

USTAR INDUSTRY PARTNERSHIPS PROGRAM

(IPP) FY17 PROGRAM ANNOUNCEMENT

UTAH SCIENCE TECHNOLOGY AND RESEARCH (USTAR) INITIATIVE

USTAR is the State of Utah's technology catalyst, accelerating the growth of the innovation ecosystem from invention through product development. Guided by Utah's economic clusters, USTAR supports technology entrepreneurs and innovators through training, funding, incubator and accelerator programs; brokering technology transfer by connecting capital, management and industry; addressing market gaps in Utah's technology ecosystem and strengthening the state's research capacity.

INDUSTRY PARTNERSHIPS PROGRAM (IPP)

Healthy, productive partnerships between industry and public or not-for-profit institutions of higher education are critical for robust innovation ecosystem. The IPP is designed to build and strengthen these relationships within the state of Utah and is developed based on best practices from other states' industry partnership programs.

Demand driven by industry, the IPP promotes the development, acceleration and commercialization of technology and innovation by teaming industry and university research expertise to address specific technology problems or gaps identified by a company. The program is open to companies that have a substantial presence in Utah, have identified a specific technology challenge whose solution would result in economic impact for the state.

Once a company identifies a technology gap, USTAR will use its network within higher education institutions in the state to identify potential research partners to address that technology gap. The industry partner and the researcher or research team will develop a joint proposal for IPP funding. The proposal must be submitted by an authorized body within the university. Proposals will be reviewed by a panel of experts and final funding decisions will be made by the USTAR Governing Authority.

INTENDED IMPACTS OF THE PROGRAM:

- Strengthen the industry-university partnership
- Address technology gaps for established companies
- Faculty at universities gain practical understanding of commercial technology opportunities and needs while also providing students experiential learning and workforce development opportunities
- Increase jobs and revenue for existing companies

ELIGIBILITY

The IPP addresses industry-identified technology gaps that have the potential for a new product development, or to provide a competitive advantage to a company with a substantial presence

in Utah. Awardees of the IPP may be required to repay funding received, if, within a period of five years after the award, the funded entity no longer maintains operations in Utah.

- Proposal must be jointly developed by a Utah-based company
- Proposal must be submitted by an authorized body within the university
- An authorized representative from the company must certify that
 - The company lacks technical capacity to resolve stated technology gap
 - The proposed university technology will resolve the technology gap
 - The company commits to provide a cost-share contribution in the form of a defined amount of funding paid to the university and/or in-kind contributions
- Company must have a substantial presence in Utah
- Company must pledge a matching contribution to support the project, which may be provided via
 - Direct payment to university for the research project
 - and/or in-kind contribution
- Technology must be between TRL(Technology Readiness Level) 0-3. For additional information regarding TRLs ...link or direct to our website

TARGETED INDUSTRY SECTORS

In FY17 (July 1, 2016 - June 30, 2017) USTAR is focused on the following targeted industries, though other industry technology sectors can apply.

Automation and Robotics - Automation technology is the use of cutting-edge machinery in industrial applications to minimize human exertion. Robotics is the branch of automation that deals with the design, construction, operation and application of robots, as well as computer systems for their control, sensory feedback and information processing.

Aerospace - Aerospace is the branch of technology and industry concerned with aeronautics and astronautics. Areas for research include, but are not limited to, innovative approaches in aerodynamics, engineering of aircraft and spacecraft and the autonomous control of aircraft.

Advanced Materials - Advanced materials are all fibers, coatings, composites, etc. that are engineered to enhance the efficiency of a product and include new materials or improvements to existing materials. Advanced materials can be applied to the creation of carbon composites, 3D printing advances, climate control, solar technology, water purification, sports, military equipment and textiles.

Big Data - Big data is a term for data sets that are so large or complex that traditional data processing applications are inadequate. Challenges include analysis, capture, data curation, search, sharing, storage, transfer, visualization, querying and information privacy. Analysis of data sets can find new correlations to gather information on topics such as business trends, crime patterns, genome sequences, complex physical environments and more.

Energy and Clean Technology – Energy and Clean Technology encompasses products and processes that harness renewable and nonrenewable materials to

dramatically reduce the use of natural resources, cut emissions and waste, and provide options for efficient energy storage and usage.

Life Sciences – Life science is defined as the study of living organisms from a cellular, molecular, or macroscopic perspective. Research in this area includes, but is not limited to, medical device development, biotechnology, pharmaceuticals, diagnostics, agriculture, genetics and healthcare IT.

APPLICATION

Applicants are required to initiate a discussion with USTAR's Special Programs Office prior to beginning the proposal. The Special Programs Office will advise on appropriate university partnerships for the specified technology gap. Once a partnership is established, applicant will then be directed to a USTAR regional director for further assistance.

Competitive applications will identify specific gaps and a technical approach, developed collaboratively between the company and university partner. Each milestone should be described with sufficient detail to make the technical challenge and the proposed technical approach clear. An overall assessment of technical risk should be included. Competitive applications will also include qualifications of the team to meet the milestones, a commercialization plan if the technology gap is solved, potential economic impact on Utah's economy and timeline for completion. Potential economic impact for Utah can be described in terms of job creation, product sales and potential revenue due to expansion of current business or the development of a new business.

APPLICATION PROCESS

If you have a technology gap and would like to use IPP to explore partnering with a university researcher, please contact our Special Programs office at IPPinfo@utah.gov.

EVALUATION CRITERIA

The peer review and business experts will use a scoring system to evaluate and rank grant applications and determine grant amounts. The scoring system may include:

1. Technical merit - This includes if the technology is of an appropriate technology readiness level, the milestones are reasonably obtainable with the proposed technical approach in the timelines anticipated
 2. Appropriate technology readiness level (TRL 2-5)
 3. Proposed milestones are reasonably obtainable with the recommended technical approach
 4. Proposed objectives will be achieved in a period not to exceed 18 months
 5. Potential for economic impact, as measured by potential for:
 - a. Potential revenue due to expansion of current business or development of new business
 - b. Product sales
- Projected time to revenue or job creation
 - Commercialization plan/market need
 - Technical capabilities and experience of the team

- Realism of the proposed costs and commitment of matching funds
- Market need for the product or technology
- Management team's capabilities and experience that will lead to market success
- Technical team's capabilities and experience that will enable market success

All reviewers are provided with standard USTAR evaluation and NDA forms.

Proposals will be reviewed on the following criteria:

Scoring Rubric for USTAR Industry Partnership Program (IPP)

Technical Merits (score 1-5)

Technical merits (score 5)

- Milestones are specific and measurable, and align to technology goals
- Approach demonstrates a strong understanding and application of technology development best practices and are not to exceed 18 months
- Technical approach has high likelihood of success, is well defined and considers alternative approaches if the original is not successful
- Timeframe for development is feasible
- TRL is of the appropriate level

Technical merits (score 3)

- Milestones are not specific or measurable, but align to technology goals
- Approach demonstrates basic understanding and application of technology development best practices
- Technical approach has a high likelihood of success and is well defined
- Timeframe for development is reasonable

Technical merits (score 1)

- Milestones are not specific or measurable and do not align to technology goals
- Approach does not illustrate understanding of technology development best practices
- Technical approach lacks detail or has low chance of success
- Development timeframe is not reasonable

Potential Economic Impact in Utah (score 1-5)

Economic Impact in Utah (score 5)

- Company will expand high wage jobs in the state in the next 2-3 years
- High revenue and/or sales anticipated

Economic Impact in Utah (score 3)

- Company will create high paying jobs in the state over the next 5-7 years
- Company will create low or middle income jobs in the state

- Moderate sales and revenue expected in 5-7 years

Economic Impact in Utah (score 1)

- No job creation in Utah
- Revenue outlook is minimal and with long lead time <10 years

Market Need/Commercialization Plan (score 1-5)

Market need for the product (score 5)

- Clear potential market identified
- Company can provide data driven definition of market
- Specific plan identified to take the technology to market
- Technology has defined market advantage to current competitors
- Aligns to targeted technology sectors

Market need for the product: (score 3)

- Clear potential market identified
- Company can provide data driven definition of market
- Specific plan identified to take the technology to market
- Technology has defined market advantage to current competitors
- Aligns to targeted technology sectors

Market need for the product (score 1)

- Market not identified, or market potential small
- No clear market advantage for this product
- Does not align to targeted technology sectors
- Unclear or undefined plan to take product to market

Management Team Capabilities

Management team's capabilities/experience that will lead to market success (score 5)

- Management team demonstrates strong capabilities and experience for market success
- Management team has strategy and capacity to take technology to market and launch products

Management team's capabilities/experience that will lead to market success (score 3)

- Management team's capabilities and experience demonstrate potential for market success
- Management team has the possibility to take technology to market and launch products

Management team's capabilities/experience that will lead to market success (score 1)

- Management team does not have sufficient capabilities to produce technology.

Technical Capability of Team (score 1-5)

Technical capabilities/experience of the team that will enable market success (score 5)

- The team has the technical background and experience to meet the milestones identified in the proposal
- Team has experience working together with a history of success
- Team has diversity of technical expertise to overcome challenges

Technical capabilities/experience of the team that will enable market success (score 3)

- Team has sufficient technical credentials to meet the milestones identified in the proposal, but does not have prior experience with taking technology to market
- Team has minimal experience working together

Technical capabilities/experience of the team that will enable market success (score 1)

- The team does not have the adequate technical capabilities and experience for market success
- Team does not have experience working together as a team

Business Team Capabilities

Business team's capabilities/experience that will enable market success (score 5)

- The team demonstrates appropriate business experience
- The team has successfully taken start-ups to market
- The team has successfully pitched to angel investors and secured funding

Business team's capabilities/experience that will enable market success (score 3)

- The team demonstrates sufficient business experience
- The team has some experience in taking start-ups to market
- The team has experience pitching to angel investors and securing funding

Business team's capabilities/experience that will enable market success (score 1)

- The team does not have ample business experience
- The team has no experience taking start-ups to market
- The team has not been successful in pitching to angel investors or securing funding

Realism of costs (score 1-5)

Realism of the proposed costs and availability of funds (score 5)

- Proposed budget is both adequate and sufficient to complete the proposed work
- The personnel budgets provide adequate hours for the work to be completed
- Categories of expenses are reasonable and appropriate for the work

Realism of the proposed costs and availability of funds (score 3)

- Proposed budget may be insufficient or more than necessary to complete the work

Realism of the proposed costs and availability of funds (score 1)

- Not realistic in proposal of cost

AWARD

Funds will be disbursed on schedule defined in contract to university. Awardees will be required to meet program milestones and to meet regularly with USTAR staff to assess progress on milestones. Funding will be contingent on successful completion of milestones and availability of appropriated funds.

Verification of receipt of company matching funds will be required.

Awardees will be contractually obligated to report to USTAR or affiliated auditors/contractors regarding jobs created and salary ranges, follow on investment, revenue, sales and other information as outlined in the Industrial Partnership Rules for a minimum of five years following completion of award.

CONTACT INFORMATION:

Questions regarding the Industry Partnership Program must be submitted in writing via email. Inquiries made via phone or other method will not be accepted.

All questions should be directed to IPPinfo@utah.gov

All frequently asked questions and answers will be posted under Industry Partnership Program Questions on the USTAR website.