EXECUTIVE SUMMARY

Convened by The Merrill Advanced Studies Center on June 11 - 13, 1997, 23 administrators and senior faculty scientists from four Big Twelve universities gathered in Valley Falls, Kansas, for the first "Planning for the Research Mission of Public Universities in the 21^{st} Century" conference. Participants had been charged to share their concerns regarding traditional institutional perspectives toward specified research issues. Additionally, they were asked to convey their ideas for a smooth and productive transition plan in order to ensure successful funded research in the next century.

Four panel discussions were held during the conference. Chancellor, Researcher, Dean, and Vice-Chancellor/Provost panels focused on four defining issues:

- The challenge to encourage colleagues invested in traditional, conservative disciplinary boundaries to engage in more flexible, cross-disciplinary configurations of research enterprise
- The need for externally-generated funding in order to support an on-going research enterprise
- The demands on researchers to be available for training graduate students in the laboratory and instructing undergraduates on a more didactic level
- The need to educate the public and non-participating regular faculty as to the highly technical substantive and financial realities of today's externally-funded research programs

Following are some of the more significant points developed by each panel.

CHANCELLORS PANEL

Dr. Robert E. Hemenway, Chancellor University of Kansas **Dr. James Moeser, Chancellor** University of Nebraska - Lincoln

- At the national level, a school's research recognition determines its status. Our regional universities are not big enough to compete on this level; we need to construct interdisciplinary complexes.
- Scientists (funded in large part by "big government" over the past 50 years) need to consider what is happening to "big research" in an era when government is down-sizing. Are there ways to form partnerships with big business to obtain research support without losing our intellectual integrity?

- Accepting corporate funding for research initiatives is fraught with sticky questions: Who will retain the rights to end products? Is the desired work simply "contract research" which doesn't develop new ideas?
- Universities need to make some changes and adapt quickly to several academic issues: academic departments (some of which are ceasing to be relevant) may not be the best "unit" structure; tenure needs to be re-examined; descriptions of what we have to offer (course titles) need to be updated/revamped on a regular basis.
- It's important for the research faculty to become involved with faculty governance. Often, this group is filled with faculty who have little or no interest in scholarship or research, who are resistant to change of any kind. This body can easily become the engine of blockade to furthering the research mission.
- Trying to be all things to all people is a recipe for mediocrity. Marginal programs should be downsized; newly available funding should go into stronger programs.
- Legislators operate on the premise that our universities are designed mainly to provide teaching and undergraduate education. Consequently, when dealing with the representatives to our state legislatures, we should focus on these basic functions.
- Universities need to be the voice of research to our society at large; there is no knowledge without inquiry. There is a problem in the way research is perceived and prioritized in our society. It's important to quash the attitude that science, as an enterprise, is just for the elite few.
- We have allowed research to be cast as the enemy of education by: permitting "teaching vs. research" to turn into a public debate, making basic science courses unattractive to undergraduates, providing inadequate undergraduate research opportunities, and not training the humanities faculty to work cooperatively.
- Universities need to be more responsive to the needs of taxpayers. Legislators make funding decisions which reflect American public opinion. Until recently, the public held its universities in the highest esteem. Currently, they see faculty as a "protected elite."
- Important steps for regional universities include striving to capture our states' top freshmen, focusing on excellence on all levels, developing character and value in our students so that our institutions will stand for something.

PANEL OF UNIVERSITY OF KANSAS SENIOR RESEARCHERS

Dr. Paul Cheney

Smith Mental Retardation and Human Development Research Center University of Kansas Medical Center

Dr. Thomas N. Taylor

Department of Botany, Natural History Museum, Biodiversity Research Center

Dr. Elias K. Michaelis

Pharmacology & Toxicology Department Higuchi Biosciences Center, Center for Neurobiology & Immunological Research, Center for Biomedical Research

Dr. Sidney A. Shapiro Rounds Professor of Law

- Cutting edge research requires an interdisciplinary approach. Consequently, institutions that support "cross-pollination" among their scientists are those which will survive.
- For collaborative research to be successful, all participants must be fully involved, make a unique and needed contribution, see significant and tangible results, and receive appropriate recognition and credit.
- Interdisciplinary graduate degrees will be the norm in the future; now is the time to move toward interdisciplinary training.
- Most researchers are driven by uncertainty and urgency, constantly bothered by fears of "falling behind," and always wondering "Am I asking the right questions?"
- Fierce national competition for grant funds stimulates faculty to strive to come up with the best ideas. Success at the national level establishes the authenticity of the faculty.
- Today's scientist, besides having excellent research skills, must have entrepreneurial skills, be competitive and willing to gamble.
- Without inquiry and research, we would not have a true research university. Consequently, the business of funding research is part of the public business.
- Time and money are the paramount issues involved in the teacher vs. researcher dichotomy. It is imperative that institutions value teaching and research equally.
- Faculty time might be more efficiently spent if academic departments had more flexibility so they could assign individual faculty to different proportions of teaching/research/service. Faculty should be placed in slots where they can be most effective.
- Researchers need sophisticated advocacy skills.
- Undergraduate education is the foundation for future funding; citizens and legislators want good teaching. Undergraduates should be encouraged, and opportunities should be made available for them, to get involved in laboratory research.

- Institutional goals need to be shared by the public at large. Even if our universities do an excellent job internally of defining and defending goals, the effort will go no where if the public isn't "on board."
- Public relations matters must be coordinated with the university's goals to be effective.

DEANS PANEL

Dr. Larry Clark, Dean Arts and Sciences University of Missouri – Columbia

Dr. Brian Foster, Dean College of Arts and Sciences University of Nebraska – Lincoln **Dr. Andrew P. Debicki, Dean** Graduate School and International Programs University of Kansas

Dr. Sally Frost-Mason, Dean College of Liberal Arts and Sciences University of Kansas

Dr. Deborah Powell, Dean School of Medicine University of Kansas Medical Center

- People who have problems with the six year tenure review are often those who are doing interdisciplinary work, which is what we purport to want them to do.
- Approximately 95% of academic jobs are not at research universities. However, we socialize our doctoral students to believe that jobs at other types of institutions are "below" them.
- In the past, patient fees financed some of the unfunded research carried on in medical schools. Since the advent of managed care, it has become imperative to figure out mechanisms to generate funding for this research which was formerly paid for out of clinical fees.
- It's important to find excellence in our faculties, and then nurture and support each member's strengths and interests. When we insist that everyone be a complete scholar, we are, perhaps, dishonoring the distinctive strengths of individual faculty members.
- Academic departments are the vessels that hold resources. They are often very conservative. They protect their resources by guarding their boundaries; if these boundaries are breached, the fear is that resources will flow out.
- Decentralization can strengthen a department (e.g., cross-listing courses, interdisciplinary curricular arrangements.)
- The vast majority of time in departmental meetings is devoted to teaching issues, not research concerns.

- Funding is inherently project-oriented (i.e. short-term), so very little long-term planning is possible. This orientation distorts the university agenda.
- We need to do a better job of training our graduate students to be teachers. Greater attention should be given to mentoring and informing graduate students about the realities of the job market and about the different types of possible teaching positions. In medical schools, the basic science faculty have never been taught how to teach medical students. Consequently, medical schools are also realizing that they need to spend more time on teacher training.
- There needs to be some flexibility within the six year tenure review requirement, especially for younger women. Women aren't productive at the same time in their careers as men, but overall, they do as much research as men; it's simply on a different timetable.
- Related to the (over) emphasis placed on research, many universities are hiring a lot more part-time teachers who do not carry research obligations. We have always advocated to the public that we are places where research and teaching are intertwined; that's why students pay more. However, this claim will become impossible to defend if we begin to hire more of these part-time teachers (winding up with a community-college level of teaching) and try to couple that with cutting-edge research.
- The future of public universities is tied to working with the private sector. Unfortunately, universities don't know how or don't want to deal with the private sector. We need to learn how to interact with industry, how to "tell the story."

PROVOST/VICE-CHANCELLOR PANEL

Dr. Al Chapman, Vice-Chancellor Academic Affairs University of Kansas Medical Center **Dr. Nancy Mergler, Senior Vice-President and Provost** University of Oklahoma

Dr. David Shulenburger, Provost University of Kansas

- As research foundations proliferate and technology transfer activities intensify, we must be aware of, and respond appropriately to, conflict of interest issues. Legal action against the institution is a virtual certainty, and is part of the cost of doing business.
- To break down departmental barriers, institutions might include extra-departmental faculty (who have an interdisciplinary research viewpoint) on search committees; orient new faculty in a manner that establishes loyalty to a region, state and the institution; enhance cross-disciplinary knowledge; encourage flexibility of appointments; use retired faculty in a more deliberate manner; cut red tape for grants; and re-examine indirect costs.

- Our institutions have the franchise to be research universities, but we also have the duty to educate our states' sons and daughters. It's absolutely necessary to do quality instruction if we want to continue the research mission.
- "Virtual universities" can be of great benefit to society, especially to people with disabilities. However, universities are particularly vulnerable to this upcoming technology, especially at the freshman and sophomore level (i.e. our cheapest instruction). If we lose this monetary foundation, there are implications for future support of research. We need to make sure that the campus is a special place for learning that cannot be replaced by a computer.
- Our institutions carry out research (i.e. we *create* knowledge) which we immediately *give* away. Private publishers take up this information, and then turn around and *sell* it back to us at exorbitant costs. A big question facing us now is whether universities or private enterprise will have the ultimate control of knowledge resources.

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All participants voiced the sentiment that there needs to be further dialog between and among our four institutions, hopefully at future events such as this one. Several administrators spoke of the need to include more faculty members in the interchange of information in order to ensure that all perspectives were equally explored.

The preceding summary is based on more complete remarks by each of the panel participants, plus commentary by other attendees. In the following section are text versions of the panelists' presentations.