WHO WE ARE

The Nebraska Food for Health Center (NFHC) is an interdisciplinary effort to understand how food can be used to influence gut microbes in human and animal health. The Center is comprised of food scientists, microbiologists, plant scientists, immunologists, geneticists, statisticians and nutritionists. Their diverse expertise provides insight/results around a connection between microbiome and disease predisposition.

The Nebraska Food for Health team includes faculty from the University of Nebraska-Lincoln, University of Nebraska at Omaha, and University of Nebraska Medical Center.

WHAT WE DO

NFHC is making a global impact everyday. Through education and research, the center primarily focuses on:

- Increasing our understanding of how the gut microbiome processes fiber and other complex components of whole grains.
- Incorporating human health traits into breeding and improvement programs for food crops.
- Discovering raw/whole foods, creating processed foods, and developing symbiotics and drugs that have clinically proven effects on the microbiome.
- Improving human health through dietary components that reduce disease risk by their beneficial effects on the gut microbiome.
- Training a new generation of interdisciplinary microbiome-related experts for careers as researchers, food and health industry leaders, and food innovation entrepreneurs.

WHAT WE DO

NFHC is making a global impact everyday. Through education and research, the center primarily focuses on:

- Increasing our understanding of how the gut microbiome processes fiber and other complex components of whole grains.
- Incorporating human health traits into breeding and improvement programs for food crops.
- Discovering raw/whole foods, creating processed foods, and developing symbiotics and drugs that have clinically proven effects on the microbiome.
- Improving human health through dietary components that reduce disease risk by their beneficial effects on the gut microbiome.
- Training a new generation of interdisciplinary microbiome-related experts for careers as researchers, food and health industry leaders, and food innovation entrepreneurs.

HOW WE DO IT

The Center is made up of five key programs and initiatives that focus on how to leverage food processing to do food production to prevent and treat disease.

- **Diversity** – An interdisciplinary group of researchers that links different aspects of crop and food production with their effects on the gut microbiome and health/wellness. This group identifies components of whole grains and downstream food processing methodologies that affect the gut microbiome, and then uses crop breeding and improvement programs as well as food processing strategies to optimize the effects of food on the gut microbiome and health/wellness of the population. The ultimate goal is to reduce the risk of diseases.

- **Gnotobiotic Program** – The program utilizes the Gnotobiotic Facility to study diet, microbiome, immunity, and health using a germ-free mouse model.

- **Clinical & Health Program** – Facilitates clinical study of diet-microbiome interactions and how they affect people’s wellness and disease susceptibility. Allows researchers to establish efficacy of specific food components in promoting wellness, disease prevention, and disease intervention.

- **Callitrichid Research Center** – As part of UNO, the center provides a transitional primate model for studying the microbiome. This non-invasive model provides pre-clinical validation of research on diet-microbiome interactions and also enables exploration of the diet-microbiome-brain-behavior axis as well as examining other various health related endpoints.

- **NFHC Fellows Program** – This graduate training program supports students interested in interdisciplinary study at the interfaces of human health, medical biochemistry, plant phonemics, and host-microbial metagenomics. Fellows are permitted a full year of research rotations between any of our current 20+ NFHC researchers on three different campuses in order to identify best fit for interests and training opportunity.
WHY WE DO IT

The mission of NFHC is to improve human health by linking agriculture and food production to wellness and disease prevention through microbiome research.

The long-term impacts of the research between agriculture and medicine holds the potential to solve and prevent some of the most important health challenges we face.

---

Jeffery Raikes

"This critical effort will further define Nebraska as an agricultural leader while bringing together for the first time agricultural production, food processing and medical research to improve the health of people in this country and around the world."

---

INVESTMENT OPPORTUNITIES

The NU Foundation has established the Nebraska Food for Health Excellence Fund which allows the Director to fund the most pressing needs including vital pilot studies. Any gift amount would be appreciated.

Gifts can also be made for specific endowments which provide the Center with the ability to recruit and retain the brightest individuals and assuring the longevity of the Center.

Endowed gifts include:

- NFHC Graduate Fellowships $4 M
- Primate Biologist at UNO $1 M
- Discovery Research Assistant $1 M
- Gnotobiotic Research Professor $1 M
- Clinical Facility $2 M
- NFHC Presidential Chair $2 M

---

Nebraska Food for Health Center
Nebraska Innovation Campus
1901 N 21st St
Lincoln, NE 68508
402-472-1862
foodforhealth.unl.edu

Interested in donating or visiting Nebraska Food for Health Center?

Josh Egley
Sr. Director of Development - IANR
University of Nebraska Foundation
1010 Lincoln Mall, Suite 300
Lincoln, NE 68508
402-458-1202
402-314-4633 mobile
josh.egley@nufoundation.org


"This critical effort will further define Nebraska as an agricultural leader while bringing together for the first time agricultural production, food processing and medical research to improve the health of people in this country and around the world."

—Jeffery Raikes