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Introduction and Table of Contents

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Perspectives













Summer 2014

Message from President Kirk Schulz and Vice President for Research Karen Burg



Kansas State University researchers found that 98 percent of people who live in rural areas work

and shop in a larger community nearby. This creates "food deserts," or large rural areas where people don't have easy access to healthy food.

To confront this challenge, the university took an interdisciplinary approach. Professors from agricultural economics, human nutrition and marketing have teamed with K-State Research and Extension specialists for the Rural Grocery initiative. In June, the university hosted the fourth national summit on the topic.

Kansas State University is fortunate to have nine colleges and almost 70 departments where such new ideas and innovations can take shape. When your institution is home to experts in fields as varied as children's literature and nuclear engineering, yet unimagined cross-disciplinary collaborations wait to surface.

We know that becoming a Top 50 public research university by 2025 will take more than working in academic silos. Our faculty know this, too. They are reaching outside their disciplines and touching fields they could never have imagined.

It's hard to find a better example of the concept of arts and sciences than the three-part "Glass Ballet." A collaboration between physics and dance, this piece breathes artistic expression into molecular motion and heating crystals to create glass (page 6).

The greatest challenges facing us this century, from food to water to energy, are multifaceted and complex. They're about more than just agronomy or ecology or engineering. Most important, they're about people.

Some of our most robust research projects haven't forgotten this. Our research teams that study water use — the depletion of the Ogallala aquifer (Summer 2013), watersheds throughout the center of the nation (page 3) — include sociologists, political scientists and other experts who delve into what these challenges mean for people and communities.

With numerous resources to pull from, it's no wonder Kansas State University has experts in many areas tackling the same subject. Just look at our research that touches on autism (page 14). Cynics might see this as inefficient. Researchers know that approaching challenges from multiple angles spawns innovation.

Interdisciplinary research like this doesn't just happen. As a university, we have been deliberate in creating an environment where working across disciplines is the norm.

It starts at the top, with encouragement and expectations from the administration. It continues with the quest to increase our extramural funding. Many grants now require an interdisciplinary aspect. It's probably no coincidence that in fiscal year 2013 we saw our largest-ever extramural funding total.

Kansas State University's support of interdisciplinary research stretches all the way to the classroom level. As you read about our stormwater research (page 16), note that it began with an undergraduate class integrating future engineers and future architects.

And that "Glass Ballet" we mentioned earlier? These professors met through K-State First, an interdisciplinary program designed to put our first-year students on a path to college success.

Even Kansas State University's internal communications spawn research across disciplines. Our faculty have told us they find potential collaborators and ignite ideas by reading about what their colleagues are doing in our faculty and staff newsletter.



As the 21st century unfolds, we see the challenges that await us: feeding a growing middle class; procuring clean and affordable energy; protecting and maximizing our water resources. Kansas State University is stepping up to face these problems, unhindered by artificial disciplinary boundaries.

President: Kirk Schulz Karen JL Burg

Vice President for Research: Karen Burg

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