

# Lemons to Lemonade: Finding new opportunities in a challenging time

April C. Mason

Provost and Senior Vice President, Kansas State University

Like many universities, at Kansas State University we have entered into a time of strategic planning. K-State 2025 is the title of the plan and the overall goal has been established. By 2025, Kansas State University will be recognized as one of the nation's top 50 public research universities. The process to establish objectives, strategies and a timeline to achieve these goals has just begun. Focus group sessions were held across our campus to include administration, faculty, students, classified and unclassified staff, and off campus with groups of alumni, business and community leaders, and members of the state legislature.

Benchmarks have been identified to establish K-State's current standing among an established group of peer institutions and, to no surprise related to this conference, the very first benchmark is that of the university's research and development expenditures. To be in the top fifty public research institutions, K-State must increase the amount of extramural funding across the entire campus.

As Provost and Senior Vice President, I have identified a number of strategies to increase research and development expenditures that I share with this group. These strategies will not surprise any in this room; however I do want to highlight the University's unique opportunity with each strategy and describe how I feel these strategies are helpful to all public research institutions.

The strategies I wish to discuss are:

- Diversify funding sources
- Collaborate

- Across campus
- Across universities
- Build on strengths
- Grow where planted
- Be opportunistic
- Hire well

**Diversify funding sources:** The public research university that will be successful today and into the future must have a deep portfolio of funding sources. Just as we are encouraged to diversify our investments personally, we as universities need to diversify our funding sources. Federal grants are and have been traditionally the key to funding research on our campuses. Keeping faculty competitive in this area is still important. However, finding other funding sources is also essential. State contracts, block grant competitions, foundations, and industry grants and contracts must be added to funding

portfolios. The search for new foundations, new industry partnerships, new sections of federal granting agencies is critical. USDA and NIH have gone through some major shifts in funding and reviewing strategies recently. The landscape of funding is constantly changing. The successful university is the one that diversifies and stays current on funding criteria.

At K-State we have had particular success in the emerging areas of energy and power and of sustainability. New partners, corporate collaborations, new federal initiatives have assisted the faculty of the university to be successful in these areas. Diversify funding sources.

**Collaborate:** Across our own campuses or across universities in this country or across country borders, collaboration is key. Gone are the days of the single investigator grant. Bringing the right group together can involve multiple people from the same department or campus, or can involve a multidisciplinary team from different institutions and countries. Technology has assisted greatly in making distance collaboration easier.

Recent changes in USDA funding at the National Institute of Food and Agriculture (NIFA) is a great example of this type of deliberate collaboration. NIFA grants are now larger and there is the expectation of larger research scope with multiple partners. NIFA as well as NSF have built into their Requests for Proposals the expectation of educational outreach with the research outcomes of the project. Collaborations between discipline scientists and educational professionals have flourished in this environment.

Funded projects of the future will be collaborations, multi-disciplinary efforts, multi-institutional projects with no room for silos. This type of work is not without

difficulties for our faculty. University officials should be responsive to the organizational needs of large multi-institutional research proposals as the complications these types of projects bring is high. Collaborate.

**Build on strengths:** The universities represented at the Merrill conference are similar in many ways, but have individual strengths and expertise. Today is the time to capitalize on those unique strengths. How can we make our submissions to funding agencies stand out—by emphasizing the uniqueness of our expertise in the grand marketplace of research expertise. At K-State we have been able to build on and capitalize on the strengths of our veterinary medical area. Infectious disease research around animal health and food safety are clearly areas of particular strength. This is not the only research done on our University campus, clearly, but it is an area we try to market, grow, and build. The investments made in an already recognized strong area are strategic and heighten the status of that area. Build on strengths.

**Grow where planted:** I don't add this to my list of strategies just because K-State is the Land Grant of Kansas and has the Agriculture College, I add it because there are unique opportunities each of us can enjoy solely as a result of where we are physically located or where we have historically invested. For K-State I would like to highlight a number of strengths that arise from both place and historical investment. When one thinks of agriculture in the state of Kansas, it does not take long to think wheat and beef. K-State has built on those areas to become national and international leaders. With the strong wheat industry in Kansas, collaborations with wheat growers, milling of wheat, testing of

baking quality in developed wheat varieties and tolerance to weather conditions have been pivotal research areas. In the beef area, the research of the Beef Quality Institute faculty and staff is in the area of safety and quality of beef products. These two areas of agriculture are essential to the economy of the state. Partnerships with the industry, industry organizations, state agriculture and local producers are key to a sustainable crop and animal production system.

The military presence in the state of Kansas is a valuable resource for our universities. K-State works with Fort Riley, Fort Leavenworth, and McConnell Air Force Base. McConnell Air Force base has Cooperative Extension programming provided on site. At Fort Riley there is a Cooperative Extension presence with an office and staff located on site. Work with Fort Riley leadership and military families has led to the development of the Military Families Institute. Long deployments, multiple deployments, injury and recuperation puts strains on families never before experienced. Faculty, staff and students work to assist military families maintain strong communications, identify helpful resources and be assured they are not alone in their situations.

Educational programming at Fort Leavenworth includes Adult education master's and Ph.D. programs and graduate education in the areas of military history and security studies. The use of distance and face to face educational programming as well as research conducted with military implications makes this collaboration most successful. Grow where planted.

**Be opportunistic:** If I were to neglect to mention the Biosecurity Research Institute at K-State and how it helped the University leverage a bid for the National Bio and Agro

Defense facility from USDA and the Department of Homeland Security, you would have been surprised. I use the phrase "be opportunistic" in the very best of ways. K-State invested strategically in the Biosecurity Research Center, Pat Roberts Hall, with its high level animal and plant disease research facilities. This facility was expensive to build and is expensive to maintain. It has, however, been central to the competition for the NBAF facility and the attraction of many new investments in the Manhattan area. The focus of research on infectious diseases continues to grow. The investment and opportunity have not been without complications. Currently animal facilities are being moved off the future NBAF site and site and infrastructure preparation for the new NBAF facility is underway. The moved animal facilities will be bigger and better equipped than the old ones. Investments had to be made to make this happen. Be opportunistic.

**Hire well:** As public universities struggle with funding, balancing tuition increases, state support and changing demographics, the hiring of new faculty to become the university of tomorrow is more and more critical. The faculty we recruit today will need to be competitive in the ever changing research arena. They will need to stay relevant in the classroom as well as in the laboratory, studio or library. We as administrators invest time, energy and resources in each new hire. We want to invest well for the future. As resources allow us to hire, we need to build on strengths and form synergies for success. After the hire we need to mentor for the continued success of each and every faculty member. Hire well.

I have discussed six strategies I think will serve us well in the research area today and into the future. The strategies: Diversity

funding sources, collaborate, build on strengths, grow where planted, be opportunistic and hire well are ways to maintain a competitive edge even in difficult times. Today's environment is one of competition for limited resources, declining state and federal funding and escalating infrastructure needs. The stakes are high. I compliment the organizers of this conference for the focus this year. We will

need to work together to share strategies and opportunities to control our own future in this changing world. The truly great resource we all have are people who are passionate about their work and the discovery of new knowledge in an educational setting. With that resource we are well prepared for any uncertain future.