

nebraska

neded.org

BIOSCIENCE & MEDICAL TECHNOLOGY

NEBRASKA
Advantage
Department of Economic Development

Agricultural & Animal Health

Nebraska has strong agricultural and animal health sectors and is known for its enormous capacity to produce grain, livestock, meats, food products, and alternative agricultural products. Nebraska continually ranks first in commercial red meat production and first in irrigated land harvested (Nebraska Department of Agriculture). Through collaboration with surrounding states, Nebraska has a commitment to continue to expand and build on current companies and products while further developing innovative products and attracting new companies.

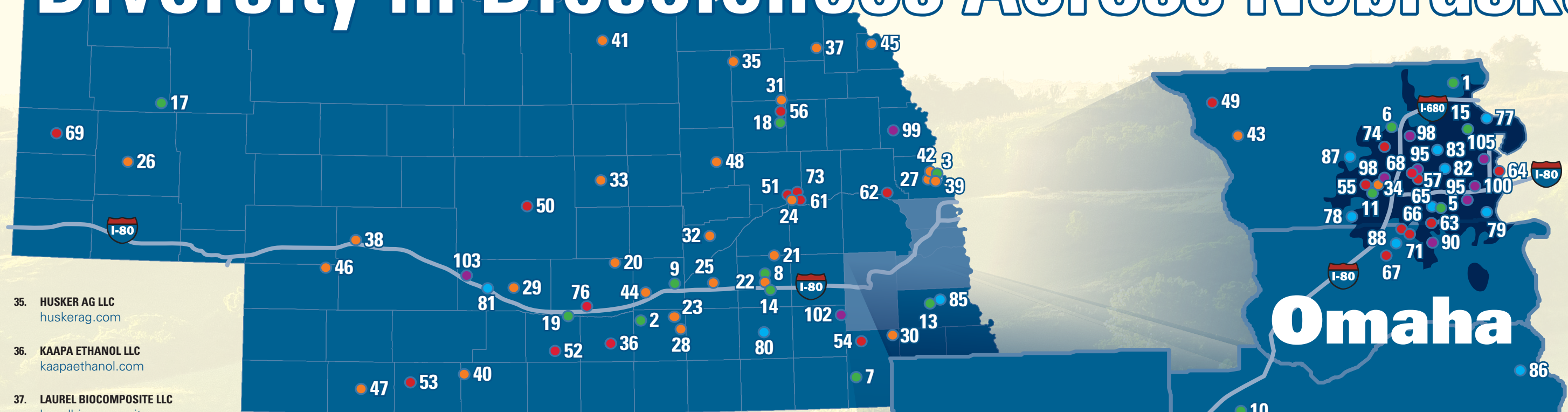
- BIOVANCE TECHNOLOGIES INC**
biovance.com
- CUPREM INC**
cuprem.com
- EVONIK - DEGUSSA INC**
degussa.com
- HOLLAND SCIENTIFIC INC**
hollandscientific.com
- INTERNATIONAL NUTRITION INC**
ini-agworld.com
- INTERVET/SCHERING PLOUGH ANIMAL HEALTH (MERCK)**
merck-animal-health.com
- KOCH FERTILIZER**
kochfertilizer.com
- MONSANTO COMPANY**
monsanto.com
- NOVA-TECH INC**
- OXBOW PET PRODUCTS**
oxbowanimalhealth.com
- PENNFIELD ANIMAL HEALTH**
- PFIZER INC**
pfizer.com
- PHARMA CHEMIE INC**
pharma-chemie.com
- PIONEER HI-BRED**
pioneer.com
- PURAC AMERICA INC**
purac.com
- SYNGENTA**
syngenta.com
- VITALIX INC**
vitalix.com
- VIT-E-MEN INC**
lifeproductsinc.com
- WARD LABORATORIES INC**
wardlab.com

Biofuels & Chemicals

Nebraska's agricultural processing, basic organic chemicals, ethanol manufacturing, organic fiber manufacturing, fertilizers and other agricultural chemicals combine to be an important key to the state's economy. Nebraska ranks 2nd among all states in ethanol nameplate and production capacity, producing more than 1.9 billion gallons of ethanol per year (Renewable Fuels Association, Washington, DC; Nebraska Energy Office, Lincoln, NE, 2012). These ethanol plants represent more than \$5 billion in capital investment in the state. The state is the largest ethanol producer west of the Missouri River. Geographic position, abundant ethanol supply and reliable, competitive rail transportation give Nebraska a strategic advantage in serving ethanol markets in the western U.S.

- ABENGOA BIOENERGY INC**
abengoabioenergy.com
- ABENGOA BIOENERGY INC**
abengoabioenergy.com
- ADVANCED BIOENERGY LLC**
advancedbioenergy.com
- AG PROCESSING INC (AGP)**
agp.com
- ARCHER DANIELS MIDLAND**
adm.com
- AVENTINE RENEWABLE ENERGY LLC**
aventinere.com
- BRIDGEPORT ETHANOL LLC**
bridgeportethanol.com
- CARGILL INC**
cargill.com
- CHIEF ETHANOL FUELS INC**
chiefethanol.com
- CORNHUSKER ENERGY**
cornhuskerenergy.com
- E-ENERGY LLC**
eenergyadams.com
- ELKHORN VALLEY ETHANOL LLC**
ldnorfolk.com
- GREEN PLAINS RENEWABLE ENERGY INC**
gpreinc.com
- GREEN PLAINS RENEWABLE ENERGY INC**
gpreinc.com
- GREEN PLAINS RENEWABLE ENERGY INC**
gpreinc.com

Diversity in Biosciences Across Nebraska



- HUSKER AG LLC**
huskerag.com
- KAAPA ETHANOL LLC**
kaapaethanol.com
- LAUREL BIOCOMPOSITE LLC**
laurelbiocomposite.com
- MIDWEST RENEWABLE ENERGY LLC**
mreethanol.com
- NATUREWORKS LLC**
natureworksllc.com
- NEBRASKA CORN PROCESSING LLC**
nebraskacornprocessing.com
- NEDAK ETHANOL INC**
nedakethanol.com
- NOVOZYMES**
novozymes.com
- PELLET TECHNOLOGY USA**
pellettechnologyusa.com
- PIONEER TRAIL ENERGY**
bfenergy.com
- SIouxLAND ETHANOL**
siouxlandethanol.com
- STANDARD ETHANOL LLC**
standard-ethanol.com
- TRENTON AGRI PRODUCTS LLC**
trentonagriproducts.com
- VALERO RENEWABLE FUELS**
valero.com

Medical Devices & Equipment

Laboratory apparatus & furniture, surgical, medical, dental, ophthalmic, analytical instruments & equipment, irradiation apparatus & electromedical equipment sectors together employ more than 3,900 people in communities across the state. Employment in this sector increased 24% from 2007-2010.

- 3-M COMPANY INC**
mmm.com
- BECTON, DICKINSON AND COMPANY**
bd.com
- BECTON, DICKINSON AND COMPANY**
bd.com
- BECTON, DICKINSON AND COMPANY**
bd.com
- BURNS PODIATRIC LABORATORY INC**
burnslab.com
- CAPPS MANUFACTURING INC**
cappsmanufacturing.com
- CETAC TECHNOLOGIES INC**
cetac.com
- COVIDIEN - KENDALL DIVISION**
covidien.com
- HKS MEDICAL INFORMATION SYSTEMS**
hksys.com

- HTI PLASTICS INC**
htiplastic.com
- J A WOOLLAM COMPANY INC**
jawoollam.com
- LI-COR BIOSCIENCES**
licor.com/bio
- MASTERCARE PATIENT EQUIPMENT INC**
mastercarebath.net
- MEDICAL ARMOR INC**
medarmor.net
- MESA LABS**
mesalabs.com
- ORION HEALTHCARE TECHNOLOGY**
orionhealthcare.com
- PRAXAIR**
praxair.com
- PRIMUS STERILIZER LLC**
primus-sterilizer.com
- RESONANCE INNOVATIONS LLC**
scanmed.com
- SLOAN MEDICAL INC**
sloanco.com
- SPINEX TEC INC**
- STANLEY SENIOR TECHNOLOGIES**
seniortechnologies.com
- STRECK INC**
streck.com

- TELEDYNE ISCO INC**
isco.com
- TORIN PRODUCTS INC**
torin.com
- TRANSGENOMIC**
transgenomic.com
- VIRTUAL INCISION INC**
robots.unl.edu
- WEST PHARMACEUTICAL SERVICES INC**
westpharma.com

Drugs & Pharmaceuticals

Medicinal, botanicals, pharmaceutical preparations, diagnostic substances and biological products are an increasingly growing subsector within the overall biosciences industry in Nebraska.

- ABS CORPORATION INC**
abs-corporation.com
- ADVANCED BIOADJUVANTS LLC**
advancedbioadjuvants.com
- AMERICAN LABORATORIES INC**
americanlaboratories.com
- BIOBERICA NEBRASKA INC**
bioiberica.com
- COLORADO BIOLABS INC**
coloradobiolabs.com
- ELEOS INC**
eleosinc.com
- JN MEDICAL CORPORATION**
jn-vaccines.org
- NOVARTIS CONSUMER HEALTH INC**
novartis.com

- PEAK NUTRITION**
peaknutrition.com
- VIREO RESOURCES LLC**
vireosystems.com
- XIMEREX INC**
ximerex.com

Research, Testing & Medical Facilities/Laboratories

Biological research, commercial medical research, testing laboratories and medical laboratories & diagnostic imaging centers comprise a major industry in Nebraska.

- AGRIUM ADVANCED TECHNOLOGIES**
agriumat.com
- AGSOURCE LABORATORIES**
agsource.crinet.com
- AMGEN**
amgen.com
- BENCHMARK BIOLABS INC**
benchmarkbiolabs.com
- CELERION**
celerion.com
- EIDE CONSULTING**
- GENESEEK/NEOGEN CORPORATION**
neogen.com/geneseek
- ICON DEVELOPMENT SOLUTIONS**
iconplc.com
- LNKCHEMSOLUTIONS INC**
lnkchemsolutions.com
- MDS PHARMA SERVICES INC**
mdsps.com
- MIDWEST LABORATORIES INC**
midwestlabs.com
- MIDWEST VETERINARY SERVICES INC**
- MVP LABORATORIES INC**
mvplabs.com
- NATURE TECHNOLOGY CORP**
natx.com
- NOVEL CHEMICAL SOLUTIONS**
novelcs.com
- PLATTE VALLEY SCIENTIFIC INC**
plattevalleyscientific.com
- RIEKE METALS INC.**
riekemetals.com
- SAFESTITCH MEDICAL INC**
safestitch.com
- SOUTHEAST NEBRASKA CANCER CENTER**
robots.unl.edu

Rankings and Facts

3rd in Biotechnology Strength Specialization Leaders

Business Facilities, businessfacilities.com, 2012

Top 10 in Biotechnology Strength Emerging Biotech Hubs

Business Facilities, businessfacilities.com, 2012

2nd in Biofuel Leaders – Ethanol

Business Facilities, businessfacilities.com, 2012

Funding from the National Institutes of Health grew by 47 percent from 2004 to 2009, compared to 15 percent nationally
Site Selection, siteselection.com, 2012

Nebraska's bioscience industry is diverse, sizable, and growing
Battelle Study, battelle.org, 2012

The state has added 7% to its bioscience employment base since 2007

Battelle Study, battelle.org, 2012

Top 10 State in total bioscience industry growth with 5% or greater job gains

Battelle Study, battelle.org, 2012

Incentives and Financing

Tax Incentives

NEBRASKA ADVANTAGE nebraskaadvantage.com

The Nebraska Advantage incentives package enhances the state's business climate and makes Nebraska a preferred location for starting and growing businesses. The package emphasizes capital investment, innovation, the creation of jobs and provides for the training of workers who accept those jobs. Incentives include:

- Sales-only formula used to calculate corporate income tax liability
- No state property tax
- No inventory tax
- No personal property tax on intangibles
- 100% depreciation for personal property tax
- Sales tax exemptions
- Sales and use tax refunds on certain property

Talent & Innovation Initiative

neded.org/ti2

The Talent and Innovation Initiative (TI2), is designed to enhance momentum in Nebraska's fastest growing industries, maintain and build on its world-class workforce, and leverage private sector innovation.

BUSINESS INNOVATION ACT

The Business Innovation Act supports the transfer of Nebraska-based technology and innovation in rural and urban areas of Nebraska in order to create high growth, high technological companies, small businesses, and microenterprises. Competitive grants will provide funding and technical assistance for research at Nebraska institutions, new product development and testing, and help expand small business and entrepreneur outreach efforts.

NEBRASKA SMALL BUSINESS INNOVATION RESEARCH INITIATIVE

The Nebraska Small Business Innovation Research (SBIR) Initiative establishes a program to provide financial assistance to small businesses with a principal place of business in Nebraska. This initiative by the State of Nebraska is designed to support applications to the federal Small Business Innovation Research program (Phase 0) and for the matching of successful federal Small Business Innovation Research program applications (Phase 1 and 2). Phase 1- to conduct feasibility research; and Phase 2- to expand and develop Phase 1 results into commercially viable innovations. There will be an open application cycle, and approved applications will be funded until the allocation is exhausted.

- "Phase 0" Planning Grants – up to \$5,000
- Phase I and Phase II – up to \$100,000 or 65% of federal grant

NEBRASKA INNOVATION FUND

The Nebraska Innovation Fund (NIF) establishes a program to provide financial assistance to individuals and businesses operating in Nebraska to support proof of concept activities and commercialization of a product or process.

- Prototype (pre-seed stage) – up to \$50,000 for purposes of creating prototype of a product stemming from research and development
- Nebraska Commercialization Program (seed stage) – up to \$500,000

NEBRASKA RESEARCH AND DEVELOPMENT PROGRAM

Academic R&D funding may be used for applied research, new product development, or new uses of intellectual property already generated by a private or public college or university in Nebraska.

- Academic R&D Phase I – up to \$100,000
- Academic R&D Phase II – up to \$400,000

- Small Business Innovation Act – up to \$10,000
- Nebraska Microenterprise Assistance Program – State Small Business Credit Initiative (SSBCI)
- Nebraska Microenterprise Investment Program – Invest NE Angel Sidecar Fund – up to \$500,000
- Nebraska Microenterprise Lending Program – Nebraska Progress Loan Fund - \$50,000 - \$5 million

Additional Opportunities

In addition to state incentives, other organizations have developed over recent years to encourage investment.

For example:

- UNeMed is a for-profit arm of the Nebraska's Board of Regents and is charged with fostering and commercializing innovation taking place at UNMC. It negotiates about 300 contracts per year enabling research and collaboration at UNMC.
- NUtech Ventures is a nonprofit organization formed to develop relationships between University of Nebraska researchers and the private sector. It connects inventors with the people and resources they need to start companies, develop products and create jobs.
- Nebraska Angels is a consortium of individual investors willing to invest in early-stage companies in Nebraska. They provide capital in the range of \$150,000 to \$750,000.
- Invest Nebraska Corporation, a nonprofit venture development organization, has both access-to-capital programs and entrepreneurial development programs.

BIOSCIENCE & MEDICAL TECHNOLOGY

Key Bioscience Research Centers & Institutions

LINCOLN

NEBRASKA INNOVATION CAMPUS

innovate.unl.edu

A dynamic environment where university and private sector talent transform ideas into innovation that impacts the world. The 249-acre development will include an estimated 7,000 people on the campus working in a collaborative environment where talented people come together intellectually to transform ideas into innovation.

UNIVERSITY OF NEBRASKA BIO-PROCESSING LABORATORY

bpdf.unl.edu

The University of Nebraska-Lincoln Biological Process Development Facility (BPDF) is a multidisciplinary “turn-key” facility focused on biopharmaceutical process research, development, and the manufacture of candidate vaccines and biotherapeutics derived from recombinant expression systems. The facility provides process research and development capabilities to transition biopharmaceuticals from discovery to Phase I/II clinical trial, featuring pilot scale facilities, a newly built cGMP suite, process research and development capabilities, and a staff of 29 focused on the development of vaccines and therapeutic agents from bacterial and yeast expression systems.

OMAHA

CREIGHTON UNIVERSITY—OMAHA

medschool.creighton.edu/medicine/research

Omaha Research at Creighton University’s School of Medicine includes bacterial resistance, cancer, hearing loss, and the conditions that affect bone health and loss. Researchers at Creighton University’s School of Medicine focus on the development of new therapies that contribute to the health and well-being of patients, and are essential to the mechanisms for treatment and disease prevention. The Intellectual Resources Management Office at Creighton University is an efficient interface between business contacts and Creighton’s technologies and services.

NEBRASKA CENTER FOR VIROLOGY

unl.edu/virologycenter

Established in the fall of 2000, this institution combines the expertise of Nebraska’s leading biomedical research institutions: University of Nebraska-Lincoln, University of Nebraska Medical Center and Creighton University. Research programs focus on important viral diseases of humans as well as within plants and animals.

GEORGE W. BEADLE CENTER

ianr.busctr.unl.edu/BBC

The George W. Beadle Center for Genetics and Biomaterials Research is a \$32 million, 140,000 square-foot facility located on the University of Nebraska—Lincoln’s main campus. The center also houses the UNL Center for Biotechnology, Redox Biology Center, and UNL Plant Science Institute. Cooperative UNL/ UNMC research programs are focused on the development of new technologies and technology spin-off companies.

UNIVERSITY OF NEBRASKA MEDICAL CENTER—OMAHA

unmc.edu

The University of Nebraska Medical Center and Eppley Cancer Center are leaders in medical research. The centers of excellence are: cancer, transplantation biology, cardiovascular disease, genetics, neuroscience, advanced biomedical technology, biosecurity and biopreparedness, and nanomedicine. Researchers are housed in the twin towers of the Durham Research Center, two 10-level facilities, complete with more than 20 research laboratories. UNeMed, the commercialization subsidiary of UNMC, handles traditional intellectual property out-licensing, and assisted in the establishment of spin-off technology companies.

Contacts

 **bionebraska**
life sciences association

BIO NEBRASKA

bionebraska.org

The mission of Bio Nebraska is to be the champion of biotechnology and an advocate for its member organizations promoting academic, industry, and government partnerships to foster the growth of life sciences within Nebraska.

Phil Kozera, Executive Director
402-829-9011
pkozera@bionebraska.org



NEBRASKA DEPARTMENT OF ECONOMIC DEVELOPMENT

neded.org

The mission of the Nebraska Department of Economic Development is to provide quality leadership and services that enable Nebraska communities, businesses, and people to succeed in a global economy. We are here, equipped and ready, to assist you and your community in developing and capitalizing on economic development opportunities.

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402-432-8376
walker.zulkoski@nebraska.gov