



Spoke Newsletter Wednesday May 02, 2018



Attendance: 27 (61%) Attendance with make ups: 29 (68%)

Lincoln East Rotary Club web address: https://portal.clubrunner.ca/4424

Program Wednesday, April 25, 2018 *Randy Jones—Aging Partners* Program arranged by Minnie Stephens

Program Wednesday, May 3, 2018

Vice Chancellor, Michael Boehm—Update on the Institute of Agriculture & Natural Resources Program arranged by Minnie Stephens



Michael J. Boehm currently serves as the University of Nebraska-Lincoln Harlan Vice Chancellor for the Institute of Agriculture and Natural Resources (IANR) and University of Nebraska Vice President for Agriculture and Natural Resources. Mike joined the university on January 1, 2017. Previously, Mike was a professor of plant pathology and vice provost for academic and strategic planning at Ohio State. Mike is an authority on the integrated management of turfgrass diseases and focuses on the biology, ecology, and management of fungal diseases. He is widely published, holds five US. and 15 international patents related to his work on the biocontrol of Fusarium head blight. Mike was also a Lieutenant Commander in the U.S. Naval Reserve for 10 years, serving as a microbiologist and served 10 years as a Staff Sargent in the U.S. Army Reserve . Mike and his wife Connie have two children, Kirby and Karly.

Nebraska Food for Health Center, University of Nebraska

"What we discover may someday lead to unprecedented approaches to prevent complex diseases and improve the quality of life of individuals with rare diseases," said Andrew Benson, center director. "This is a good test case for us." Trillions of microbes, such as bacteria, viruses and fungi, live in the human

gut microbiome. Normally, the microbiome helps the body regulate organs, develop immune systems, fight disease and metabolize foods. But sometimes that doesn't happen, and center researchers are learning that abnormalities in the gut microbiome are factors in many diseases.





May 02, 2018

A Rotary Thank You to Michael Boehm for an excellent presentation on UNL Studies on Food For Health.

Lincoln East Rotary Club Meetings at Valentino's—70th & Van Dorn Noon Luncheon starting @ 11:45 a.m. The multidisciplinary center capitalizes on strengths in agricultural production, food processing, and biomedical ressearch from throughout the university system to develop the science of dietary modulation - the ability to manipulate the gut microbiome with specific dietary components.

The research focuses on developing hybrid crops and foods with proven capacity to influence the microbiome and provide health benefits for people with cystic fibrosis, heart, disease, inflammatory bowel disease, diabetes, obesity, cancers and mental disorders.

Identifying components from commodity plants that selectively feed beneficial microbes or inhibit the growth of the harmful ones will enable researchers to develop ingredients and foods from such plants with health-promoting properties.

Many major universities with medical centers are investigating the gut microbiome, but the Nebraska Food for Health Center is unique in its approach.

We can connect agriculture and medicine in a way that no one else can, and we use the gut microbiome to connect them.

"Everything we do is driven by science." For example, the university's rich history in plant breeding enables scientists to use quantitative genetics and breeding to identify potentially beneficial "traits" in crops such as corn, soybeans, dry edible beans, and sorghum. These traits are identified first by testing the capacity of the grains

to affect a microbiome in vitro.

When candidate traits are identified, researchers next validate the effects by observing how the grains interact with the gut Microorganisms in a live animal in the Gnotobiotic Mouse Facility. If those molecules show promise, scientists will then progress to testing the effects in human clinical studies and work to develop hybrid crops containing those beneficial ingredients to improve human health.

"This new interface between agriculture and medicine holds tremendous potential to transform how we think about preventing and treating disease,"

Our History:

The conceptual framework for the Nebraska Food for Health Center came from the Gut Function Initiative at the University of Nebraska–Lincoln. Established in 2007 within the Department of Food Science and Technology by Andrew Benson and Robert Hutkins, the Gut Function Initiative provided a conceptual framework for food science research based on a complete understanding of the human gut function, including the hundreds of trillions of microbes (the gut microbiome) that reside in the gut ecosystem. Studies led by Gut Function Initiative researchers brought about remarkable discoveries of how individual genetics and the immune system work to shape species composition of the gut microbiome; an understanding of how some bacterial species have adapted to life in the gut; and an understanding of how specific dietary components can have a major influence on microbiome composition and inflammatory and metabolic characteristics of an individual.

Meanwhile, biomedical researchers around the world were making discovery after discovery showing that abnormalities in the gut microbiome were associated with a wide range of metabolic diseases (e.g. obesity, diabetes, metabolic syndrome) and inflammatory diseases (Inflammatory Bowel Diseases, Colon Cancer). Translational studies from the initiative also fueled a growing interest in "dietary modulation"—the ability to specifically stimulate growth of desirable (beneficial) species of gut microbes through use of targeted dietary components that are exclusively metabolized by these microbes (but not by human metabolism alone). Just the opposite of antibiotics, dietary modulators of the microbiome selectively feed microbes that provide benefits to the host.

Note:: Information in this Spoke article was acquired from Growing A Healthy Future Magazine

Lincoln East Rotary Club Teacher of the Month—April 2018 Mitch Hirt—Irving Middle School



Jason Shanahan, Principal, Mitch Hirt, Teacher, Kayla Finck, U.S. Bank, Wayne Casper, Chairman

Lincoln East Rotary Club Members extend a sincere thank you and congratulations To Mitch Hirt, as an outstanding teacher in Lincoln Middle Schools.



Keith Larsen Konan Blaise Koko

Konan Blaise Koko, is a champion, having won several power lifting titles in both Nebraska and Africa. He is also a survivor of polio. Keith Larsen, member of the 14th Rotary Club, described him as the club's hero for being the inspiration for one of the group's projects: giving wheelchairs to polio survivors.

(Lincoln East Rotary Foundation contributed \$300 to this project)

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CASHIER TABLE May—Darrel Huenergardt June—Gordon Bair Contact Dick Cumming		Guests & V Merrilea Anderson Mitch Hirt Lori Hirt Kayla Finck Mike Boehm	Visitors Steve Grosserode Teacher Spouse U.S. Bank Speaker
A sincere thank yo	ncoln East Rotary Clu <i>Collections to</i> ou to all Lincoln East Rot oject. We will continue t	<i>Date: \$900.00</i> tary Club members that to pass the basket throug	t made donations to

May 16, Amanda Mobley Guenthe—Bone Creek Museum, arranged by Minnie Stephens May 23, Dr. Steve Jones – On Line Teaching/Dept. of Animal Science, arranged by Minnie Stephens May 30, Dennis Buckley—Past Editor, Neighborhood Extra, arranged by Wayne Casper-