

I ILLINOIS ACES

2020-2025

COLLEGE OF AGRICULTURAL, CONSUMER
& ENVIRONMENTAL SCIENCES

STRATEGIC PLAN

MORE THAN MEETS THE I

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2020-2025

COLLEGE OF ACES STRATEGIC PLAN

INTRODUCTION

The College of Agricultural, Consumer and Environmental Sciences (ACES) strives to ensure a vibrant future for discoverers, learners, stakeholders, and beneficiaries. A vital part of the University of Illinois, the College of ACES aligns its strategy with “The Next 150” Urbana-Champaign campus strategic plan.

The University’s vision statement reminds us of our aspirations and our roots.

“We will be the preeminent public research university with a land-grant mission and global impact.”

That vision propels how the University’s goals and strategies intersect with – and enhance – what we do in the College of ACES.

The College of ACES pairs the vision of global preeminence with local and regional relevance to help solve important problems. Dean Kim Kidwell’s mantra of “what we do and why it matters” fuels our mission and how we take action.

Strategy drives how we build our capabilities, targeting the areas of greatest promise. It gives us clear understanding for making decisions because we know why our work matters. This essential forethought guides us to live into our vision and reason for being.

In short, we know where we’ve come from, where we’re going, what resources to invest, what benefits to expect, and how to measure – and repeat – our successes.

The ACES 2020-2025 Strategic Plan embodies “More Than Meets the I,” matching at every turn the campaign launched in May 2019. At its core, “More Than Meets the I” encompasses how we share our story. Doing so in impactful and personal ways reaches more people and moves them to act in concert with the College of ACES. Our strategic plan helps us ensure our vibrant story thrives for years to come.

MORE THAN MEETS THE I



By fulfilling the strategic priorities outlined in this plan, the ACES community will create a road map for building a brilliant future for food and agriculture, families and communities, and the environment across the state of Illinois and beyond. Together, we transform lives through education, research and outreach. We invite you to be a part of our *#ACESculture* story.”

KIM KIDWELL, DEAN, COLLEGE OF ACES

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VISION

ACES will be globally preeminent and locally relevant in addressing grand challenges related to food and agriculture, families and communities, and the environment.

MISSION

Discovering, advancing, and integrating new knowledge to ensure nutritious and safe food, sustainable and innovative agriculture, strong and economically resilient families and communities, and environmentally sustainable use of natural resources to benefit the people of Illinois and the world.

GUIDING PRINCIPLES

ACES STRIVES TO EMBODY THE FOLLOWING PRINCIPLES IN ALL THE WORK DONE IN THE COLLEGE:

- Creating an inclusive, diverse, and rewarding atmosphere for work and learning
- Enabling an environment for highly creative scholarly activity
- Leading scholarship at all levels
- Providing the finest education for undergraduates, graduates, and other audiences
- Actively engaging with public audiences in our areas of scholarship
- Serving the institution and the profession
- Taking responsibility for individual and collective actions
- Expecting accountability for program outcomes and effects
- Contributing to the organization's health and growth
- Encouraging innovative and superior performance in all aspects of our mission

AREAS OF DISTINCTION

THE COLLEGE OF ACES HOSTS SEVEN ACADEMIC DEPARTMENTS:

- Agricultural and Biological Engineering
- Agricultural and Consumer Economics
- Animal Sciences
- Crop Sciences
- Food Science and Human Nutrition
- Human Development and Family Studies
- Natural Resources and Environmental Sciences

ACES IS ALSO HOME TO:

- Agricultural Leadership, Education, and Communications program
- Division of Nutritional Sciences
- Metropolitan Food and Environmental Systems major

The college also administers the Illinois Agricultural Experiment Station and University of Illinois Extension. Consequently, the College of ACES is distinctive across a wide range of disciplines and functions that support the land-grant mission of the University of Illinois.

DISCOVERY/RESEARCH

- Excellence in basic and applied research
- Scientific leadership across a spectrum of biological, physical, behavioral, and social sciences
- Strong interdisciplinary collaborations
- Robust partnerships with distinguished programs and institutions

LEARNING/EDUCATION

- Recognized, highly valued educational programs
- Exceptionally qualified and increasingly diverse students
- Undergraduates well prepared for careers and graduate education
- Outstanding graduate and professional training

ENGAGEMENT/EXTENSION

- Dedicated Extension capacity for sustained and effective statewide outreach
- Unique partnerships among urban and rural constituencies
- Longstanding public and private partnerships
- Strong track record and capability for international outreach and collaboration

SOCIETAL IMPACT/ECONOMIC DEVELOPMENT

- Graduates who contribute to the growth and welfare of Illinois and the world
- Knowledge application that matters to constituencies
- Systems to translate and develop innovations and commercialize technology
- Integration of research and outreach to achieve societal impact and progress



OUR PROCESS

After “The Next 150” strategic plan launched in the fall of 2018, ACES began to develop a new strategic plan that would embody the spirit of the campus plan and lay a course for the college.

We aligned the ACES strategic plan with “The Next 150” plan, which focuses on the pursuit of four goals:

- To foster scholarship, discovery, and innovation
- To provide transformative learning experiences
- To make a significant and visible societal impact
- To steward current resources and generate additional resources for strategic investment

Building on the college’s previous strategic plans and priorities, the collaborative planning process informed our goals and will direct our actions during the next five years. College leadership endorsed the basic vision, mission, and guiding principles.

Departments and other units nominated delegates to participate in goal-development brainstorming in fall 2019. Some 120 participants from faculty, staff and students across the College of ACES and University of Illinois Extension generated hundreds of ideas. We also welcomed input from departmental units and through an online questionnaire. The steering committee synthesized the input into a coherent set of goals and strategies, vetted through the college’s town hall, administrative and executive committees, and leadership team.

Throughout the process, we challenged ourselves to formulate strategies that would be:

- **FOUNDATIONAL** - critical to our purpose that we simply must do.
- **EVOLVING** - changing in ways that will make us better at what we do.
- **MOONSHOTS** - big dreams that can change the game for ACES and for our society.





GRAND CHALLENGE

Knowledge generated and brought to bear to meet grand societal challenges emerges from scholarship in the College of ACES. We inform solutions for these challenges, while we create exceptional opportunities for our students, as well as economic and social value for our other stakeholders. We contribute excellence to the University of Illinois in critical areas of discovery and learning, while we help to:

- Create resilient, sustainable agricultural, food, energy, and social systems
- Influence positive responses to climate change
- Ensure greater food security in Illinois and around the world
- Achieve gains in wellness and health care through human development and nutrition
- Regenerate land and water resources for current needs and future generations



ACES MOONSHOTS

To achieve our vision, people associated with the College of ACES possess audacious ideas and big dreams. Our future success will hinge in some measure on achieving great ambitions. Samples of these ideas arose during the strategic planning process.

- Endow the College of ACES, with a naming opportunity and an endowment goal exceeding \$500 million
- Build undergraduate enrollment to one-tenth of the Urbana-Champaign campus enrollment
- Construct a state-of-the-art instructional facility on the ACES campus with capacity for large classrooms and massive online instructional delivery
- Create a southern portal to the University of Illinois at Urbana-Champaign via the South Farms and new engagement facilities





“

The legislation that created our land-grant universities ranks among the most optimistic expressions and realizations of the potential of higher education in our history. It charged universities like ours to actively engage with the world around us with the purpose of delivering a better future for all of society.”

REMARKS BY CHANCELLOR ROBERT J. JONES, UNIVERSITY OF ILLINOIS
SESQUICENTENNIAL CELEBRATION, URBANA, FEBRUARY 28, 2017

GOAL I: FOSTER SCHOLARSHIP, DISCOVERY, AND INNOVATION

1. Create knowledge and innovations for climate-resilient food and agricultural systems.
 - a. Enhance synergies among ACES research programs investigating climate-change mitigation and adaptation at different scales, from global to local, including urban and rural ecosystems and communities, farms, families, and individuals.
 - b. Lead research that increases economic and environmental benefits from careful stewardship of land, water, and natural resources.
 - c. Provide solutions for efficient and effective design of diverse local production systems for both rural and urban settings.
2. Generate understanding that promotes equitability, food security, and community health.
 - a. Strengthen capacity for inquiry-based research into important social determinants of physical, mental, and social health.
 - b. Increase participation of the public in ACES research to broaden its societal reach.
 - c. Nurture research that increases access to more nutritious and healthy foods.
3. Be a global leader in the transition to data-driven food and agricultural systems.
 - a. Hire faculty with excellent data science skills and ACES domain knowledge.
 - b. Upgrade current and build new research facilities that enable design and testing of digital innovations.
 - c. Aggressively seek external support for research opportunities in the digital space.
 - d. Strengthen research partnerships on campus and beyond through the Center for Digital Agriculture.

INTERDISCIPLINARY RESEARCH IMPACT

ACES scientists and laboratories play significant roles in some of the most important research programs at Illinois, such as Realizing Increased Photosynthetic Efficiency (RIPE); the Center for Advanced Bioenergy, and Bioproducts Innovation (CABBI); the Center for Nutrition, Learning and Memory; the Microbial Systems Initiative; the Food and Families Program of the Family Resiliency Center; and the Center for Digital Agriculture.

4. Recruit and develop people who excel at team-based science.

- a. Expand perspectives for collaboration by increasing diversity among faculty, staff, and students.
- b. Support network-building activities that foster collaboration on finding solutions to grand challenges in food security, climate change, health and wellness, and other ACES focus areas.
- c. Increase ACES faculty participation in interdisciplinary campus institutes and centers.
- d. Strengthen current and build new relationships with strategic partners from industry, research institutes, and academia in Illinois and around the world that span the full land-grant mission.
- e. Value contributions to team-based science in professional advancement.

5. Translate research outcomes into societal benefits.

- a. Incentivize partnerships among teams of faculty, Extension, and stakeholders to develop, test, and demonstrate novel solutions to grand challenges in food, health, and climate.
- b. Increase ACES engagement with Research Park, Carle Illinois College of Medicine, and Discovery Partners Institute.
- c. Value stakeholder and public engagement and translation of scholarship in professional advancement.
- d. Lead by example among campus and our peers in minimizing environmental impact.

Investigators in ACES regularly lead collaborations with colleagues through campus institutes: Beckman Institute for Advanced Science and Technology; Cancer Center; Carl Woese Institute for Genomic Biology; Center for Social and Behavioral Sciences; National Center for Supercomputing Applications; Interdisciplinary Health Sciences Institute; Institute for Sustainability, Energy, and Environment; and Prairie Research Institute.



GOAL II:

PROVIDE
TRANSFORMATIVE
LEARNING
EXPERIENCES



1. Increase opportunities for every student to complete integrative learning experiences.

- a. Increase financial support for students completing experiential learning activities such as research, study abroad, and internships.
- b. Develop unified processes to guide undergraduates in completing learning experiences that complement the classroom.
- c. Expand opportunities for graduate students to complete experiential learning activities.
- d. Develop programs to encourage service-based learning through connections with Illinois Extension, Discovery Partners Institute, and ACES Office of International Programs.

2. Develop innovative and effective online educational programming for graduate, professional, and undergraduate students.

- a. Improve physical infrastructure and capacity in ACES for effective online delivery of courses and training.
- b. Provide training and incentives for faculty and staff to engage in online education.
- c. Develop and execute a process for determining the feasibility of new degree and training programs.
- d. Create and market new online educational programs that fill societal needs.

3. Recruit and support the success of a diverse and representative student body.

- a. Market and recruit at both the department and college level to attract outstanding high school students from Illinois and beyond.
- b. Establish new partnerships and leverage existing ones with organizations that work with high school students, both in our areas of historical strength (4-H, FFA) and in new fields.
- c. Increase scholarship opportunities for undergraduate students, especially those who are first-generation college students; who come from rural and underrepresented communities; and who are pursuing novel career paths to success.
- d. Evaluate and improve upon existing academic and career advising models to maintain and improve student graduation and career placement rates.
- e. Develop inflows of non-traditional students, including mid-career adults and international students.

4. Build on the quality of College of ACES teaching and learning.

- a. Recruit, retain, and reward excellent educators in ACES.
- b. Evaluate and improve the physical infrastructure of the college devoted to teaching and learning.
- c. Develop forward-looking curricula that will build an innovative workforce.
- d. Foster a culture of excellence in teaching and learning among ACES faculty and staff.
- e. Assess student learning in courses and curricula and make adjustments to improve student learning outcomes.

CURRICULAR INNOVATIONS

ACES is introducing important innovations to courses and curricula that will meet current and future demands for students who possess valuable knowledge and skills. New majors in the college aim to capitalize on these opportunities for our students. Significant investment within ACES focuses on fostering leadership and career-readiness skills through the ACES Leadership Academy, building on the life-skill enhancement Illinois youth receive through 4-H, and offering undergraduate and graduate degree programs in Agricultural Leadership, Education, and Communications. Other creative new majors include Metropolitan Food and Environmental Systems; Computer Science + Crop Sciences; and Computer Science + Animal Sciences. Examples of other new and emerging programs include Professional Science Master Programs in digital agriculture, synthetic biology and fermentation, and plant biotechnology.

GOAL III:

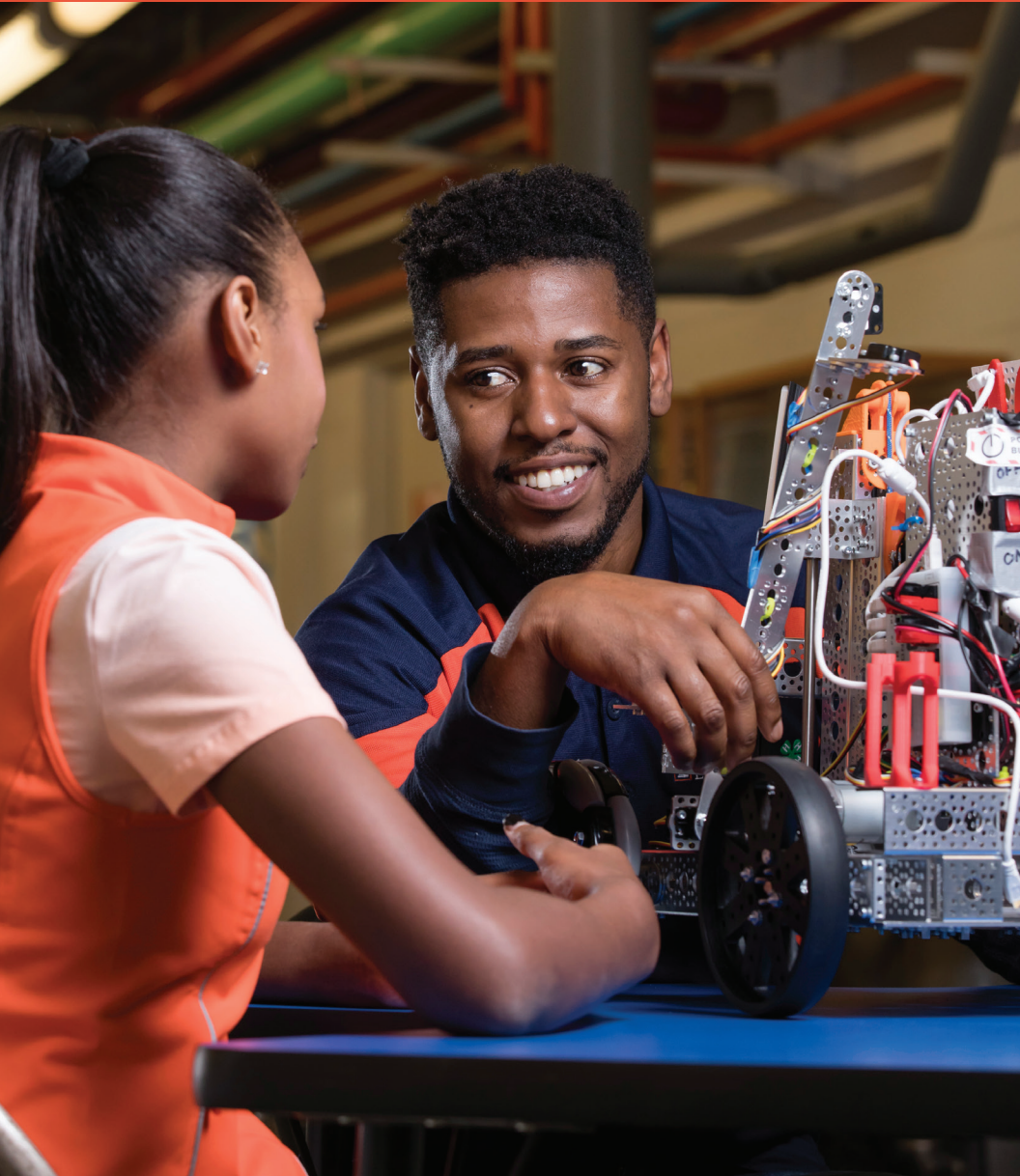
MAKE A SIGNIFICANT AND VISIBLE SOCIETAL IMPACT



1. Strengthen Illinois Extension as a primary interface between campus and communities/stakeholders.
 - a. Leverage Extension networks to provide a platform for community needs to which we respond.
 - b. Enhance programming to address underserved populations and emerging societal problems in locally relevant ways.
 - c. Expand digital dissemination of and access to ACES research to enhance stakeholder impact.
 - d. Increase collaboration between faculty and Extension employees to align ACES research with community and stakeholder needs.
2. Increase connections to inform relevant policymaking.
 - a. Disseminate our research on locally relevant and timely issues to law and policy audiences, using compelling messages and language.
 - b. Shape science-informed public policy, regulation, and corporate visioning that promote both technology adoption and societal acceptance.
 - c. Establish an academy of public engagement and extension education to develop the professional skills of faculty, staff, and students for research translation and dissemination.

DIGITAL FIRST

Illinois Extension continues to serve as the flagship outreach program for the University of Illinois with a physical presence across the entire state. Successful College of ACES digital outreach, most notably on the *farmdoc* platform, reaches broad and widely dispersed audiences with highly relevant information. Investment in a “digital first” strategy and the proposed Extension and Public Engagement Connection Center (EPECC) will advance those capabilities in scale and scope. Automating data-collection systems in our research facilities will also add rich data context to our engagement.



3. Communicate more broadly, and more effectively, what we do and why it matters.

- a. Use targeted, ongoing, multi-media strategies to create awareness and increase reach to external audiences about ACES knowledge and practice.
- b. Create an internal ACES visiting system where our personnel can learn what each unit is doing.

4. Foster existing and new collaborations with communities and stakeholders.

- a. Strengthen intercultural competencies among our faculty, staff, and students.
- b. Proactively build relationships with underserved communities or stakeholder groups with an eye toward future collaborations.
- c. Incentivize and reward successes in public engagement and extension through professional advancement.
- d. Prioritize interdisciplinary innovations that have the potential to redefine external and public conversations about agriculture, environment, community, and human well-being.

5. Expand our network and reach.

- a. Expand opportunities for students, faculty, and staff to engage in community, industry, and international experiences.
- b. Build connections between the University of Illinois and international universities.

GOAL IV:

STEWARD CURRENT
RESOURCES
AND GENERATE
ADDITIONAL
RESOURCES
FOR STRATEGIC
INITIATIVES



Feed Technology Center | Photo taken March 2020

21ST CENTURY FACILITIES

Purposefully translating discoveries into practice requires facilities capable of supporting research and development activities. Tangible examples include the recently opened Integrated Bioprocessing Research Laboratory, the renovated Food Science Pilot Plant, the new Feed Technology Center, and state-of-the-art facilities to support photosynthesis research and high throughput phenotyping. Future improvements envisioned include a new biomedical swine production unit, a new child development laboratory, and new irrigated agronomy research plots. A central Extension facility will anchor capital development of the Arboretum and the ACES corridor on Lincoln Avenue. ACES must also support our students in the digital age of learning, while accommodating our ambitions for growth. To do so, we need modern, flexible instructional facilities; larger, technologically enabled classrooms; and the infrastructure to reach virtual audiences in different spaces and at different times.



1. Generate new ways to diversify and expand the funding portfolio for ACES.

- a. Create and activate a plan to produce high-value, multi-audience online education (e.g. certificates, degree programs, extension) across ACES departments and Extension.
- b. Develop and deploy new courses appealing to non-ACES students to attract new enrollment in ACES courses.
- c. Cultivate corporate and private partnerships to secure funding through endowments (e.g., College of ACES, buildings, and programs), foundations, businesses, and industry.
- d. Establish a strategy to improve access to international resources, including students, faculty, and research funding.
- e. Increase the portfolio of grants and contracts in ACES from funding organizations that can and will support indirect cost rates aligned with the campus budget model.

2. Modify existing internal ACES processes and develop new capacities to reduce costs, maximize efficiency, and promote sustainability.

- a. Centralize and support shared resources that will help us more efficiently meet ACES strategic goals (e.g., equipment, space, and technology).
- b. Examine and streamline operational processes within ACES (e.g., optimizing financial management and advancement processes).
- c. Revitalize and modernize core facilities to enhance an optimal learning environment and enable greater research capacity.

3. Strategically invest ACES resources to maximize our strengths, align with the campus plan, and enhance the return on investment.

- a. Create a comprehensive professional development and support system for faculty and staff, from orientation through succession planning, to maximize our commitment to the highest quality teaching, research, and extension in ACES while fostering an inclusive climate.
- b. Increase availability and coordination of scholarships to incentivize recruitment, retention, and support of a diverse pool of highly qualified students.
- c. Mobilize, encourage, and reward collaborations within and outside of ACES through competitive funding opportunities and by reducing barriers to interdisciplinary and inter-organization collaboration.
- d. Assess and prioritize investments in new multi-use facilities with the highest potential for impact on teaching, research, and Extension.
- e. Invest in capacity for increased tracking, measurement, and evaluation of activities to inform future investments.

4. Foster an integrated and holistic approach to ACES advancement efforts.

- a. Aggressively and strategically market our research, teaching, and Extension impacts across campus, with alumni, and with the public to highlight our pivotal role in addressing societal needs in our agricultural, consumer, and environmental science domains.
- b. Empower faculty and staff to engage in advancement activities and strategies (e.g., an advancement academy).
- c. Build an integrated infrastructure (e.g., software solutions, databases, coordination, and pre-graduation mentoring) to strengthen access to the ACES alumni network nationally and internationally.

MEASURING PROGRESS

As we turn goals into actions, ACES will be intentional in measuring progress. Key strategic indicators aligned with the campus strategic planning process will provide continuity for monitoring progress, revealing trends, and evaluating efforts.

The strategic profile for ACES will consist of both standard and custom measures, as well as objective measures and subjective analyses. For some of the campus and college goals - especially those pertaining to engagement and societal impact - we're continuing to define appropriate measures and determine how to acquire relevant data.

As together we strive to ensure that vibrant future for discoverers, learners, stakeholders, and beneficiaries, we will regularly communicate about progress to the ACES community. We appreciate and welcome your engaged and exuberant participation.







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