Proposal writers must follow the National Science Foundation’s instructions on “Broader Impacts.” Broader Impacts are one of two criteria important to NSF; the other is Intellectual Merit. To assist you with the Broader Impacts criteria, the IIT Research Office has developed a checklist of questions to ask yourself before you begin writing this section of your proposal. NSF instructions state:

“All NSF proposals are evaluated through use of the two National Science Board approved merit review criteria. In some instances, however, NSF will employ additional criteria as required to highlight the specific objectives of certain programs and activities.

“The two merit review criteria are listed below. Both criteria are to be given full consideration during the review and decision-making processes; each criterion is necessary but neither, by itself, is sufficient. Therefore, proposers must fully address both criteria. (GPG Chapter II.C.2.d.i. contains additional information for use by proposers in development of the Project Description section of the proposal.) Reviewers are strongly encouraged to review the criteria, including GPG Chapter II.C.2.d.i., prior to the review of a proposal.

“When evaluating NSF proposals, reviewers will be asked to consider what the proposers want to do, why they want to do it, how they plan to do it, how they will know if they succeed, and what benefits could accrue if the project is successful. These issues apply both to the technical aspects of the proposal and the way in which the project may make broader contributions. To that end, reviewers will be asked to evaluate all proposals against two criteria:

- **Intellectual Merit:** The Intellectual Merit criterion encompasses the potential to advance knowledge; and
- **Broader Impacts:** The Broader Impacts criterion encompasses the potential to benefit society and contribute to the achievement of specific, desired societal outcomes.

“The following elements should be considered in the review for both criteria:

1. What is the potential for the proposed activity to
   a. Advance knowledge and understanding within its own field or across different fields (Intellectual Merit); and
   b. Benefit society or advance desired societal outcomes (Broader Impacts)?
2. To what extent do the proposed activities suggest and explore creative, original, or potentially transformative concepts?
3. Is the plan for carrying out the proposed activities well-reasoned, well-organized, and based on a sound rationale? Does the plan incorporate a mechanism to assess success?
4. How well qualified is the individual, team, or organization to conduct the proposed activities?
5. Are there adequate resources available to the PI (either at the home organization or through collaborations) to carry out the proposed activities?

“Broader impacts may be accomplished through the research itself, through the activities that are directly related to specific research projects, or through activities that are supported by, but are complementary to, the project. NSF values the advancement of scientific knowledge and activities that contribute to achievement of societally relevant outcomes. Such outcomes include, but are not limited to: full participation of women, persons with disabilities, and underrepresented minorities in science, technology, engineering, and mathematics (STEM); improved STEM education and educator development at any level; increased public scientific literacy and public engagement with science and technology; improved well-being of individuals in society; development of a diverse, globally competitive STEM workforce; increased partnerships between academia, industry, and others; improved national security; increased economic competitiveness of the United States; and enhanced infrastructure for research and education.

“Proposers are reminded that reviewers will also be asked to review the Data Management Plan and the Postdoctoral Researcher Mentoring Plan, as appropriate.”

IIT Proposal Writers can use the following questions to help them address these instructions:

☐ Does your project include an IPRO, and if it does, can you describe the engagement of underrepresented minorities with your IPRO? For example, inviting high school students to view your research on IPRO Day and the potential impact on those underrepresented minorities?

☐ Are you planning to present to conferences, workshops, or other forums?

☐ Are women involved with your research; if so, how?

☐ Are people with disabilities engaged with your research?

☐ Are diverse populations involved; if so, how?

☐ Are you planning to engage high school students with your research in some way? For example, speaking at a local high school with students from underrepresented minorities.

☐ What impact will your research have on STEM education?

☐ What graduate or undergraduate classes will the research contribute to?

☐ Have you had or do you have plans to engage with the press/media?

☐ What is your engagement with public policy or government entities (e.g., DOD)?

☐ Are there standards that the research will positively impact?

☐ What have you already done to illustrate your involvement in any of these areas?

☐ How will the research enhance the skill set of the research team itself, including faculty?

☐ Do you have a direct relation with a company or companies that will benefit from the research?

☐ Are there portions of IIT’s Mission Statement you can cite in relation to the issues in the NSF instruction on Broader Impacts?  IIT’s Vision/Mission Statement follows: “Vision: IIT will be
internationally recognized in distinctive areas of education and research, using as its platform the global city of Chicago, driven by a professional and technology-oriented focus, and based on a culture of innovation and excellence. Mission: To provide distinctive and relevant education in an environment of scientific, technological, and professional knowledge creation and innovation.”