Summary of Blue Ribbon Committee on Large Proposals

**Strategic Research Development:**

- The committee found that research at CEAS is often “reactive” rather than “proactive”. Our faculty are very good in responding to existing opportunities but our research is not sufficiently strategic to be “ahead to the curve”. We need to develop strategic research thrusts in areas with anticipated (i.e. future) needs and funding opportunities.

- When responding to large center-size proposal we often lack one or more faculty with crucial expertise (either fundamental or technology specific research). While such expertise can be typically found externally we often do not have the “critical mass” on-site to form a competitive core-team. Departments should coordinate their hiring plans among each other and, if possible, align their hiring plans with the college-wide strategic research thrusts.

- The College and the Campus should develop strategic partnerships with other educational institutions (e.g. community colleges, minority serving institutions), industry, and the state. These partnerships will be crucial to ensure the impact of our research on workforce development. However, these partnerships take time to develop and need to be established and maintained along strategic thrusts, independent of a particular proposal. This implies that in general these partnerships need to be initiated by research centers, departments, or the College, and not by individual PIs.

**Incubation of new bold ideas:**

- The committee found that one major issue that prevents us from winning center-size awards is a lack of bold and novel ideas that are at the fore-front of engineering research. Such ideas need to be developed before solicitations are issued.

- The ideas should be aligned with a broader strategic vision of the College and the Campus.

- To incubate new ideas, funding should be provided to form small teams of 2-3 PIs in order to develop a “big idea” into a competitive proposal; the funding period should be 2-3 years; resources should be sufficient to fund one graduate student or post-doc who will develop initial results.

- A major goal of the incubation projects should be to submit one or multiple proposals, including at least one multi-million dollar proposal.

**Additional recommendations:**

- Provide resources and support to develop large proposals such as professional writers and consultants with specific insight into the funding agency. Resources for a center-size proposal may significantly exceed what is currently provided through the ADR office. The cost of developing a competitive large center-size proposal may easily $50k.
• Change the culture of how big proposals are developed, e.g. by adopting procedures used at some of the institutes (internal reviews, rigorous schedules, etc).
• Develop a comprehensive support system for developing high-quality education and outreach plans. The current ad-hoc approach is neither efficient nor successful.
• Provide incentive / expectation to develop large proposals. Currently there is not sufficient recognition for leading or being part of the core team of a large center-size proposal. Faculty pursuing a large center-size proposal should receive support that allows them focusing on the development of the proposal while managing their ongoing research and teaching activities. The latter is in particular an issue for successful faculty with large research programs.