# U.S. DEPARTMENT OF AGRICULTURE (USDA)

FOR FY2025, THE U OF I SYSTEM REQUESTS **\$500 MILLION** FOR AFRI; WE ALSO REQUEST **\$500 MILLION FOR THE RESEARCH FACILITIES ACT**.

#### We also support APLU's requests.

AFRI	
FY2025 PBR	= \$475M
FY2024	= \$445.2M
FY2023	= \$455M
FY2022	= \$445M
FY2021	= \$435M

**Appropriations Bill:** Agriculture, Rural Development, Food and Drug Administration, and Related Agencies

**Agency:** National Institute of Food and Agriculture

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## USDA ALLOCATIONS/AWARDS, FY 2023

University of Illinois at Urbana-Champaign	
Account	Amount
Hatch Act (Research & Education Programs)	\$7.2M
Smith-Lever 3(b)-(c) (Extension Activities)	\$10.3M
Agriculture and Food Research Initiative (AFRI) (Research & Education Programs)	\$9.3M
Expanded Food and Nutrition Education Program (EFNEP)	\$2.2M
Supplemental Nutrition Assistance Program Education (SNAP-Ed)(Extension + UIC)	\$21M

UIUC maintains a robust and dynamic partnership with the United States Department of Agriculture (USDA). UIUC's College of Agricultural, Consumer, and Environmental Sciences (ACES) and the Illinois Agricultural Experiment Station are critical components of the state's research and educational infrastructure. Hatch Act and related formula funds enhance capacity for applied science in Illinois, benefiting areas such as plant genetics and photosynthesis, soil and water conservation, animal performance, and strategies for human health and nutrition. The USDA's Agriculture and Food Research Initiative (AFRI) provides competitive research programs that drive discovery and innovation in ACES and other campus units.

The National Institute of Food and Agriculture (NIFA) supports University of Illinois Extension, whose educator network spans all 102 Illinois counties, delivering evidence-based outreach and engagement programs in five key areas: community, economy, environment, food, and health. NIFA provides capacity to U of I Extension through Smith-Lever 3(b) & (c) support.

More than \$7M in competitive USDA funding to the College of Veterinary Medicine advances agricultural animal health through basic and applied research into disease



prevention and through training programs that help producers and veterinarians improve biosecurity and productivity on farms.

# USDA-SUPPORTED PROJECTS AT UIUC

**Artificial Intelligence in Agriculture** The \$20M USDA-funded Artificial Intelligence for Future Agricultural Resilience, Management, and Sustainability Institute serves as a nexus for multidisciplinary research teams that advance foundational AI and use these advances to address important challenges facing world agriculture. Accomplishments include advancements in computer vision, including applying technology developed for human dance to detect livestock movement; improvements in small robot navigation in corn and soybean fields; as well as many developments in AI algorithms. The project continues to serve and receive input from diverse stakeholder groups.

#### **Farmer Mental Health**

Agricultural producers in the North Central region experience anxiety, depression, substance use, and death by suicide at disproportionately higher rates than the general population. Through a \$7.2M grant from USDA-NIFA, Illinois researchers and Extension specialists have formed the North Central Farm and Ranch Stress Assistance Center to create and expand stress management and mental health resources and services. The Center provides professional interventions, supports farm telephone hotlines and websites, and provides training and resources for producers and those who support them.

#### **Creating Food Oases in Urban Ecosystems**

USDA helps College of ACES and Illinois Extension support urban farmers in Illinois. Researchers received a \$975K USDA-NIFA grant to integrate recent advances in robot hardware design, vision-based perception, autonomous navigation, and manipulation towards automating high tunnel operations such as harvesting, pruning and pest management thereby achieving sustainable increases in yield and profitability. Extension professionals are engaging with urban and minority farmers in Illinois and Alabama to assess the economic implications that accompany the increase in yield and identify barriers to adoption.

#### **Animal Health**

UIUC's College of Veterinary Medicine has more than \$7M in competitive USDA funding to support animal health research. These projects are focused on vaccine development and understanding the pathogenesis and transmission of agricultural animal diseases. For instance:

- Supporting the beef, pork and poultry industries by developing vaccines to fight important viral diseases, developing new ways to detect and monitor for disease threats, and preparing producers and veterinarians to respond in case of a disease outbreak.
- Fighting global hunger with novel approaches to reduce the impact of key livestock parasites.
- Delivering high-quality online learning focused on animal-disease training and other needs of rural veterinary practitioners and students, so these professionals can partner with producers to ensure on-farm biosecurity

and increase productivity and efficiency.

#### Optimizing Fermented Foods to Improve Human Immune Function

UIUC researchers received a \$638K AFRI award from USDA NIFA to study bioactive metabolites in fermented foods, that may be optimized to support a healthy gut microbiome and promote anti-inflammatory activity in humans. The grant contributes to the Personalized Nutrition Initiative, aimed at optimizing health and quality of life through nutrition – an interdisciplinary partnership that includes the College of ACES and the Carl R. Woese Institute of Genomic Biology.



#### **Regenerative "Farm of the Future"**

UIUC received a \$3.9M USDA-NIFA grant to establish an 80 acre farm testing regenerative approaches to corn, soybean, and livestock production. Researchers with the university's Center for Digital Agriculture, National Center for Supercomputing Applications, and Institute for Sustainability, Energy, and Environment will leverage digital tools including precision farming, remote sensing, autonomous robotic management, and AI to accelerate new practices and management technologies that are more sustainable, profitable, affordable, and scale-neutral.

### IMPACTS OF THE ILLINOIS SNAP-ED AND EFNEP INVESTMENTS

University of Illinois Extension and UIC leveraged \$18M of total investment in Illinois' 2023 Supplemental Nutrition Assistance Program Education (SNAP-Ed) to improve food access, promote healthy food choices, and help Illinois families save money. SNAP-Ed is statewide partnering with 1,637 organizations across 364 cities to deliver nutrition education. The program reached over 1 million Illinois residents through face to face classes, newsletters, and outreach assistance. SNAP-Ed also helped partners and communities acquire over \$4 million in grant and donor funds to expand food access and health in priority areas. 2023 concluded a three-year evaluation, including a returnon-investment study which estimated broad societal and economic value of the Illinois SNAP-Ed program. Results estimate that a single year of IL SNAP-Ed programming generates a total societal value of between \$76.0 million and \$135.3 million dollars. View the full report on the Illinois SNAP-Ed Impacts page.

Using the \$2.2M Expanded Food and Nutrition Education Program (EFNEP) investment, University of Illinois Extension continues to deliver in-depth nutrition, physical activity, and food buying educational programming to diverse audiences having limited incomes. Through virtual and in-person programs, 96% of adults reported making healthier food choices after participating in the EFNEP program and 91% of youth improved their knowledge or abilities to choose foods according to the Dietary Guidelines for Americans.

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