



UPCAM + Request for Proposals in Advanced Manufacturing

Application Deadline: October 6, 2023

Funding Period: November 1, 2023 – June 30, 2024

Maximum Number of Grants Awarded: TBD based on proposals received. \$100,000 available.

Background & Vision: The goal of this University of Pittsburgh Center for Advanced Manufacturing (UPCAM) grant is to leverage the efforts of diverse faculty groups in the Swanson School of Engineering (SSoE) in the field of advanced manufacturing to kick start major initiatives. To enhance Pitt's national recognition in manufacturing and the visibility of our interdepartmental manufacturing research and education, UPCAM is requesting proposals from SSoE faculty to support growth in multi-investigator research and/or education offerings. The preparation of major proposals or establishment of new programs is highly demanding from the standpoints of time commitment and administrative requirements. This initiative serves to recognize those demands and to incentivize SSoE faculty to lead in the growth of major UPCAM-related activities.

Additionally, faculty are invited to apply for a supplement (up to \$5,000) from the **Center for Industry Studies + program (CIS+),** to help engineering faculty members form teams with researchers from the social sciences and other disciplines.

Objective: UPCAM funding can be used for (but is not limited to) any of the following:

- (1) the formation of research teams to prepare for large scale, external funding grants that are generally focused on advancing manufacturing technology (e.g., ERC, MURI, MRSEC, EFRC) – preparation activities can include multi-PI meetings and collaborator and/or funding agency visits
- (2) the planning and execution of advanced manufacturing workshops hosted by SSOE and focused on technological innovation to transform manufacturing approaches and practices
- (3) the development of a new certificate program in the general realm of advanced manufacturing (this can include support of faculty PI, students or bringing in outside senior industry personnel)
- (4) small equipment purchases or equipment repairs that encourage multi-department collaboration

Proposal topics outside the opportunities listed above will be considered on a case-by-case basis by the UPCAM Executive Committee.

Eligibility Requirements: Due to the interdepartmental nature of UPCAM we highly encourage Co-PI collaborations between SSoE departments (i.e., inclusion of at least two key investigators with current SSoE appointments in different departments). At least one UPCAM or CIS affiliated faculty member from SSoE (tenure or non-tenure stream) must be a PI on the proposal, however, collaborations with other Pitt faculty, staff and students are encouraged. Faculty that are currently not affiliated with either UPCAM or CIS should contact David Ruvolo (david.ruvolo@pitt.edu) if they are interested in joining. External partnerships with industry, government and academia are also highly regarded.

Budget: Budgets should be within the maximum range of \$40,000 (not subject to university overhead, but benefits must be applied) with reasonable and justifiable costs detailed in the application. All grants will be funded through June 30, 2024. Funds can be applied towards (but are not limited to) travel,

planning meetings, costs associated with generating preliminary data, proposal consultants, proposal prep costs, workshop expenses, PI and Co-PI summer salary support, student salary and equipment.

Matching Support: Matching support would be considered favorably in the proposal evaluation but is not required. If any matching support is being provided, this should be detailed in an accompanying letter of support (not counted toward page limits). As mentioned above, up to \$5,000 in matching funds will be made available to accepted proposals that promote collaboration between scholars in engineering and other disciplines as part of the CIS+ program.

Preparation and Submission of Application: Proposals should include the following sections:

- Summary (1 page)
- Proposal Narrative (no more than 3 pages)
- CIS+ supplement (if applying), (no more than 1 page)
- Budget and Justification
- Biosketches of PI and co-PIs

All documents should be emailed as a single PDF to upcam@pitt.edu with the subject "Last Name – UPCAM 2023 Proposal."

Proposal Evaluation: Proposals will be reviewed by a committee designated by the UPCAM Executive Committee. Reviewers will rate the proposals on the following specific guidelines:

- Impact: must show a vision for what future initiatives or capabilities will be generated from the investment.
- Feasibility: Does the proposed activity consist of a well-considered plan that can be easily executed given its particular environment and resources?
- Novelty: Creativity of the proposed activity. Does it introduce novel concepts or methodologies?
 Does it challenge existing standards and/or protocols to suggest new ones?
- Interdepartmental Implications: Does the proposed project encourage collaboration between researchers in more than one department?
- CIS+ program supplements will be reviewed by the CIS core staff and Advisory Board Members as needed. At the end of the grant period, CIS+ awardees are required to make a short presentation and submit a 2 page (max) outcomes report.

Follow-up Evaluation: Awardees will be required to submit a short progress report (1 page) no later than April 1, 2024, and a final report (2 pages) due by September 1, 2024. Additional details for reporting requirements will be provided if the proposal is funded.

For Additional Information:

David Ruvolo – <u>david.ruvolo@pitt.edu</u> Swanson School of Engineering <u>upcam@pitt.edu</u>