Outcome: Subset of teams begin to share I-Corps training knowledge
67	Only asked if identifie as Mentor	d participation in I-Corps	Text Box		Intermediate Outcome: Subset of teams begin to share I-Corps training knowledge
68		Are you using Osterwalder's Business Model Canvas in your current work?	Binary Y/N		Intermediate Outcome: Subset of teams begin to share I-Corps training knowledge
69	If answer to previous is Yes		Channels Cost Structure Customer Relationships Customer Segments Key Activities Key Partners Key Resources Revenue Streams Value Propositions	Likert Scale 1-5 1-Not at all useful 5- Extremely Useful	Intermediate Outcome: Subset of teams begin to share I-Corps training knowledge
70		Please Explain:			Intermediate Outcome: Subset of teams begin to share I-Corps

									training knowledge
71			Did the I-Corps award lead to any collaborations between you and the external community?	Binary Yes/No for each Industry Investors Local or state government Non-profit organization Other					Intermediate Outcome: Collaborations are formed
72	Collaboratio ns		Please identify any other collaborations between you and the external community	Partner Name	Organization Type	Financial contributions of partner organization	Multiple textboxes	I-Corps Indicators & Monitoring System ¹ ; EFRI Indicators& Monitoring System; PFI:BIC Logic Model ³ & Indicators;	Intermediate Outcome: Collaborations
73	Collaboratio ns		Did the I-Corps award lead to any collaborations between the university you are currently affiliated with and the external community?	Yes No I am no lor university	ger affilia	ated with a			Intermediate Outcome: Collaborations are formed
74	Collaboratio ns	Only asked if answered "yes"	Which of the following collaborations between the university you are currently affiliated with and the external community did the I-Corps award lead to?	For each ite No Industry Investors Local or sta Non-profit Other	ite goverr	nment			Intermediate Outcome: Collaborations are formed
75	Collaboratio ns		Please identify any other collaborations between your	Text Box					Intermediate Outcome: Collaborations are

76	university and the external community. Are you currently pursuing a new	Binary Y/N	formed N/A Routing
	venture?		
77	Has your I-Corps experience influences your new venture? Please use the comment box to explain your answer.	It has positively influenced it It has negatively influenced it It has not had a positive or negative influence Text Box	Long Term Outcome: Business Creation
78	Thanks for your responses! Is there anything else you would like us to know about your I-Corps experience that wasn't captured by this survey?	Text Box	N/A

- [1] NCIIA now Venturewell, "I-Corps Indicators & Monitoring System." 23-Oct-2013.
- [2] "Kauffman Firm Survey Annotated Questionnaire." Ewing Marion Kauffman Foundation.
- [3] NSF Engineering, "PFI:BIC Logic Model & Indicators." 26-Jul-2013.