USTAR

USTAR TECHNOLOGY ACCELERATION PROGRAM (TAP)
FY18 SPRING PROGRAM ANNOUNCEMENT

Note to prospective applicants: Please read this announcement carefully and follow all requirements. Applicants not adhering to the process outlined in this document will have their proposals disqualified. Applicants wishing to re-apply to TAP must comply with the revised procedures. <u>Note the new requirement for business-related milestones.</u>

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 and 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.

TECHNOLOGY ACCELERATION PROGRAM (TAP)
The Technology Acceleration Program (TAP) is a USTAR competitive grant program that supports private sector technology development for Utah-based companies. Proposed work can include, but is not limited to, research and development, proof of concept, product validation, and product development. TAP grants must be used to accelerate the development and commercialization of a technology and project proposals must identify specific technical and business milestones leading to the proposed outcome.

In addition to the award, TAP awardees may receive non-material support, such as referral to USTAR's partner networks, to assist in achieving technical and business milestones with the goal of commercial success.

ELIGIBILITY
- Company must be Utah-based; i.e. maintain its principal place of business in Utah. To be considered Utah-based, a company must:
    - Be registered with the Utah Division of Corporations as an active for-profit business entity in good standing
    - Maintain at least 90% of employees in Utah.
    - A residency waiver may be requested after awards are made, if more than 50% but less than 90% of the company employees reside in Utah.
    - Companies must have:
        - fewer than 50 employees, and
        - raised less than $5MM in private funding, and
        - less than $1MM annual revenue

- TAP proposals should align with the targeted industry sectors identified by the USTAR Governing Authority (outlined below).
- Applicants may not submit a TAP proposal if current TAP or UTAG grant milestones will not be completed by the application deadline, March 20, 2018.
- Proposed technology milestones for TAP funds must be at an initial technology readiness level (TRL) of 3-5. Milestone outcomes cannot exceed TRL 6. For information regarding TRLs, visit https://ustar.org/grant-programs/tap-technology-acceleration-program/general-trls
- Misrepresentation of any kind may result in immediate disqualification.
- Company must have a license in good standing for any intellectual property at the time of application. For technology licensed out of a university, the company must have an executed license or at a minimum, have an option in place with the ability to convert to a license within nine (9) months of contract date.

Targeted Technology Sectors

USTAR is focused on the following targeted technology industry sectors for FY18 (July 1-June 30):

Automation and Robotics (including IoT and Smart City technologies) - 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 concerned with aeronautics and astronautics. Areas for research include, but are not limited to, innovative approaches in aerodynamics, advanced materials, engineering of aircraft and spacecraft and the autonomous control of aircraft. This includes both manned and unmanned systems.

Big Data and Cybersystems - Big Data is a term for data sets that are so large or complex that traditional data processing and analytical 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 relationships to gather information on topics such as business trends, crime patterns, genome sequences, complex physical environments and more.

Cybersystems is an overarching term related to computerized electrical and mechanical processes, as well as information generation and large capacity, rapid access storage, as well as data encryption, data security against breaches and data retrieval technologies. USTAR wishes to inspire creation and development of new strategies to prevent attacks on computer system networks and develop new encryption tools and computer hardware with a line of sight toward the next generation of computer hardware.

Note: software application development and software subscription services are not considered in scope for this funding mechanism.

Energy and Clean Technology – Energy and clean technology encompasses products and processes that harness renewable and nonrenewable advanced 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 advanced materials for life science applications, medical device development, biotechnology, pharmaceuticals, diagnostics, agriculture, health IT and genetics.

APPLICATION PROCESS

Stage 1. <u>Mandatory</u> **Letter of Intent** (LOI) that includes the following:

1. Inclusive dates: February 2 - 20, 2018
2. Go to ustargrants.org to request an account to gain access to the portal.
3. Locate the TAP FY18 Spring LOI funding opportunity and provide required information including:
   a. Proposal title, company contact name and contact information
   b. EIN and business license (number and jurisdiction)
   c. Technology sector
   d. Description of technology, unmet need, and alignment with selected technology sector (300 words maximum)
   e. Select Technology Readiness Level (TRL)
   f. Beginning and ending TAP project goals (300 words maximum)
   g. Status of Intellectual Property
   h. Estimated total budget request
4. GRAMA disclosure (link provided in the portal)
5. W-9 form (link provided in the portal)
6. **Complete and submit the LOI by February 20, 2018, 5:00 p.m. MT**. Only LOIs submitted through the ustargrants.org portal will be accepted for review.
7. The LOI is reviewed and either accepted or declined by USTAR.
8. An applicant whose LOI is accepted will be invited to complete a full application. Instructions for completing a full application will be sent to the main company contact within 5 business days.
9. An applicant whose LOI is declined will also be notified by email with an explanation for the decision. **LOIs with incomplete information are eligible for correction and resubmission if received by February 13, 2018.**

Stage 2. **Complete Applications** will be accepted through an online portal starting February 26, 2018. By submitting an application, applicants agree to all terms and conditions for the program. It is suggested that applicants refer to the provided checklist on USTAR's website to ensure submission of a complete application (see details below). All submitted documents **must** be uploaded as PDF files with the exception of the budget, which may be uploaded in Excel.

The application deadline is no later than **March 20, 2018 at 5:00 p.m. MT**.

1. **Quad Chart** – (downloadable template) Summarize key elements of the technology and commercial positioning according to the template.

2. **White Paper** (create document with each subsection) Do not exceed six pages, 1.5 spacing and no less than 12-point Arial font with one inch margins. (See specifics on graphs, tables and supplemental material below.) The white paper must be presented in NON-CONFIDENTIAL terms and must include the following:
    a. **Introduction:** Describe the overall technology background, problem being solved in terms of unmet need, innovation (disruptive-transformational-incremental improvement over state-of-the-art), rationale and overall approach based on current technology readiness level, TRL, and expected TRL at project completion.
    b. **Technical Strategy:** For each project milestone describe the technical approach, the expected outcome(s) and specific deliverable(s). Include limitations and alternative approaches. The timeline for completion must be stated. The entire project period must not exceed 18 months.
    c. **Commercial Market Strategy:** Describe the business model and commercialization strategy of the company, such as the intended market, competitors, innovation that will allow it to compete in the market, as well as market size and realistic revenue stream if company is successful. Address the path to market, regulatory path (if applicable), additional resources required and how they will be acquired. Identify specific business milestones (e.g., customer discovery, product market fit, establishing a governance board, etc.), and include specific deliverable(s) for these milestones. USTAR's expectation is that the majority of the budget request is based on technical milestones. However, a portion of the budget may be requested to meet the proposed business milestones. No budget may be requested to hire sales or marketing personnel, to develop websites or marketing campaigns, or similar activities.
    d. **Economic Impact:** Characterize the potential economic impact on the state of Utah if your company is successful in taking the technology to market. This can include job creation, product sales and potential revenue. The economic impact description should also include anticipated time to market. Indicate if resources, such as manufacturing or supplies, will be sourced within Utah.
    e. **Governance**: Describe the governance structure of your company.
    f. **Cited references** are public domain articles and scientific literature. These are not counted in the page limit.
    g. **Graphs and Data Tables** including figures and images are best embedded in the text and count toward the page limit, and may be 10 pt or larger font. **Supplemental material,** such as patents, counts toward the page limit.
3. **Scope of Work** – In the portal, you will be required to provide a breakdown of your project. You will present your research plan according to milestones (technical and business), their corresponding deliverable(s), budget and timeline.
4. **Budget and Budget Justification**: (downloadable forms)
    a. Follow the budget template; all 3 worksheets must be filled in and included for the budget to be complete. Proposals will be declined without complete budget information. For project personnel, include the hourly pay rate (detailed budget only) and the fully burdened hourly pay rate (hourly pay rate plus benefits). Additional information can be found on the budget justification template.
    b. Follow the instructions on the Budget Justification template.

      c. Funding for travel is discouraged. If necessary for milestone completion, document the specific activity, the rationale and the portion of budget that will be used outside of Utah.

      d. Any required equipment in the budget that exceeds $5,000 will require justification.

      e. In the justification, identify any private or government funds raised to date or pending. Include the source of funds and total amount raised. If USTAR funds have been used to date, please specify the date awarded and amount.

      f. If anticipating additional funding to supplement the proposed project, describe the amount and source specifically.

5. **Key Personnel Biosketch**: (downloadable form) Use one form for each key person not to exceed 5 pages per Biosketch.

      a. Include Personal Statement - describe background and experience that will lead to milestone accomplishment

      b. Technical and/or management contribution to the project

6. **Letters of Support** – (upload as PDF) USTAR accepts letters from those supporting the commercial interest in the company, such as strategic partners, potential customers and others not directly affiliated with the company. **No more than 3 letters are permitted, each less than 2 pages.**

Stage 3. USTAR reserves the right to invite selected applicants to give a brief presentation to a review panel. A presentation template will be provided in that instance.

STATE FISCAL YEAR

The state's fiscal year is July 1 - June 30. Please use Fiscal Year designation (FY18, FY19 or FY20 as appropriate) in developing your budget and Scope of Work.

FUNDING SPECIFICATIONS

USTAR receives an annual appropriation. Therefore, funding for TAP is dependent on USTAR's appropriation. There is no minimum/maximum or suggested amount. Budgets and proposals should be driven by the cost associated with the milestones. However, USTAR puts a cap on compensation of project personnel not to exceed an annual salary of $150,000 per person per year (maximum rate of $72.11 per hour). USTAR does not pay overhead costs.

EVALUATION CRITERIA

USTAR strongly encourages that you not disclose confidential materials in your application. An initial screen will be conducted by USTAR staff to ensure proposals meet submission requirements.

Upon acceptance of application materials, an independent, volunteer panel of technical and industry experts from the corresponding USTAR technology sectors review TAP proposals. The review process is managed from USTAR headquarters in Salt Lake City. Reviewers sign confidentiality disclosure agreements with USTAR and are prescreened to avoid conflicts of interest with applicants.

Peer review panels will review proposals based on the following criteria:

- Technical merit
- Potential for success of business including consideration of governance structure and business milestones
- Capacity and experience of the management team
- Potential for economic impact, as measured by:
    - Job creation
    - Product sales
    - Potential revenue due to expansion of current business or development of new businesses
    - Projected time to revenue or job creation
- Market need
- Technical capacity of team
- Reasonableness of cost proposal (size and allocation of budget is appropriate for the work proposed and matching funds available)
- Reasonableness of proposed milestones and timelines
- Any other factor indicative of applicant's ability to produce measurable and timely impacts on the state in areas related to the economic development performance metrics used to evaluate USTAR activities.

SCORING RUBRIC FOR TAP - the scoring range is 1-5, in whole numbers. Reviewers scores are averaged and compiled into a rank order.

Technology Evaluation – (*from the White Paper); weighted 35%*
Score 5 on Technical Merit
- Milestones are specific, measurable, actionable and aligned with overall project objective
- The aggregate of milestones drives the commercial goals
- Technical description is detailed and provides alternative strategies to address unexpected outcomes
- Research timeline is adequate relative to project goals

Score 3 on Technical Merit
- Milestones are vague yet remain aligned with overall project objective
- The aggregate of milestones somewhat drives the commercial goals
- Technical description is detailed and but misses alternative strategies
- Research timeline not realistic relative to project goals

Score 1 on Technical Merit
- Milestones are not specific, measurable, actionable or aligned with overall project objective
- The aggregate of milestones does not support commercial goals
- Technical description is not detailed and is missing alternative strategies
- Research timeline fails to support project goals

Possible Economic Impact Evaluation – *(from the White Paper); weighted 20%*

Score 5 on Economic Impact
- Company plans to add permanent FTEs in the next 2-3 years
- Plan to leverage technology into sales, Federal grants, partnerships or risk capital investment in 2-3 years

Score 3 on Economic Impact
- Company plans to add permanent FTEs in the next 5-7 years
- Plan to leverage technology into sales, Federal grants, partnerships or risk capital investment in 5-7 years

Score 1 on Economic Impact
- Company does not provide a plan to add permanent FTEs
- Plan to leverage technology into sales, Federal grants, partnerships or risk capital investment is not addressed

Commercial Market Plan Evaluation – *(from White Paper); weighted 15%*

Score 5 of Commercial Market Evaluation
- Data driven discussion of business model; i.e., problem being solved, specific market, competition and competitive advantage
- IP strategy is provided
- Business milestones are well defined and achievable

Score 3 of Commercial Market Evaluation
- Partial or qualitative data driven discussion of business model; i.e., problem being solved, specific market, competition and competitive advantage
- IP strategy is provided
- Business milestones are reasonable and may be achievable

Score 1 of Commercial Market Evaluation
- No discussion of business model; i.e., problem being solved, specific market, competition and competitive advantage
- IP strategy is provided
- No business milestones are included in the proposal

Management Team Capabilities Evaluation – *(from Budget Justification and Biosketches); weighted 15%*

Score 5 of Management Team Evaluation

- History of success marketing like technologies in this sector
- Experience in scaling like technologies in this sector
- Active governance structure and Board appropriate for stage of company

Score 3 of Management Team Evaluation
- History of success marketing technologies in other sectors
- Experience in scaling technologies in other sectors
- Planned governance structure and Board appropriate for company and in progress

Score 1 of Management Team Evaluation
- No experience marketing technologies
- No experience in scaling technologies
- Governance structure and Board inappropriate for TRL or not addressed

Technical Team Capabilities Evaluation - *(from Budget Justification and Biosketches); weighted 10%*

Score 5 Technical Team Evaluation
- Qualified background and experience to drive project, overcome delays and complete project as described
- Allocation of effort by project staff is appropriate
- Team experienced in maneuvering a technology toward a commercial product
- Breadth of skill set among team members to bring toward commercialization

Score 3 Technical Team Evaluation
- Not all members have background and experience to drive project, overcome delays and complete project as described
- Allocation of effort by project staff is modest
- Partial experience in maneuvering a technology toward a commercial product
- Limited skill set within team required for commercialization

Score 1 Technical Team Evaluation
- Few or no members have background and experience to drive project, overcome delays and complete project as described
- Allocation of effort by project staff may put the project at risk
- No experience in maneuvering a technology toward a commercial product
- Team lacks skill set required for commercialization

Budget Evaluation – *(from Budget pages and Budget Justification); weighted 5%*

Score 5 of Budget Evaluation
- Proposed budget is realistic for the project and its milestones

- Expertise and % effort of salaried professionals consistent with the milestone
- Non-salary expenses sufficient to support project without padding

Score 3 of Budget Evaluation
- Proposed budget is somewhat over or under budgeted for the project and its milestones
- Expertise and % effort of salaried professionals is not adequate for the milestone
- Non-salary expenses of project are inappropriate

Score 1 of Budget Evaluation
- Proposed budget is not realistic for the project and its milestones
- Expertise and % effort of salaried professionals is not realistic for the milestones
- Non-salary expenses of project are inappropriate

AWARD

USTAR has the discretion to determine the maximum amount of grant funding awarded based on available funds and quality of applicant pool. Upon award of the TAP grant, and prior to any disbursement of funds, the company must enter into a written agreement with USTAR governing the use of grant funding. Unless addressed in the terms and conditions of the written agreement between the company and USTAR, the following provisions shall apply:

- Company must remain a Utah-based company for at least five years from initial disbursement of TAP funding, as defined above.
- Company may not use TAP grant funding to provide a primary benefit to any state other than Utah.
- For all other eligibility requirements, company must maintain eligibility status for the TAP program until the project is complete, all milestones have been met, final disbursement of funding has been made, and first year reporting has been completed.
- Funding will be contingent on successful completion of milestones and availability of appropriated funds. Partial milestone funding will be provided up front with the remaining amount to be disbursed upon milestone completion and verification of deliverable.

A company that violates the requirements above forfeits the grant funding and may be required to repay all or a portion of funds received as part of the TAP grant.

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 Technology Acceleration Program administrative rules, terms and conditions of contract for a minimum of five years following completion of award.

Prior to disbursement of funds, awardees may be required to demonstrate that they are properly authorized to operate in the State of Utah (LLC, S-Corp, C-Corp, etc.). Awardees will be

required to meet program milestones and to meet regularly with USTAR staff to assess progress on milestones.

If the company moves out of Utah or is acquired within 5 years of the last payment of the grant, awardee may be required to pay the state back as stated in the TAP terms and conditions.

Schedule of disbursement of funds will be defined in the contract. Awards will be for no more than 18 months.

Award Timeline:

USTAR anticipates announcing selected proposals within 60 days of the closing date, and anticipates contracts will be delivered within 45 days following announcements.

Contact Information

Questions regarding TAP must be submitted in writing via email to TAPinfo@utah.gov . Inquiries made via any other method will not be accepted. In the interest of assuring fairness, all frequently asked questions and answers will be posted under TAP Questions on the USTAR website. Applicants with specific questions regarding any aspect of their application must be received no less than 24 hours before the close of the application deadline.