Midwest Public Health Innovation and Research Expo

November 3, 2023 College of Public Health University of Nebraska Medical Center

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I. MORNING SESSIONS Theme: Messages and Messengers

Session 1—Forging Collaboration Across Disciplines Chair: Eleanor Rogan, PhD

○ 9:00 – 9:10 AM

Ali Khan, MD, MPH, MBA

Dean and Professor, College of Public Health

University of Nebraska Medical Center (UNMC)

Welcome

○ 9:10 – 9:20 AM

Derek McLean, PhD

Dean and Professor, Institute of Agriculture and Natural Resources (IANR) University of Nebraska-Lincoln

Welcome and Introduction to UNL Institute of Agriculture and Natural Resources

o 9:20-10:15 AM

Elizabeth VanWormer, PhD

Associate Professor School of Veterinary Medicine & Biomedical Sciences, Director of One Health, IANR

University of Nebraska-Lincoln

Interface of humans, animals, and the environment

Amy T. Desaulniers, PhD

Assistant Professor of Reproductive Physiology, School of Veterinary Medicine & Biomedical Sciences, IANR

University of Nebraska-Lincoln

Physiological effects of atrazine on swine: implications for agriculture and human health

Christopher Gustafson, PhD

Associate Professor of Behavioral Economics & Health Disparities,

Agricultural Economics, IANR

University of Nebraska-Lincoln

Using choice process variables to understand consumer food choice behavior in complex environments

Roma Subramanian, PhD

Associate Professor of Communication, College of Communication, Fine Arts and Media

University of Nebraska at Omaha

Substance abuse in rural Nebraska









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Session 2—Public Health Equity and Disparities in Healthcare Chairs: Edward Peters, DMD, SM, ScD, FACE, and Stacey Coleman, MPA

o 10:30-10:55 AM

Robin Lally, PhD, MS, BA, RN, AOCN, FAAN, Director of the Center for Patient, Family, & Community Engagement in Chronic Care Management and Bertha L. Pankratz Professor of Nursing, College of Nursing UNMC

What are we doing about cancer-health disparities and inequities? Review of two local implementation studies

o 10:55-11:15 AM

Athena Ramos, PhD

Associate Profession, Health Promotion, College of Public Health UNMC

Cattle Feedyard Worker Health Study

o 11:15-11:45 AM

Qingzhao Yu, PhD

Interim Associate Dean for Research, School of Public Health Louisiana State University Health Sciences Center at New Orleans Inference on Moderation Effect with Mediation Analysis--Application to Explore the Trend of Racial Disparity in Oncotype DX Test for Breast Cancer Treatment

o 11:45 AM-12 noon

Panel Discussion

Introductory comments from Stacey Coleman; panelists were Drs. Lally, Ramos, and Yu









II. AFTERNOON SESSIONS Theme: Public Health Problems and Solutions

Session 3—Poster Presentations

Chair: Dana Verhoeven, PhD

• POSTERS PRESENTED FROM 12:00-1:00 PM

Grace Mabiala-Maye

Department of Health Services Research & Administration (HSRA) College of Public Health, UNMC

Co-authors: Abbie Raikes, Marcus Waldman, Katelyn Hepworth

Food Insecurity and Child Development in Nebraska: The Role of Income,

Home Learning Environment, and Family Socio-Demographic Factors

Maria Mickles

Department of HSRA

College of Public Health, UNMC

Co-author: Dana Verhoeven

Examination of the National Cancer Institute's Comprehensive Cancer Centers' Survivorship Program Websites

Aatiya Ahmad

Department of HSRA

College of Public Health, UNMC

Co-author: Dana Verhoeven

Examining conflicts between multidisciplinary teams in cancer care

Todd Wyatt

Department of Environmental, Agricultural and Organizational Health (EAOH)

College of Public Health, UNMC

Co-authors: K. L. Bailey, D. R. Samuelson, and D. L. Knoell

Triple-hit model of alcohol, zinc deficiency, and cigarette smoke exposure

impairs lung inflammatory and immune responses

Runqiu Wang

Department of Biostatistics (BIO)

College of Public Health, UNMC

Co-authors: Ran Dai, Hongying (Daisy) Dai, Cheng Zheng

Controlling FDR in selecting group-level simultaneous signals from multiple data sources with application to the National Covid Collaborative Cohort data

Kyei Baffour Afari

Department of BIO

College of Public Health, UNMC

Co-author: Dr. Christiana Lewis Nicole

Performance Comparison of Imputation Methods for Mixed Data Missing at Random with Small and Large Sample Data Set with Different Variability

Juliana Monono

Department of Epidemiology

College of Public Health, UNMC

Co-author: Dr. Joseph Fauver

Understanding Perceptions of Tick-Borne Disease (TBD) Risk and Prevention in Agricultural Operators and Their Healthcare Providers in the Plains States

Hanh Pham

Department of BIO

College of Public Health, UNMC

Co-authors: Hongying Daisy Dai PhD, Pham Hanh BS, Nick Guenzel PhD, Mathuri Morgan BS, Ellen Kerns PhD, Jonathan P. Winickoff MD, MPH Adoption of Vaping Cessation Methods by U.S. Adolescent E-cigarette Users

Apu Chandra Das

Department of BIO

College of Public Health, UNMC

Co-authors: Dr. Lynette Smith, Dr. Ran Dai, Dr. Anna Lokshin

Stability Selection Ensemble Learning Framework for Identifying Biomarkers for Early Cancer Detection

Jiani Zhang

Department of BIO

College of Public Health, UNMC

Co-author: Su Chen

Effects of parity and other reproductive factors on breast cancer risk and age at diagnosis

Amber Brown Keebler, MD

Assistant Professor, Division of General Internal Medicine, College of Medicine

UNMC

Co-authors: Kaleb Michaud, PhD and Sofia Pedro, MS Financial toxicity among patients with rheumatoid arthritis and noninflammatory rheumatic conditions

Vaibhavi Mone

Department of HSRA

College of Public Health, UNMC

Co-authors: Jungyoon Kim, Hongmei Wang, Paul Estabrooks, and Jane Potter

Sociodemographic Variability in Telehealth Utilization Among Older Adults During The Covid-19 Pandemic

Cleo Zagurski

Creighton University

Co-authors: Tzeyu Michaud PhD, George Johnson MSPH, Kathryn E. Wilson, PhD, Gwenndolyn C. Porter, PhD, Paul A. Estabrooks PhD

Reach and weight loss of comparison group participants that engaged in the active intervention following a diabetes prevention trial

lkenna Orji

Department of EAOH

College of Public Health, UNMC

Co-authors: Dr. Dike Ogbuagu, Dr. S.M.O. Akhionbare

Effects of Highways and Local Activities on the Physicochemistry of

Groundwater in Owerri, Imo State, Nigeria





BREAKOUT ROOMS FROM 12:00-1:00 PM Room #1: Promoting Public Health Communication through Team Science and Innovation

Chairs:

- 🗌 Jesse Bell, PhD
 - Associate Professor of Environmental, Agricultural and Occupational Health

College of Public Health, UNMC

Derek McLean, PhD

Professor and Dean, Institute of Agriculture and Natural Resources,

UNL

Room #2: Global Health and Student Engagement Chair:

Danielle Thies, MPH, MA
Program Manager, Center for Global Health and Development,
College of Public Health, UNMC







Session 5—Research Innovation Chair: Ronnie Horner, PhD

o 1:00-1:20 PM

Cheryl Beseler, PhD

Associate Professor of Environmental, Agricultural and Occupational Health

College of Public Health, UNMC

Trajectories in exposure to discrimination among US adults during the COVID-19 pandemic

o 1:20-1:40 PM

Jungyoon Kim, PhD

Assistant Professor of Health Services Research & Administration College of Public Health, UNMC

BEAT Cancer: A Cross-Sectoral Partnership to Improve Cancer Prevention among African Americans

o 1:40-2:00 PM

Todd Wyatt, PhD

Professor of Internal Medicine, Division of Pulmonary, Critical Care, Sleep & Allergy, College of Medicine, and EAOH, College of Public Health, UNMC *Triple-hit model of alcohol, zinc deficiency, and cigarette smoke exposure impairs lung inflammatory and immune responses*



Session 6—Student Research and Awards Ceremony Chair: Daisy Dai, PhD o 2:00-2:20 PM Chambers Fellowship Taylor Clarkson, MPH student of Epidemiology College of Public Health, UNMC Faculty advisor: Joseph Fauver, PhD o 2:20-2:25 PM NIH F31 Applicants Louis Fok, PhD student of Epidemiology Faculty advisor: Abraham Mengist, PhD o 2:25-2:35 PM Student Research Conference Awardees **Rishad Ahmed, PhD student of Health Promotion** Faculty advisor: Athena Ramos, PhD Emma Hymel, PhD student of Epidemiology Faculty advisor: Shinobu Watanabe-Galloway, PhD Josiane Kabayundo, PhD student of Epidemiology Faculty advisor: Shinobu Watanabe-Galloway, PhD Rashmi Lamsal, PhD student of Health Services Research & Administration Faculty advisor: David Palm, PhD **Emiliane Lemos Pereira, PhD student of Health Promotion** Faculty advisor: Tzeyu Michaud, PhD Vaibhavi Mone, PhD student of Health Services Research & Administration Faculty advisor: Jungyoon Kim, PhD Natalia Santos, PhD student of Health Promotion Faculty advisor: Fabiana Silva, PhD Harlan Sayles, PhD student of Biostatistics Faculty advisors: Lynette Smith, PhD, and Chris Wichman, PhD Sarah Tucker, PhD student of Environmental, Agricultural and **Occupational Health** Faculty advisor: Aaron Yoder, PhD Xiaoqing Wang, MPH student of Biostatistics Faculty advisor: Ran Dai, PhD

III. AWARD College of Public Health Research Recognition Award

Alumni Research Award

Kavita Mosalpuria, PhD Assistant Professor of Public Health in Brody School of Medicine East Carolina University, NC

Dr. Mosalpuria received her PhD in Health Services Research, Administration and Policy in August 2021



IV. POSTER ABSTRACTS

Aatiya Ahmad Department of Health Services Research & Administration College of Public Health, UNMC Co-author: Dana Verhoeven Examining conflicts between multidisciplinary teams in cancer care

Background and objective

Cancer is an intricate and complex disease that requires multiple specialist teams to work closely together to delivery care. A multidisciplinary team (MDT) promotes more precise and comprehensive care to cancer patients, which is why it has grown in popularity in the last decade. MDTs work as a team-of-teams, or multiteam systems, which can create challenges both within and between teams for care coordination due to specialization differentiation and goal discordance. This paper proposes a theoretical framework for understanding how goal alignment impacts cancer care delivery and care coordination both within and between care teams. The objective of this research is to develop a framework for goal alignment within MDTs by 1. Defining goal conflicts that commonly arise between teams, 2. Why they occur, and 3. Discuss ways to minimize or resolve them.

Kyei Baffour Afari Department of Biostatistics College of Public Health, UNMC Co-author: Dr. Christiana Lewis Nicole Performance Comparison of Imputation Methods for Mixed Data Missing at Random with Small and Large Sample Data Set with Different Variability

Background and objective

Missing data is considered as an unstored data value for a variable in observation of interest. As complete data sets are needed to help firms and institutions to produce more accurate and precise results, the presence of missing data rather leads to inaccurate results, bias in parameter estimation and reduction in statistical power.

Missing data invariably give rise to reduced sample size and thus, leads to a less precise confidence interval and reduced power in the tests of significance. All these pitfalls lead to incorrect conclusions and invalid recommendations. The study assesses the best multiple imputations by chain equation (MICE) procedure for handling missing data for large and small mixed data sets with different variability and with different percentage levels of missingness.

Amber Brown Keebler, MD Assistant Professor, Division of General Internal Medicine College of Medicine, UNMC Co-authors: Kaleb Michaud, PhD and Sofia Pedro, MS Financial toxicity among patients with rheumatoid arthritis and noninflammatory rheumatic conditions

Background and objective

Often not evaluated in clinical visits, financial distress associated with medical costs, known as financial toxicity, has emerged as an important factor affecting patient health due to reduced medication adherence, stress, and negatively impacted relationships. Originally utilized in oncology, the FACIT-COST questionnaire provides a quantitative measure of financial toxicity validated in chronic diseases such as diabetes and cardiovascular disease. Financial toxicity has never been described in rheumatology, and we aimed to quantify financial toxicity and identify associated factors in participants with rheumatoid arthritis (RA) versus non-inflammatory rheumatic disease (NIRD).

Apu Chandra Das

Department of Biostatistics College of Public Health, UNMC Co-authors: Dr. Lynette Smith, Dr. Ran Dai, Dr. Anna Lokshin Stability Selection Ensemble Learning Framework for Identifying Biomarkers for Early Cancer Detection

Background and objective

A growing number of biological markers are being tested to identify sensitive and specific biomarkers for early cancer detection, tumor regrowth, or metastasis. The biomarkers can be obtained by simple blood tests, making them an inexpensive, noninvasive method for detecting cancer. Modern biomarker analysis often result in high-dimensional data sets with many more biomarkers than subjects (n \ll p). However, there is no guarantee that all the signal variables will be selected by existing regularization approaches. Since ovarian cancer and endometrial cancer have poor prognoses, we aim to identify biomarkers that show excellent performance in both the discovery and validation phases of early cancer detection.

Grace Mabiala-Maye

Department of Health Services Research & Administration College of Public Health, UNMC Co-authors: Abbie Raikes, Marcus Waldman, Katelyn Hepworth Food Insecurity and Child Development in Nebraska: The Role of Income, Home Learning Environment, and Family Socio-Demographic Factors

Background and objective

Food insecurity is a well-known risk factor for delayed child development. Still, the contribution of other factors, such as income, home learning environment (HLE), and family socio-demographic factors, remains to be determined. Therefore, the study aimed to determine the association between food insecurity and child development and assess the role of income, HLE, and family socio-demographic factors in that association.

Maria Mickles

Department of Health Services Research & Administration College of Public Health, UNMC Co-author: Dana Verhoeven

Examination of the National Cancer Institute's Comprehensive Cancer Centers' Survivorship Program Websites

Background and objective

There are an estimated 16.9 million cancer survivors in the US, and that number is expected to grow to more than 22.1 million by 2030 (Miller et al., 2019, 2022). To address the increased need for cancer treatment and survivorship care, the National Cancer Institute's (NCI) established Comprehensive Cancer Center designation status to recognize cancer centers delivering quality care. However, despite the increased prevalence, little is known about the cancer survivorship programs in place to handle the growing population (Miller et al., 2022). This study reviewed and evaluated the quality of survivorship care programs offered by NCI Comprehensive Cancer Centers by systematically reviewing their public-facing websites using Nekhlyudov and colleagues (2019) framework. Results outline survivorship care quality in terms of 1. Contextual Domains of Health-Care Delivery, 2. Domains of Cancer Survivorship Care Pertaining to Cancer and its Treatment, and 3. Domains of Cancer Survivorship Pertaining to General Health Care factors.

Vaibhavi Mone

Department of Health Services Research & Administration College of Public Health, UNMC

Co-authors: Jungyoon Kim, Hongmei Wang, Paul Estabrooks, and Jane Potter

Sociodemographic Variability in Telehealth Utilization Among Older Adults During The Covid-19 Pandemic

Background and objective

There is a limited understanding of the sociodemographic factors to improve Telehealth-based preventive care use for older adults. This study explored the changes in utilization of Medicare annual wellness visits (AWV) among older patients in primary care settings before and during the COVID-19 pandemic when delivery via telehealth became an option. The study will also examine how these changes are associated with sociodemographic characteristics of patients. Juliana Monono Department of Epidemiology College of Public Health, UNMC Co-author: Dr. Joseph Fauver Understanding Perceptions of Tick-Borne Disease (TBD) Risk and Prevention in Agricultural Operators and Their Healthcare Providers in the Plains States

Background and objective

Ticks are rapidly expanding their geographical ranges across the U.S., including into new regions in the central plain's states. Specific Aim 1- Develop and deploy a questionnaire to understand agricultural operators' perceptions of tick-borne disease risk and prevention. Specific Aim 2- Adapt and expand an existing questionnaire aimed at understanding healthcare provider and veterinary professionals' knowledge of tick-borne diseases to additional plains states.

Ikenna Orji

Department of Environmental, Agricultural and Occupational Health College of Public Health, UNMC

Co-authors: Dr. Dike Ogbuagu, Dr. S.M.O. Akhionbare Effects of Highways and Local Activities on the Physicochemistry of Groundwater in Owerri, Imo State, Nigeria

Background and objective

Background

- Several studies have shown that human activities can degrade groundwater quality.
- Most highways in Nigeria are busy with several activities.
- Sampling locations close to the highway for this study had activities such as local restaurants, guest houses, roadside trading, road construction, and vehicular movements.
- The study investigated a correlation between these activities and groundwater physicochemistry.

Objectives

- To determine possible temporal variations in the physicochemistry of groundwater proximal to highways in Owerri, Imo.
- To compare the levels of the physicochemical parameters with regulatory standards for drinking water.

Hanh Pham

Department of Biostatistics College of Public Health, UNMC Co-authors: Hongying Daisy Dai PhD, Pham Hanh BS, Nick Guenzel PhD, Mathuri Morgan BS, Ellen Kerns PhD, Jonathan P. Winickoff MD, MPH Adoption of Vaping Cessation Methods by U.S. Adolescent E-cigarette Users

Background and objective

A large number of adolescent e-cigarette users intend to quit vaping or have past-year quit attempts. However, it remains unknown which methods they use in their vaping cessation efforts.

Runqiu Wang

Department of Biostatistics College of Public Health, UNMC Co-authors: Ran Dai, Hongying (Daisy) Dai, Cheng Zheng Controlling FDR in selecting group-level simultaneous signals from multiple data sources with application to the National Covid Collaborative Cohort data

Background and objective

As the COVID-19 pandemic continues to impact societies worldwide, investigating and mitigating the long-term consequences of the virus on individuals' post-acute phase has become a crucial concern. In the recently established National COVID Collaborative Cohort (N3C), electric health record (EHR) data on the same candidate features are independently collected in multiple sites, offering opportunities to identify risk factors for post-acute COVID sequelae (or long COVID) by combining information from various sources. However, since the data from different sites are with heterogeneous populations and different quality, it is challenging to make reliable discoveries from such joint data. In statistical analysis, false discovery rate (FDR) controlling procedures can provide important statistical guarantees for replicability in risk factor identification. This study aims to develop a novel FDR controlling method to identify mutual risk factors for long COVID with an exact FDR control guarantee.

Todd Wyatt

Department of Environmental, Agricultural and Organizational Health College of Public Health, UNMC Co-authors: K. L. Bailey, D. R. Samuelson, and D. L. Knoell

Triple-hit model of alcohol, zinc deficiency, and cigarette smoke exposure impairs lung inflammatory and immune responses

Background and objective

Alcohol misuse is a known risk factor for pneumonia. However, combined life exposures (the exposome) are poorly understood in the context of alcohol misuse. Previously, we demonstrated that alcohol prevents effective mucociliary clearance and the combination of cigarette smoking+alcohol results in aldehyde-mediated inflammation and protein adduction altering injury repair. Immune function is mediated by zinc, an essential nutrient and cofactor with insufficient dietary intake negatively impacting one-third of the world's population. We hypothesized that a complex model of alcohol, smoking, and zinc deficiency would result in a significant impairment of innate infection defense compared to each condition alone.

Cleo Zagurski

Creighton University

Co-authors: Tzeyu Michaud PhD, George Johnson MSPH, Kathryn E. Wilson, PhD, Gwenndolyn C. Porter, PhD, Paul A. Estabrooks PhD Reach and weight loss of comparison group participants that engaged in the active intervention following a diabetes prevention trial

Background and objective

We examined the reach and weight loss outcomes of comparison group participants in a diabetes prevention trial who enrolled in the active intervention (i.e., digital-based diabetes prevention program) after the trial ended.

Jiani Zhang Department of Biostatistics College of Public Health, UNMC Co-author: Su Chen Effects of parity and other reproductive factors on breast cancer risk and age at diagnosis

Background and objective

Breast cancer stands as a significant health concern, influenced by various factors, including one's reproductive history such as parity, and age at first full-term pregnancy. Prior studies have shown that parity can have complicated effects on breast cancer. This study aims to investigate both linear and nonlinear relationships between parity and breast cancer risk, as well as ages at diagnosis of breast cancer.

V. SPONSORS AND CO-SPONSORS

College of Public Health

University of Nebraska Medical Center

The mission of the College of Public Health is to transform lives and to create a healthy future for all individuals and communities through premier education, research, and service to Nebraska, the nation, and the world. The COPH is accredited by the Council on Education for Public Health (through July 1, 2024); only 50 of the 134 academic medical centers in the United States have accredited public health colleges. COPH faculty work with collaborators from the other UNMC colleges on funded and unfunded research projects.

The COPH is housed in the Harold M. and Beverly Maurer Center for Public Health (MCPH). The MCPH is a 61,423-square-foot facility in which are offices, workspaces, and meeting spaces for College students, faculty, and staff. Included herein are approximately 11,880 square feet of lockable office space for faculty and professional staff and 3,550 square feet of modular office space for staff and teaching and research assistants. Centrally located space for core support functions (mail, copying, and general workspace) is provided on each of the facility's three floors.

The facility has four conference rooms plus three rooms that facilitate collaborative learning/research available to College administration, faculty, and staff. Three conference rooms are equipped, at minimum, with Smart Board technology. Additionally, one of these conference rooms is equipped to provide streaming Internet video and two-way video conferencing. COPH students learn in nine classrooms, all of which have full digital technology including Zoom capability (two-way video conferencing). Additionally, four of them have Echo 360 video/audio recording technology. Classrooms range in size from an 82-seat auditorium to multiple 16-20 seat classrooms. The combined education and student support area is approximately 6,740 square feet.

The COPH provides ample common space—both formal and informal—to encourage student, community, and faculty interactions. The lobbies are

designed to provide semi-private meeting areas as well as open areas for interaction. A variety of seating configurations allow distinct areas for discussion, group work, and individual studying.

Institute of Agriculture and Natural Resources University of Nebraska-Lincoln

The University of Nebraska Institute of Agriculture and Natural Resources (IANR) at UNL was created by the Nebraska Legislature in 1973 through the enactment of LB149. This legislation culminated more than ten years of discussion by state leaders, University officials, and agriculture interests in Nebraska who were concerned that agriculture was not being given proper financial support, administrative access, and prominence within the University—especially considering the unquestioned importance and contributions of agriculture and natural resources to the state's economy and success.

IANR is composed of the College of Agricultural Sciences and Natural Resources (CASNR), the Agricultural Research Division (ARD), Nebraska Extension and the ARD and Extension components of three departments in the <u>College of Education and Human Sciences</u>. IANR innovation in research, teaching, and extension education places Nebraska on the leading edge of food production, environmental stewardship, human nutrition, business development, and youth engagement.

College of Agricultural Sciences and Natural Resources (CASNR) prepares students for careers in everything from animals to plants, soil to climate, golf to business, mechanization to leadership, and food to forensic science. Students are prepared for successful careers and a lifetime of informed decisions through the development of food, fuel, water, and landscape systems as models for formal and informal science education.

Agricultural Research Division (ARD) is the only public entity in Nebraska charged with conducting agricultural research vital to Nebraska where agriculture is the leading industry. Many ARD scientists, who currently are working on approximately 300 research projects throughout Nebraska, also hold teaching or extension appointments. That means exciting new discoveries move quickly from the field or laboratory into the classroom and across Nebraska. Nebraska Extension delivers research-based knowledge Nebraskans can immediately use in their lives, businesses, families and communities. Extension's key focus areas are animal agriculture, crops for the future, children, youth and families, entrepreneurship, food, nutrition and health, water and environment. Approximately 144,000 Nebraska youth are involved in extension's 4-H program.

Great Plains IDeA-Center for Translational Research University of Nebraska Medical Center

The Great Plains IDeA-CTR, funded by the National Institute of General Medical Sciences, is tasked with building infrastructure for investigators in the state of Nebraska. The cores of the Great Plains IDeA-CTR support the following objectives: 1) to support the development and/or enhancement of infrastructure and human resources required to address clinical and translational research needs in IDeA-eligible states/jurisdictions, (2) to strengthen clinical and translational research that addresses the broad spectrum of health challenges faced by populations in IDeA-eligible states/jurisdictions, and (3) to foster and coordinate collaboration in clinical and translational research within an IDeA-CTR network and with other institutions.

Administrative Core

The Administrative Core oversees the GP IDeA-CTR and provides resources for consultations and research navigation services.

<u>Biomedical Informatics, Bioinformatics, & Cyberinfrastructure Enhancement</u> (<u>BERD</u>)

The BERD core provides critical research design, epidemiological, and biostatistical expertise for collaborative research, education, and training in the advancement of CTR within the GP IDeA-CTR network.

Biostatistics, Epidemiology, & Research Design (BIBCE)

The BIBCE core provides informatics infrastructure necessary to support CTR, including support for the Clinical Research Analytics Environment (CRANE), Nebraska Biobank, Electronic Health Record Data Access Core, and the Bioinformatics and Systems Biology Core.

Community Engagement & Outreach (CEO)

The CEO core facilitates and disseminates high-quality and locally relevant community-engaged research that advances CTR and aligns with the state's health priorities.

Professional Development (PD)

The PD core provides a wide array of professional development opportunities, such as seminars, a research scholar program, an early career investigator program, research studios, and mini sabbatical funding.

Pilot Projects Program

The Pilot Projects Program provides opportunities for pilot funding through various mechanisms including: team research, tech transfer, heart and vascular, data science, community engagement, design methodology, and innovation grants.

Tracking & Evaluation (T&E)

The T&E core conducts activities to determine the effectiveness of the GP IDeA-CTR, and works alongside evaluators from similar programs to determine best practices in evaluating infrastructure building programs.