

K-INBRE 2008 Symposium
Remarks by EVC and Provost Richard Lariviere

“Bioscience and Medical Research: The Kansas Advantage”

Saturday, January 19, 2008
InterContinental Hotel, Salon 1A/1B
Country Club Plaza, Kansas City, Missouri

The Provost will be introduced by Steve Warren.

- Thank you, Steve, and thanks also to Joan Hunt and her staff for all the planning and effort that went into hosting this year’s Symposium.
- Joan and Peter Smith, associate director of K-INBRE, [**Kay IN-bree**] were in Lawrence yesterday with our very special guest, Dr. Barbara Alving. It was an opportunity to introduce Dr. Alving to a variety of current and anticipated research initiatives, including:
 - Bi-campus drug discovery and delivery;
 - Bioinformatics;
 - The COBRE programs; and
 - Efforts aimed at training the next generation of research scientists – that is, the students in our midst who will one day succeed -- and exceed -- us.
- We greatly appreciated her willingness to build a visit to Lawrence into her plans.
- The presentations yesterday took place at our Multidisciplinary Research Building, or MRB, which opened in 2006. From the third floor, you can look across to where the third and fourth phases of our Structural Biology Center are nearing completion. We will dedicate that facility later this year.
- Very nearby we anticipate placing a new complex for KU’s nationally recognized School of Pharmacy.

- Expanding the School to provide more pharmacists in Kansas is a high-priority, \$50 million, state initiative endorsed by Governor Sebelius in her State of the State Address on Monday. We are grateful for her strong show of support.
- In time, other research facilities will be built on this emerging biosciences campus within a campus at Lawrence.
- In a larger sense, however, I'm also describing an entirely new approach to the way we think about research at KU.
- It is multi-disciplinary, multi-campus, multi-dimensional and, yes, "multi-millions." There are also multiple beneficiaries of what we do, as we translate research into invention into venture.
- Cooperative research at the Lawrence and Medical Center campuses – and the application of that to pioneering cures and treatments – is no longer incidental or even accidental. It is intentional and integral to the work, and becoming more so.
- That is as it should be. We owe this to the taxpayers whose generosity and patience makes our work possible.
- Now, Lawrence is not alone in expanding and updating our research infrastructure. The Kansas Life Sciences Innovation Center at the Medical Center is another spectacular example.
- Kansas State, Wichita State, and other Symposium participants have made similarly impressive investments that – taken together – have expanded the state's research capacity considerably.
- Frankly, these investments were long overdue in Kansas.
- Given the inevitable uncertainty of federal funding for research, and the heightened competition for scarce grant dollars, we are often tempted to feel anxiety about the future of basic research in this country. Can we maintain and sustain what we've created?
- Indeed, if support for such agencies as NIH is not soon rekindled, some of that anxiety will be well-founded.

- Anxiety is already high among that “next generation of research scientists” I spoke of, the ones jostling each other for their first grant, first publication, and the opportunity to show their stuff in the classroom and lab.
- But I remain optimistic – partly because I’m in Kansas.
- I wasn’t always in Kansas, but I’ve always been optimistic! I spent most of my career in Texas – a state not known for small thinking or its modesty.
- And I grew up in Iowa – what poet James Hearst called a “Land of Beginnings” – where a handful of corn is a promise of harvests to come.
- The investment this country has made in research infrastructure, researchers, and research itself is a wonderful and visionary promise of harvests to come. In this case, the bioscience harvest is:
 - Healthier people,
 - Healthier plants and animals,
 - More productive crops and livestock,
 - Stronger, less expensive composite materials, and
 - Everything good that grows out of the questions we ask and the answers we find in our research.
- Funding is finite. But our need to know is infinite. Finding the balance between those two points is the challenge we face as advocates for basic research and enthusiasts for the applied research that stems from it.
- But I remain optimistic – especially because I’m in Kansas, a state whose motto (“To the stars, through difficulties”) is a perfectly hedged Midwestern statement of exuberance tempered by experience.
- Last year, the University of Nebraska Press published a collection of essays about the Cornhusker State. Its title – *The Big Empty* – is no doubt how some people view the entire Great Plains region. It doesn’t show up on their mental map.

- We must change that view, especially where bioscience research is concerned. What seems merely empty to some appears boundless to others – “a place of possibilities” for realistic dreamers like the late Bill Narayan of KUMC – intent on translating research dreams into medical realities.
- Kansas has been thinking big in recent years. Examples:
 - **The Kansas Bioscience Authority** was created by the Legislature in 2004. Its mission is to reinvest more than \$500 million in tax revenue over 15 years in ways that grow the bioscience industry and the state’s economy.
 - **KansasBIO** was established at about the same time and serves – under the gifted leadership of Angela Kreps – as the voice for the biotech industry in Kansas and an advocate for the research that makes innovation possible.
 - **The Kansas Technology Enterprise Corporation (KTEC)** is a dynamic private/public partnership dedicated to stimulating technology-based economic development in Kansas. With the creative leadership of Tracy Taylor, KTEC does that through Centers of Excellence on university campuses and other strategic investments.
 - In 2002, the **Legislature authorized bonding for research** facilities at Kansas State, Wichita State, and KU’s Lawrence and Medical Center campuses. This was a courageous move in the midst of a recession, but it signaled the state’s growing appreciation for bioscience research as a sustainable pathway to a stronger economy.
 - **New local organizations** – such as the Lawrence-Douglas County Biosciences Authority – are also investing public resources in an attempt to nurture research and create job opportunities in their communities.
 - Finally, KU is aggressively pursuing **National Cancer Institute designation as a Comprehensive Cancer Center**. Achieving this goal is KU’s highest priority, and was once more endorsed publicly by Governor

Sebelius in her State of the State address. Her budget proposal recommends a continued annual state investment of \$5 million toward NCI designation. (A \$5 million annual appropriation has the same benefit as a \$1 billion endowment) We are most grateful for her support.

- The **Kansas Bioscience Authority** – guided by its courageous and talented president, Tom Thornton – merits special attention. It is truly “The Kansas Advantage” and a model for other states looking for ways to invest productively in bioscience, medical research, animal health, biomaterials and anything else you can imagine that’s carbon-based.
- On Wednesday, the Authority Board acted on an astonishing array of investments that will benefit Kansas in many ways:
 - Blake Peterson of Penn State and Juergen Richt **[RICKED]** of Iowa State were designated “**KBA Eminent Scholars**” and will come to KU and Kansas State, respectively, this year.
 - These appointments represent commitments of nearly \$6 million, with the expectation that their research will grow in volume, attract other researchers of equal caliber, and result in commercial opportunities in the near future.
 - A \$2 million commitment was made in support of a KU grant proposal to NSF for a **biomaterials research center**. Wichita State is our partner in the \$12 million, six-year proposal. While the match is contingent on the success of the proposal, it’s a significant show of support from the state.
 - Finally, KBA announced planning grants for the development of three “**KBA Centers of Innovation.**”
 - When approved later this year, the centers will receive tens of millions of dollars in long-term funding from KBA for research in biomaterials, drug delivery, and advanced plant design. The focus of the centers is commercialization, and the program requires close collaboration between Kansas companies and Kansas universities.

- What I'm describing is a state that is mobilizing and marshaling its universities and their research strengths as never before.
- Probably the best example of this is the state's National Bio and Agro-Defense Facility (NBAF) consortium.
- NBAF will be a \$451 million, 500,000-square-foot facility — one of the largest federal research facilities in the country and the largest in the Midwest. It will provide integrated research, response, and diagnostic capabilities to protect animal and public health.
- Sites in Kansas, Mississippi, Texas, North Carolina and Georgia are still under consideration. In Kansas, NBAF would be ideally located: in Manhattan, on the Kansas State campus.
- It took an extraordinary degree of bipartisan regional cooperation – by federal and state elected officials, the Bioscience Authority, KTEC, higher education leaders, local communities and businesses – for Kansas to emerge as a finalist in this competition.
- What the NBAF consortium has demonstrated is the state's ability to rally single-mindedly around a common research and economic development goal that matters to Kansas and the whole country.
- This would definitely put Kansas on that “map” I spoke of earlier.
- We are bringing the same sense of shared purpose to the translation of collaborative KU research into benefits for others.
- That shared purpose is also evident in the KBA Centers of Innovation effort, the KTEC Centers of Excellence, the National Cancer Institute designation initiative, the School of Pharmacy proposal, and everything else I've talked about this morning.
- This is a great time to be in bioscience research in the state of Kansas. This is the Kansas Advantage few other states match.
- For all the anxiety we may feel as researchers and university administrators about prospects for federal funding . .

- For all the doubts we may have about public support for innovative bioscience research . .
- For every grant we don't get that received a great score from an NIH review panel . .
- I have this typically Kansas response:
 - Those are the "difficulties";
 - There are the "stars."
- We must overcome the one to get to the other.
- With all the Kansas Advantages I've just described, our possibilities are boundless – if we have the courage to think big and act even more boldly.

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