Introduction

Forging the Future, the UAB strategic plan for 2018-2023, provides a guide for our continued success as a world-class university. Our record in teaching, scholarship, patient care and service demonstrates a rich history of serving society. Forging the Future builds on that tradition by introducing the concept of the “grand challenge.” These are projects that will muster our individual and collective strengths to address significant and pressing needs — resulting in positive and tangible outcomes for our university, our city, our state and society overall. In other words, we will define one or more Grand Challenges, address them and work toward solutions.

What Is a Grand Challenge?

Simply put, a Grand Challenge is a significant problem that when solved will positively impact a large number of people and society in general. It is large in scope and results from complex causes. Progress toward solutions requires a combination of innovative approaches, technologies, treatments and/or policies. Interdisciplinary and convergent approaches are essential. Examples of Grand Challenges include:

- Removing the threat of nuclear war from the world
- Providing access to clean water in India
- Reducing obesity in America
- Transitioning Los Angeles County to 100 percent sustainability by 2050
- Making Birmingham the [healthiest/most livable/best public art] city in America

The UAB Grand Challenge will serve as an opportunity to unite university activities (teaching, research, scholarship, commercialization, patient care, service) along with the capabilities of partnering organizations to solve large-scale problems. It is not intended to hinder individual or departmentally based activities, but instead to augment and enhance them.

The UAB Strategic Investment Fund will provide substantial funding for one or more Grand Challenge efforts, provided that the support is matched from other sources with new and/or verifiable in-kind support. A UAB Grand Challenge may be supported from the Strategic Investment Fund for up to 5 years.

Below are the process and anticipated milestones for the Grand Challenge Request for Proposals. Since the UAB Grand Challenge initiative is uncharted territory, some of the dates are subject to change. The May 1 deadline and deliverables for Step One – Concept Paper are final, but all remaining steps and the Reporting stage are still in a draft form and will be revised according to the findings during workshops and lessons learned.

Milestones:

Step One – Concept Paper, due May 1, 2018

Teams and individuals are encouraged to submit a concept paper through this form on the UAB Grand Challenge site. The concept papers will be used to identify approximately three to four topical areas for
subsequent workshop(s) and to allow submitters to find commonalities among themselves. Concept papers will be shared on the UAB Grand Challenge site.

Concept papers should be 2 pages in length (12-point type, Times New Roman font, 1-inch margins) and should include the following:
- Name of the UAB Grand Challenge;
- Principal point of contact’s name, title, email address and phone number;
- Description of the problem to be addressed, including its importance to the state of Alabama and how it is generalizable to other states, the U.S. and the world;
- Desired outcomes and the conceptualization of the plan of work to achieve them; and a
- List of potential team members (individuals and organizations) from inside and outside UAB – this is NOT included in the 2-page count.

Step Two – Workshop(s), late Spring/early Summer 2018 (DRAFT – DATE SUBJECT TO CHANGE)

We anticipate supporting one or more facilitated workshops designed to foster team formation, engender outside-the-box thinking, and share lessons learned from other university Grand Challenge efforts. In addition, the systems approach will be introduced during the first workshop as a guide for the development of proposals and the implementation of UAB Grand Challenge projects. This approach requires detailed definition of requirements, identification of tasks and challenges, methods for performance of the tasks and resolutions to challenges, schedule and budget requirements, review milestones, risk and associated mitigation plans, verification methods and final deliverables. Concept paper submission is NOT required to participate in the workshop(s).

Step Three – Planning Grant Proposal, due early Fall 2018 (DRAFT – REQUIREMENTS AND DATE SUBJECT TO CHANGE)

The planning grant is intended to provide resources to further develop ideas, facilitate team formation and engage stakeholder community networks. As a result of planning grant activities, Grand Challenge teams will be better equipped to propose projects with large societal impact. Funding may be used to organize activities such as workshops, conferences, travel and time to support team formation, nurture external relationships, fill expertise gaps and identify specialized resources. While encouraged, it is not mandatory to have submitted a concept paper in order to submit a planning grant proposal. The deliverable expected at the conclusion of the planning grant period is a full proposal.

Total support for planning grants will be approximately $150,000. Three to six proposals will be funded. Proposals should be 5 pages in length (12-point type, Times New Roman font, 1-inch margins) and should include the following:
- Title page (not included in page count):
  - Name of the Grand Challenge;
  - Name and contact information for the principal investigator; and
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- List of identified and potential team members (individuals and/or organizations) and their roles. This includes members from inside and outside of UAB.
- Description of the Grand Challenge problem to be addressed, including its importance to the state of Alabama and how it is generalizable to other states, the U.S., and the world;
- Description of the planning process, including timeline for the submission of a full proposal;
- Schedule of milestones;
- Budget and budget justification (not included in page count); and
- Biosketches of the principal investigator and leadership team members (not included in page count).

In evaluating the planning grant proposals, the following criteria will be considered:

- Importance of the Grand Challenge;
- Alignment with UAB’s strategic priorities;
- Plan for creating interdisciplinarity and/or convergence;
- Qualifications of the PI and identified leadership team members;
- Potential for engagement of many/all facets of the university – research, scholarship, teaching, service, patient care, student life, community engagement, alumni, athletics, etc.;
- Partnerships with stakeholders outside the university;
- Realistic resourcing plan; and
- Potential ability to attract sustainable external funding.

The submission of a planning grant is a prerequisite to submit a full proposal.

Step Four – Full Proposal, due January 2019 (DRAFT – REQUIREMENTS AND DATE SUBJECT TO CHANGE)

The submission of a planning grant is a prerequisite to submit a full proposal. Total UAB Strategic Investment Fund support for the Grand Challenge program will be approximately $1,000,000 per year for three to five years, after which time projects should be externally supported. One to two proposals will be funded. Proposals are required to follow the systems approach, described in Step Two, for the implementation of the Grand Challenge. Planning grant teams will be invited to submit a full proposal of approximately 15 pages, which includes the following:

- Title page (not included in page count)
  - Name of the Grand Challenge;
  - Name and contact information for the principal investigator; and
  - List of identified and team members (individuals and/or organizations) and their roles in the project. This includes members from inside and outside of UAB.
- Description of the problem to be addressed, including its importance to the state of Alabama and how it is generalizable to other states, the U.S. and the world;
- Short-term and long-term objectives, including an impact statement;
- Description of the alignment between the proposed Grand Challenge objectives and the university’s strategic priorities;
- Timeframe to accomplish the project goals, including milestones;
- Implementation plan;
- Specific and general approaches to securing external support for project sustainability beyond 5 years;
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- Short biosketches of the leadership team and a description of their commitment to the Grand Challenge (not included in page count);
- Letters of support, including from all collaborating deans and entities (not included in page count); and
- A detailed and realistic resourcing plan to include faculty/staff costs, space needs and programmatic costs. This should include indications of commitment for all cost matching, faculty hires, space allocation and other costs (not included in page count).

In evaluating the full proposals, the following criteria will be considered:
- Importance of the issue to be addressed;
- Ability to achieve success;
- Opportunity to gain national pre-eminence for UAB;
- Alignment with UAB’s strategic priorities;
- Potential for real interdisciplinarity and/or convergence;
- Qualifications of the PI and leadership team;
- Potential to utilize and build university strengths;
- Potential for engagement of many/all facets of the university – research, scholarship, teaching, service, patient care, student life, community engagement, alumni, athletics, etc.;
- Partnerships with stakeholders outside the university;
- Realism of the resourcing plan;
- Strength of the implementation plan; and
- Potential ability to attract sustainable external funding.

**Reporting (DRAFT – REQUIREMENTS AND DATE SUBJECT TO CHANGE)**

The following reporting requirements and reviews will be applied to the UAB Grand Challenge project(s):
- Brief quarterly project status, cost, schedule and risk mitigation report;
- Detailed annual report due on the anniversary of the project start date;
- Extensive project review in Year 3; and
- Final review at the conclusion of the project.

Funding will be contingent upon successful completion of milestones as described in the proposal and detailed in the annual reports and reviews.