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GALLOGLY COLLEGE OF ENGINEERING
STEPHENSON SCHOOL OF BIOMEDICAL ENGINEERING
The UNIVERSITY of OKLAHOMA

OU SBME Translational Stimulation Committee (TSC)

Internal Awards Program Description

The OU SBME Translational Stimulation Committee (TSC) is committed to fostering a culture of innovation, entrepreneurship, and translational research within the Stephenson School of Biomedical Engineering. To provide flexible support for early-stage translational activities, the TSC has established an internal awards mechanism for projects that advance promising ideas toward real-world impact through prototyping, customer discovery, validation studies, or other translational milestones.

Purpose

This program aims to:

- Enable rapid progress on translational concepts that are not yet ready for large external grants.
- Support hands-on development, testing, and iteration of biomedical technologies, tools, and processes.
- Encourage multi-level participation (undergraduate, graduate, postdoctoral, and faculty) in translational research and entrepreneurship.
- Strengthen OU SBME's pipeline of projects that can compete for external funding, incubation, and commercialization opportunities.
- Promote engagement with experiential innovation activities modeled after initiatives such as the National Medical Device Make-a-thon.

Eligibility

- Open to **undergraduate, graduate, postdoctoral, and faculty applicants** affiliated with OU SBME.
- Applicants may apply as individuals or teams; **teams are strongly encouraged**, particularly those that span training levels or disciplines.
- Projects must have a clear **translational focus**, such as:
    - Prototype development or refinement
    - Feasibility or benchtop validation studies
    - Early user / customer discovery activities

  - Design for safety, usability, or manufacturability
- Each individual may participate in multiple proposals, but may serve as **lead applicant on only one** funded project per cycle.
- Awards are made **per project**, not per individual contributor.

Incentive Structure

To support translational progress, the TSC will provide the following internal awards:

- **Number of Projects:** Support for **3–5 projects** per annual cycle.
- **Award Size:**
  - Typical awards range from **$500–$2,000 per project**, depending on scope, needs, and available funds.
  - Budgets may include materials and supplies, prototyping costs, user-testing related expenses, core facility fees, and other justified project-related costs in accordance with OU policies.
- **Non-monetary Support (as available):**
  - Feedback and mentoring from TSC, OkBiostart, and Advisory Board members.
  - Connections to campus and external resources (e.g., OTC, entrepreneurial programs, incubators).

Application Requirements

A complete application can be up to 3 pages, not including Title Page or Appendices. The recommended page length of each component is in parenthesis.

Title page does not count toward 3-page limit. Appendices may be included.

1. **Title Page**
   - **a.** Project Title
   - **b.** Team Members, including any PIs or Mentors
2. **The Problem You Are Solving (1/3 page)**
   a. Clearly define the problem, pain points, and the customer needs
   b. Describe the target users/customers, and the clinical or practical context
   c. Quantify the impacts: social, global, economic, etc
3. **What has been done to solve the problem? (1/3 page)**

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   a. Define current approaches to solving the problem.
   b. Why do they not solve the problem (what is the gap)?
   c. Provide citations and concrete examples.
4. **What is your solution/innovation? (1/2 page)**
   a. Explain the proposed solution to the problem.
   b. Brief scientific/engineering rationale and approach. Include any current feasibility studies or proof of concept evidence.
   c. Why is this solution unique? What makes it novel?
5. **Technical & Translational Plan: (1/2-1 page)**
   a. Clearly defined **2–3 goals** to be accomplished within the **one-year period**.
   b. Concrete development **milestones with measurable outcomes** (e.g., "working prototype tested in simulated environment," "10 user interviews completed," "bench test demonstrating X performance").
      i. What are your success metrics?
      ii. Key performance indicators: How do you know what success looks like? What achievements will indicate you're on track?
   c. Include a high-level table of milestones and their deliverables in **Appendix A**.
   d. Include a high-level Gantt chart (by month) in **Appendix B**.
   e. High-level **pathway to translation**, such as:
      i. Follow-on funding (e.g., SBIR/STTR, foundation grants)
      ii. IP and licensing strategy
      iii. Clinical or field pilot studies
      iv. Startup formation or adoption by an existing organization
6. **Team & Mentorship (1/3 page)**
   a. Roles and responsibilities of each team member.
   b. Any clinical, industry, or community partners and their role
7. **Itemized Budget & Justification (1/2 page)**
   a. Breakdown of requested funds (materials, prototyping, services, etc.).
   b. Justification linking each line item to specific goals and milestones.

Tips for a Good Application:

- **Specificity:** Use concrete examples, data, and metrics. Avoid vague statements.
- **Progress:** Demonstrate learning and momentum, not just ideas.
- **Connection:** Relate your technology decisions to market or clinical realities.
- **Be grounded:** Be ambitious, but keep timelines and challenges realistic.

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- **Reference Appendix:** Direct the reviewers to supporting material to strengthen your case.

Conditions

- **Application Timeline**
  - **Proposal Deadline: March 31, 2026**
  - **Notice of Award: May 1, 2026**
  - **Funding Period:** One (1) year from the start date, with **potential renewal** contingent upon:
    - Demonstrated progress toward translational milestones
    - Availability of funds
    - Submission of a brief progress report
  - Your application should be combined into a single PDF file and submitted to the TSC (sbme_tsc@groups.ou.edu).
- **Use of Funds**
  - All expenditures must comply with University of Oklahoma purchasing and compliance policies.
  - Funds may not be used for general salary support or tuition, unless previously approved under specific circumstances.
  - Unspent funds at the end of the funding period may be reallocated by the TSC unless a renewal is approved.
- **Reporting Requirements**
  - Awardees must provide a brief **midpoint update** (e.g., 6 months) and a **final report** summarizing:
    - Key activities and outcomes
    - Challenges and pivots
    - Next steps (e.g., external proposals, IP actions, clinical or customer engagement plans)
  - Awardees may be asked to present outcomes at an SBME seminar, showcase, or Advisory Board meeting.
- **Review and Selection**
  - Proposals will be evaluated on **innovation, translational potential, feasibility within the requested budget and timeframe, and team composition/mentoring plan**.
  - **Reviewers:**

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    - TSC members
    - OkBiostart representatives
    - Members of the SBME Advisory Board
  - Conflicts of interest will be managed according to standard academic review practices.
- **Funding Availability**
  - Funding is limited and subject to annual TSC budget allocation.
  - The TSC reserves the right to **partially fund** proposals, adjust the number of awards, or decline to fund in a given year if proposals do not meet program criteria.

Program Impact

Through this internal awards mechanism, the TSC seeks to:

- Accelerate the maturation of early-stage biomedical engineering concepts into robust, testable solutions.
- Provide a low-barrier, high-impact funding opportunity that complements larger institutional and external programs.
- Create a visible portfolio of translational projects that highlight the creativity and societal impact of the OU SBME community.
- Build a stronger bridge between classroom, laboratory, and real-world implementation, inspired in part by national experiential innovation models such as the National Medical Device Make-a-thon.

By investing in translational projects at all training levels, this program is intended to expand the pipeline of innovators and technologies emerging from the Stephenson School of Biomedical Engineering and to amplify their impact within Oklahoma and beyond.

Questions can be directed to Dr. Qinggong Tang (qtang@ou.edu).