Research and Discovery Phase II Planning Committee Report to Chancellor Steinmetz 9 September 2016 **Committee Members:** Scot Burton (WCOB), Jennifer Webb (ARCH), Conra Gist (COEHP), Paul Millet (ENGR), Daniel Rainey (CAFLS), Melody Herr (Library), Sara Gosman (Law), Lynn Jacobs (ARSC), Doug Rhoads (ARSC), Julie Stenken (ARSC), Patricia Herzog (ARSC), Chris Frala (VCFA), Amy Schlesing (VCAD)

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<u>Preamble:</u> The University Planning committee for reviewing and reporting on **research and discovery** themes at the University of Arkansas has analyzed the departmental overview documents provided to the committee.

The unit reports were as diverse as our university. In some instances, it was challenging to compare areas of research and creative activities across the variety of report styles and content produced by different units. Yet the committee recognizes and applauds the numerous and unique research and creative activities on this campus. Most reports primarily summarized the current state of strengths/concerns rather than providing visions for new areas of research/discovery for exploration.

In this document, we identify commonalities in the reported strengths, concerns, and future visions. We propose a number of responses that help answer the question: "How Can We Get Better?" by building upon our strengths and addressing our concerns:

1. Raise our research profile and support our premier faculty in their research endeavors. Common themes identified within the unit reports include:

- Recruit, hire, and retain more faculty to add expertise to burgeoning areas.
- Increase funded research and creative activities by providing support to faculty for grant proposals.
 - For example, release time for grant writing; unit-specific grant-writing support staff.
- Expand and/or develop staff that is well compensated to facilitate work and bring expertise to efforts.
- Support faculty research productivity, as well as conference and association participation.
- Assess annual review process to determine bias in short-term vs. long-term incentives.
- Facilitate better research-teaching balance and better work-life balance.
- Consider the role of instructors and what they can bring to research endeavors.
- Strengths: A theme repeatedly identified in the unit reports is the top-quality faculty who seek to not only advance research knowledge and creativity, but also care about their students' learning at the graduate and undergraduate level. A positive energy regarding faculty involvement at all levels of research, teaching and service is prominent throughout the unit reports. At the University of Arkansas, we have a creative, diverse, and energetic faculty willing to take risks in order to further research and creative activities.
- Concerns: The outstanding energy of the faculty is greatly tempered by ongoing concerns in several areas: low salaries relative to peer research institutions; significant needs for new tenure-track faculty to bring in new ideas and collaborations, and most importantly additional expertise; high stress of maintaining a research productivity while meeting the needs of our students at the graduate and undergraduate level; reward processes not transparently defined, especially in interdisciplinary programs; and necessary support for wide range of research/creative endeavors. Reliable funding is a consistent concern across units. Annual review processes appear to incentivize short-term gains rather than long-term innovation and performance in research and discovery activities.

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2. Foster and sustain interdisciplinary research in the university and with external stakeholders. Common opportunities identified within the unit reports include:

- Redevelop organizational structures to break down walls between departments and colleges, and promote positive interactions, collaborations, and research endeavors.
- Define, create, and foster interdisciplinary opportunities with external stakeholders.
- Improve industry-academic partnerships to foster industrial research funding.
- Train faculty, departments, and colleges on how to engage in interdisciplinary research.
- Strengths: There is broad awareness of the benefits and need for interdisciplinary work. An excellent example is the variety of interdisciplinary programs hosted by the Graduate School. Many newly established programs are growing. Units desire collaboration with external stakeholders as a way of enhancing research outcomes, establishing funding, and creating opportunities for long-term efforts.
- <u>Concerns</u>: There is no system in place to reward those who do interdisciplinary research, and sometimes the allocation of limited resources serves as a disincentive. Operational definitions for recurring words and interdisciplinary themes need to be better defined.

3. Develop priority plans to increase research space, facilities, and infrastructure on campus. Common opportunities identified within the unit reports include:

- Increase the quantity and quality of space for research and creative activities across colleges.
- Strengths: Some facilities exist where space and equipment is underutilized.
- Concerns: There is inadequate workspace for new faculty, graduate students and staff, as well as inadequate lab space for research. Aging infrastructure/equipment leads to loss of productivity while a knowledge gap in what is available often leads to underuse. Other issues include: lack of internal funding for startup projects, gaps in library resources, lack of long-term research/discovery support and funding to maintain high productivity, and competing resources with undergraduate teaching loads. Few departments have adequate, fairly-compensated staff so significant administrative work is transferred to faculty.

4. Expand graduate programs by increasing numbers of students, stipends, and programs. Common opportunities identified within the unit reports include:

- Develop new graduate programs: 24 new programs listed 7 doctoral and 17 masters.
- Add new graduate assistantship funding and increase existing stipend funding.
- Recruit quality graduate students and expand the proportion who are doctoral students.
- Expand support for travel stipends and other resources to support professionalization.
- <u>Strengths</u>: There is graduate student support through travel stipends and fellowships (DDF, DAF).
- <u>Concerns</u>: Issues include: low number of graduate students on research assistantships; need
 for more and better recruitment; limited quality and diversity of students; insufficient resources
 to accommodate student needs; need for graduate programs in high-demand areas; and
 pressure from undergraduate teaching loads.

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5. Support a more demographically diverse university by increasing faculty and student diversity. Common opportunities identified within the unit reports include:

- Increase summer student research camps and other recruitment efforts.
- Better inform potential students of research facilities and opportunities.
- Enhance networks with HBCU, Native American, and Hispanic serving institutions.
- Improve recruitment of quality graduate students from diverse backgrounds across all levels.
- Encourage and support faculty and student participation at professional meetings that promote/develop research activities among diverse/underrepresented student populations.
- Strengths: The U of A has several ongoing projects that seek to introduce students with diverse backgrounds to research/discovery efforts and our campus (e.g., George Washington Carver Research Program, AIM, NSF REUs). Many units aspire to address diversity internally.
- Concerns: Unit reports identified: limited outreach and networking with undergraduate programs that have diverse student bodies; limited resources to inform diverse student populations about the wide range of degree and career opportunities available on campus; and insufficient funding for the George Washington Carver Research Program.

6. Design effective strategies for communication across disciplines and with external stakeholders. Common opportunities identified within the unit reports include:

- Create better communication opportunities for and results of campus research/discovery activities.
- Build cross-disciplinary exchanges about new and ongoing projects across campus.
- Strengths: Internal communication is recognized across most units as an important part of good research practices. Interdisciplinary research has grown in recent years and continues to be a priority. We have major, world leading companies in the region.
- <u>Concerns</u>: It is difficult to know what interdisciplinary work is already occurring or how to
 further foster it. This leads to interdisciplinary opportunities being overlooked simply
 because of lack of awareness. There is a lack of staff support in communication of
 funding/grant opportunities, best practices, and lessons learned in finding/receiving awards.