The Daniel J. Epstein Institute  
Viterbi School of Engineering  
University of Southern California  

Academic Year 2010 - 2011

Introduction

The objective of the Daniel J. Epstein Institute is to be the thought leader in shifting the profession’s paradigm from cost and time minimization to include quality of life factors as well. The Institute is soliciting proposals from faculty within the USC Daniel J. Epstein Department of Industrial & Systems for a number of activities and programs to launch research and scholarly initiatives that are innovative and forward-looking within the theme of enhancing quality of life.

Eligibility

All faculty who have a primary appointment within the Daniel J. Epstein Department of Industrial & Systems Engineering are eligible to serve as Principal Investigators. Faculty members who have primary appointments outside the Epstein Department can serve as Co-PIs. Co-PIs from outside USC must receive approval from the Institute before proposal submission.

Selection Criteria

A faculty review committee will evaluate proposals according to how closely the proposed activity matches the vision of the Institute, namely,

- To shape the future of the field of Industrial and Systems Engineering, with emphasis on enhancing the quality of life.

- To foster creativity and invention within the key facets of USC’s Daniel J. Epstein Department of Industrial and Systems Engineering including research and education.

- To create a vibrant intellectual environment at USC where world-class researchers in Industrial and Systems Engineering and related fields engage in the development of new ideas, thus positioning the Epstein Department at the forefront in thought leadership in the world.

Funding Guidelines and Restrictions

Budgets should be conservative and cost-effective. All proposals must include a budget with only direct expenses. The Institute does not fund Research Assistants or faculty salaries and reserves the right to request budget reductions based on available funds.
Submission

All proposals must be submitted by email to the Institute Director, Maged Dessouky, (maged@usc.edu). All materials for a given proposal must be combined into a single *.pdf file. The types of fundable activities that the Institute will support are outlined below. Please make sure to indicate the type of activity that you are proposing in your submission and all the necessary support material for the requested activity. All activities except the thematic research program will be evaluated on a rolling basis throughout the year. The thematic research program has a due date of 5:00 pm on November 15, 2010.

Fundable Activities

Visitors Program

The purpose of the Visitors Program is to host top scholars from academia and industry for short visits and/or residence for various lengths of time to foster research collaboration with Epstein faculty and students. In most cases, these visits should be in the order of days or weeks, and the Institute will provide the funds to cover travel to and from USC and any local expenses associated with the room and board for the visitor. In exceptional cases, the Institute will fund longer term visits as part of a faculty sabbatical. In such cases, there must be a clearly stated plan outlining the output of the proposed collaboration. Also, the Institute will consider requests for Epstein faculty to visit other academic and industry institutions, though such requests may be given lower priority.

For external visitors, the application will require the submission of i) a CV, ii) a letter from the host justifying the visit, the benefit of the collaboration, a proposed schedule, and the desired research output, and iii) a budget. For requests pertaining to Epstein faculty visiting other institutions, the application will require i) an invitation letter from the host university, ii) a letter justifying the visit clearly indicating a proposed schedule, the benefit of the collaboration and the desired research output, and iii) a detailed budget. Applications for the visitors program will be evaluated by a faculty committee.

Workshop and Event Organization

The Institute will provide support to host the demonstration and/or showcasing of research, organization of high-quality invited workshops or focused seminar series, and formation of study groups to explore new directions of research. The purpose of these events is the generation of white papers or position reports for wide distribution on research issues pertinent to the vision of the Institute.

The maximum amount that is available per event is $12,000. Applications for funding such events will be evaluated by a faculty committee. Applications must include i) a summary describing the event and its desired outcome, and a list of potential participants of the event, and ii) a budget including any possible cost-sharing support.
**Doctoral Student Travel**

The Institute will provide support for doctoral students in the Epstein Department to attend a conference or related event to present their research. Applications for the travel grants must be submitted by the advisor and must include i) the student’s name, ii) the title of the talk, iii) the name of the conference or event, and iv) a statement confirming that the student will be presenting the work. The maximum support per trip is $750 and at most one request can be made on behalf of each student in each academic year. Applications for doctoral student travel will be evaluated by the Institute leadership.

**Student Projects**

The Institute will provide support for student projects that will make a significant impact on the quality of life within economically disadvantaged communities. Proposed projects must utilize principles, tools, and techniques that are part of the ISE curriculum and must not exceed duration of one year. Applications for student projects must be submitted by a faculty advisor and include i) a clear and detailed description of the project including the ISE principles or tools that will be utilized by the project, ii) a support letter from the organization in which the proposed work will be conducted, and iii) a detailed budget. Student wages can be budgeted, but it is expected that some cost-sharing based on time be included in the proposal. Applications for student projects will be evaluated by a faculty committee.

**Mini-Grants**

The Institute will provide support for a number of miscellaneous activities that enhance the learning and research environment for Epstein faculty and students. Course material development, research retreats, and special social events that enrich the Epstein community are example mini-grant activities that the Institute will fund.

Applications for mini-grants will be evaluated by the Institute leadership. Mini-grant requests should be in the range of $200 to $2000. Applications must include i) a statement of the proposed activity and its contribution to the learning or research environment, and ii) a detailed budget.

**Thematic Research Projects**

The Institute will fund projects to facilitate research and scholarly activities under well defined, finite-duration themes that are strikingly innovative and forward-looking within the general theme of using Industrial and Systems Engineering principles to enhance quality of life. The Institute will not support activities that can be funded directly through external funding agencies, foundations, industry, or through internal sources, such as the Zumberge fund, the Viterbi innovation fund, etc.

The total funding available per year across all thematic research awards is $50,000 (direct expense). The earliest start date for thematic research projects in this award cycle is January 1, 2011. The Institute will not award more than one project to any PI, though PIs may submit multiple proposals. The Institute may grant 0, 1, or 2 awards depending on the quality of
proposals and availability of resources in each award cycle. The Institute may request budget reduction for the awarded proposals.

The proposal should not exceed 5 pages, excluding the cover page. Each proposal must include the following elements:

1. **Cover page**
   The cover page should include the proposal title, name of the PI and all other Co-PIs, and requested budget.

2. **Project Objective and Abstract**

3. **Background and motivation for the topic to be addressed**
   Problem to be addressed, what has been done previously, why it is important, and relevance to the Institute’s vision.

4. **Methodology**
   The methodology by which the project objectives will be accomplished.

5. **Tasks, Schedule and Deliverable**
   Steps that will be followed in executing the methodology, when they will be completed, and description of the research product.

The proposal must clearly state: *Why the proposed theme and associated activities must be supported by the Daniel J. Epstein Institute and not by other funding sources.*

In addition to the review criteria of aligning the research to the Institute’s vision, additional review criteria will be used to assess thematic research proposals. They are:

- Clear indication of how the proposed theme and associated activities enhance the reputation of the Epstein Department, and inspire future research trends and directions that are aligned with the Institute’s vision.

- Producing tangible products for wide public dissemination, such as physical/virtual demonstrations, proceedings, journal publications, white papers, reports, etc.

- Potential for follow-on funding from other sources

Applications for thematic research proposals will be evaluated by a faculty committee.

**Further Information**

All questions should be directed to the Institute Director, Professor Maged Dessouky, [maged@usc.edu](mailto:maged@usc.edu).