

Integrating Learning, Discovery, and Engagement for an Even Better Nebraska

The University of Nebraska-Lincoln's Institute of Agriculture and Natural Resources (IANR) is positioned squarely at the nexus of **food, energy, water, health, and community.** In Nebraska, these sectors are inseparably linked—and they are vital to Nebraska's ability to thrive.

True to our Land-grant mission, IANR works with Nebraskans to increase access to a powerful combination of Learning, Research, and Extension. Coupling IANR's **multidisciplinary expertise** with the vision, talent, and spirit of innovation of our fellow Nebraskans will **accelerate discoveries and solutions** that directly impact families, agriculture, businesses, communities, and the future of our state and its people.

Nebraskans—from policy makers to ag producers; from business leaders to residents both rural and urban—align on the key issues and concerns facing our state. They told us they want to work in partnership with their University to address big challenges including:

- **Growing a talented workforce** with the expertise, mastery, and innovation crucial to the continuing success needed to propel Nebraska forward.
- Improving statewide prosperity by transforming Nebraska's prowess in food, fuel, feed, and fiber production and natural resources stewardship into sustained success.
- Attracting & retaining young people to help ensure that Nebraska fosters the next generation of leaders, professionals, and change-makers.
- **Enhancing the health & well-being** of Nebraskans to help them enjoy an even better quality of life in every respect.
- Creating statewide economic vitality that allows all Nebraskans the opportunity to find success in thriving rural and urban communities.

These challenges and opportunities, which are critically important in Nebraska, are echoed across the United States and around the globe. In working across the state to fulfill UNL's Land-grant mission, IANR's research, teaching and Extension have and will continue to have an impact in addressing critical issues that extend far beyond the borders of our state.

For the past half century, IANR has consistently demonstrated it is uniquely positioned and unquestionably qualified to lead in these areas. IANR faculty, students and staff, work alongside Nebraskans and leaders in agriculture and natural resources from around the world to tackle key challenges and co-create solutions for an even better future for our state and its people.

No other entity in Nebraska—or perhaps the world—is better equipped to do so.

IANR is not only about who we are, but what we do and how and when we do it. Most importantly, it's about **where** we do what we do.

No other place has what Nebraska has:

The Sandhills. The High Plains Aquifer. Some 80,000 miles of streams, rivers, reservoirs, and lakes.

A complex network of ecosystems and working landscapes. Abundant natural resources. A rich history of productivity, stewardship, and innovation. And good, optimistic people who care deeply about their families, neighbors, communities, agriculture, natural resources, and the future of their state

IANR represents the very heart and soul of Nebraska. Our agricultural roots run deep—and our commitment to scientific discovery, our passion for teaching and learning, and our love for this state and its people are unmatched.

These attributes are the very foundation of our Strategic Direction. The Pillars of this direction are bold, ambitious, and necessary:

- Grow and strengthen Nebraska's agricultural and natural resources ecosystems.
- Improve the health and well-being of all Nebraskans.
- Promote progress and prosperity for all Nebraskans.

These Pillars articulate IANR's Strategic Direction and plan of work for the next five years, and reflect hours of serious dialogue with Nebraskans from all walks of life—from Nebraska City to Harrison, South Sioux City to Benkelman, Valentine to Beaver City, and everywhere in between.

We heard what you had to say. With your input, our Strategic Aims for IANR are both foundational and flexible—enabling us to pivot as circumstances dictate while staying true to our core values and strengths.

We know and appreciate the fact that our success will depend on engagement and collaboration with our fellow Nebraskans as we co-create an even brighter future for our state and beyond. We deeply appreciate your continued support and very much look forward to partnering with you to deliver opportunities and achieve success for all of us.

Thank you.

Institute of Agriculture and Natural Resources

IANR innovation places Nebraska on the leading edge of food, fuel, feed, and fiber production, environmental stewardship, human nutrition and health, business development, and youth engagement. By providing access to a continuum that spans research to teaching to application to engagement, IANR strives to serve the needs of every Nebraskan from border to border— ensuring that every interaction matters.

IANR is comprised of:

College of Agricultural Sciences and Natural Resources (CASNR): Focused on developing a continuum of pathways for the next generation of leaders, problem-solvers, and change-makers with the talent, innovation, and spirit to position Nebraska as the premier global destination for attracting, preparing, and retaining talent to ensure a thriving agricultural future for the state and beyond.

Agricultural Research Division (ARD): Through groundbreaking research and scientific discovery, ARD creates innovative solutions designed to use insights about the future to anticipate change and overcome challenge. ARD develops scalable strategies and practices to enhance and advance the sustained success and profitability of agriculture and food production, natural resources sustainability, resilience, and health for future generations.

Nebraska Extension: The boots-on-the-ground, statewide network of experts that puts IANR research and education to work in our communities every day— sharing unbiased scientific research, evidence-based insights, and unmatched expertise to help Nebraskans make better-informed decisions for themselves, their families, their communities, and their farms, ranches, and businesses.

College of Education & Human Sciences (CEHS): IANR includes the ARD and Extension components of departments in CEHS focused on child, youth, and family studies, food and nutrition, textile science and merchandising, social science, and human health. CEHS enhances IANR's multidisciplinary approach through the lens of human interactions, personal choices and behavior, family dynamics, and overall health and well-being.

Nebraska College of Technical Agriculture (NCTA): Ranked as one of the nation's best two-year colleges and among the top 30 trade schools in the nation, NCTA is a small campus with a big impact. Its unwavering focus on technical and applied agriculture amplifies IANR's impact statewide and provides pathways to CASNR for those who want to continue their postsecondary educational experience.

IANR Pillars

Grow and strengthen Nebraska agricultural and natural resources ecosystems.

We are committed to working with producers, industry leaders, policy makers, and others in making Nebraska the second largest agricultural economy in the nation. IANR is focused on scientific discovery and education that help the state's crop and livestock producers continually improve efficiency, profitability, performance, resilience, natural resources stewardship, and global competitiveness. This includes biobased innovations that transform the role of Nebraska agriculture in the world economy. Nebraska's

position in the center of the country that produces more food than anywhere else in the world, coupled with its prominence in U.S. and global ag, ag trade, and more, perfectly positions our state to lead conversations around agriculture, food production, natural resources management, and human health.

Improve the health and well-being of all Nebraskans.

IANR initiatives encompass the entire lifespan of Nebraskans—from birth to early child development, from parenting to quality childcare, from food security to nutrition for overall human health and well-being. IANR research and Extension programming help improve the availability of clean water, the nutritional value and human health impacts of food, the productivity and profitability of production agriculture, the vitality of rural communities, and the developmental and educational outcomes for young children and youth. IANR's overall objective is to empower Nebraskans to have confidence in their decisions, make well-informed choices, and help them be active, engaged participants in the success and health of their families, their communities, and their state.

Promote progress and prosperity for all Nebraskans.

Nebraskans look to IANR for strong leadership, trusted partnership, and unwavering optimism when it comes to the future for their families and their communities. Because IANR is integrally connected and present across the state, IANR has a pulse on what Nebraskans want and need to thrive and be successful—providing youth STEM programming, providing pathways to critically important careers and expertise in ag and natural resources, and fostering entrepreneurship and leadership in urban and rural communities. IANR helps Nebraskans discover their strengths and opportunities, empowers them to have confidence in their decisions, and provides continual access to the education they need to prepare for and confidently meet the challenges that await and opportunities that lie ahead.

Strategic Aims Across Research and Innovation, Teaching and Learning, and Extension and Engagement 2024–28

Where every person and every interaction matters. The Institute invests in its people by developing, empowering, and supporting all members of our community to reach their full potential and thrive. We create opportunity, cultivate collaboration, build trust, and uphold accountability across the Institute, ensuring that our work environment exemplifies a shared commitment to excellence in research, teaching, Extension, and engagement.

- Co-creating a better tomorrow by growing the size, scope, scale, efficiency, profitability, and resilience of Nebraska's agricultural and natural resources ecosystems.
- Inspire Nebraskans and their communities and beyond through uniquely local partnerships, collaboration, innovative leadership development, and 4-H and other youth programming that help create and connect Nebraskans to pathways that span the continuum of learners and promote UNL as Nebraska's college for a lifetime of learning.
- Foster research innovation in natural lands and waters, and **natural resources conservation** to proactively address both present and future societal needs, including water quality, soil health, and our unique climate, promoting sustainability and health for future generations.
- Foster and grow partnerships across the state—from early childhood through college/university education—that expose Nebraska youth to a broad array of post-secondary pathways that strengthen rural communities and align with workforce demands in agriculture and natural resources, including nurturing the Northeast Nebraska Educational Compact and supporting and expanding programming in food, water, energy, and societal systems (FEWSS).
- Strengthen Nebraska agriculture and food, fuel, feed, and fiber systems by understanding the needs of Nebraska farmers and livestock producers, rapidly transferring unbiased research and technology into evidence-based best management practices and new crop varieties tailored to Nebraska's growing conditions and sharing them across the state.

- Provide a vibrant, collaborative, and inclusive research environment to drive innovative breakthroughs and discoveries such as genetically selected crops and livestock, sustainable aviation fuel, and digital ag tools that position Nebraska as a global leader in sustainable, and profitable agri-food production systems.
- Ensure access to learning opportunities that help Nebraskans **populate the talent highway** through scholarships and other programs that grow our workforce in key areas including veterinary medicine, entrepreneurialism, ag security, and other innovative educational opportunities that contribute to Nebraska's success.
- Enhance the health and well-being of all Nebraskans by advancing the understanding of the animal and human microbiome, developing foods that improve human health, and developing and sharing statewide learning opportunities focused on nutrition, food access, food security, high-quality education and child development overall wellness, and disaster responsiveness.
- Create and maintain a connected, statewide platform for groundbreaking research that includes labs, research centers, commercial scale research facilities, and partnerships with producers through on-farm research, to revolutionize the use of agricultural products for value-added commercial development.
- Grow experiential education opportunities across Nebraska that accelerate learning, ensure each student graduates with an internship, study abroad experience, servicelearning opportunity, or other real-world experience; and cultivate creative, enthusiastic change-makers and leaders to prepare Nebraskans for the future of work.

Implementing the IANR Strategic Direction and measuring our progress

The IANR Pillars and Strategic Aims serve as a framework for furthering our research and discovery, teaching and learning, and Extension and engagement during 2024-28.

IANR faculty, staff and students in our departments, units, and centers partner with those we serve to deliver the IANR Pillars and Strategic Aims. Our work takes place in labs, fields, streams, landscapes, studios, and classrooms across Nebraska, our region, and around the world. Our creative, collaborative, and enthusiastic approach ensures IANR is effective, nimble, and innovative—seizing opportunities as they arise.

IANR's Strategic Direction is built on the spirit of innovation and flexibility.

As we in IANR decide how to best advance our Pillars and Strategic Aims, we invite you to help write the next chapter of our shared Strategic Direction:

- IANR's colleges, divisions, academic departments, units, centers, and program areas will each design their own strategic guiding document, which, working within the Pillars and Aims, will guide and prioritize work over the next five years.
- IANR faculty, staff and students are invited to align their individual and collective teaching and learning, Extension and engagement, and research and discovery activities with one or more of the Aims and Pillars of IANR's Strategic Direction.
- IANR leadership, faculty, staff, and students will evaluate progress against our Pillars and Aims periodically, adjusting as needed to ensure we remain relevant.

- As faculty and unit leaders complete their impact statements as part of their annual review process, they can point to which Pillars and Strategic Aims their work supports.
- These impact statements will be the basis for broadly shared stories of impact and relevance, including stories highlighted during these meetings, academic program reviews, and annual reporting done by leaders across IANR.

Our Strategic Direction is just that—a direction. The roads we take and the places we go will be determined by the needs of Nebraskans, the complex challenges of our world, and the hard work and dedication of the people of IANR who spend each day on the frontlines of research and discovery, teaching and learning, and Extension and engagement.

We thank you for your passion and dedication to serving the people of Nebraska and the world.

