**Purpose**

This questionnaire is the first step for better understanding resources you can leverage to develop and implement processes for accelerating research-based innovation, and translating that innovation into products and services that benefit society.

**Instructions**

Questions are organized by four major topic areas (Research Innovation, Technology Commercialization, Entrepreneurship, and New Venture and Business Development), and each topic area is further broken down by entity type or asset (e.g., universities, government entities, support infrastructure, etc.).

* Data collection for this survey should begin **no later than August 5, 2015**.
* The survey contains primarily *qualitative* data (in the form of ranking and yes/no questions) so each team member must submit an individual questionnaire. However, you may want to assign specific team members to collect any *quantitative* data requested.
* Please try to answer the questions from a *state* perspective (we are using “state” to reference both US states and territories that are described as jurisdictions for EPSCoR programs). Please answer from an institutional perspective if you do not believe you can answer from a state perspective. Please check one of the boxes below:

□ I am answering this from a state perspective.

□ I am answering this from an institutional perspective: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Name of Institution

* **Please insert your last name and state abbreviation in the footer of your completed document.**
* All completed individual surveys should be sent to John Hopkins (jhop@utk.edu) via email **(in Word format) no later than September 4, 2015**, for consolidation.

A consolidated version will be provided to your team at the first workshop.

In addition to data we have provided in this package for your state, you can find additional information by reviewing regional economic reports, scanning the Internet, and obtaining input from local leaders of public, private, academic, and non-profit entities. A list of potential data sources is included at the end of this document.

The survey begins on the next page. If you have any questions on survey completion, please contact John Hopkins at jhop@utk.edu or Joy Fisher at joy.fisher@utk.edu.

Below is a drawing of your state on which your **key** assets will be placed. **These assets should be those you consider important to research-based innovation and technology commercialization.** The location of each asset should be indicated by a specific colored letter (indicated below).  If there is not enough room on the drawing of the state to list the assets, use the colored characters as a legend below the state to itemize the list.  Label the following by copying and pasting the boxed letters (below the state) onto the appropriate places within the state outline:

* Location of your state capitol (black P)
* Locations/names of 4-year colleges/universities doing research-based innovation (dark blue U)
* Locations/names of community colleges involved in innovation-based research and/or entrepreneurship, if any (light blue C)
* Location/names of national labs/private research institutions (dark red L)
* Location/names of **key** industrial partners that have the capacity to and/or already utilize research-based innovation (purple I)
* Locations of business incubators and accelerator programs (red A)
* Locations of research parks (orange R)
* Locations/names of angel/venture capital sources (green V)



**Legend:**

U

L

A

I

C

P

R

V

**Research Innovation** (Colleges, Universities, National Laboratories and Other Research Centers

* What are the primary innovation-based research programs and centers at each entity?
* Rank the availability of specialized programs and/or research incentives for advancing innovation-based research:

**1 5**

 **Poor** **I----------I----------I----------I----------I Very Good**

* How are universities and/or their programs ranked by relevant arbiters of quality (e.g., US News)?

 **1 5**

 **Worse than Average** **I----------I----------I----------I----------I Better than Average**

* How many researchers have experience in inventing, creating start-ups, and/or licensing their technologies to companies?

**1 5**

 **None** **I----------I----------I----------I----------I More than 20**

* What special facilities and/or equipment exist to facilitate research innovation?
* How open is the culture to inside and/or outside collaboration for innovation-based research? Be prepared to discuss examples at the workshop to support that perception.

**1 5**

 **Closed** **I----------I----------I----------I----------I Very Open**

* What formal partnerships exist for *research collaboration*, both between research institutions, and between research institutions and private industry (examples include partners in the Eastman Innovation Network and Joint Research Institutes between organizations). Be prepared to discuss examples at the workshop.
* How does the dollar amount of annual federal, state, and private grant funding compare to peer institutions?
1. **5**

**Federal: Much Worse** **I----------I----------I----------I----------I Much Better**

**State: Much Worse** **I----------I----------I----------I----------I Much Better**

**Private: Much Worse** **I----------I----------I----------I----------I Much Better**

**Technology Commercialization**

* *Colleges, Universities, National Laboratories and Other Research Centers:*
	+ Evaluate staffing of the tech transfer offices:
		- Are there enough people? **Circle one: Yes No Not Sure**
		- Do they have the right background? **Circle one: Yes No Partially Not Sure**
		- How is the office perceived **internally**?

**1 5**

 **Ineffective** **I----------I----------I----------I----------I Very Effective**

* How is the office perceived **externally**?

**1 5**

 **Ineffective** **I----------I----------I----------I----------I Very Effective**

* + How do the technology transfer statistics (annual disclosures, licenses, number of patents applied, number of patents issued, revenues) compare with peer institutions?

**1 5**

 **Much Worse** **I----------I----------I----------I----------I Much Better**

* + How active and visible are technology commercialization champions (both non-academic and academic successes and advocates) on campus?

**1 5**

 **Non-existent** **I----------I----------I----------I----------I Very Active and Visible**

* + Are there technology transfer policies and incentives in place that encourage technology commercialization (e.g., revenue sharing, college- or department-based incentives)?

**Circle one: Yes No Partially Not Sure**

* + Are inventions, patents, start-ups, or licensing considered as part of the tenure process at universities?

**Circle one: Yes No Partially Not Sure**

* + Do any internal/institutional funding programs for technology commercialization (e.g., technology maturation funds) exist?

**Circle one: Yes No Partially Not Sure**

If yes:

* + How long has the program been in place? \_\_\_\_\_\_\_\_\_\_
	+ How many have been awarded? \_\_\_\_\_\_\_\_\_\_
	+ What is the average dollar level awarded? \_\_\_\_\_\_\_\_\_\_
	+ Do lab sharing agreements exist that allow institution lab facilities to be used by faculty or staff launching start-ups and/or local start-up companies?

**Circle one: Yes No Not Sure**

* + Are any special programs (e.g., events) or facilities in place to encourage technology commercialization? Be prepared to discuss examples at the workshop.

**Circle one: Yes No Partially Not Sure**

* + Is technical assistance offered to region’s businesses? Be prepared to discuss examples at the workshop.

**Circle one: Yes No Not Sure**

* + Are there industry relations programs that match corporate needs with institution capabilities? **Circle one: Yes No Not Sure**

If yes, how effective are the programs? Be prepared to discuss examples at the workshop.

**1 5**

 **Not Effective** **I----------I----------I----------I----------I Very Effective**

* + How does state SBIR/STTR funding compare with peers?

**1 5**

 **Much Worse** **I----------I----------I----------I----------I Much Better**

* + What university SBIR/STTR collaborations exist with local businesses? Be prepared to discuss examples at the workshop.
	+ Have NSF Partnership for Innovation or iCorps grants been awarded over the last five years? **Circle one: Yes No**

If yes, how much was the award? \_\_\_\_\_\_\_\_\_

What is the focus, and what entities are involved?

* + Are there NSF Industry University Cooperative Research Centers in operation?

**Circle one: Yes No**

If yes, what is the focus and what entities are involved?

* + Have any corporate venture arms provided funding for technology commercialization?

 **Circle one: Yes No**

If so, for what purpose and what amount?

* *Other Organizations*
	+ How many technology business accelerators are in your region? \_\_\_\_\_\_
	+ How effective are accelerator programs performing relative to their metrics for success?

**1 5**

**Not Effective** **I----------I----------I----------I----------I Very Effective**

* + How many technology business incubators are in your region? \_\_\_\_\_\_\_\_\_\_\_
	+ How effective are business incubators performing relative to their metrics for success?

**1 5**

**Not Effective** **I----------I----------I----------I----------I Very Effective**

* + What special facilities exist at the incubators, if any (e.g., wet labs)?
	+ Do university-related research parks exist to support technology based companies?

**Circle one: Yes No**

* + How many companies are in residence in these research parks? \_\_\_\_\_\_\_\_\_\_\_
	+ What companies exist in your state that could collaborate with research institutions to commercialize new technology? Be prepared to discuss potential examples at the workshop.
	+ Do non-government organizations exist to support entrepreneurs?

**Circle one: Yes No**

* + How effective are these organizations in supporting entrepreneurs? Be prepared to discuss examples at the workshop.

**1 5**

**Not Effective** **I----------I----------I----------I----------I Very Effective**

**Entrepreneurship**

* *Colleges, Universities, National Laboratories and Other Research Centers:*

* + Does an entrepreneurial degree program exist at the universities?

**Circle one: All Some None**

* + Does an entrepreneurial minor exist at the universities?

**Circle one: Yes No**

If so, is it cross-discipline?

**Circle one: Yes No Not Sure**

* + Do any entrepreneurial law school programs exist at universities?

**Circle one: Yes No Not Sure**

* + Do any entrepreneurial programs focused on technology exist at universities?

**Circle one: Yes No Not Sure**

* + Are there any programs that encourage student and/or faculty/staff cross-pollination of ideas?

**Circle one: Yes No Not Sure**

* + Is there an entrepreneurial leave policy in place?
	+ **Circle one: Yes No Not Sure**
	+ Does a conflict of interest policy exist for faculty/staff that want to create start-ups?

**Circle one: Yes No Not Sure**

* + Do any policies exist that negatively impact new business formation?

**Circle one: Yes No Not Sure**

* + Is the culture open for faculty, students, and/or staff to participate in start-ups?

**1 5**

 **Closed** **I----------I----------I----------I----------I Very Open**

* + How many university business plan/pitch competitions are offered annually? \_\_\_\_\_\_\_\_
	+ Are there any venture funds that target student companies?

**Circle one: Yes No Not Sure**

If yes, many awards have been made? \_\_\_\_\_\_\_\_\_\_\_\_\_

What is the average dollar amount? \_\_\_\_\_\_\_\_\_\_\_\_\_

* + Are there any university or college-related venture/angel funds?

**Circle one: Yes No Not Sure**

If so, how much has been invested? \_\_\_\_\_\_\_\_\_\_\_

What is the success rate? \_\_\_\_\_\_\_\_\_\_\_

* *Support Infrastructure:*
	+ Do entrepreneurs have access to accountants, lawyers and marketers specializing in start-up businesses?

**Circle one: Yes No Not Sure**

* + Is there an organized program for entrepreneurial mentors?

**Circle one: Yes No Not Sure**

* + Does any co-working space exist in the region?

**Circle one: Yes No Not Sure**

* + Are there any philanthropic organizations that support entrepreneurship in your state?

**Circle one: Yes No Not Sure**

If yes, what types of grants and dollar amounts have been invested?

* + Have any local companies invested in start-ups in the region?

**Circle one: Yes No Not Sure**

If yes, be prepared to discuss who they are and what types of companies have they funded at the workshop.

* *Federal/State/Local Government Programs:*
	+ Are there any existing and/or unique federal, state, or local government programs in your state that facilitate development of entrepreneurial companies?

**Circle one: Yes No Not Sure**

If yes, provide links to their websites below.

* + Are there any state or federal business plan competitions in your region?

**Circle one: Yes No Not Sure**

If yes, what are the specific focus areas (if any)?

* + Are there regular SBIR/STTR workshops and/or webinars?

**Circle one: Yes No Not Sure**

* + Are there funded SBIR support programs in place, from Phase 0-III and including proposal writing, matching, bridge, fasttrack, etc.

**Circle one: Yes No Not Sure**

If yes, describe:

How effective are these programs?

**1 5**

**Not Effective** **I----------I----------I----------I----------I Very Effective**

* + Are there any special events promoting entrepreneurship?

**Circle one: Yes No Not Sure**

* + Are there any regulatory barriers for starting new businesses? Be prepared to discuss at the workshop.

**Circle one: Yes No Not Sure**

**New Venture and Business Development**

* *Angel and Venture Capital Groups:*

List the regional groups:

|  |  |  |  |
| --- | --- | --- | --- |
| Name of Fund | Size of Fund | Average Deal Size | Investment Sectors |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

* + Have any angel/VC firms *outside your region* invested in your local start-up companies?

**Circle one: Yes No Not Sure**

If yes, what is the average size of investment? \_\_\_\_\_\_\_\_\_\_\_\_\_

What types of companies received funding?

* + Are there any shared manufacturing facilities available for new businesses?

**Circle one: Yes No Not Sure**

* + Are there any prototyping facilities for use by small/new businesses?

**Circle one: Yes No Not Sure**

* + How easy is it to start new businesses in your region/state?

**1 5**

 **Not Easy at All** **I----------I----------I----------I----------I Very Easy**

* + Do tax credits/tax incentive programs exist for start-up/tech-based companies?

**Circle one: Yes No Not Sure**

* + Has a cluster strategy been developed for your region? **Circle one: Yes No Not Sure**

If so, how effectively is it being implemented related to research-based innovation?

**1 5**

 **Not Effective** **I----------I----------I----------I----------I Very Effective**

* *Business and Economic Development Organizations:*
	+ Do any venture development organizations exist? **Circle one: Yes No Not Sure**

If so, what is the focus area, if any?

* + Are there any state-funded entrepreneurial organizations?

**Circle one: Yes No Not Sure**

If yes, what programs do they provide to help new companies grow?

* + Are there any special events for helping/growing new businesses? Be prepared to discuss examples at the workshop.

**Circle one: Yes No Not Sure**

**----------------------------------------------------------------------------------------------------------------------------------------**

**Based on the data collected, rank how strong you perceive your state to be in the following areas (where 1 is Very Weak and 5 is Very Strong)? All team members should do this individually:**

 **1 5**

* **Research Innovation I----------I----------I----------I----------I**
* **Technology Commercialization I----------I----------I----------I----------I**
* **Entrepreneurship I----------I----------I----------I----------I**
* **New Venture and Business Development I----------I----------I----------I----------I**

**DATA**

* AUTM data attached
* NSF data attached
* Link to by-state SBIR data: <https://www.sbir.gov>

**OTHER RESOURCES**

| **EVALUATION AREAS** | **SOURCE** | **WEB SITE** |
| --- | --- | --- |
| Four-Year Colleges & Universities | US News and World Report rankings | [www.usnews.com/education](http://www.usnews.com/education) |
| National Science Foundation  | <https://ncsesdata.nsf.gov/webcaspar/> |
| Chronicle of Higher Education | [www.chronicle.com](http://www.chronicle.com) |
| National Association of College and University Business Officers | [www.nacubo.org](http://www.nacubo.org) |
| Association of University Technology Managers | [www.autm.org](http://www.autm.org) |
| Spending | Federal R&D spending | [www.rand.org/pubs/monograph\_reports/MR1824.html](http://www.rand.org/pubs/monograph_reports/MR1824.html) |
| Private R&D | [www.saibooks.com](http://www.saibooks.com) |
| Venture Capital | Moneytree survey | [www.pwcmoneytree.com](http://www.pwcmoneytree.com) |
| Angel/VC Firms | Local print media | [www.bizjournals.com](http://www.bizjournals.com)[www.crain.com](http://www.crain.com)[www.angelcapitalassociation.org](http://www.angelcapitalassociation.org) |
| Foundation Giving | The Foundation Center | [www.foundationcenter.org](http://www.foundationcenter.org) |
| Government Programs | Small Business Administration | [www.sba.gov](http://www.sba.gov) |
| Tax Burden, Business Costs | Moody’s | [www.economy.com](http://www.economy.com) |
| The Tax Foundation | [www.taxfoundation.org](http://www.taxfoundation.org) |
| Clusters | Harvard | <http://www.isc.hbs.edu/about-michael-porter/affiliated-organizations-institutions/Pages/us-cluster-mapping-project.aspx> |