

**NU Board of Regents  
visit to the  
University of Nebraska Medical Center  
Wednesday, October 4, 2023 – Thursday, October 5, 2023**

**Wednesday, October 4, 2023**

**Parking:** Lot 36

**8:30 A.M. Refreshments & Gathering**

*Location: Olson Atrium, 4<sup>th</sup> Floor Wigton Heritage Center, UNMC*

**9:00 A.M. Welcome: The UNMC Mission, Vision & Strategy**

*Location: Olson Atrium, 4<sup>th</sup> Floor Wigton Heritage Center, UNMC*  
Jeff Gold M.D., Chancellor

**9:30 A.M. Illuminating the Student Experience. Go Labs!**

*Location: Olson Atrium, 4<sup>th</sup> Floor Wigton Heritage Center, UNMC*  
Katie Schultis, President & Student Regent, UNMC Student Senate

**9:35 A.M. Building the Future Health Professions Workforce**

*Location: Olson Atrium, 4<sup>th</sup> Floor Wigton Heritage Center, UNMC*  
H. Dele Davies, M.D., Senior Vice Chancellor for Academic Affairs;  
Dean, Graduate Studies

**9:55 A.M. Brick by Brick: Forty Years of Med Center Growth**

*Location: Olson Atrium, 4<sup>th</sup> Floor Wigton Heritage Center, UNMC*  
Jen Bartholomew, Associate Vice Chancellor of Facilities, UNMC;  
Vice President, Facilities Management, Nebraska Medicine

**10:05 A.M. Break**

**10:20 A.M. Step by Step: Rural Health & Wellness in Nebraska**

*Location: Olson Atrium, 4<sup>th</sup> Floor Wigton Heritage Center, UNMC*  
Nicole Carritt, Assistant Vice Chancellor for Health  
Workforce Education Relations



- 10:40 A.M. Protecting our Nation: Center for Sustainment of Trauma and Readiness Skills (C-STARS) Update**  
*Location: Olson Atrium, 4<sup>th</sup> Floor Wigton Heritage Center, UNMC*  
Elizabeth Schnaubelt, M.D., Lieutenant Colonel, U.S. Air Force;  
Director, C-STARS Omaha, Global Center for Health Security
- 10:50 A.M. Hope and Healing: How Advanced Clinical Trials Save Lives**  
*Location: Olson Atrium, 4<sup>th</sup> Floor Wigton Heritage Center, UNMC*  
Russell McCulloh, M.D. Associate Vice Chancellor for Clinical  
Research, Professor of Hospital Medicine, Infectious  
Disease
- 11:10 A.M. Walk to Lunch at the Davis Global Center**
- 11:30 A.M. Lunch with UNMC Deans & Vice Chancellors**  
*Location: Holographic Theatre, Davis Global Center, UNMC*  
*Videos: Global Center for Health Security Holograph*  
Deans & Vice Chancellors: “One Highlight and Introduction”
- 1:00 P.M. iEXCEL | Davis Global Center Transforming Education**  
*Location: Main Lobby, Davis Global Center, UNMC*
- 2:00 P.M. Conclude Campus Visit & Break**
- 3:00 P.M. BOR Committee Meeting Rooms Available**  
*Location: Room 3014, Davis Global Center, UNMC*
- 5:00 P.M. Break – Travel to Munroe-Meyer Institute**
- 6:30 P.M. Cocktails, Gathering & Optional Tour of Munroe-Meyer Institute**  
*Location: Munroe-Meyer Institute, 6902 Pine Street, Omaha NE 68106*  
Karoly Mirnics, M.D., Ph.D. Director, Munroe-Meyer Institute, UNMC
- 7:00 P.M. Regents Dinner: The Munroe-Meyer Institute**  
*Location: Munroe-Meyer Institute, 6902 Pine Street, Omaha NE 68106*  
*Video: “MMI Statewide: Hannah’s Story”*
- Hotel: Hilton Garden, 6737 Frances Street, Omaha NE**

**Thursday, October 5, 2023**

**Parking:** Lot 36

**8:30 A.M. Refreshments & Gathering**

*Location: Olson Atrium, 4<sup>th</sup> Floor Wigton Heritage Center, UNMC*

**9:00 A.M. Board of Regents Meeting**

*Location: Olson Atrium, 4<sup>th</sup> Floor Wigton Heritage Center, UNMC*

*UNMC Report*

- *UNMC Mission, Vision & Strategy – Jeff Gold, M.D.*
- *Rural Health Program Impact – Katie Schultis*
- *Experiential Center for Enduring Learning – Pam Boyers, Ph.D.*
- *Pancreatic Cancer Center of Excellence – Sunil Hingorani, M.D., Ph.D.*
- *Child Health Research Institute – Ann Anderson Berry, M.D., Ph.D.*

**12:00 P.M. Regents Meeting Concludes**

**Optional Boxed Lunches for Regents**

**Optional Board of Regents Closed Session**

*Location: Andrews Board Room, Durham Outpatient Center, Room 3623*

WELCOME TAB WILL BE  
INSERTED HERE



## Welcome: The UNMC Mission, Vision & Strategy



**Jeffrey P. Gold, MD**

Chancellor

[jeffrey.gold@unmc.edu](mailto:jeffrey.gold@unmc.edu), 402-559-4201, @jeffreypgold

Jeffrey P. Gold, MD, is a nationally recognized leader and tireless advocate for transforming higher education, academic medicine and health care delivery across the public and private higher education spectrum.

He became the eighth chancellor of the University of Nebraska Medical Center, vice president of the University of Nebraska System and chair of the board of UNMC's principal clinical care academic health system partner, Nebraska Medicine, in early 2014.

In July 2021, Dr. Gold also was named provost and executive vice president of the University of Nebraska System, in addition to his ongoing UNMC/Nebraska Medicine responsibilities. In this role, Dr. Gold is the chief academic officer of the University of Nebraska System of approximately 50,000 learners, over \$750 million of research and liaison to the Board of Regents for all aspects of academic affairs.

As UNMC's chief executive officer, Dr. Gold is responsible for all aspects of campus leadership, program quality and operations, including seven colleges, two degree-granting institutes, the entire professional staff and faculty of more than 6,000 and 4,700 health professions students. Additionally, Nebraska Medicine has more than 8,500 employees and an operating budget of more than \$2.3 billion.

The combined annual economic impact of the "500-mile campus" academic health center with 37 Centers of Excellence exceeds \$6.4 billion and employs more than 52,000. During this time, the UNMC enrollment has grown by just more than 43%, the sponsored research programs by more than 300% and the clinical programs by more than 150%.

In his systemwide roles as provost and executive vice president, Dr. Gold oversees all undergraduate, graduate and professional academic education, research and experiential programs as well as the student support areas for the University of Nebraska system campuses, approximately 50,000 students, more than \$750 million in research and a combined economic impact of over \$10 billion.

From May 2017 to June 2021, Dr. Gold also served as chancellor of the University of Nebraska Omaha, the state's only public metropolitan university and its most diverse campus. The UNO complex has seven thriving colleges, an enrollment of more than 13,000 undergraduate students, 3,000 graduate students, a broad public service mission and two NCAA Division I-A athletic programs. Following more than four highly successful years of growth and prominence at UNO, in 2021, he stepped down to assume the University of Nebraska System provost and executive vice president responsibilities across all undergraduate, graduate and professional programs.

Dr. Gold holds a tenured faculty appointment at the rank of professor in the UNMC College of Medicine, as well as in the UNMC College of Public Health, where his active research interests in health care policy, population health and epidemiology are concentrated. He also leads several key economic development boards for the state and the university system, including the Greater Omaha Chamber, University Technology Development Corp, the University Technology Transfer Corp, Nebraska Enterprises Corp, UNeTech Corp, and several others.

Prior to joining UNMC, Dr. Gold served as chancellor of the University of Toledo's academic and clinical health sciences, which includes the colleges of Medicine, Nursing, Pharmacy, Health Science and Human Service, and Graduate Studies. In that role, Dr. Gold had full leadership responsibility of the clinical, education and research programs, the faculty practice plan and the integrated hospital and ambulatory health care delivery system.

The background of the slide features a large, faded circular seal of the University of Nebraska Board of Regents. The seal contains the text "UNIVERSITAS NEBRASKENSIS" at the top and "FEB. 15, 1869." at the bottom. In the center, there is an open book with the motto "DEUS DEDICAVIT OMNIBUS ARTE" and a torch. The seal is flanked by two figures, one holding a torch and the other a book.

# University of Nebraska Board of Regents

## UNMC Campus Visit.

October 4, 2023

October 4, 2023





## UNMC 2023 BOARD OF REGENTS UPDATE



## UNMC 2023 BOARD OF REGENTS UPDATE



### **Step by Step: Rural Health & Wellness in Nebraska**

*Location: Olson Atrium, 4th Floor Wigton Heritage Center, UNMC*

Nicole Carritt, Assistant Vice Chancellor for Health Workforce Education Relations

### **Protecting our Nation: Center for Sustainment of Trauma and Readiness Skills (C-STARS) Update**

*Location: Olson Atrium, 4th Floor Wigton Heritage Center, UNMC*

### **Hope and Healing: How Advanced Clinical Trials Save Lives**

*Location: Olson Atrium, 4th Floor Wigton Heritage Center, UNMC*

Russell McCulloh, M.D., Associate Vice Chancellor for Clinical Research, Professor of Hospital Medicine, Infectious Disease

**Board of Regents**  
University of Nebraska Medical Center  
**October 4-5, 2023**

## **AGENDA**

### **Walk to Lunch at the Davis Global Center**

### **Lunch with UNMC Deans & Vice Chancellors**

*Location: Holographic Theatre, Davis Global Center, UNMC*

Deans & Vice Chancellors: "One Highlight and Introduction"



# UNMC 2023 BOARD OF REGENTS UPDATE



## iEXCEL | Davis Global Center Transforming Education

Location: Main Lobby, Davis Global Center, UNMC

## Conclude Campus Visit & Break

## BOR Committee Meeting Rooms Available

Location: Room 3014, Davis Global Center, UNMC

## Break – Travel to Munroe-Meyer Institute

## Cocktails, Gathering & Optional Tour of Munroe-Meyer Institute

Location: Munroe-Meyer Institute, 6902 Pine Street, Omaha NE 68106

Karoly Mirnics, M.D., Ph.D., Director, Munroe-Meyer Institute, UNMC

## Regents Dinner: The Munroe-Meyer Institute

Location: Munroe-Meyer Institute, 6902 Pine Street, Omaha NE 68106

“MMI Statewide: Hannah’s Story”

**Board of Regents**  
University of Nebraska Medical Center  
October 4-5, 2023

## AGENDA

# UNMC 2023 BOARD OF REGENTS UPDATE



**Board of Regents**  
University of Nebraska Medical Center  
October 4-5, 2023

| Thursday, October 5, 2023                                                           |                                                                   |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| Parking: Lot 38                                                                     |                                                                   |
| 8:30 A.M. Refreshments & Gathering                                                  | Location: Union Station, 4th Floor (Hillman) Parking Center, UNMC |
| 9:00 A.M.                                                                           |                                                                   |
| 10:00 A.M. Presenting our Nation: Center for Sustainable and Translational Research | Location: Union Station, 4th Floor (Hillman) Parking Center, UNMC |
| 10:30 A.M. Break                                                                    |                                                                   |
| 11:00 A.M. Board of Regents Meeting                                                 | Location: Union Station, 4th Floor (Hillman) Parking Center, UNMC |
| 11:30 A.M. Lunch                                                                    |                                                                   |
| 1:00 P.M. Break                                                                     |                                                                   |
| 2:00 P.M. Board of Regents Meeting                                                  | Location: Union Station, 4th Floor (Hillman) Parking Center, UNMC |
| 3:00 P.M. Break                                                                     |                                                                   |
| 4:00 P.M. Board of Regents Meeting                                                  | Location: Union Station, 4th Floor (Hillman) Parking Center, UNMC |
| 5:00 P.M. Board of Regents Meeting                                                  | Location: Union Station, 4th Floor (Hillman) Parking Center, UNMC |
| 6:00 P.M. Board of Regents Meeting                                                  | Location: Union Station, 4th Floor (Hillman) Parking Center, UNMC |
| 7:00 P.M. Board of Regents Meeting                                                  | Location: Union Station, 4th Floor (Hillman) Parking Center, UNMC |
| 8:00 P.M. Board of Regents Meeting                                                  | Location: Union Station, 4th Floor (Hillman) Parking Center, UNMC |
| 9:00 P.M. Board of Regents Meeting                                                  | Location: Union Station, 4th Floor (Hillman) Parking Center, UNMC |
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| 11:00 P.M. Board of Regents Meeting                                                 | Location: Union Station, 4th Floor (Hillman) Parking Center, UNMC |
| 12:00 A.M. Board of Regents Meeting                                                 | Location: Union Station, 4th Floor (Hillman) Parking Center, UNMC |



# University of Nebraska Board of Regents

## UNMC Mission, Vision & Strategy

October 4, 2023



## UNMC 2023 BOARD OF REGENTS UPDATE



We are Nebraska Medicine and UNMC. Our mission is to **lead the world in transforming lives to create a healthy future for all individuals and communities** through premier educational programs, innovative research and extraordinary patient care.



## UNMC 2023 BOARD OF REGENTS UPDATE



We are Nebraska Medicine and UNMC. Our mission is to **lead the world in transforming lives to create a healthy future for all individuals and communities** through premier educational programs, innovative research and extraordinary patient care.



Innovation



Teamwork



Excellence



Accountability



Courage



Healing

UNMC  Nebraska Medicine

## UNMC 2023 BOARD OF REGENTS UPDATE



We are Nebraska Medicine and UNMC. Our mission is to **lead the world in transforming lives to create a healthy future for all individuals and communities** through premier educational programs, innovative research and extraordinary patient care.



### CONTINUOUS GROWTH

- Educational Scope & Excellence Growth
- Research Scope & Excellence Growth
- Clinical Care Scope & Excellence Growth
- Engagement Scope & Excellence Growth





# UNMC 2023 BOARD OF REGENTS UPDATE

## UNMC 2017-2023 Strategic Initiatives

UNMC | Nebraska Medicine

UNePlan 2.0  
Strategic Planning



Mission  
Vision  
Values

Goals  
Strategies  
Initiatives  
Tactics



Colleges  
Departments  
Divisions  
Centers  
VC Units  
Institutes  
Centers  
Core Labs  
NFP Corps  
Service Units  
Auxiliaries  
Partnerships

**STRATEGIC PLANNING: 2024-27**  
8-Goals 63-Strategies 667-Initiatives

# UNMC 2023 BOARD OF REGENTS UPDATE

## UNMC 2017-2023 Strategic Initiatives

UNMC | Nebraska Medicine

UNePlan 2.0  
Strategic Planning

Goal 1: Educational learner focus

Goal 2: Research scope and prominence

Goal 3: Clinical excellence

Goal 4: Community engagement

Goal 5: Inclusion, diversity & belonging

Goal 6: Economic development

Goal 7: Organizational culture

Goal 8: Organizational leadership

### UNMC-Nebraska Medicine-Nebraska Foundation

#### UNMC-NM Development 1.1.1 Finish fundraising for the Global Center.

Complete :95% (Last updated: 12/23/2016 by Amy Volk)

[View History](#) [Add Status Update](#) [Jeffrey Gold - Overall](#)

**Narrative Description :** Identify philanthropic prospects and present the compelling case for support to fully fund the \$102M initiative.

**Metric :** Fully funded \$102M

**Time :** Complete in current FY2017

**Type :** Develop New Program

**Resource :** No New Resources

| Responsibility | Name           | Title                         | Email                  |
|----------------|----------------|-------------------------------|------------------------|
| Overall        | Gold, Jeffrey  | Chancellor                    | jeffrey.gold@unmc.edu  |
| Primary        | Volk, Amy      |                               |                        |
| Collaborator   | Boyers, Pamela | Assoc Vice Chancellor, IEXCEL | pamela.boyers@unmc.edu |

## UNMC 2023 BOARD OF REGENTS UPDATE

### UNMC 2017-2022 Strategic Initiatives

UNMC | Nebraska Medicine

**UNePlan**<sup>2.0</sup>  
Strategic Planning

Goal 1: Educational learner focus

Goal 2: Research scope and prominence

Goal 3: Clinical excellence

Goal 4: Community engagement

Goal 5: Inclusion, diversity & belonging

Goal 6: Economic development

Goal 7: Organizational culture

Goal 8: Organizational leadership

| Plan Year | # Initiatives | # Complete | % Completed |
|-----------|---------------|------------|-------------|
| 2017      | 583           | 383        | 87%         |

| Plan Year | # Initiatives | # Complete | % Completed |
|-----------|---------------|------------|-------------|
| 2018      | 359           | 259        | 86%         |

| Plan Year | # Initiatives | # Complete | % Completed |
|-----------|---------------|------------|-------------|
| 2019      | 497           | 282        | 83%         |

| Plan Year | # Initiatives | # Complete | % Completed |
|-----------|---------------|------------|-------------|
| 2020      | 611           | 430        | 86%         |

| Plan Year | # Initiatives | # Complete | % Completed |
|-----------|---------------|------------|-------------|
| 2021      | 580           | 395        | 85%         |

| Plan Year | # Initiatives | # Complete | % Completed |
|-----------|---------------|------------|-------------|
| 2022      | 843           | 463        | 78%         |

## UNMC 2023 BOARD OF REGENTS UPDATE

### UNMC 2022-2026 Strategic Initiatives

#### Academic Year 2022-26

UNMC | Nebraska Medicine

**UNePlan**<sup>2.0</sup>  
Strategic Planning



Goal 1: Educational learner focus

77% completed

Goal 2: Research scope and prominence

78% completed

Goal 3: Clinical excellence

71% completed

Goal 4: Community engagement

73% completed

Goal 5: Inclusion, diversity & belonging

80% completed

Goal 6: Economic development

77% completed

Goal 7: Organizational culture

82% completed

Goal 8: Organizational leadership

78% completed



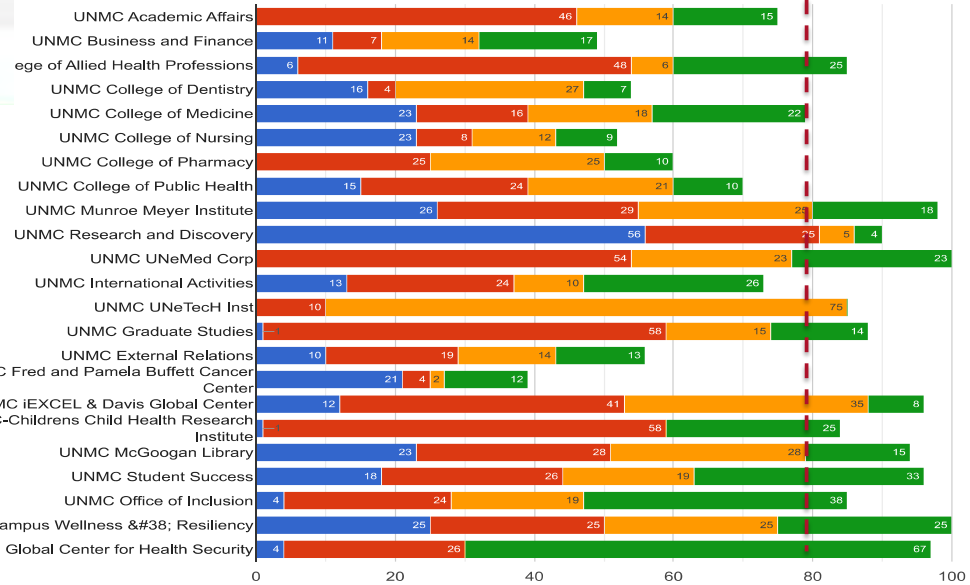
# UNMC 2023 BOARD OF REGENTS UPDATE

## UNMC 2022-2026 Strategic Initiatives

UNMC | Nebraska Medicine

UNePlan 1.8  
Strategic Planning

Entity  
UNMC Academic & Business Units



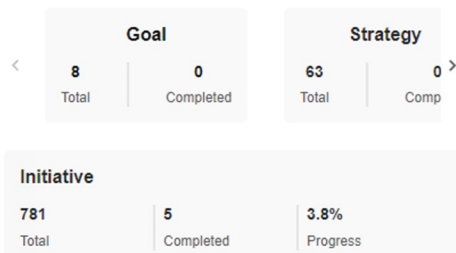
# UNMC 2023 BOARD OF REGENTS UPDATE

## UNMC Strategic Initiatives

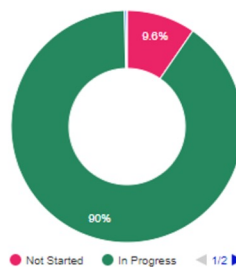
UNMC | Nebraska Medicine

UNePlan 2.0 2023-26  
Strategic Planning

### Quick Strategic Plan Snapshot



### Overall Initiative



### Quick Engagement Snapshot



## UNMC 2023 BOARD OF REGENTS UPDATE

### UNMC 2024-27 Strategic Initiatives



# University of Nebraska Board of Regents

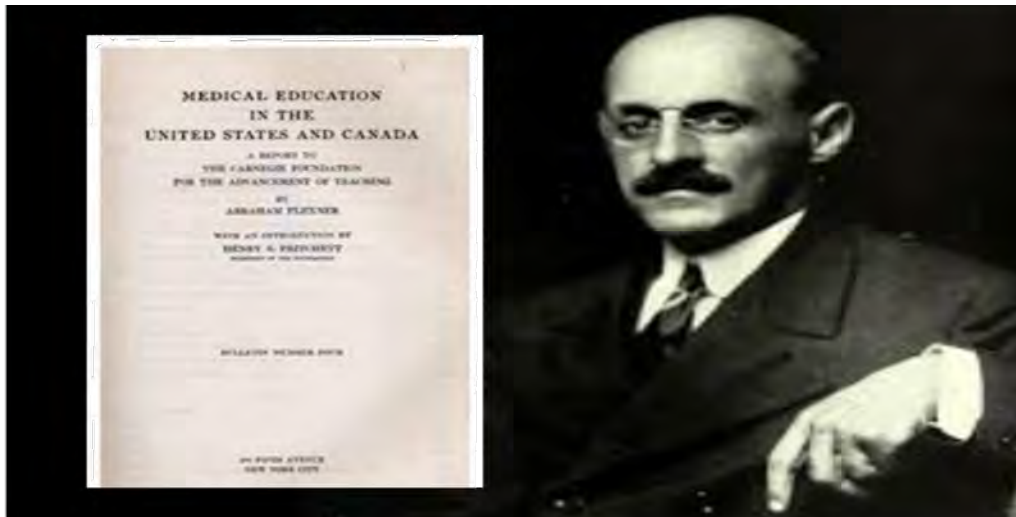
## US Academic Health Science Centers

October 4, 2023

## UNMC 2023 BOARD OF REGENTS UPDATE

# Integrated Academic Health Science Centers

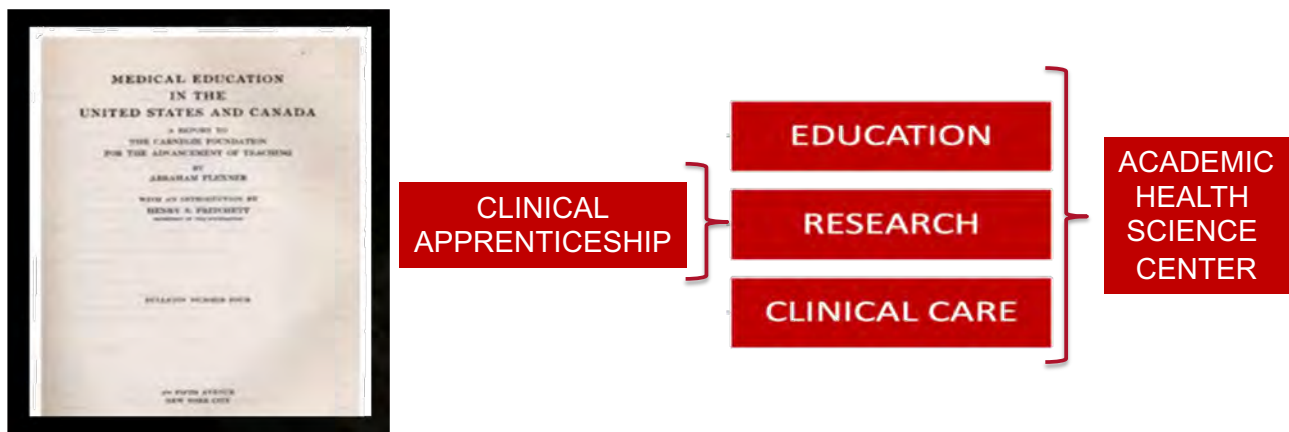
## Integrated Academic Health Center History



## UNMC 2023 BOARD OF REGENTS UPDATE

# Integrated Academic Health Science Centers

## Integrated Academic Health Center History



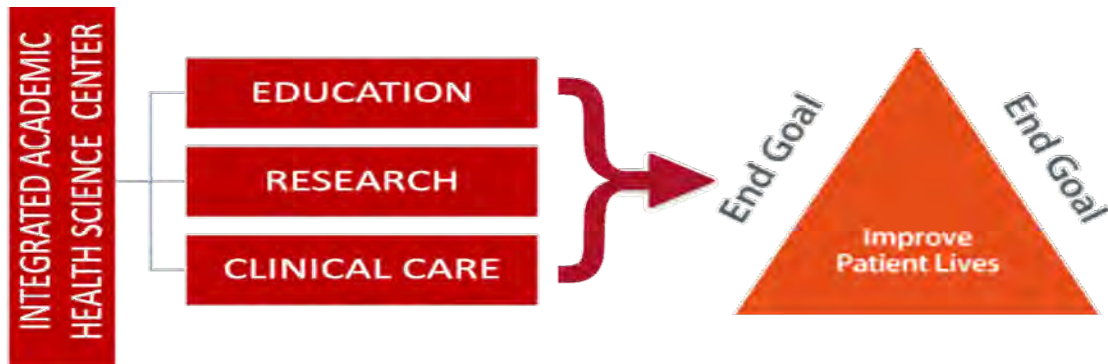


## UNMC 2023 BOARD OF REGENTS UPDATE



### Integrated Academic Health Science Centers

#### Integrated Academic Health Center Structure



What is an **academic medical center**? ... At an **academic medical center**, education, research, and clinical care are combined to provide the best possible clinical care, that uses cutting-edge technologies, resources and therapies other community hospitals may not have available.

## UNMC 2023 BOARD OF REGENTS UPDATE

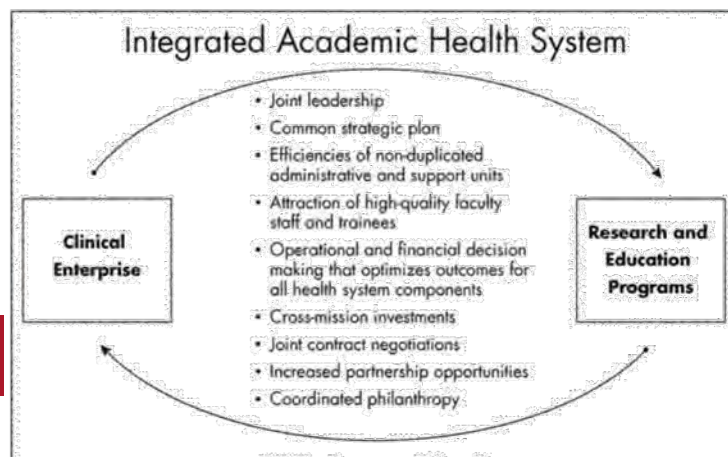


### Integrated Academic Health Science Centers

#### Integrated Academic Health Center Structure



Lead the world in transforming lives to create a healthy future

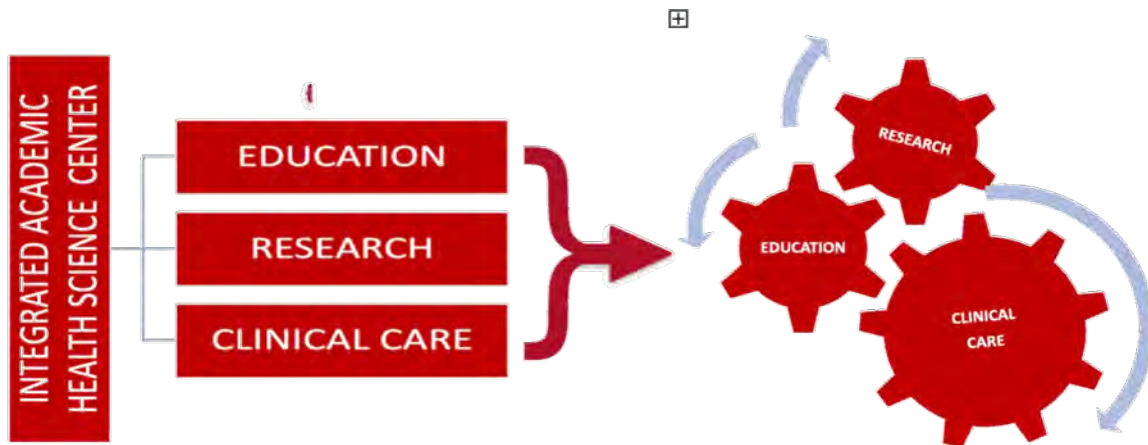


## UNMC 2023 BOARD OF REGENTS UPDATE



### Integrated Academic Health Science Centers

#### Integrated Academic Health Center Structure

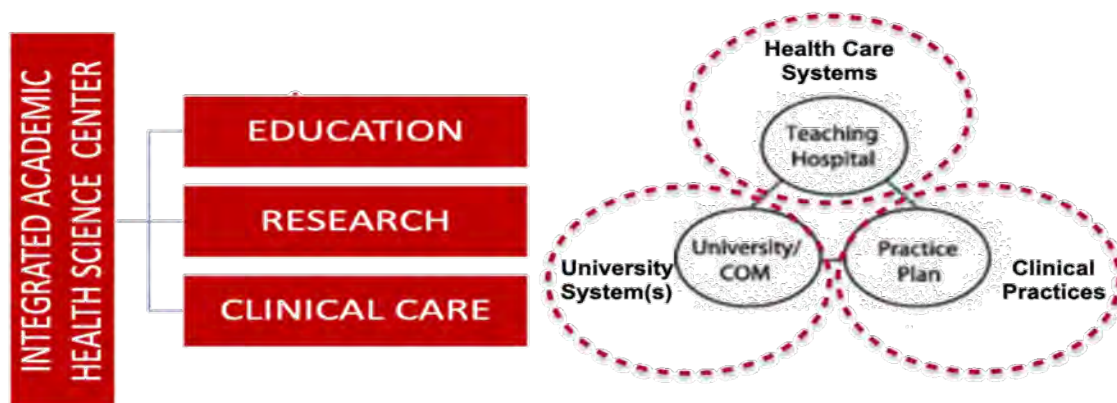


## UNMC 2023 BOARD OF REGENTS UPDATE



### Integrated Academic Health Science Centers

#### Integrated Academic Health Center Structure

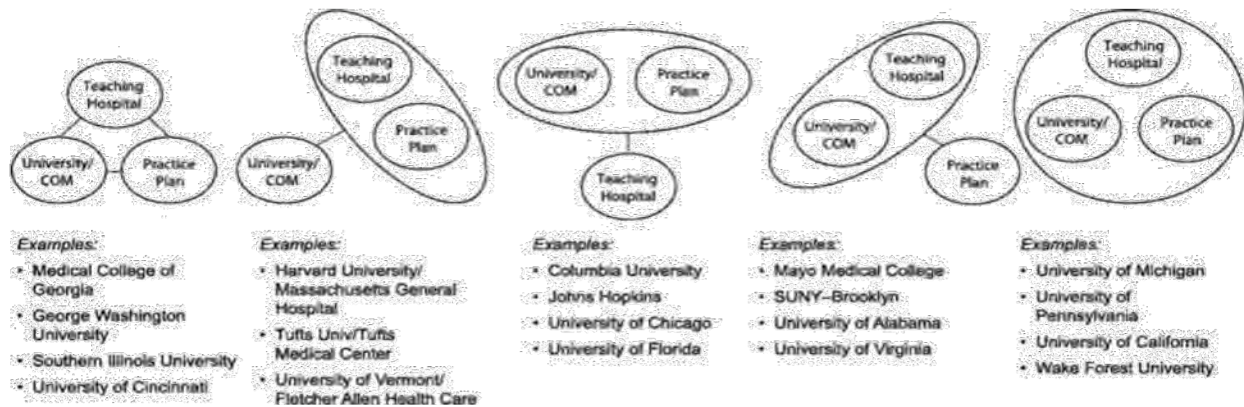


## UNMC 2023 BOARD OF REGENTS UPDATE



### Integrated Academic Health Science Centers

#### Five Most Common Types Integrated Academic Health Center Structures



## UNMC 2023 BOARD OF REGENTS UPDATE



### Integrated Academic Health Science Centers

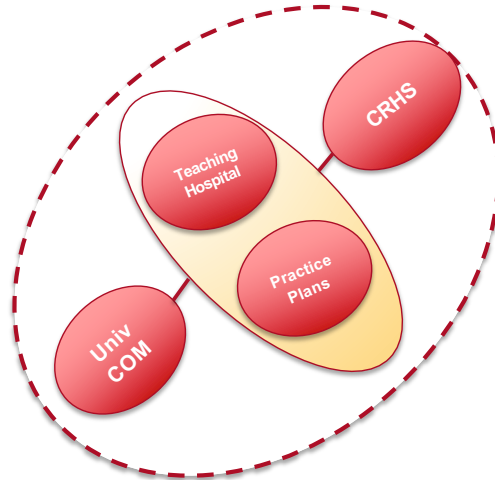
#### Integrated Academic Health Center Structure



## UNMC 2023 BOARD OF REGENTS UPDATE



### Integrated Academic Health Science Centers UNMC/CRHS/NM Integrated Academic Health Center Structure



## UNMC 2023 BOARD OF REGENTS UPDATE



### Integrated Academic Health Science Centers Integrated Academic Health Center Structure

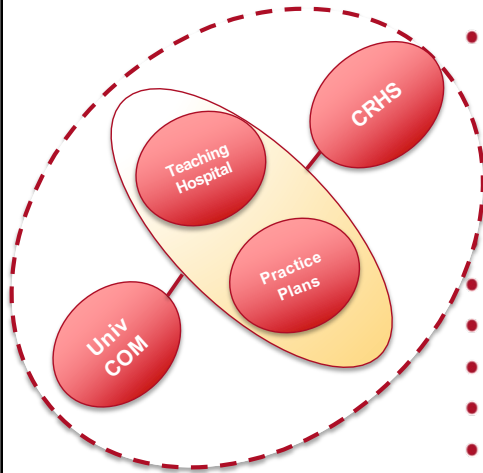




## UNMC 2023 BOARD OF REGENTS UPDATE



### Academic Health Science Centers Headwinds



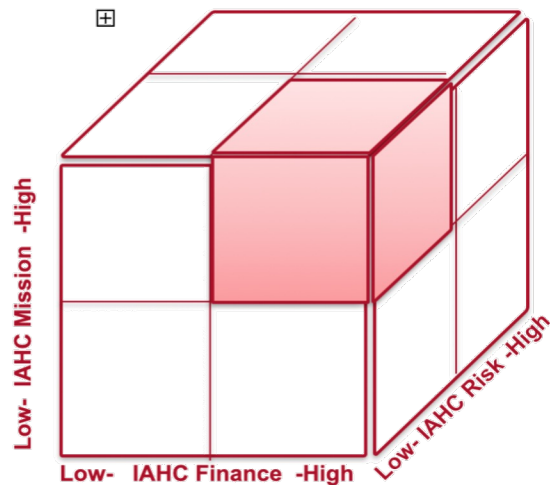
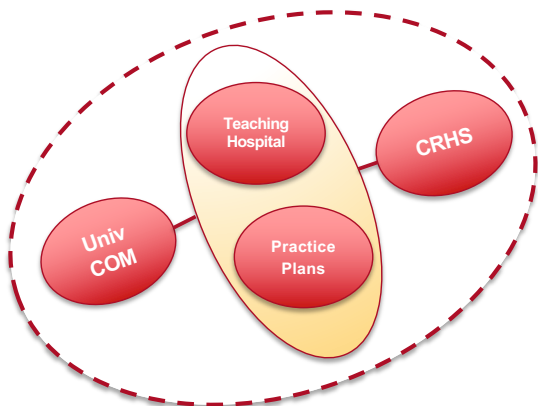
- **Mission-Value Risks**
  - Academic Excellence
  - Safety-Quality of Care
  - Customer Experience
- **Reputational Risks**
- **Regulatory Risks**
- **Political Risks**
- **Governmental Risks**
- **Accreditation Risks**
- **Worker Wellbeing Risk**
- **Geopolitical Risks**
- **Public Safety Risks**

## UNMC 2023 BOARD OF REGENTS UPDATE



### **Integrated Academic Health Science Centers**

Balancing Mission, Financial Stability & Risk



# University of Nebraska Board of Regents

## AHSC RECOGNITION OF EXCELLENCE

October 4, 2023

 University of Nebraska  
Medical Center

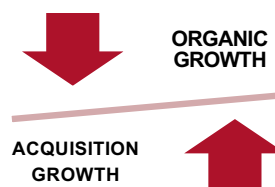
## UNMC 2023 BOARD OF REGENTS UPDATE

### Integrated Academic Health Science Centers

Current Trends in Mission, Growth & Sustainability

#### CONTINUOUS MISSION DRIVEN GROWTH

- Educational Scope & Excellence
- Research Scope & Excellence
- Clinical Care Scope & Excellence
- Engagement Scope & Excellence



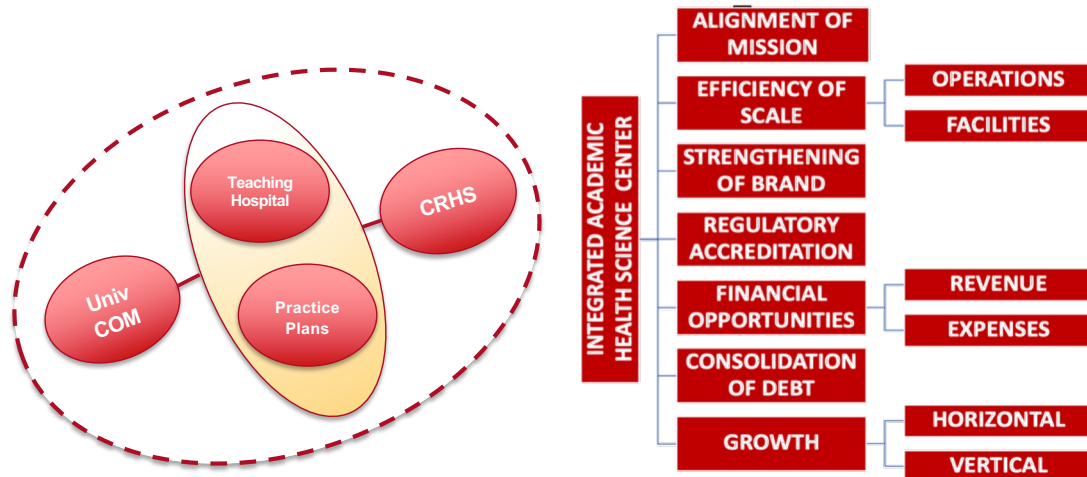
| Scope & Excellence | People | Programs | Facilities | Finances | Investments | Partners | Recognition |
|--------------------|--------|----------|------------|----------|-------------|----------|-------------|
| Education          |        |          |            |          |             |          |             |
| Research           |        |          |            |          |             |          |             |
| Clinical Care      |        |          |            |          |             |          |             |
| Engagement         |        |          |            |          |             |          |             |

## UNMC 2023 BOARD OF REGENTS UPDATE



### Integrated Academic Health Science Centers

#### Current Trends in Growth & Sustainability

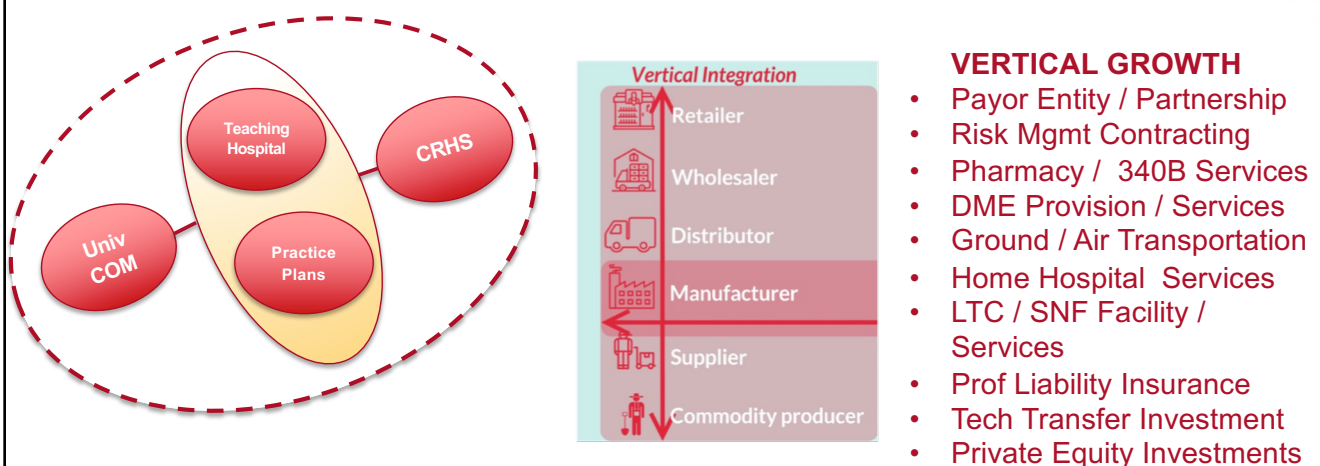


## UNMC 2023 BOARD OF REGENTS UPDATE



### Integrated Academic Health Science Centers

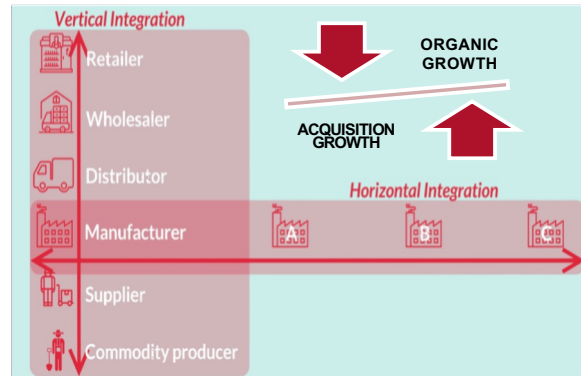
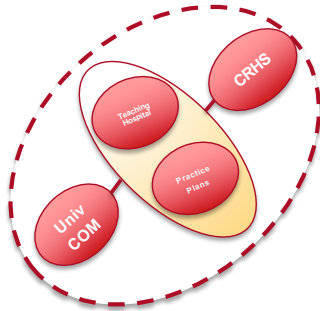
#### Current Trends in Vertical Growth & Sustainability



## UNMC 2023 BOARD OF REGENTS UPDATE

### Integrated Academic Health Science Centers

#### Current Trends in Horizontal Growth & Sustainability



#### HORIZONTAL GROWTH

- Cobranding / Marketing
- Value Based Purchasing
- Hosp / ASC / Clinic M & A
- Physician Practice M & A
- Liability Mgmt/ Refinancing
- Pharma/Supply Contracting
- Elec Health Record Hub
- Procurement Contracting
- Workforce Services/Benefits
- 'Back of House' Functions

## University of Nebraska Board of Regents

### AHSC RECOGNITION OF EXCELLENCE

October 4, 2023



University of Nebraska  
Medical Center



## UNMC 2023 BOARD OF REGENTS UPDATE

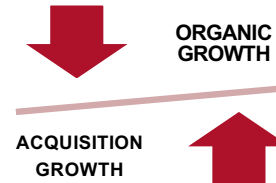


### Integrated Academic Health Science Centers

Current Trends in Mission, Growth & Sustainability

#### CONTINUOUS MISSION DRIVEN GROWTH

- Educational Scope & Excellence
- Research Scope & Excellence
- Clinical Care Scope & Excellence
- Engagement Scope & Excellence



| Scope & Excellence | People | Programs | Facilities | Finances | Investments | Partners | Recognition |
|--------------------|--------|----------|------------|----------|-------------|----------|-------------|
| Education          |        |          |            |          |             |          |             |
| Research           |        |          |            |          |             |          |             |
| Clinical Care      |        |          |            |          |             |          |             |
| Engagement         |        |          |            |          |             |          |             |

## UNMC 2023 BOARD OF REGENTS UPDATE



### Integrated Academic Health Science Centers

Current Trends in Recognition for Excellence

#### CONTINUOUS GROWTH

- Educational Scope & Excellence
- Research Scope & Excellence
- Clinical Care Scope & Excellence
- Engagement Scope & Excellence

|               | Recognition |
|---------------|-------------|
| Education     | ?           |
| Research      | ?           |
| Clinical Care | ?           |
| Engagement    | ?           |

#### RECOGNITION OF SCOPE & EXCELLENCE

- USNews
- Forbes
- Beckers
- Vizient
- CMMS
- AAMC
- BIG10
- TJC
- HIMS
- AUTM
- NIH
- NCI
- NAM
- AAU

## UNMC 2023 BOARD OF REGENTS UPDATE



### Integrated Academic Health Science Centers

Current Trends in Recognition for Excellence



## UNMC 2023 BOARD OF REGENTS UPDATE



### Integrated Academic Health Science Centers

Current Trends in Recognition for Excellence

#### CONTINUOUS GROWTH

- Educational Scope & Excellence
- Research Scope & Excellence
- Clinical Care Scope & Excellence
- Engagement Scope & Excellence

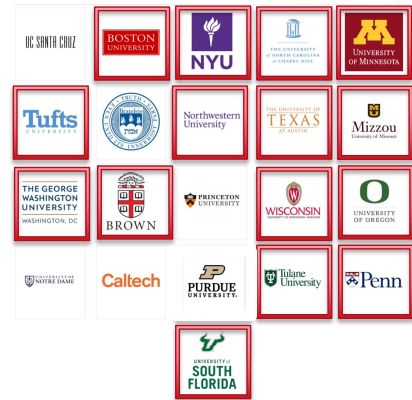
|               | Recognition |
|---------------|-------------|
| Education     | ?           |
| Research      | ?           |
| Clinical Care | ?           |
| Engagement    | ?           |

#### RECOGNITION OF SCOPE & EXCELLENCE

- |                |              |
|----------------|--------------|
| • USNews       | • TJC        |
| • Forbes       | • HIMS       |
| • Beckers      | • AUTM       |
| • Vizient      | • NIH        |
| • CMMS         | • NCI        |
| • AAMC         | • NAM        |
| • <b>BIG10</b> | • <b>AAU</b> |

## UNMC 2023 BOARD OF REGENTS UPDATE

### AAU ACADEMIC HEALTH SCIENCE CENTERS



57 of 71 ACADEMIC HEALTH SCIENCE CENTERS

41

## UNMC 2023 BOARD OF REGENTS UPDATE

### BIG10 AAU ACADEMIC HEALTH SCIENCE CENTERS



13 of 57 ACADEMIC HEALTH SCIENCE CENTERS

42

# UNMC 2023 BOARD OF REGENTS UPDATE

## BIG10 & ACADEMIC HEALTH SCIENCE CENTERS

# BIG

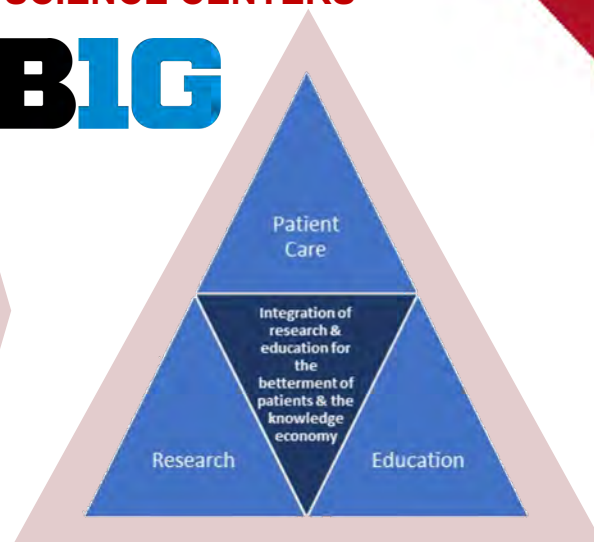


# UNMC 2023 BOARD OF REGENTS UPDATE

## BIG10 & ACADEMIC HEALTH SCIENCE CENTERS

| BIG10 UNIVERSITY SYSTEMS  | # AHC |
|---------------------------|-------|
| University of Illinois    | 1     |
| University of Indiana     | 1     |
| University of Iowa        | 1     |
| University of Maryland    | 1     |
| University of Michigan    | 1     |
| Pennsylvania State        | 1     |
| University of Wisconsin   | 1     |
| Northwestern University   | 2     |
| Michigan State University | 2     |
| University of Nebraska    | 2     |
| University of Minnesota   | 3     |
| Ohio State University     | 3     |
| Rutgers University        | 6     |

# BIG





## UNMC 2023 BOARD OF REGENTS UPDATE

### BIG10 & ACADEMIC HEALTH SCIENCE CENTERS



| BIG10 UNIVERSITY SYSTEMS  | # AHC |
|---------------------------|-------|
| University of Illinois    | 1     |
| University of Indiana     | 1     |
| University of Iowa        | 1     |
| University of Maryland    | 1     |
| University of Michigan    | 1     |
| Pennsylvania State        | 1     |
| University of Wisconsin   | 1     |
| Northwestern University   | 2     |
| Michigan State University | 2     |
| University of Nebraska    | 2     |
| University of Minnesota   | 3     |
| Ohio State University     | 3     |
| Rutgers University        | 6     |

# BIG

| Big10 AHC Governance Survey       | Data |
|-----------------------------------|------|
| Big10 Universities Surveyed (#)   | 13   |
| Big10 Universities Responded (#)  | 13   |
| Big10 Academic Health Centers (#) | 26   |

## UNMC 2023 BOARD OF REGENTS UPDATE

### BIG10 & ACADEMIC HEALTH SCIENCE CENTERS



| BIG10 UNIVERSITY SYSTEMS  | # AHC |
|---------------------------|-------|
| University of Illinois    | 1     |
| University of Indiana     | 1     |
| University of Iowa        | 1     |
| University of Maryland    | 1     |
| University of Michigan    | 1     |
| Pennsylvania State        | 1     |
| University of Wisconsin   | 1     |
| Northwestern University   | 2     |
| Michigan State University | 2     |
| University of Nebraska    | 2     |
| University of Minnesota   | 3     |
| Ohio State University     | 3     |
| Rutgers University        | 6     |

# BIG

| Big10 AHC Governance Survey        | Data |
|------------------------------------|------|
| Big10 University Board Members (#) | 212  |
| Big10 AHC Board Members (#)        | 603  |
| Big10 AHC Dual Board Members (#)   | 38   |

# University of Nebraska Board of Regents

## UNMC LEADERSHIP TEAM

October 4, 2023



University of Nebraska  
Medical Center

## UNMC 2023 BOARD OF REGENTS UPDATE

### UNMC Leadership Team



**Dele Davies, MD**  
Senior Vice Chancellor,  
Academic Affairs



**Anne Barnes**  
Vice Chancellor for  
Business, Finance and  
Business Development



**Kenneth W. Bayles, PhD**  
Vice Chancellor for  
Research



**Chris Kratochvil, MD**  
Interim Vice Chancellor  
for External Relations



**Michael Ash, MD**  
Vice Chancellor for  
Information & Technology

## UNMC 2023 BOARD OF REGENTS UPDATE



### UNMC Leadership Team



**Kyle Meyer, PhD**  
Dean, College of Allied  
Health Professions



**Gerard Kugel, DMD, PhD**  
Dean, College of Dentistry



**Bradley Britigan, MD**  
Dean, College of Medicine



**Lepaine Sharp-McHenry, DNP**  
Dean, College of Nursing

## UNMC 2023 BOARD OF REGENTS UPDATE



### UNMC Leadership Team



**Keith Olsen, PharmD**  
Dean, College of Pharmacy



**Ali S. Khan, MD, MPH**  
Dean, College of  
Public Health



**Emily Glenn**  
Dean, McGoogan Health  
Sciences Library



**Karoly Mirnics, MD, PhD**  
Director, Munroe-Meyer  
Institute



## UNMC 2023 BOARD OF REGENTS UPDATE



# UNMC Campus Visit Program



**Ann Anderson Berry, MD, PhD**  
Director, Child Health  
Research Institute



**Elizabeth R. Schnaubelt, MD**  
Colonel, USAF  
Director of C-STARS



**Jennifer Bartholomew**  
Assistant Vice Chancellor of  
Facilities and Planning



**Katie Schultis**  
Student Regent  
President, Student Senate

## UNMC 2023 BOARD OF REGENTS UPDATE



# UNMC Campus Visit Program



**Russell McCulloh, MD**  
Associate Vice Chancellor  
for Clinical Research



**Nicole Carritt**  
Assistant Vice Chancellor  
for Health Workforce  
Education Relations



**Sunil Hingorani, MD, PhD**  
Director, Pancreatic Cancer  
Center of Excellence



**Pamela Boyers, PhD**  
Associate Vice Chancellor  
for Clinical Simulation and  
iEXCEL



## UNMC 2023 BOARD OF REGENTS UPDATE



Precision Medicine - Helping to  
put together the medical puzzle

/ PRESS RELEASES

**Nebraska Medicine & Helix  
Partner to Provide Precision  
Care in Nebraska to Help Find  
Health Issues Individually and  
Statewide**



## UNMC 2023 BOARD OF REGENTS UPDATE



Discussion



# University of Nebraska Medical Center™

**BREAKTHROUGHS** FOR LIFE.®



UNIVERSITY OF  
**Nebraska**  
Medical Center

STUDENT EXPERIENCE TAB  
WILL BE INSERTED HERE

## Illuminating the Student Experience



**Katie Schultis**

**UNMC Student Senate President and Student Regent**

**kaitlyn.schultis@unmc.edu; 402-300-1921**

Katie Schultis is a fourth-year medical student from the small town of Diller, Nebraska, population 260. She completed her undergraduate studies at the University of Nebraska at Kearney. Schultis is committed to using her medical expertise to improve health care access and outcomes for rural populations. She was elected UNMC Student Senate President and Student Regent for the 2023-2024 academic year, demonstrating her commitment to student advocacy and the betterment of higher education in Nebraska. Schultis plans to pursue a career in urology.



HEALTH PROFESSIONS TAB  
WILL BE INSERTED HERE

## Building the Future Health Professions Workforce



### **Dele Davies, MD**

**Senior Vice Chancellor, Academic Affairs; Dean, Graduate Studies**  
dele.davies@unmc.edu; 402-559-5130; @DeleDaviesMD

H. Dele Davies, MD, is an internationally recognized expert in pediatric infectious diseases and a leader in community health. As senior vice chancellor for academic affairs and dean for graduate studies, Dr. Davies is responsible for academic, faculty and student oversight of the six different health professions colleges and the graduate studies program, working with a talented team of deans, faculty and staff to build and enhance UNMC's academic programs and build the momentum of making UNMC the most learner-centered health science center in the nation.

Dr. Davies holds a master's degree in epidemiology from the University of Toronto, Canada, and a master's in health care management from the Harvard School of Public Health. He is specialty trained in pediatrics and pediatric infectious diseases from the Hospital for Sick Children in Toronto. He previously served as chair of pediatrics and human development at Michigan State University (2003-2012) and director of the Child Health Research Unit at Alberta Children's Hospital in Calgary, Canada, and the Child Health Research Institute at the University of Calgary (1993-2003).

Dr. Davies has more than 200 publications in peer-reviewed journals related to his research on infectious diseases topics, in addition to an edited book on Obesity in Childhood and Adolescence, several book chapters and other scholarly publications, and numerous presentations at national and international meetings.

His research interests lie in infectious diseases, especially perinatal infections caused by Group A and B streptococcus. His work was seminal in establishing the population-based rates, epidemiologic risk factors, serotypes and major virulence factors for Group A and B streptococcal infections in Canada, setting the stage for possible introduction of effective vaccines. His research has been funded by several agencies, including the National Institutes of Health, the Alberta Heritage Foundation for Medical Research and the Canadian Institutes of Health Research.

Dr. Davies is currently a member of the National Biodefense Science Board, providing guidance to the Secretary of the US Department of Health and Human Services and the Assistant Secretary of Preparedness and Response within the Administration for Strategic Preparedness and Response, co-chairing its Readiness and Resiliency Working Group. He also is a board member of the American Academy of Pediatrics Committee on Children and Disasters. He serves on the Dean's Advisory board of the University of Global Health Equity in Rwanda and on the Board of Directors of the Council of Graduate Schools.

Other previous national service includes a six-year term on the "Red Book" Committee on Infectious Diseases of the American Academy of Pediatrics; a five-year term as a member of the Board of Scientific Counselors for the National Centers for Infectious Diseases of the Centers for Disease Control and Prevention (Atlanta); a six-year term on the NIH (NIAID) Microbiology and Infectious Diseases (MIDB) Study Section on training grants; secretary-treasurer of the Association of Medical School Pediatric Department Chairs; chair of the Pediatric Investigators Collaborative Network on Infections in Canada; member of the Canadian Pediatric Society Infectious Diseases and Immunization Committee; member of Health Canada's Committee to Advise on Tropical Medicine and Travel; and chair of the Diversity Committee of the Council of Graduate Schools. He also is the founding past chair of the Association of Academic Health Centers Chief Academic Officers Executive Leadership Group.

Dr. Davies has received numerous prestigious awards during his career for his research, teaching, and mentorship, including the Mo-Watanabe Distinguished Faculty Award at the University of Calgary (twice), the William B. Weil Jr. Endowed Distinguished Pediatric Faculty Award of the College of Human Medicine at Michigan State University and the 2022 Deans Alumni Lifetime Achievement International Impact Award of the Temerty Faculty Medicine, University of Toronto. He is the namesake and honorary board member of the Davies Project that provides transportation for seriously ill children and pregnant women to essential healthcare. Since 2006, he has been recognized annually as a member of the Best Doctors of America, is a fellow of both the Infectious Diseases Society of America and Pediatric Infectious Diseases Society, and a member of the Alpha Omega Alpha National Honors Society, the Society for Pediatric Research, and the American Pediatric Society.

NU BOARD OF REGENTS PRESENTATION

# Building the Future Health Professions Workforce for Nebraska

**H. Dele Davies, MD, MS, MHCM**

Senior Vice Chancellor for Academic Affairs  
Dean of Graduate Studies



University of Nebraska  
Medical Center™

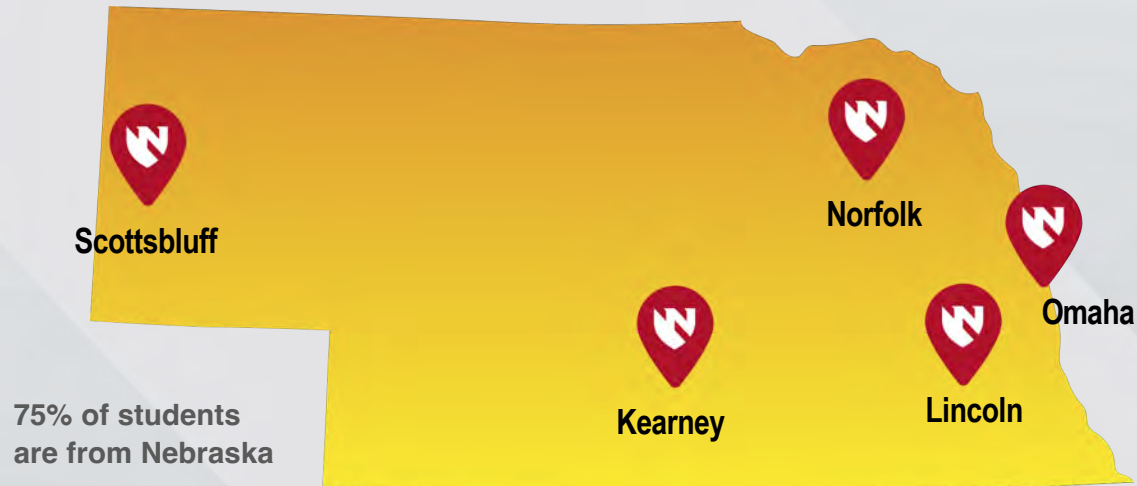
## UNMC/NEBRASKA MEDICINE **Mission**

Our mission is to lead the world in transforming lives to create a healthy future for all individuals and communities through premier educational programs, innovative research and extraordinary patient care.





## 500-mile-wide campus



## Colleges and Institutes

A leader in health sciences education and workforce development for Nebraska

- Allied Health
- Dentistry
- Medicine
- Nursing
- Pharmacy
- Public Health
- Graduate Studies
- Munroe-Meyer Institute
- Eppley Institute for Cancer Research

**Nearly half** of Nebraska's physicians, dental professionals, pharmacists, bachelor-prepared nurses and allied health professionals graduated from UNMC.



## We rank among the best nationally



**#7** Most Medical Graduates Practicing in Rural Areas (of 162)  
★ Top 4% of the country

**#16** Best Physicians Assistant Program (of 211)  
★ Top 8% of the country

**#8** Best Primary Care Medical School (of 123)  
★ Top 7% of the country

**#23** Best Nursing (BSN) Program (of 656)  
★ Top 4% of the country



## ADDITIONAL RANKINGS



**#28** Best Pharmacy Program (of 134)

**#34** Best Physical Therapy Program (of 239)

**#35** Medical Graduates Practicing in Primary Care Fields (of 162)

**#55** Best Public Health Program (of 202)

**#58** Best Research Medical School (of 130)

**#62** Best Doctor of Nursing Practice (of 169)

**#79** Best Online Master's in Nursing Programs (of 186)

## STUDENT Enrollment

Record high of  
4,555 students

- Increase of 3.4% over 2022
- 23<sup>rd</sup> straight year of continuous growth



## Enrollment Trends



Areas that have seen the most growth  
since 2013:

**+ 116%** Public Health

**+ 64%** Graduate Studies

**+ 38%** Allied Health Professions



## Enrollment by Curriculum Type

| Type      | 2022  | 2023  |
|-----------|-------|-------|
| In-Person | 3,627 | 3,635 |
| Blended   | 275   | 347   |
| Online    | 504   | 573   |

Students enrolled in blended programs **increased 26%** and online programs **increased 14%**.

## Our campus stretches across the world

Students come from **82 different countries**







## Student performance ranks among the best in the nation



### ON-TIME Graduation Rates

| Program                               | Graduation Rate |
|---------------------------------------|-----------------|
| Allied Health Professional            | 96%             |
| Allied Health Undergraduate           | 100%            |
| Dentistry (Certificate, Hygiene, DDS) | 99%             |
| Doctoral                              | 91%             |
| Master's                              | 82%             |
| Medicine                              | 93%             |
| Nursing (DNP, MSN, BSN)               | 88%             |
| Pharmacy                              | 96%             |
| Public Health (MPH, MHA, Certificate) | 87%             |



NATIONAL  
LICENSURE OR  
BOARD EXAM  
**Pass Rates**

| Program             | UNMC Rate | National Rate |
|---------------------|-----------|---------------|
| BSN                 | 85%       | 82%           |
| Dental              | 100%      | 99%           |
| MD Step 1           | 93%       | 93%           |
| MD Step 2           | 100%      | 99%           |
| Pharmacy            | 96%       | 84%           |
| Physical Therapy    | 100%      | 92%           |
| Physician Assistant | 100%      | 95%           |

## Our Graduate Students Win Prestigious National Awards



**72** biomedical and medical  
sciences students have  
received **81** national awards

(since 2013)

**35** National Institutes of Health  
(NIH) awards

**18** American Heart Association  
(AHA) awards

**2** National Science Foundation  
(NSF) awards

**26** additional national awards



# Pipeline programs help strengthen Nebraska workforce

## High School Alliance

A unique partnership between UNMC and all metropolitan Omaha area school districts

**834** junior and senior students enrolled since the program started



### IMPACT

- 97% have gone on to college
- 75% study health STEM in college
- 50% end up in health professions



## uBEATS

UNMC & UNO Building Excellence in Academics Through STEM

**38,781** students and **531** teachers enrolled since started in 2020

- **12,676** current students enrolled since 8/15/23



Since start, ~  
**49% enrollees**  
from Nebraska



RURAL, KEARNEY AND URBAN

## Health Opportunities Programs

**794** total RHOP and KHOP graduates since programs started

- **58% remain in Nebraska**
- **74% practicing in Rural Nebraska**

| Specialty* | % in Nebraska | % Practicing in Rural Nebraska |
|------------|---------------|--------------------------------|
| Medicine   | 68%           | 70%                            |
| Dentistry  | 54%           | 80%                            |
| Nursing    | 54%           | 80%                            |
| Allied     | 53%           | 76%                            |

\*RHOP and KHOP





# Summer Health Professions Education Program

**1,365** total graduates since program started

- **80%** of those who have applied to Medicine or Dentistry have matriculated to a health professions school.

**215** graduates have attended UNMC.



## ADDITIONAL Workforce Planning Efforts

- Affiliation agreements between College of Nursing and regional community colleges and hospitals
- Collaboration between College of Public Health and Kansas City University and Marian University
- Public Health Early Admissions Student Track

## DAVIS Global Center

**122,088** people trained  
since opening

**35% increase since opened**

- **29,837** trainees in FY 2021
- **41,787** trainees in FY in 2022
- **40,396** trainees in FY in 2023



Trainees include faculty and students from five UNMC colleges, residents, internal and external clinical staff, and the military.

★ **14,298** external individuals have received training.

## UNMC / UNK Health Science Education Complex II

### FUNDING

- \$95m project
- \$60m state (ARPA)
- \$35m philanthropy

### FACILITY ACTIVATION

- December 2025 – February 2026



South Elevation

**Double enrollment to > 600**  
health science students

“

Culture is strategy.  
We succeed at our best  
only when we help each  
other succeed.

Jim Collins



UNIVERSITY OF  
**Nebraska**  
Medical Center



MED CENTER GROWTH TAB  
WILL BE INSERTED HERE



## Forty Years of Med Center Growth



### **Jennie Bartholomew**

**Associate Vice Chancellor of Facilities, UNMC;  
Vice President, Facilities Management, Nebraska Medicine**  
[jbartholomew@nebraskamed.com](mailto:jbartholomew@nebraskamed.com); 402-559-3532

Jennie Bartholomew serves as vice president of facilities management for Nebraska Medicine and associate vice chancellor of campus facilities for UNMC. In her position, she oversees operations, real estate, planning and construction for the health system and academic enterprise. Bartholomew also manages the organization's support services for environmental and food services.

Bartholomew joined the health care system in 2003. She previously served in several roles within the Facilities and Process Improvement departments, including executive director of Facilities Management.

Bartholomew holds a master's degree in business administration with an emphasis in executive leadership from University of Nebraska and Gallup Institute. She also earned a bachelor's degree in industrial engineering from the University of Nebraska.

As part of her role, Bartholomew leads planning and construction for transformational projects including:

- The Dr. Edwin G. & Dorothy Balbach Davis Global Center, which opened in 2020 and houses the National Quarantine Unit and the iEXCEL clinical simulation program.
- The Fred & Pamela Buffett Cancer Center, which opened in 2017 and includes state-of-the-art inpatient and outpatient care and cutting-edge research facilities.
- Munroe-Meyer Institute, which opened in April 2021. The facility serves individuals with intellectual and developmental disabilities and features clinics, play spaces, a pool and splash pad, a gym and laboratory spaces.
- Primary care clinic expansion efforts, including new facilities in community locations including downtown Omaha, North Omaha, Gretna, Elkhorn, Millard and Village Pointe.

Current planning for the Innovation Design Unit and Project NExT, including a state-of the art academic medical center facility and a federal all-hazard disaster response military and civilian partnership.

# Building Infrastructure Management Approach

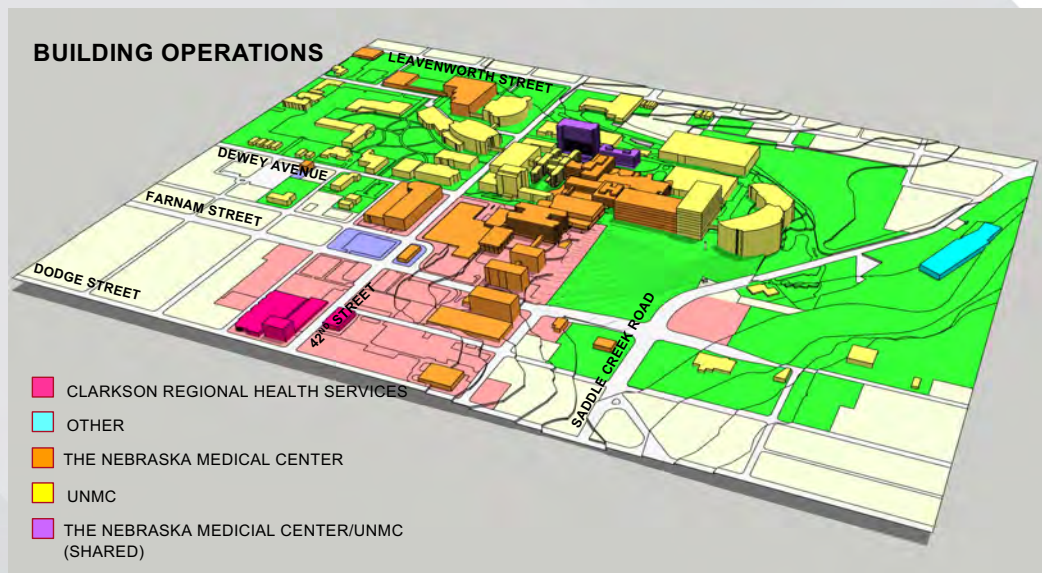
Jen Bartholomew  
Facilities Operations



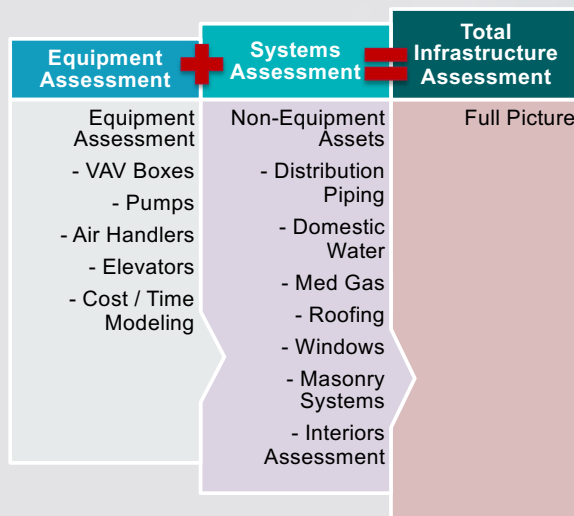
University of Nebraska  
Medical Center™

## Methodology

Costs are the responsibility of the institution that is responsible for managing building operations.



# Methodology



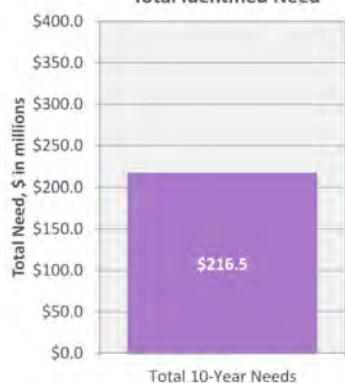
Facilities combines the life cycle equipment and cost modeling assessment with known non-tagable assets to complete the full Infrastructure Assessment on a Building-by-Building Basis

# UNMC Responsibility



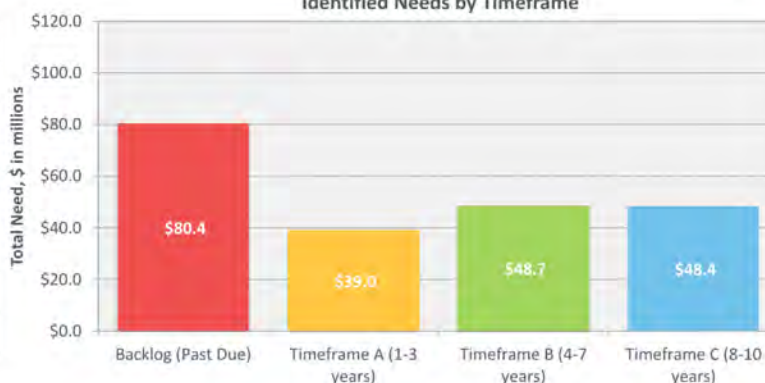
## Identified Needs by Timeframe

37% of total need is past due  
Total Identified Need



|               |       |
|---------------|-------|
| # of projects | 2,448 |
|---------------|-------|

Identified Needs by Timeframe



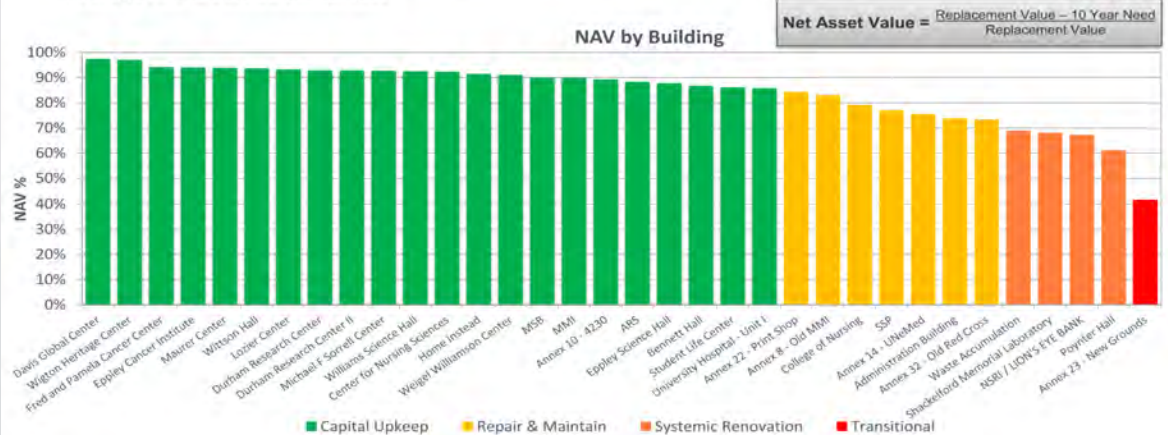
|      |     |     |     |
|------|-----|-----|-----|
| 1007 | 423 | 450 | 568 |
|------|-----|-----|-----|

Without Soft Costs or Inflation included in estimates.

# UNMC Asset Stack

## Net Asset Value by Building

Average NAV is 90% across campus



### Notes:

- Compares each asset's backlog relative to assessed value of the asset
- Strong correlation of data to known investment needs and recent investments
- Validates previous campus data regarding future investment needs

# Nebraska Medicine Responsibility

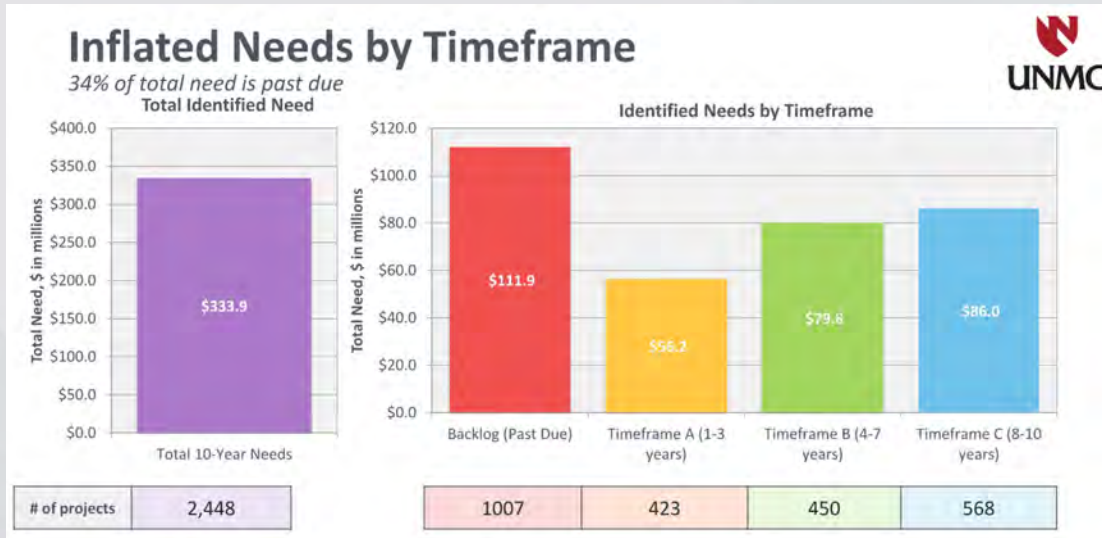
- Industry standard for deferred assets is 30-35%.
- Highest concentration of high risk deferred assets are in Clarkson Tower (62%).

Deferred Asset Cost by Building

| Location    | Building Name | Deferred % |
|-------------|---------------|------------|
| Blue Zone   | HLC           | 18.5%      |
|             | CKT           | 61.5%      |
| Green Zone  | BCC           | 0.0%       |
|             | TEI           | Null       |
|             | CDN           | 64.2%      |
|             | LOC           | Null       |
|             | ISC           | Null       |
|             | CDS           | 63.4%      |
|             | STP           | 97.0%      |
| Orange Zone | KWT           | 75.0%      |
|             | LTC           | 41.8%      |
|             | DOC           | 67.0%      |
|             | UT4           | 33.2%      |
|             | UT2           | 60.3%      |
|             | UT3           | 44.1%      |



# UNMC Responsibility



RURAL HEALTH WELLNESS TAB  
WILL BE INSERTED HERE

## Rural Health & Wellness in Nebraska



**Nicole Carritt, MPH**

**Assistant Vice Chancellor for Health Workforce Education Relations,  
Director of Rural Health Initiatives**  
ncarritt@unmc.edu; 402-559-2921

Nicole Carritt has more than 15 years of experience leading organizations in the public health, nonprofit, and academic sectors, focusing on health and rural health needs. Carritt joined UNMC in 2016 as the statewide Nebraska Area Health Education Center (AHEC) Program Deputy Director, addressing the state's health workforce needs, and was appointed the inaugural director of Rural Health Initiatives in 2019. Carritt also serves as the assistant director of the Community Outreach and Engagement Office for the Fred & Pamela Buffett Cancer Center. Her areas of expertise are health-related community organizing, policy and advocacy, providing technical assistance, and collaboratively building health-related initiatives for long-term and sustainable change. Carritt is the past president of the Nebraska Rural Health Association, a graduate of Leadership Omaha, and recently completed a fellowship with the National Rural Health Association.

As Assistant Vice Chancellor for Health Workforce Education Relations, Carritt provides coordination, facilitation and promotion for a wide array of campus and community health workforce education programs, services and initiatives that benefit UNMC, the individual colleges and programs within UNMC, and the state of Nebraska and beyond. In the role, she promotes the development and coordination of UNMC's expansion in central and western Nebraska via the enhanced partnership with the University of Nebraska at Kearney, promotes the development and facilitates the UNMC Interprofessional Experiential Learning and Preceptor Initiative, and leads the development and coordination of UNMC health workforce education pathway programs.

# Creating A Healthier Rural Nebraska

**Board of Regents**

**October 4, 2023**



University of Nebraska  
Medical Center™

## Nebraska's Rural Health Landscape



Demographic and  
population distribution  
changes



Transformational  
change in healthcare  
delivery



Increasing unmet  
healthcare needs may  
manifest as health care  
inequity and poorer  
health outcomes



Growing dichotomy in  
access between rural  
and urban  
communities





## Healthier Rural Nebraska

### Leverage

Leverage proof of concept, strong cross-institutional partnership with UNK, and successful existing programs at the HSEC – from undergraduate pre-health, to pathway programs, to professional



### Create

Create high-skill, high-demand and high-wage (H3) jobs that support rural vitality and economic stability for the state



### Address

Address rural healthcare workforce needs of rural Nebraska and surrounding region

## Rural Health Education Building Groundbreaking





## Where We Are Now

Final Stages of structural planning and design

Program plans and budgets to inform rural and interprofessional program development

Collaborating with community leaders, hospital and health systems, and other key partners

Preparing for occupancy in early 2026



## Key Components

Focus on **interprofessional education and training**

**Enhanced rural community-based and clinical experiences** for students

iEXCEL hub

**Research**

Expanded and enhanced programs to **support degree advancement**

Opportunities to **support rural practitioners in the region (i.e., through CE)**

Developing new certificate and degree options for health professions students that **meet emerging needs in the clinical and community environment**



## Programmatic Overview

### New or expanded training programs in the following colleges:

- College of Allied Health Professions
- College of Medicine
- College of Nursing
- College of Pharmacy
- College of Public Health
- Rural Health Initiatives
- Behavioral Health Education Center of Nebraska (BHECN)

### Building existing undergraduate provisional admittance programs like KHOP and RHOP.

At full implementation, total enrollment at UNMC-Kearney would be nearly 600 learners.



## Design & Construction



Concept Rendering

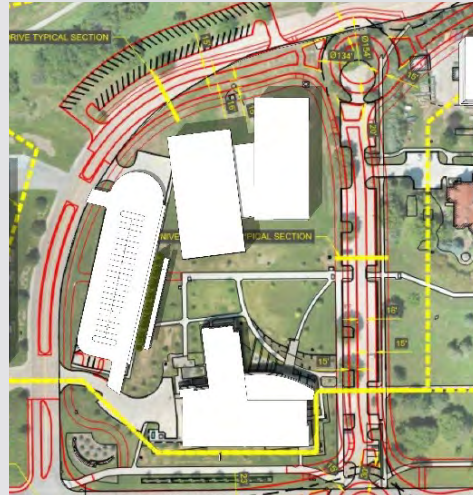




# Design & Construction



Concept Rendering



2<sup>nd</sup> Floor Bluff Rendering





Entry Rendering

## Considerations



**Funding** for ongoing programmatic development and sustainability.



Expansion will require thorough and thoughtful planning to ensure students in every program receive an **equitable training experience** to that of those based at the main campus AND **sufficient clinical and experiential training** partnerships



Short-term **housing and community capacity for students**



Enhanced **pathway programs, scholarships and student loan repayment programs**

# UNMC Preceptor & Experiential Learning Excellence



Develop and maintain an integrated information management system for UNMC



Enhance preceptor and clinical training site recruitment, retention, training and support systems



Coordinate interprofessional experiential learning/training opportunities for UNMC students and partner communities



**Nikki Carritt, MPH**

Asst. Vice Chancellor for Health Workforce Education Relations

Director, Rural Health Initiatives

Asst. Director, Community Outreach & Engagement, FPBCC

[ncarritt@unmc.edu](mailto:ncarritt@unmc.edu) | 402.559.2921

PROTECTING OUR NATION TAB  
WILL BE INSERTED HERE

## Protecting our Nation: Center for Sustainment of Trauma and Readiness Skills (C-STARS) Update



**Elizabeth Schnaubelt, MD**

**Lieutenant Colonel, U.S. Air Force; Director, C-STARS Omaha, Global Center for Health Security**

**[elizabeth.schnaubelt@volunteer.unmc.edu](mailto:elizabeth.schnaubelt@volunteer.unmc.edu); 402-836-9185**

Lt. Col. Elizabeth Schnaubelt, MD, joined the UNMC/Nebraska Medicine team in 2018 when she was assigned as the inaugural medical director for the U.S. Air Force Center for Sustainment of Trauma Readiness Skills (C-STARS) Omaha. C-STARS Omaha's mission is to advance the readiness skills and competency of U.S. Air Force medical personnel so they can provide safe and effective care for patients who have contracted or may have been exposed to highly hazardous infectious diseases. To accomplish the C-STARS Omaha mission, Dr. Schnaubelt and her team also work closely with the Nebraska

Biocontainment Unit. In addition to her significant responsibilities as the C-STARS Omaha medical director, Dr. Schnaubelt carries a substantial clinical load, attending on the general infectious diseases and orthopedic infectious diseases services in the UNMC ID Division, and fully participates in the clinical and educational missions of UNMC.



# C-STARS Omaha

Center for Sustainment of Trauma and Readiness Skills

**Lt Col Elizabeth R. Schnaubelt, MD**  
Department of Internal Medicine



University of Nebraska  
Medical Center™

## C-STARS Omaha at UNMC – Nebraska Medicine

- U.S. Air Force training platform, established 2018
- Mission: *To advance the readiness skills of Air Force medical personnel to deliver safe and effective care for patients affected by high consequence infectious diseases (HCID)*





## Principles of Biocontainment Care course

- Purpose: advance the readiness skills for safe and effective biocontainment care delivery
- Foundational course in highly hazardous communicable diseases / HCID
- Principles apply to all environments
- Taught in Davis Global Center

Air Force partners with University of Nebraska Medical Center for infectious disease proficiency



## Infectious Diseases Air Transport (IDAT)



- Purpose: provide aeromedical evac for members affected by HCID
- Transport Isolation System (TIS) developed in 2014 for Ebola
- Negatively Pressurized Conex (NPC) developed in 2020 for COVID
- UNMC/NM reachback support facilitated successful operationalization

### Transport Isolation System



Photo by Roland Balik



U.S. Air Force photo by A1C John Wright

### Negatively Pressurized Conex



U.S. Air Force photo by SSgt Chris Drzazgowski



U.S. Air Force photo by A1C John Wright



## Sustainable IDAT Training

- Enduring training beyond “just-in-time” is critically needed for HCID
- A formal IDAT course has been proposed
  - Multidisciplinary team of Air Force instructor cadre
  - Train personnel to safely aeromedically evacuate patients affected by HCID
  - Training location with space for classrooms, Negatively Pressurized Conex, fuselage trainers or mock-ups, equipment, supplies, and office space
- C-STARS Omaha has been selected as the training location for IDAT



Photo courtesy of Lt Col Paul Hendrickson



U.S. Air Force photo by A1C John R. Wright



U.S. Air Force photo by A1C John R. Wright



Photo by Dr. Christopher Kratochvil



UNIVERSITY OF  
**Nebraska**  
Medical Center



ADVANCED CLINICAL TRIALS TAB  
WILL BE INSERTED HERE



## Hope and Healing: How Advanced Clinical Trials Save Lives



### **Russell McCulloh, MD**

**Associate Vice Chancellor, Clinical Research; Professor, Pediatrics**  
**[russell.mcculloh@unmc.edu](mailto:russell.mcculloh@unmc.edu); 402-955-4496**

Russell McCulloh, MD, a nationally recognized leader in clinical research, is associate vice chancellor for clinical research for UNMC. Dr. McCulloh also serves as assistant dean for clinical research for the UNMC College of Medicine, director for clinical and translational research operations for Children's Hospital & Medical Center, and vice president for research at Nebraska Medicine.

As the associate vice chancellor for clinical research, Dr. McCulloh provides vision for clinical research, identifies research initiatives and incentives to foster research excellence, expands translational research teams, and increases the number and success of large grant applications. He also facilitates joint research program planning, including identifying areas for strategic recruitment of nationally recognized, extramurally funded investigators.

Dr. McCulloh serves as the liaison between the UNMC Vice Chancellor for Research Office and the research community, concerning clinical research support and shared resources, strategic planning initiatives, policies and new initiatives. He also makes recommendations about existing and proposed clinical research support.

# Hope and Healing: How Advanced Clinical Trials Save Lives

**Russell McCulloh, MD**

Associate Vice Chancellor for Clinical Research



University of Nebraska  
Medical Center™

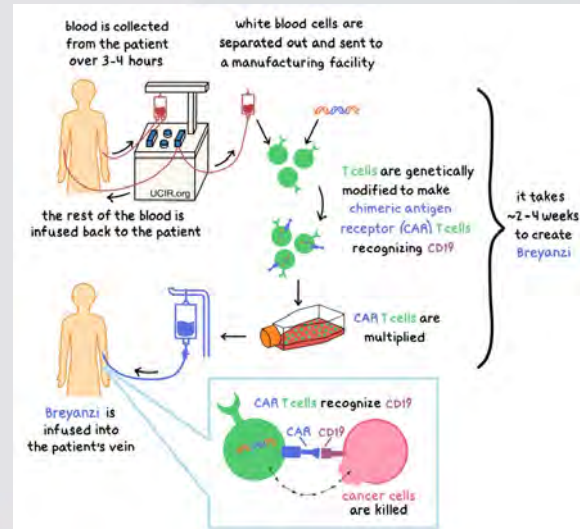
## Advanced clinical trials: what do we mean?



- Technology
- Facilities
- Approaches
- People



# Facilities and Technology



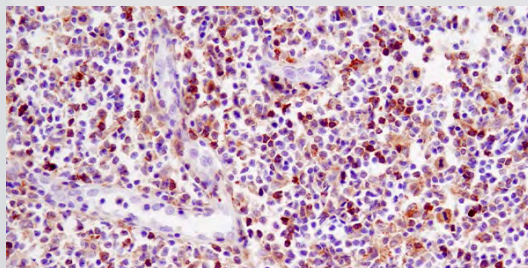
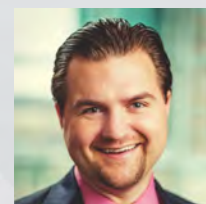
# Cellular therapy to treat cancer



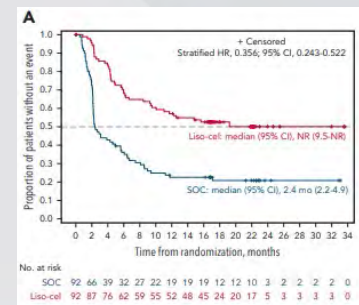
**Regular Article**

**CLINICAL TRIALS AND OBSERVATIONS**

**Lisocabtagene maraleucel as second-line therapy for large B-cell lymphoma: primary analysis of the phase 3 TRANSFORM study**



**74% improvement in event-free survival among patients needing second-line therapy**

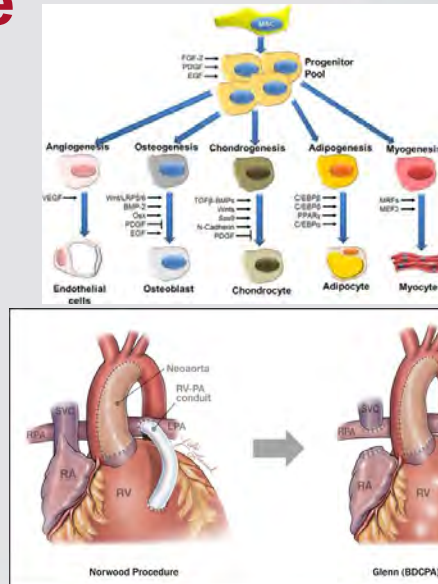
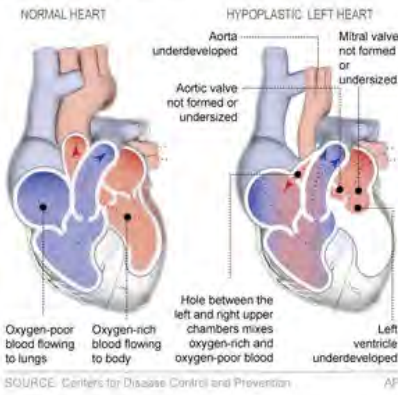


# Cellular therapy for congenital heart disease



## Hypoplastic Left Heart Syndrome

As the baby develops during pregnancy, the left side of the heart does not form correctly, making it hard for oxygen-rich blood to flow to the body.



# Gaining insights into the genetic basis for diseases



**MEASURABLE CLINICAL IMPACT**

**1 in 75**

were at-risk for at least one serious, actionable genetic condition across CDC Tier 1 conditions:

- Familial Hypercholesterolemia (FH)
- Lynch Syndrome (LS)
- Hereditary Breast and Ovarian Cancer (HBOC)

**90%**

would have been missed under current medical practice

**22%**

had already developed indications of disease

**Helix Health**

Download Your Lab Report

Talk to a Genetic Counselor

Talk to Your Health Care Provider

Talk to Your Family

**Download Your Lab Report**

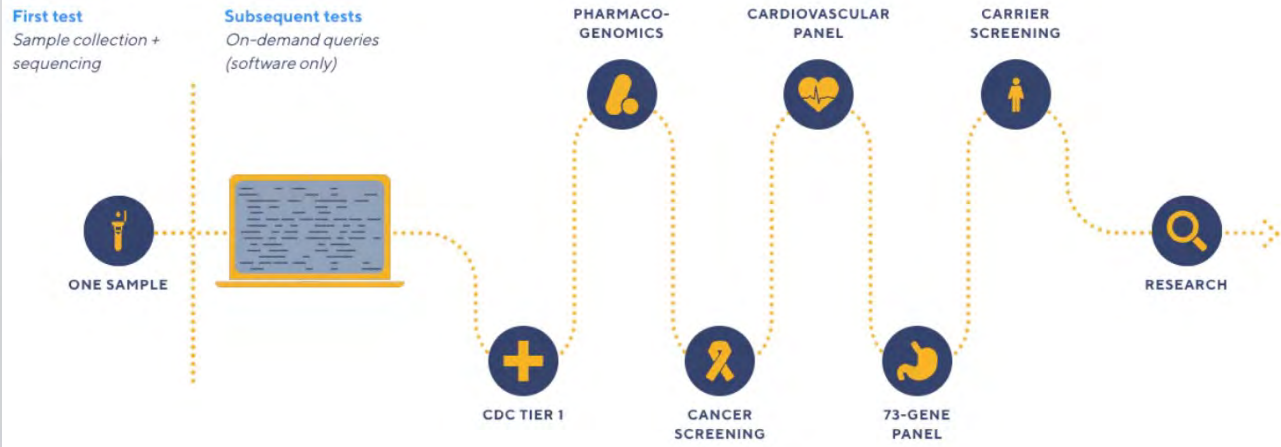
Helix® Health makes it easy to download your results and add them to your personal health records, as well as share them with your health care

**Here's how your Lab Report can help:**

- Your health care provider or genetic counselor needs to know the details of your results before they can recommend specific actions. For example, if you were found to have a variant, they need to know the exact gene, the specific details about the variant and how it is inherited. This is because not all variants have the same impact: some are linked to a greater risk of developing a condition and may have different recommended interventions compared to others. Also,

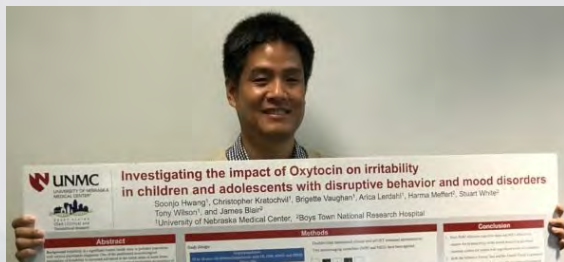


# Statewide initiative: 100,000 participants



Questions?: [geneticinsights@nebraskamed.com](mailto:geneticinsights@nebraskamed.com)

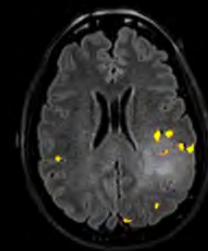
# Where do behavioral health drugs work in the brain?



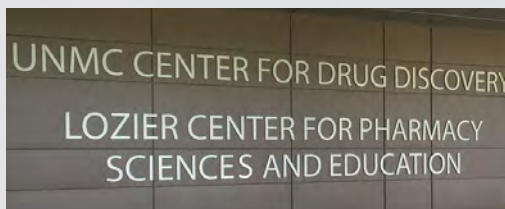
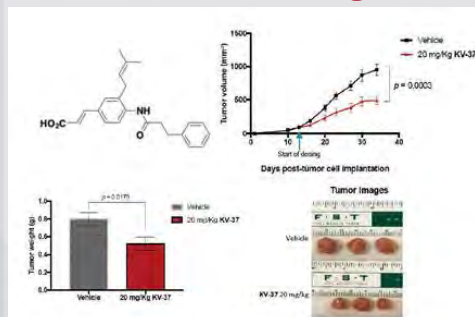
- Functional MRI
- Drug distribution, metabolism
- Safer dosing, more targeted use
- Important: >75% of drugs given to children off-label



06.9.47.21  
FMRI\_TEST



# Advanced Technology: Drug Delivery & Discovery



- New antibiotic, anti-cancer, pain management candidates
- Outstanding federal funding record, College of Pharmacy

- PTSD clinical trial
- Cannabidiol with new delivery mechanism (better safety and distribution)
- UNMC leading site



## In-home technology



**ECHO**  
Environmental influences  
on Child Health Outcomes  
A program supported by the NIH

IDEA States  
Pediatric Network

**Bryan Health**

HEPA filters in homes to reduce medical visits and hospitalizations among young children

Respiratory infections are a leading cause of hospitalizations and death among children <2 years old



**Children's**  
HOSPITAL & MEDICAL CENTER  
OMAHA



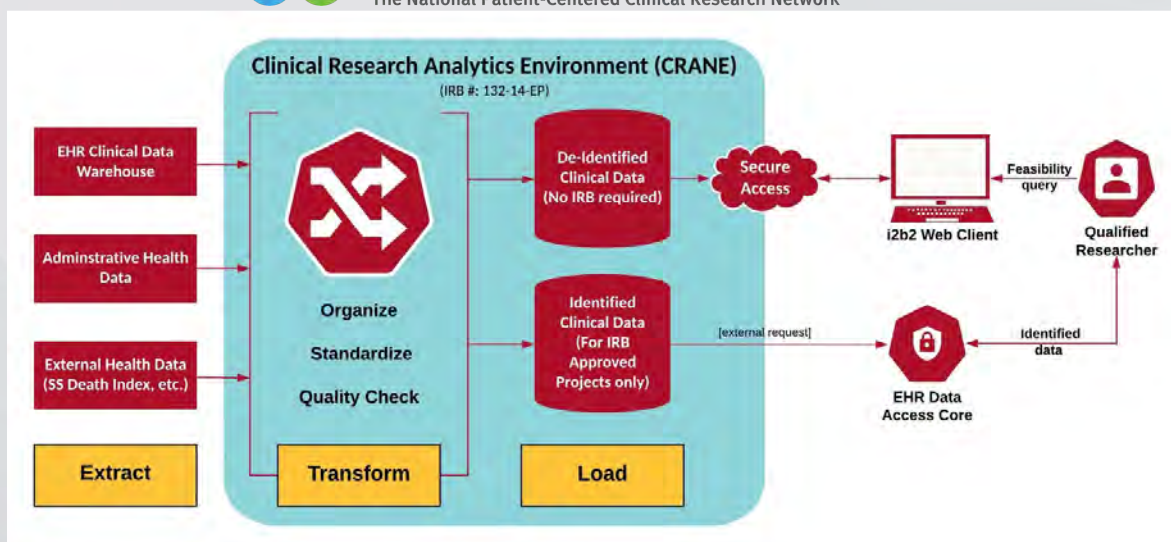


# Advanced Clinical Trials: New Approaches

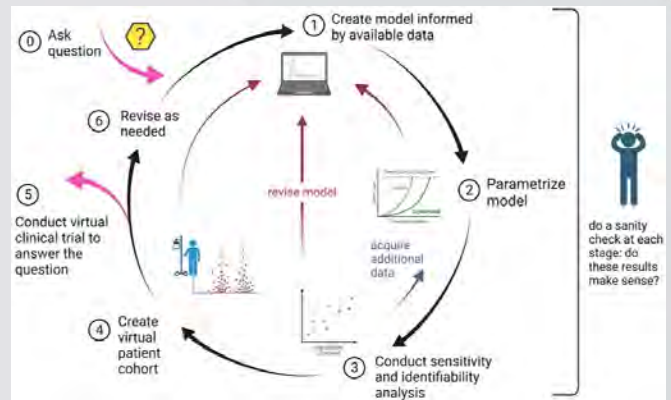


pcornet<sup>®</sup>

The National Patient-Centered Clinical Research Network



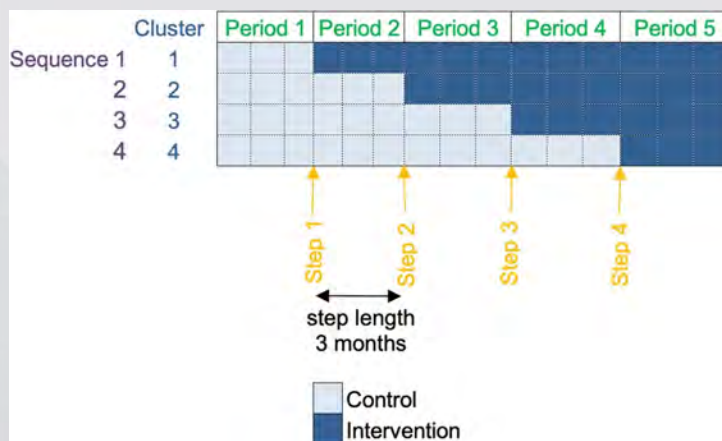
# Virtual Clinical Trials



# Advanced clinical trials design



Cluster-randomized trials: Making hospitals research subjects, not patients



## ABCDEF bundle

- Assess, prevent, and manage pain and Delirium
- Both spontaneous awakening and breathing trials
- Choice of analgesia/sedation
- Early mobility
- Family engagement



# Why research matters

The NEW ENGLAND JOURNAL of MEDICINE

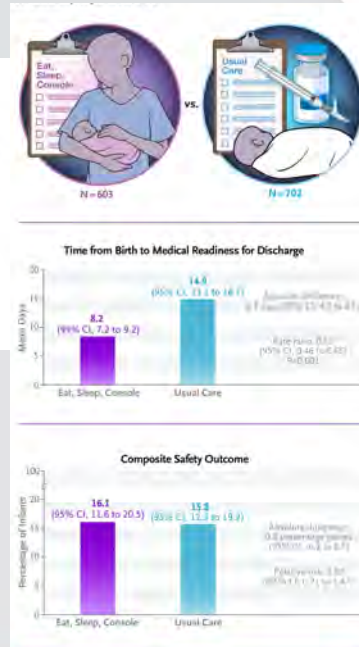
## ORIGINAL ARTICLE

### Eat, Sleep, Console Approach or Usual Care for Neonatal Opioid Withdrawal



#### ESC

- Cut hospital stays almost in half
- Improved bonding with parents



# Remote clinical trials

Greater (rural)  
Nebraska experiences  
barriers to clinical trials  
access/participation

Common to rural states

A fundamental health  
disparity

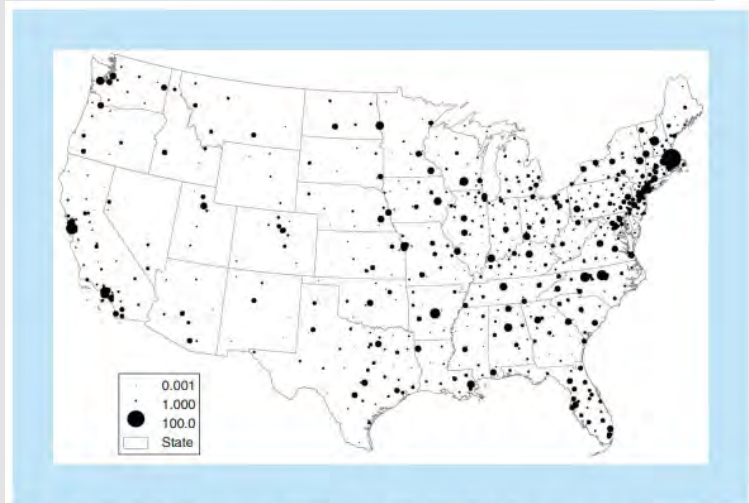
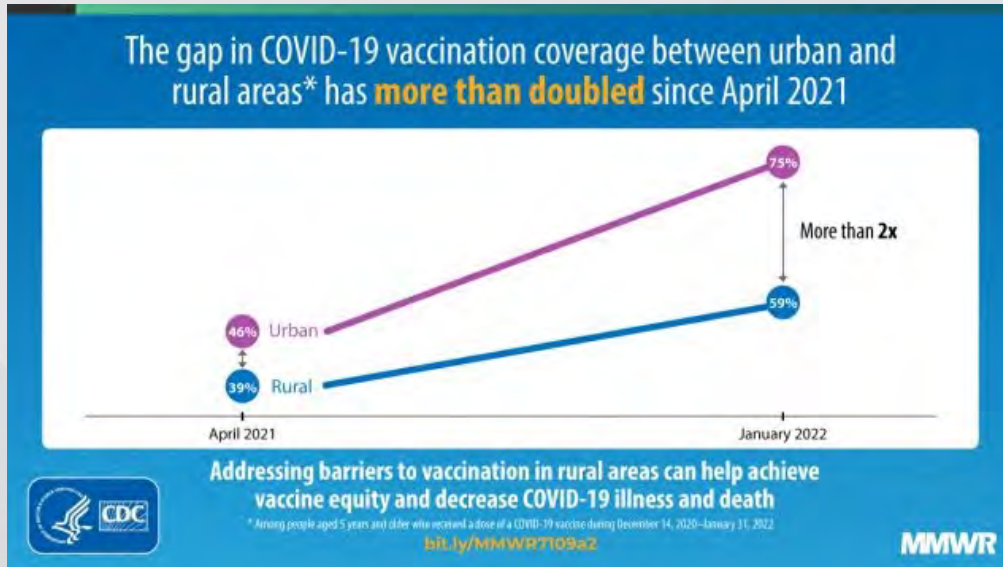


Figure 1. Number of clinical trial sites per 10,000 persons (2002–2007), by 3-digit zip code tabulation area. Circles are proportional to the number of clinical trial sites per 10,000 persons and are plotted at the centroid (spatial center) of each 3-digit zip code tabulation area. Data are based on 174,503 trial sites in the continental USA reported from 1 November, 2002 to 1 November, 2007 in the Bioresearch Monitoring Information System. Data taken from [12].

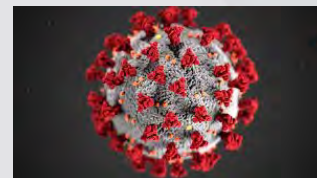
## Why does it matter?



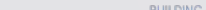
## Example

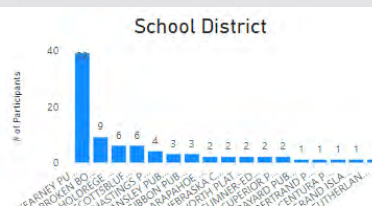
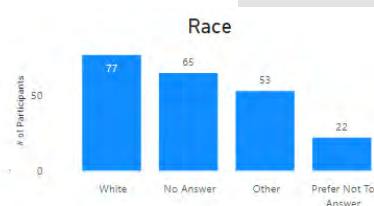
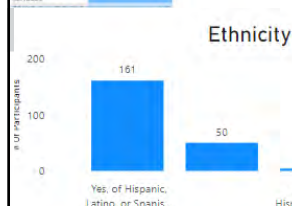
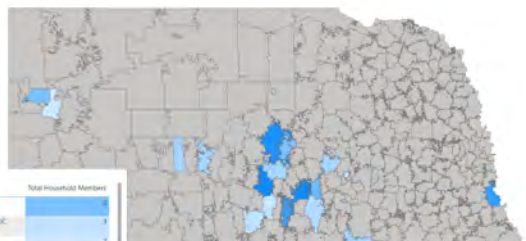


Feasibility Trial of the iAmHealthy intervention in rural clinics

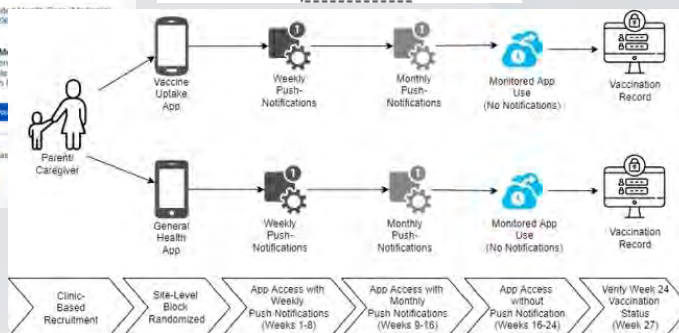
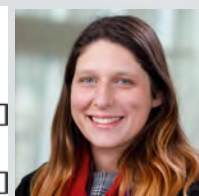
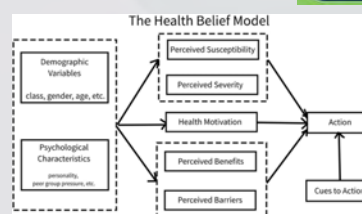
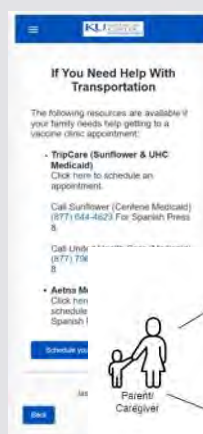





 Buffalo County  
**COMMUNITY PARTNERS**<sup>®</sup>  
 BUILDING A HEALTHIER COMMUNITY



**MoVeUP**



**Children's**  
HOSPITAL & MEDICAL CENTER

We know children.



# Summary

Advanced clinical trials take many forms:

- New Technology
- New approaches
- New communities engaged

UNMC strongly positioned to extend access to life-saving and life-improving clinical trials across diverse communities

- Rural
- Diverse Healthcare settings
- Community settings





UNMC LEADERSHIP TAB  
WILL BE INSERTED HERE

## VICE CHANCELLORS

### Senior Vice Chancellor for Academic Affairs



**Dele Davies, MD**

**dele.davies@unmc.edu; 402-559-5130; @DeleDaviesMD**

H. Dele Davies, MD, is an internationally recognized expert in pediatric infectious diseases and a leader in community health. As senior vice chancellor for academic affairs and dean for graduate studies, Dr. Davies is responsible for academic, faculty and student oversight of the six different health professions colleges and the graduate studies program, working with a talented team of deans, faculty and staff to build and enhance UNMC's academic programs and build the momentum of making UNMC the most learner-centered health science center in the nation.

Dr. Davies holds a master's degree in epidemiology from the University of Toronto, Canada, and a master's in health care management from the Harvard School of Public Health. He is specialty trained in pediatrics and pediatric infectious diseases from the Hospital for Sick Children in Toronto. He previously served as chair of pediatrics and human development at Michigan State University (2003-2012) and director of the Child Health Research Unit at Alberta Children's Hospital in Calgary, Canada, and the Child Health Research Institute at the University of Calgary (1993-2003).

Dr. Davies has more than 200 publications in peer-reviewed journals related to his research on infectious diseases topics, in addition to an edited book on Obesity in Childhood and Adolescence, several book chapters and other scholarly publications, and numerous presentations at national and international meetings.

### Vice Chancellor for Business, Finance and Business Development



**Anne Barnes, MBA**

**annebarnes@unmc.edu; 402-559-6301**

Anne Barnes, MBA, joined UNMC in June 2022 as vice chancellor for business, finance and business development. As vice chancellor, she oversees all budget, finance, operational and administrative services, as well as all business development activities, in support of the chancellor.

Barnes previously served as senior associate dean for administration and finance at the University of Oklahoma College of Medicine, where she served for 25 years as the principle business officer and later also served as chief administrative officer of OU Physicians, the physician faculty practice plan.

Barnes played a pivotal role in both the financial and operational aspects of the integration of the practice plan and the OU Health system, leading to the creation of OU Health Partners, Inc., a 501c3 faculty group practice sub-corporation within OU Health.

Barnes graduated from Oklahoma Baptist University with a bachelor's in business administration with a major in accounting. She received a certified public accountant designation in 1996. Barnes graduated from the Meinders School of Business at Oklahoma City University with a master's in business administration with high honors in 2007.

## Interim Vice Chancellor for External Relations



**Chris Kratochvil, MD**  
**ckratoch@unmc.edu; 402-559-4203**

Chris Kratochvil, MD, is the interim vice chancellor for external relations at UNMC, focusing on government relations, alumni, strategic communications, rural and community initiatives. Dr. Kratochvil serves as the senior adviser to the Global Center for Health Security and in 2021 was named the inaugural distinguished chair for the Global Center for Health Security.

Dr. Kratochvil is a fellow of the National Strategic Research Institute and a core competency adviser for Active and Passive Medical Defense against Weapons of Mass Destruction and Consequence Management for the National Strategic Research Institute. As the medical director of UNeHealth, which serves to support commercial clinical research, he oversees a team focused on commercial contracting and agreements. He serves as the institutional official for UNMC's Human Research Protection Program.

Dr. Kratochvil is a co-principal investigator of the Administration for Strategic Preparedness and Response National Center for Health Security and Biopreparedness, which trains federal partners and provides quarantine services for the U.S. He is a co-principal investigator for the CDC Project Firstline as well as a collaborative Public Health Service training program. He previously served as co-principal investigator of the federally funded National Emerging Special Pathogens Training and Education Center, which supports research and preparedness nationally and helped launch the Special Pathogens Research Network. He is a member of the Nebraska Biocontainment Unit leadership team and from 2020-2021 served as chair of the Big Ten Task Force for Emerging Infectious Diseases.

## Vice Chancellor for Information and Technology



**Michael Ash, MD**  
**miash@nebraskamed.com; 402-552-3389**

Michael Ash, MD, serves as vice chancellor for information and technology at the University of Nebraska Medical Center and as executive vice president and chief operating officer at Nebraska Medicine. He oversees information technology and information security, in addition to inpatient, ambulatory and procedural areas.

With more than 20 years of experience in health information technology, Dr. Ash has led Nebraska Medicine to national recognition as a HIMSS Stage 7 and Davies Award-winning organization. Nebraska Medicine has also received Vizient's prestigious Quality & Safety Leadership Award. Prior experience includes leadership positions at Cerner, including chief medical officer and vice president for physician strategy and innovation.

Prior to joining Cerner, Dr. Ash worked as an internal medicine physician. He graduated with a bachelor's degree in pharmacy and earned his medical degree from the University of Missouri at Kansas City. He completed his internal medicine residency at Baylor College of Medicine in Houston.

## Vice Chancellor for Research



**Kenneth Bayles, PhD**

**kbayles@unmc.edu; 402-559-8490**

Kenneth Bayles, PhD, was named UNMC's Vice Chancellor for Research in 2022.

Dr. Bayles trained in bacterial genetics at Kansas State University, earning a PhD in 1989 for his studies of toxin production by the gram-positive pathogen, *Staphylococcus aureus*. He then performed post-doctoral research at the University of Maryland, Baltimore County, examining the regulatory response to DNA damage in *Bacillus subtilis* and *S. aureus*.

After nine years as a faculty member at the University of Idaho, he moved to the University of Nebraska Medical Center, where he became the founding director of the Center for Staphylococcal Research and combined the talents of several investigators to focus on the role of staphylococcal biofilm in the development of disease.

In 2011, Dr. Bayles was promoted to associate vice chancellor for basic science research, supporting several campus-wide efforts to enhance the productivity of its research faculty, including the Nebraska Drug Discovery and Development Pipeline. In 2018, he also was appointed associate vice chancellor for research and creative activity at the University of Nebraska Omaha.

Throughout his career, Dr. Bayles' research interests have been funded by multiple NIH grants and have remained focused on elucidating the regulation of bacterial cell death and defining their roles in biofilm development. This research has led to greater than 120 publications, many of which having expanded the boundaries of bacterial physiology to include the concept of bacterial programmed cell death and the hypothesis that the molecular control of this process is conserved in plants and animals. In addition, his studies have led to the discovery that bacterial biofilm is a complex developmental process that includes many functions previously thought to be reserved for more complex organisms.

In more recent years, his research interests have expanded to Department of Defense-related activities including work on countermeasures against weapons of mass destruction such as therapeutics and vaccines to protect against select agents and toxins, as well as compounds to protect against radiation exposure.

For his contributions to the field of microbiology, Dr. Bayles was inducted into the American Academy of Microbiology in 2017.



# Senior Adviser to the Chancellor



**Bob Bartee**

**bbartee@unmc.edu; 402-559-7381**

Robert Bartee serves as senior adviser to the chancellor at the University of Nebraska Medical Center. He led government relations and communication efforts at UNMC for more than four decades, including as vice chancellor of external relations from 2006-22. He also served for part of that time as vice chancellor for external relations at the University of Nebraska at Omaha.

Bartee is a leader in designing strategies for public policy advocacy, communications and strategic advancement. He lectures and speaks on topics such as Leadership in the 21<sup>st</sup> Century and The Politics of Health. Among his successes:

- Targeting 20 percent of the state's Tobacco Settlement Funds for Biomedical Research.
- Dedicating a portion of the state's Cigarette Tax to research in cancer and smoking-related diseases.
- Securing state support for the nationally recognized Nebraska Rural Health Education Network (RHEN).
- Leading efforts to raise public funding for the Fred & Pamela Buffet Cancer Center.
- Helping to create and obtain state support for the Behavioral Health Education Center of Nebraska (BHECN).
- Assembling partners to create a vision and master plan to revitalize midtown Omaha.
- Establishing the UNMC High School Alliance.
- Leading efforts to create the Nebraska Cancer Registry.
- Creating the UNMC Health Professions Tracking Center.
- Creating the UNMC Office of Alumni Relations.
- Creating the Office of State and Community Relations at UNO.

A 1969 graduate of the University of Nebraska-Lincoln, Bartee holds a master's degree from Syracuse University, Maxwell Graduate School of Public Affairs. He has served as a member of the Association of American Medical Colleges Senior Level Advocacy Group and its Governmental Relations Steering Committee, and the Association of Academic Health Centers Health Policy Advisory Committee and Policy Assembly.

## DEANS & DIRECTORS

### College of Allied Health Professions Dean



**Kyle Meyer, PhD, MS, PT, FASAHP**  
**kpmeyer@unmc.edu; 402-559-5903**

Kyle Meyer, PhD, MS, PT, FASAHP, is founding dean of the UNMC College of Allied Health Professions.

Upon earning his bachelor's of science degree in physical therapy from UNMC, Dr. Meyer began his career – that now spans over four decades – as a physical therapist. He practiced pediatric physical therapy for over 20 years and was instrumental in developing the first pediatric physical therapy department at Children's Hospital & Medical Center in Omaha.

He returned to his alma mater in 1991 as a faculty member and director of clinical education in the physical therapy program. During his tenure on faculty, he served on the UNMC Faculty Senate for seven years, presiding as president in 2000-01.

Dr. Meyer served as a credentialed clinical trainer for the American Physical Therapy Association Clinical Instructor Education and Credentialing Program and the Advanced Credentialed Clinical Instructor Program for 12 years. He was a member and chair of the national Clinical Instructor Education Board for the American Physical Therapy Association and co-authored a national training curriculum for physical therapy clinical educators, the Advanced Credential Clinical Instructor Program.

He later was appointed associate dean and then senior associate dean for Allied Health in the College of Medicine, prior to being named the founding dean of the newly created UNMC College of Allied Health Professions in 2015.

Also in 2015, the College of Allied Health Professions expanded to the new Health Science Education Complex on the University of Nebraska-Kearney campus. In 2016, the College of Allied Health Professions was awarded the Visionary Leadership Award by UNMC Faculty Development in recognition of these accomplishments.

In 2016, Dr. Meyer was elected as a fellow in the Association of Schools Advancing Health Professions for his record of demonstrated leadership and significant contributions in allied health, becoming at that time one of only 179 individuals awarded the honor since 1981. He currently presides as president of the Midwest Deans Association of the Association of Schools Advancing Health Professions.

Dr. Meyer also holds a master's of science degree in anatomy from UNMC, and both a master's of public administration and a PhD in public administration from the University of Nebraska Omaha. In 2017, he was recognized with the Alumni Award for Excellence in Public Service by the School of Public Administration at the University of Nebraska Omaha.

# College of Allied Health Professions

## 2022-2023

Allied health professionals make up about **60%** of the health care workforce! Our **16** programs make up the **2nd** largest enrollment among UNMC's health professions education programs. Historically, our **1st**-time pass rates on national licensure or certification exams have exceeded national means.

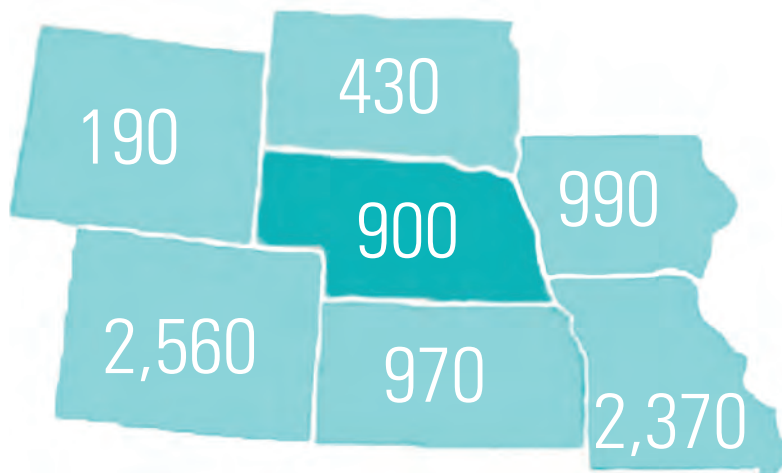
**65%** of our students  
are NE residents.

HSEC Enrollment **143**  
HSEC Graduates **59**

HSEC = Health Science Education  
Complex in Kearney

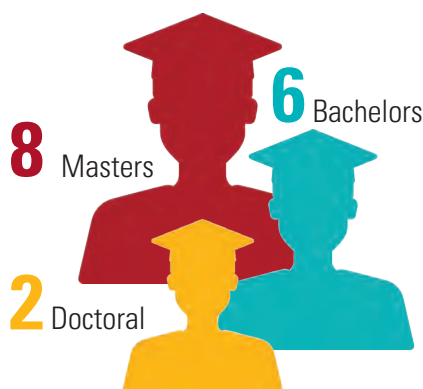
## Workforce Demand

U.S. Department of Labor Bureau of Labor Statistics  
Projected Annual Openings for Allied Health Professionals 2020-2030

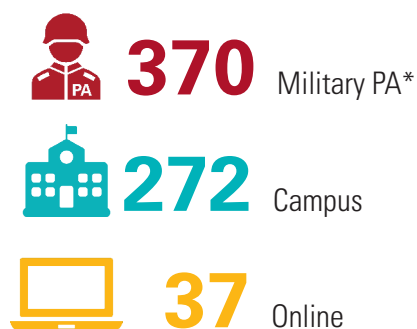


**250** Cardiovascular Interventional Technology  
NR Clinical Perfusion  
NR Diagnostic Cytology  
**440** Diagnostic Medical Sonography  
NR Genetic Counseling  
NR Health Professions Teaching & Technology  
NR Healthcare Delivery Science  
**150** Magnetic Resonance Imaging  
**2,050** Medical Laboratory Science  
**450** Medical Nutrition  
**810** Occupational Therapy  
**1,320** Physical Therapy  
**870** Physician Assistant  
**240** Radiation Therapy  
**1,000** Radiography  
**830** Respiratory Care  
**8,410** **TOTAL REGIONAL OPENINGS**  
NR = Not Reported

### DEGREE PROGRAMS

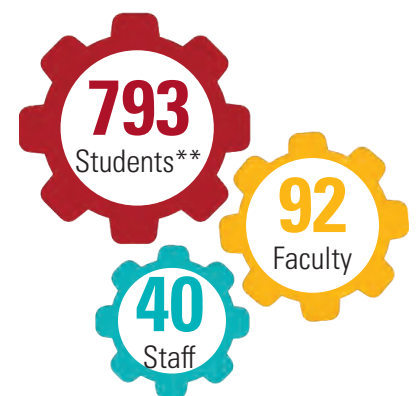


### DEGREES CONFERRED 2022



\*UNMC's PA program has been the premiere degree-awarding choice of the U.S. military since 1996 with over 5800 UNMC degrees awarded.

### FALL 2022



\*\*includes online students

## Key Strategic Priorities

As part of the *Only in Nebraska: A Campaign for Our University's Future*, the College of Allied Health Professions endeavors to raise \$12 Million for these key strategic priorities:



### Relentless focus on student access and success:

- Student scholarships
- Student success
  - ◊ Capital and infrastructure
  - ◊ Student wellbeing
  - ◊ Career and placement services
- Support for experiential learning
  - ◊ International studies
  - ◊ Expenses related to clinical rotations



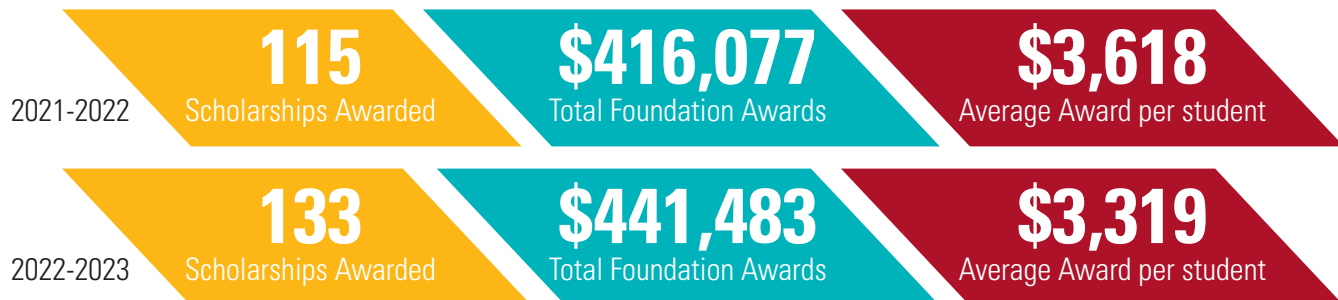
### Enhancement of faculty and academic excellence:

- Endowed dean position
- Endowed chairs and professorships
- Faculty support programs and funds
- Academic program support
- Strategic enrollment management



### Transformational research, discovery and innovation:

- Unrestricted and discretionary funds
- Enhanced clinical research laboratory spaces
- Start-up support and endowed funds for research faculty or program development
- Student engagement programming



### Programs vary in



length: **9** months to **36** months at UNMC



number of credit hours: **30** to **124**



class size: **8** to **66**

#### For additional information contact

Jessica Janssen Wolford  
University of Nebraska Foundation  
402-504-3327  
[jessica.janssenwolford@nufoundation.org](mailto:jessica.janssenwolford@nufoundation.org)

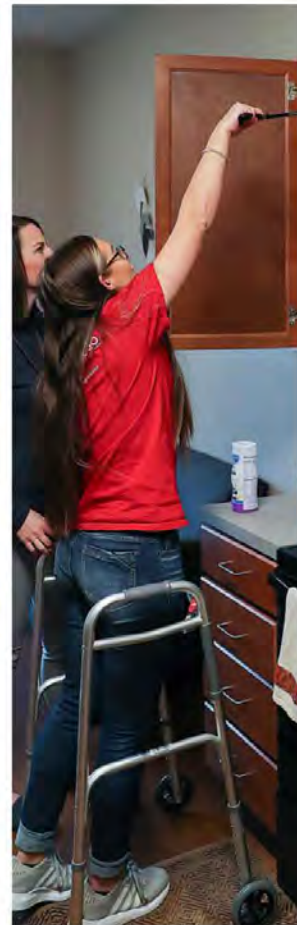
or

Kyle P. Meyer, PhD, MS, PT, FASAHP  
University of Nebraska Medical Center  
College of Allied Health Professions  
402-559-7428 | [kpmeyer@unmc.edu](mailto:kpmeyer@unmc.edu)





University of Nebraska  
Medical Center



**Together in health.**  
**Juntos por la Salud.**

[unmc.edu/alliedhealth](http://unmc.edu/alliedhealth)





# OUR PROFESSIONS NUESTRAS PROFESIONES



**Cardiovascular Interventional Technologists** inject dye into blood vessels and take special images. These images show how well the blood vessel is working, and the techs use them during various treatments.  
**Starting wage: \$59,512**  
**Middle-range wage: \$72,694**  
**Job after graduation: 100%**

**Los Tecnólogos de Intervenciones Cardiovasculares** inyectan tinte en los vasos sanguíneos y toman imágenes especiales. Estas imágenes muestran cómo el vaso sanguíneo está funcionando y los técnicos las utilizan durante varios tratamientos.  
**Salario inicial: \$59,512**  
**Rango salarial medio: \$72,694**  
**Empleo después de la graduación: 100%**



**Computed Tomography Technologists** use special X-rays to take pictures of very thin layers of bones and organs inside the body and look for injury or disease.  
**Starting wage: \$50,024**  
**Middle-range wage: \$63,710**  
**Job after graduation: 100%**

**Los Tecnólogos en Tomografía Computarizada** utilizan rayos X especiales para tomar fotografías de capas muy delgadas de huesos y órganos dentro del cuerpo y buscar lesiones o enfermedades.  
**Salario inicial: \$ 50,024**  
**Rango salarial medio: \$63,710**  
**Empleo después de la graduación: 100%**



**Cytologists** look at cells from various parts of the human body under a microscope. They find different infections, diseases, and cancers.  
**Starting wage: \$65,000**  
**Middle-range wage: \$72,121**  
**Job after graduation: 100%**

**Los Citólogos** usan un microscopio para ver a las células en diversas partes del cuerpo. Ellos encuentran diferentes tipos de infecciones, enfermedades y cánceres  
**Salario inicial: \$65,000**  
**Rango salarial medio: \$72,121**  
**Empleo después de la graduación: 100%**



**Magnetic Resonance Imaging Technologists** use a machine with a large magnet connected to a computer. The machine makes pictures of organs and structures inside the body to help find diseases or injuries.  
**Starting wage: \$58,016**  
**Middle-range wage: \$72,808**  
**Job after graduation: 100%**

**Los Tecnólogos de Imágenes de Resonancia Magnética** utilizan una máquina conectada a una computadora la cual produce imágenes de órganos y estructuras del cuerpo. Estas imágenes ayudan a encontrar enfermedades y lesiones.  
**Salario inicial: \$58,016**  
**Rango salarial medio: \$72,808**  
**Empleo después de la graduación: 100%**



**Clinical Perfusionists** run a complicated machine that works like a person's heart and lungs. This keeps a person alive while their heart is stopped for open-heart surgery. The perfusionist also runs equipment that saves and cleans blood during operations.  
**Starting wage: \$138,000**  
**Middle-range wage: \$175,000**  
**Job after graduation: 100%**

**Los Perfusionistas Clínicos** manejan una máquina que hace las funciones del corazón y los pulmones de una persona. Esta mantiene a una persona con vida durante una cirugía a corazón abierto. El perfusionista también se encarga del equipo que limpia y guarda la sangre durante la cirugía.  
**Salario inicial: \$138,000**  
**Rango salarial medio: \$175,000**  
**Empleo después de la graduación: 100%**



**Diagnostic Medical Sonographers** use special machines that send sound waves into a patient's body. The sound waves, which are too high to hear, do not hurt the body, but they can make pictures that help understand organs and find diseases.  
**Starting wage: \$64,000**  
**Middle-range wage: \$75,920**  
**Job after graduation: 100%**

**Los Ecografistas de Diagnóstico Médico** usan máquinas especiales que envían ondas de sonido hacia al cuerpo del paciente. Las ondas sonoras, que son demasiado altas para oír, no lastiman el cuerpo, pero pueden tomar fotografías que ayudan a entender los órganos y encontrar enfermedades.  
**Salario inicial: \$64,000**  
**Rango salarial medio: \$75,920**  
**Empleo después de la graduación: 100%**



**Genetic Counselors** are trained in genetics and counseling. They teach and support people who might get or have a genetic disease.  
**Starting wage: \$76,702**  
**Middle-range wage: \$89,489**  
**Job after graduation: 100%**

**Los Consejeros Genéticos** están preparados en genética y consejería. Enseñan y apoyan a las personas que pueden tener o tienen una enfermedad genética.  
**Salario inicial: \$76,702**  
**Rango salarial medio: \$89,489**  
**Empleo después de la graduación: 100%**



**Medical Laboratory Scientists** use special equipment to perform many different laboratory tests on fluids taken from a patient. These include blood, saliva, or urine. The tests identify and help treat diseases.  
**Starting wage: \$57,949**  
**Middle-range wage: \$62,441**  
**Job after graduation: 100%**

**Los Científicos de Laboratorio Médico** utilizan equipos especiales para realizar diferentes pruebas de laboratorios sobre fluidos tomados de un paciente. Estos incluyen la sangre, saliva u orina. Las pruebas identifican y ayudan a tratar enfermedades.  
**Salario inicial: \$57,949**  
**Rango salarial medio: \$62,441**  
**Empleo después de la graduación: 100%**



**The respiratory therapy program will begin in 2023 or 2024.**  
**El programa de terapia respiratoria comenzará en 2023 or 2024.**



**Medical Nutrition Therapists** (Registered Dietitian Nutritionists) are experts on food and nutrition. They use nutrition science to assess status, to help people stay healthy, and to treat chronic diseases.

**Starting wage: \$60,900**  
**Middle-range wage: \$72,000**  
**Job after graduation: 100%**

**Los Terapeutas de Nutrición Médica (Dietistas Registrados)** son expertos en la alimentación y nutrición. Ellos evalúan el estado de las personas y ayudan a mantenerse saludables para tratar enfermedades crónicas.  
**Salario inicial: \$60,900**  
**Rango salarial medio: \$72,000**  
**Empleo después de la graduación: 100%**



**Physical Therapists** use exercises to help people walk and move better, when they are hurt or have diseases. They use special equipment, strengthening, stretching, and other exercises.

**Starting wage: \$67,000**  
**Middle-range wage: \$91,010**  
**Job after graduation: 100%**

**Los Terapeutas Físicos (Fisioterapeutas)** utilizan ejercicios para ayudar a mejorar el caminar y movimiento de las personas que están heridas o sufren enfermedades.  
**Salario inicial: \$67,000**  
**Rango salarial medio: \$91,010**  
**Empleo después de la graduación: 100%**



**Radiation Therapists** give daily treatments to people who have cancer. They use special equipment to give the right amount of radiation to the exact area of a patient's body. This, hopefully, will take away the cancer and make them feel better.

**Starting wage: \$63,896**  
**Middle-range wage: \$88,850**  
**Job after graduation: 100%**

**Los Terapeutas de Radiación** dan tratamientos diarios a las personas que tienen cáncer. Utilizan el equipo especial para dar la cantidad correcta de radiación al área exacta del cuerpo de un paciente. Esto, con esperanza, le quitará el cáncer y los hará sentirse mejor.  
**Salario inicial: \$63,896**  
**Rango salarial medio: \$88,850**  
**Empleo después de la graduación: 100%**



**Occupational Therapists** help patients who have diseases or injuries get better at the things everyone does every day to take care of themselves. These include eating, bathing, toileting, and working.  
**Starting wage: \$69,050**  
**Middle-range wage: \$92,588**  
**(This program began in 2021.)**

**Los Terapeutas Ocupacionales** ayudan a los pacientes en la recuperación de enfermedades y lesiones para que puedan ejercer labores diarias. Esto incluye comer, bañarse, usar el baño y trabajar.  
**Salario inicial: \$69,050**  
**Rango salarial medio: \$92,588**  
**(Este programa comenzó en el 2021.)**



**Physician Assistants** work with doctors to help patients get better. They do checkups, find illness or diseases, prescribe medicines, help perform surgeries, and talk with patients about their care.  
**Starting wage: \$100,000**  
**Middle-range wage: \$115,390**  
**Job after graduation: 100%**

**Los Asistentes Médicos** trabajan con los doctores para ayudar a los pacientes a sentirse mejor. Ellos hacen chequeos, encuentran enfermedades, recetan medicamentos, ayudan durante la cirugía y hablan con los pacientes sobre sus atenciones médicas.  
**Salario inicial: \$100,000**  
**Rango salarial medio: \$115,390**  
**Empleo después de la graduación: 100%**



**Radiographers** use special machines that take X-rays to make pictures of tissues, organs, bones, and vessels inside the human body.  
**Starting wage: \$45,276**  
**Middle-range wage: \$61,900**  
**Job after graduation: 100%**

**Los Radiólogos** utilizan máquinas especiales que toman radiografías para obtener imágenes de los tejidos, órganos, huesos y vasos sanguíneos del interior del cuerpo humano.  
**Salario inicial: \$45,276**  
**Rango salarial medio: \$61,900**  
**Empleo después de la graduación: 100%**





Allied health professionals make up about 60% of the healthcare workforce.

Aproximadamente, los profesionales aliados de la salud representan el 60% de la fuerza laboral médica.



## THE COLLEGE AT A GLANCE

### ASPECTOS MÁS DESTACADOS DEL COLEGIO

- **Second largest enrollment among UNMC's professional programs**  
Entre las profesiones de la UNMC es el tercer programa con más estudiantes
- **27 degree tracks available leading to one of 17 certificates or degrees**  
27 programas disponibles para obtener uno de 17 certificados o títulos académicos
- **Over 700 students enrolled in traditional campus-based and distance education programs**  
Matriculan a más de 700 estudiantes en programas tradicionales que residen en el campus y de educación a distancia
- **More than 65% of on-campus students are Nebraska residents**  
Más del 65% de estudiantes son residentes de Nebraska
- **First-time pass rates (for the past 13 years) on licensure or certification exams exceed the national means for their professions' pass rate**  
Durante los últimos 13 años, la tasa de aprobación en los exámenes de licenciaturas y certificados exceden la puntuación nacional de sus profesiones

Rev. 03/2022



College of Allied Health Professions | Enrollment Management & Student Affairs  
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## College of Dentistry Dean



**Gerard "Gerry" Kugel, DMD, PhD**  
**gkugel@unmc.edu; 402-472-1372**

Gerard "Gerry" Kugel, DMD, PhD, began serving as dean of the UNMC College of Dentistry on Sept. 18, 2023.

He previously served as associate dean for research and professor of comprehensive care at Tufts University School of Dental Medicine in Boston, maintains a private dental practice and has helped develop a curriculum for a new dental school. He has extensive expertise in clinical research and esthetic dentistry.

Among his professional activities, Dr. Kugel serves as a reviewer for The New England Journal of Medicine, The Journal of Dental Materials, The Journal of Esthetic and Restorative Dentistry and The Journal of Cosmetic Dentistry. He also is a fellow in the Academy of General Dentistry and the Academy of Dental Materials.

Dr. Kugel received his doctorate of dental medicine from Tufts University in 1985 and his PhD in Dental Materials in 2004 from the University of Siena, Italy. He also has a master's degree in anatomy and cellular biology from Tufts, and an Executive Certificate in Management and Leadership from the Sloan School of Management at MIT. Dr. Kugel has published more than 200 articles and more than 300 abstracts in the field of restorative materials and techniques. He also has given more than 400 lectures both nationally and internationally.

# College of Dentistry Fast Facts

Founded in 1899, the UNMC College of Dentistry has educated dental health professionals for the **past 124 years**. Our mission is to “continually improve the oral health of the people of Nebraska and beyond through a humanistic approach to education, extraordinary patient care, and innovative research.”

## 2022-2023 Academic Year

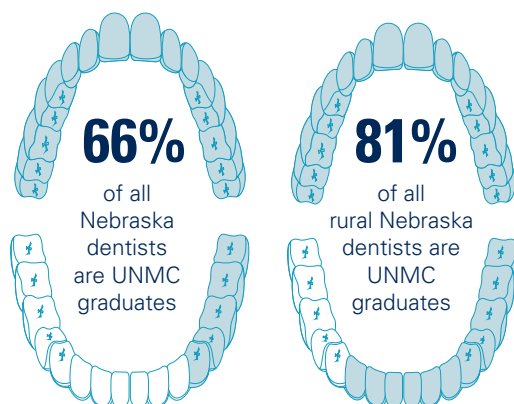
### DEGREE/CERTIFICATE PROGRAMS

| STUDENTS/CLASS                                                  |                                         | YEARS/COD  |
|-----------------------------------------------------------------|-----------------------------------------|------------|
| <b>52</b>                                                       | Doctor of Dental Surgery                | <b>4</b>   |
| <b>24</b>                                                       | Bachelor of Science in Dental Hygiene   | <b>2</b>   |
| POSTGRADUATE EDUCATION                                          |                                         |            |
| <b>3</b>                                                        | Endodontics                             | <b>2</b>   |
| <b>3</b>                                                        | Orthodontics                            | <b>2.5</b> |
| <b>4</b>                                                        | Pediatric Dentistry                     | <b>2</b>   |
| <b>2</b>                                                        | Periodontics                            | <b>3</b>   |
| <b>5</b>                                                        | General Practice Residency              | <b>1</b>   |
| <b>2</b>                                                        | Advanced Education in General Dentistry | <b>1</b>   |
| MEDICAL SCIENCES INTERDEPARTMENTAL AREA (MSIA) GRADUATE PROGRAM |                                         |            |
| <b>11</b>                                                       | MS in Oral Biology                      | <b>~ 2</b> |
| <b>4</b>                                                        | PhD in Oral Biology                     | <b>~ 4</b> |

### OUR PEOPLE

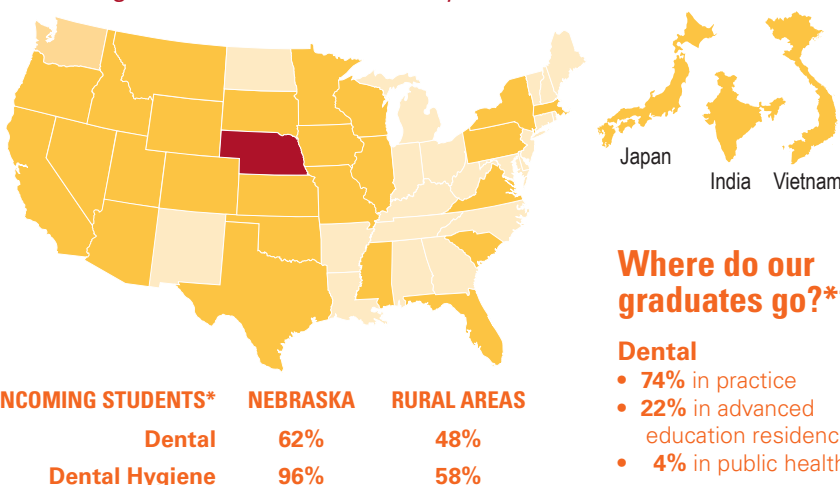


### STATE WORKFORCE



### STUDENT SNAPSHOT

Incoming Students: Where do they come from?



### Where do our graduates go?\*

- Dental**
- 74% in practice
  - 22% in advanced education residencies
  - 4% in public health

- Dental Hygiene**
- 100% in practice

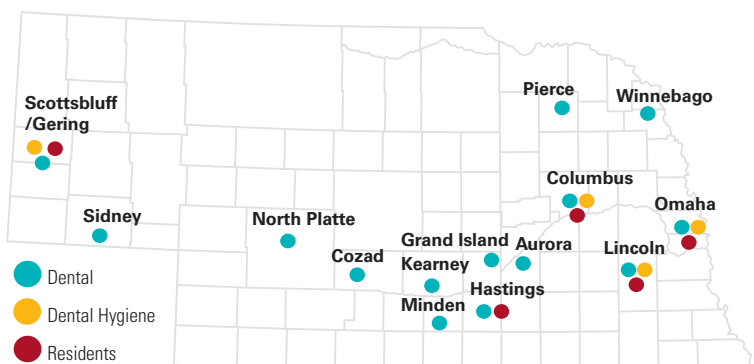
\*\*Data from the graduating classes of 2023

**SCHOLARSHIPS** The College of Dentistry provided more than **\$280,000** in scholarship aid from private contributions.

\*Data from the incoming classes starting fall 2023

## SERVICE

Current Rotation Sites for Dental & Dental Hygiene Students and Residents



**Continuing Education 2022-2023**  
65 courses offered

The College of Dentistry forms part of the dental "safety net" for the state of Nebraska, conducting **83,189 patient visits in 2022-2023.**



- Lincoln clinics: 28,391
- Omaha clinics: 15,026
- Extramural rotations: 1,486
- Charitable outreach: 38,286



**The college traditionally provides more than \$6.1 million of free and reduced fee care each year to underserved populations**

## RESEARCH

Over the past 5 years, **College of Dentistry faculty and staff members have authored:**



**\$1,187,036**

**extramural research support in 2022-2023**

Areas of research supported by this funding: studies on cell signaling in skin biology, palatal fusion, oral and other cancers; dental materials research; digital dentistry; DNA damage and repair in cancer biology; experimental treatment of periodontal disease; teledentistry in rural health; and oral health training and service.



**Sustained support from NIH funding**

averaging over \$1.3 million per year for the past 10 years despite having the 10th smallest dental student class size in the country.



**13 grants awarded**

to College of Dentistry faculty and staff members in 2022-2023.



**100%**

of our dental and dental hygiene students conduct research in their programs and 25% go on to present at national conferences and meetings.



## OUR VALUES

We value our strong sense of community. We are committed to compassionate care, collaborative learning, and the continuous exploration of knowledge. We demonstrate integrity, accountability, intellectual curiosity, and passion in everything we do. We respect diversity and its contributions to our culture of excellence.

# College of Medicine Dean



**Bradley Britigan, MD**  
**bradley.britigan@unmc.edu; 402-559-8878**

Bradley Britigan, MD, is a physician scientist trained in internal medicine and infectious disease. He has served as the Stokes-Shackelford professor and dean of the UNMC College of Medicine since July 2011.

Since 2011, Dr. Britigan also has co-directed the pediatric faculty practice plan, Children's Specialty Physicians, with the chief executive of Children's Hospital & Medical Center in Omaha.

In January 2014, he also assumed the role of interim president of Nebraska Medicine, the health care system formed by the integration of the Nebraska Medical Center, Bellevue Medical Center, and UNMC-Physicians, whose formation he helped develop. The latter is the faculty practice plan of UNMC. He held this position until August 2016, when the health system named a permanent chief executive.

During Dr. Britigan's tenure as dean, the College of Medicine has seen a marked increase in the size and scale of activities in each of its missions. The number of full-time faculty has increased by 50 percent, extramural research funding has doubled, three new departments have been created, a new medical school curriculum has been developed and implemented, many new clinical programs have been developed in conjunction with the college's health partners, and the number of female leaders in the college has substantially increased.

A Minnesota native who grew up in St. Louis, Dr. Britigan earned his bachelor's degree at Cornell University in Ithaca, New York, and his medical degree from the University of Southern California in Los Angeles. He completed internal medicine residency at Rhode Island Hospital in Providence and a fellowship in infectious diseases at the University of North Carolina at Chapel Hill.

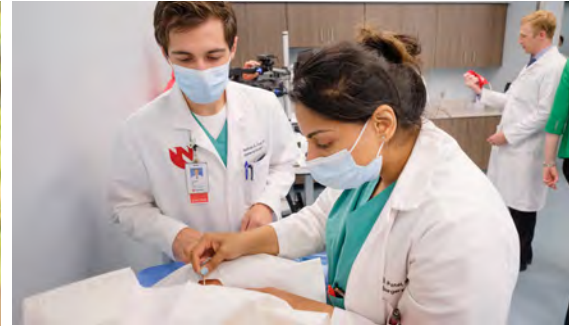
Dr. Britigan joined UNMC after seven years at the University of Cincinnati, where he was the Taylor Professor and chair of the department of internal medicine. Prior to that, he spent 17 years at the University of Iowa, where he was director of the division of infectious diseases, fellowship program director, and NIH T32 training grant PI for 11 years in the department of internal medicine. He also has had a greater than 30-year role as a staff physician and investigator in the United States Department of Veterans Affairs. He has been involved in medical student, graduate student, resident and postdoctoral fellow education throughout his career.

Research in Dr. Britigan's laboratory focuses on the biology of oxygen-centered free radicals and/or iron metabolism as they relate to host defense/inflammation. There is a particular emphasis on these events in phagocyte biology and the pathogenesis of infection with bacterial pathogens such as *Pseudomonas aeruginosa*, *Mycobacterium tuberculosis* and *Francisella tularensis*. His research has been funded over the years by NIH, the VA, and a variety of research foundations.

The author of more than 130 peer-reviewed publications, Dr. Britigan was elected to membership in the American Society for Clinical Investigation and the Association of American Physicians. He is a fellow of the Infectious Diseases Society of America and was the president of the American Federation for Medical Research from 1996-1997 and president of the Central Society for Clinical Research from 2010-2011. He continues to be clinically active in adult infectious diseases and medical education. He also has served for several years as a member of the review and selection committees for Executive Leadership in Academic Medicine Program that seeks to advance the careers of women in academic medicine. He has served as member of site visit teams for the Liaison Committee for Medical Education that is responsible for the accreditation of medical schools in the United States and Canada.



# College of Medicine



**The UNMC College of Medicine is the largest of UNMC's colleges, with approximately 1,100 full-time faculty and 22 departments.** Tasked with expanding and transforming medical care throughout Nebraska and beyond, it also is the second least-expensive primary care medical school among the top schools ranked by U.S. News & World Report. As part of its effort to build the medical workforce in Nebraska, UNMC is opening a regional medical school campus at the University of Nebraska at Kearney in the fall of 2026, allowing 10 to 20 new students each year to begin their medical education in Central Nebraska. The Kearney initiative will build on the following accomplishments:



## EDUCATION

- The UNMC College of Medicine has **527 medical students** in 2023-24, a 1% increase from the previous year. This includes 35 students in the college's MD/PhD program.
- Last year, the college received more than **2,050 applications** and interviewed 378 candidates, all virtually
- Of the 134 students admitted, 77% are from Nebraska and 55% are women
- Student's average entering GPA is 3.87, and average MCAT is 512 (83rd percentile)
- **116 medical students** graduated in May of 2023
  - 50% are in residency training in a primary care discipline (family medicine, internal medicine, obstetrics and gynecology, and pediatrics).
  - 22% are in hospital-based specialties (anesthesiology, emergency medicine, radiology, pathology).
  - 18% are in surgical specialties (gen surgery, neurosurgery, ortho, urology, ophthalmology, otolaryngology).
  - 8% are in other specialties (neurology, psychiatry, dermatology, PM&R).
  - 38% stayed in Nebraska for residency.



## RESEARCH

The UNMC College of Medicine contains **80% of researchers at UNMC**, who receive 70% of research funding. The college's grant funding includes:

- \$121.8 million in research-specific awards for FY23.
- \$92.8 million from federal grants and contracts.
- \$20.3 million from industry grants and contracts.
- \$8.7 million from the state and other sources.

The college **ranked 58th of 144** medical schools in NIH funding in 2022.

Major research focus areas:

- Cancer
- Infectious diseases
- Neurosciences
- Cardiovascular disease



## CLINICAL CARE

In partnership with **Nebraska Medicine** and **Children's Hospital**, UNMC faculty provide:

- Most of the advanced adult and pediatric care to Nebraska and the surrounding region.
- Wide-ranging care to the metropolitan Omaha area.

Clinical faculty have more than doubled since 2011 to meet clinical demands.

- Average medical school debt at graduation of this year's class was approximately \$160,000. The national average is approximately \$200,000.
- **218 new UNMC residents and fellows** started in July 2023:
  - 42% are women and 22% graduated from the UNMC College of Medicine.
- Currently, UNMC has **715 residents and fellows** total in all years, with 233 positions in primary care.
  - 74 ACGME-accredited programs, an ADA accredited oral surgery program, and six non-ACGME accredited specialty training programs.
- The Association of American Medical Colleges ranks UNMC in the:
  - 99th percentile of schools whose graduates pursue careers in primary care.
  - 96th percentile of schools whose graduates who practice in rural areas.
  - 83rd percentile of schools whose graduates practice in the state in which they graduated from medical school.

## College of Nursing Dean



**Lepaine Sharp-McHenry, DNP**  
**lmchenry@unmc.edu; 402-559-4109**

Lepaine Sharp-McHenry, DNP, began serving as dean of the UNMC College of Nursing in July 2023. A registered nurse since 1981, Dr. Sharp-McHenry previously served as dean of the College of Natural, Behavioral and Health Sciences at Simmons University in Boston, and as dean of the College of Nursing at Oklahoma Baptist University.

Dr. Sharp-McHenry received an associate's degree in nursing at Southern Arkansas University, bachelor's in nursing from the University of Arkansas, master's as a clinical nurse specialist in psychiatric mental health nursing from the University of Oklahoma, and a doctorate in nursing practice with a specialty

in executive leadership from Union University in Tennessee.

She has held leadership roles in national organizations such as the National Association of Directors of Nursing Administration in Long Term Care, National Council of State Boards of Nursing, American Association of Colleges of Nursing, Commission on Graduates of Foreign Nursing Schools, and Commission on Collegiate Nursing Education.

She published and co-authored articles and served as an expert panel member in the development of clinical practice guidelines in the long-term care field.



# College of Nursing



**The College of Nursing has five divisions educating students around the state of Nebraska.** We are recognized nationally for excellence in teaching, research, practice and leadership. Our College of Nursing Divisions are: Omaha established in 1917; Lincoln, 1974; West Nebraska (in Scottsbluff), 1988; Kearney, 1993; Northern (in Norfolk), 2010.

## DEGREE PROGRAMS

### Baccalaureate of Science in Nursing (BSN)

- Traditional pre-licensure BSN
- Accelerated pre-licensure BSN
- RN-BSN Degree

### Master of Science of Nursing (MSN)

- 9 specialty options, dual MSN/MBA and post-graduate certificate options available

**Doctor of Nursing Practice (DNP) – offered as a post-master's DNP or BSN-to-DNP degree**

**PhD Program – offered as a post-master's PhD or as a BSN-to-PhD degree**

## QUICK STATISTICS

- **99.33% cumulative NCLEX pass rate** (as of 9/14/2023)
- **990 students** (including PhD)
- **161 faculty; 72 staff**
- **Ranked 23rd among 656 BSN Programs** in the U.S. by US News & World Report
- **11** Endowed Chairs and Professorships
- **3** Center for Research and Practice
- **78%\*** of BSN graduates are employed in Nebraska (\*most recent data)
- **Total grant funds of \$5.9M;** NIH Funding of \$1.5M (Oct '22 – Sept '23)





- **11,520 hours of clinical practice** by 26 faculty members in clinical practice at 28 clinical agencies; estimated 22,000 patient encounters
- **Over \$2M** in student support

## KEY STRATEGIC PRIORITIES

Build a culture of self-care, belonging, and respect for faculty, staff and students.

Expand Healthcare Access by maximizing our clinical practice model and community engagement.

Promote inclusive excellence by diversifying faculty and students.

Optimize educational learning through competency-based education and incorporation of advanced technologies.

Expand workforce with registered nurses, advanced practice nurses to bolster the rural workforce of Nebraska.

“Since 1917, the UNMC College of Nursing has been leading the education of nurses in Nebraska to produce nurse educators, nurse scientists and clinicians, with a goal to foster a culture of inquiry, discovery and innovation. Our programs were built on a strong foundation which is evident today in our mission to transform lives through a premier education, innovative research, highest quality of health care and health equity. These pillars are at the forefront of our work providing guidance as we support the growth and development of students and faculty.”

– **Lepaine Sharp-McHenry, DNP, RN, FACDONA**

# College of Pharmacy Dean



**Keith Olsen, PharmD, FCCP, FCCM**  
**keith.olsen@unmc.edu; 402-836-9273**

Keith Olsen, PharmD, FCCP, FCCM, serves as the Joseph D. Williams Endowed Dean of the UNMC College of Pharmacy, where he received his PharmD.

Dr. Olsen earned a Bachelor of Science in Chemistry at Wayne State College and completed a residency at Nebraska Medicine.

Dr. Olsen was on the UNMC faculty for two decades before serving as dean of the University of Arkansas Medical Sciences College of Pharmacy for three years.

Dr. Olsen is recognized as a Fellow of the American College of Clinical Pharmacy and the American College of Critical Care Medicine. He was elected to the Board of Regents of the American College of Critical Care Medicine in 2010 and 2013, serving as vice chancellor in 2017 and now current chancellor, the first pharmacist to do so. He was elected to the Board of Trustees Research Institute for the American College of Clinical Pharmacy in 2012.

He has published more than 350 peer-reviewed publications, abstracts and book chapters in the areas of critical care pharmacotherapy and infectious diseases.

Two graduating Doctor of Pharmacy classes have recognized him as the Distinguished Teacher of the Year. He is one of the co-developers of a Point-of-Care certification program for pharmacists.

# College of Pharmacy



**The College of Pharmacy was started in 1910 on the University of Nebraska Lincoln, making a permanent move to UNMC in 1977. The College has long history of national and international leadership in education and research. The following is a short list of accomplishments by our faculty and students:**

## Professional Education

- Over 70% of Nebraska pharmacists are graduates of the College
- 4<sup>th</sup> College to offer only the Doctor of Pharmacy (1979) degree and the first outside of California
- Ranked in the top 20% of US pharmacy schools by U.S. News and World Report
- Our first-time pass rate has NEVER been below 90% on the national licensure exam (NAPLEX)
- Our graduates generally finish in the top 10 of 144 pharmacy schools on the NAPLEX
  - #1 in the US in 2019 and 2020 with 100% first time pass rates
- Our graduates have finished 1<sup>st</sup> or 2<sup>nd</sup> on NAPLEX exam for 9 of 11 years in the Big Ten
- Our education programs:
  - Doctor of Pharmacy (Pharm.D.)
  - Master of Science in Pharmaceutical Sciences (M.S.)
  - Doctor of Philosophy in Pharmaceutical Sciences (Ph.D.)
  - Pharmacy Technician Certificate program
  - Bachelor of Science in Pharmaceutical Sciences with UNO (B.S.-PS)
- Pharm.D. program is accredited through 2029

## Research Programs

- Per FTE, rank #8 of 142 pharmacy schools in research funding
- 10 current and former College faculty were recently ranked among the top 2% of all researchers in the world in their fields
- Largest graduate program on UNMC campus



# College of Public Health Dean



**Ali Khan, MD, MPH, MBA**  
**ali.khan@unmc.edu; 402-559-9349**

Ali Khan, MD, MPH, MBA, a former assistant surgeon general, is the third dean of the UNMC College of Public Health. Dr. Khan's vision is for the college to develop innovative strategies in helping to make Nebraska the healthiest state in the Union as a national global model.

He served at the Centers for Disease Control and Prevention for 23 years before retiring as the director of the Office of Public Health Preparedness and Response. In that role, he managed the \$1.5 billion public health security program and was responsible for CDC's public health preparedness and response activities. He provided strategic direction, support and coordination

for these activities across CDC, as well as with local, state, tribal, national, territorial and international public health partners.

Dr. Khan joined the CDC and U.S. Public Health Service Commissioned Corps in 1991 as an Epidemic Intelligence Service officer and over the past decades has led and responded to numerous high-profile domestic and international public health emergencies, including hantavirus pulmonary syndrome, Ebola hemorrhagic fever, monkeypox, avian influenza, Rift Valley fever, severe acute respiratory syndrome (SARS), the Asian Tsunami (2004), and the initial public health response to Hurricane Katrina in New Orleans.

In 1999, Dr. Khan served as one of the main architects of the CDC's public health bioterrorism preparedness program, which upgraded local, state and national public health systems to detect and rapidly respond to bioterrorism. As the deputy director of this novel program, he led the creation of the critical agent list that was the basis for all biological terrorism preparedness, published the first national public health preparedness plan with key focus areas to improve local and state capacities, and initiated pilots of syndrome-based surveillance and health data fusion.

These preparedness efforts were crucial in limiting the scope of the first anthrax attack, during which he directed the CDC operational response in Washington, D.C. More recently, he has focused on advancing our nation's health security by developing methods to improve public health knowledge exchange, integration and delivery; use of social media for crowd sourcing data, sharing information and soliciting volunteers; risk-based approaches to build robust public health systems and resilient communities; new metrics such as the national health security index – a composite measure of state preparedness; and emergency management programs globally.

Dr. Khan's professional career has focused on emerging infectious diseases, bioterrorism and global health security. He founded the Public Health Matters blog and has been personally engaged in guinea worm and polio eradication activities. While directing global infectious disease activities, he designed the laboratory component of the CDC's field epidemiology and training program. He also helped design and implement the CDC component of the \$1.2 billion, 5-year President's Malaria Initiative. He co-founded a novel center at the CDC to champion a One Health strategy to ensure health security from a myriad of zoonotic, vector-borne and food-borne infectious diseases. More recently he has focused on better integration of public health and healthcare for disease prevention, reducing health inequities, and the social determinants of health.

Dr. Khan received his medical degree from Downstate Medical Center in his hometown of Brooklyn, New York, and completed a joint residency in internal medicine and pediatrics at the University of Michigan at Ann Arbor before joining the CDC. He is a fellow of the American Academy of Pediatrics and the American College of Physicians. He has a master's of public health from Emory University's Rollins School of Public Health, where he was an adjunct professor and directed the emerging infections course, and a master's of business administration from the University of Nebraska Omaha.

He has more than 150 peer-reviewed publications, textbook chapters, editorials and brief communiqués. He has consulted extensively for multiple U.S. organizations, including the National Aeronautics and Space Administration, numerous ministries of health and the World Health Organization.



The UNMC College of Public Health (COPH) collaboratively and relentlessly seeks new and creative solutions to the most challenging problems in public health while working to prevent them from happening in the first place. The COPH includes an inclusive team of students, staff, and faculty who value health equity, diversity, knowledge, collaboration, and innovation to assure that all communities in Nebraska, across the country, and around the world are healthy and can thrive.

## DEGREE PROGRAMS

### Masters

The College of Public Health offers three different Master programs:

- Master of Public Health
- Master of Health Administration
- Master of Science in Biostatistics

### Certificates

To respond to the growing need for more specialty trained public health professionals, the College of Public Health has created many new non-degree certificate programs:

- Applied Biostatistics
- Emergency Preparedness
- Infectious Disease Epidemiology
- Maternal and Child Health
- Occupational Safety and Health
- Public Health

### Programs available online

### DrPH

The DrPH in Public Health Practice is an online, asynchronous professional doctoral degree program designed for those with three or more years of public health experience.

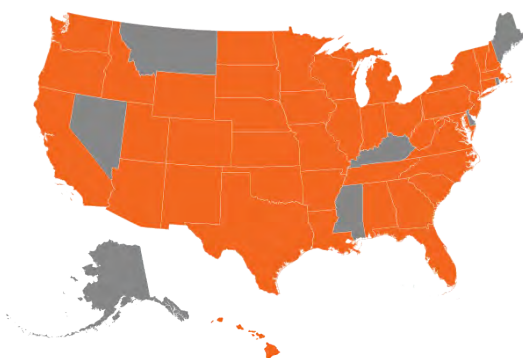
### PhD

The College of Public Health collaborates with the UNMC Graduate Studies Office to offer training in specialized disciplines:

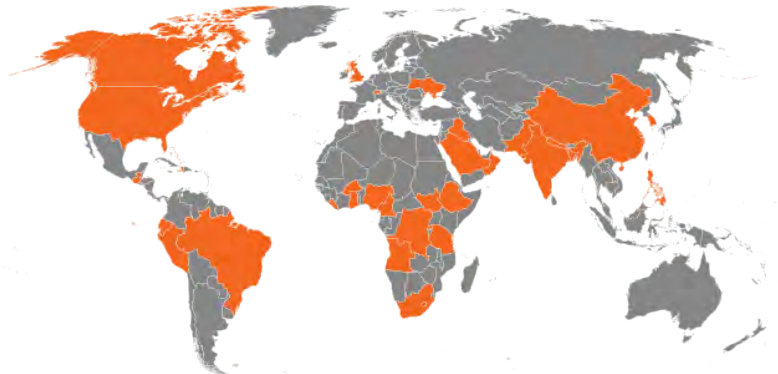
- Biostatistics
- Environmental Health, Occupational Health & Toxicology
- Epidemiology
- Health Promotion and Disease Prevention Research
- Health Services and Policy Research

## GEOGRAPHIC FOOTPRINT - 432 STUDENTS

### 42 states in the U.S.



### 34 countries worldwide



Maps by Free Vector Maps

## OUR IMPACT

Established 17 years ago, the college has demonstrated its ability to train, staff and strengthen Nebraska's public health workforce.

COPH has demonstrated leadership on the national and global stages.



Enrollment has grown  
**+10%**  
since last year.

COPH has a  
**82%**  
increase in our sponsored awards (research and non-research) for the last fiscal year.

### Total Extramural Funding



# McGoogan Health Sciences Library Dean



**Emily Glenn, MSLS**  
**emily.glenn@unmc.edu; 402-559-4085**

Emily J. Glenn, MSLS, serves as dean of the Leon S. McGoogan Health Sciences Library at UNMC. In this role, Glenn is responsible for the library's strategic direction, resources and services, plus a significant exhibit collection in the Wigton Heritage Center. She is a member of the University of Nebraska Consortium of Libraries Executive Committee. Prior to being named dean, she served as the library's associate dean, overseeing user services, collections, education and teaching, and technology. Glenn brings over 20 years of experience in corporate, academic and special libraries.

Glenn came to UNMC from the University of Washington, where she was the community health outreach coordinator with the Network of the National Library of Medicine for Region 5. She also held positions as a chief librarian at St. Paul's Hospital Millennium Medical College in Ethiopia, as the librarian of a university-affiliated biomedical research institute in Seattle, and as the head of archives technical services at Duke University Medical Center Library and Archives in Durham, N.C.

Glenn is a distinguished member of the Academy of Health Information Professionals. In 2019-2020, she was a fellow of the National Library of Medicine and the Association of Academic Health Sciences Libraries Leadership Fellows Program. She graduated from the Leadership Institute for Academic Librarians at Harvard Graduate School of Education.

As an Association of Academic Health Sciences Libraries Future Leaders Committee member, Glenn helps develop future academic health sciences library leaders. Glenn has mentored several early career librarians in the Medical Library Association's Rising Star and Colleague Connection programs. She also has served on the Medical Library Association's Membership Committee and Nominating Committee, as chair of the International Services Committee, and on several awards and honors juries. She previously served as president of the Pacific Northwest Chapter, Medical Library Association and Special Libraries Association.

Glenn's professional interests include leadership, innovation and design, mentoring and inclusion. She has authored chapters, articles, presentations and posters about health sciences information and libraries in academic health sciences settings. In 2018, she was awarded a Medical Library Association Librarians without Borders/Elsevier Foundation/Research4Life Grant to provide Hinari and Research4Life resources instruction in Rwanda.

Glenn holds a bachelor's degree in sociology with a minor in women's studies from the University of Oregon and a master's of library science degree from the University of North Carolina at Chapel Hill.

# Leon S. McGoogan Health Sciences Library

*Connecting the past, informing the present, building the future.  
Inspiring excellence in education, research, and patient care through  
information.*

Our librarians lead instruction and integration of evidence-based, quality health information and promote lifelong learning for health sciences professionals. We offer data services and education for all researchers.



## Wigton Heritage Center

*A catalyst for understanding, experiencing, and appreciating UNMC's  
history and other Nebraska health professionals.*

Our archives and special collections team curates 17 physical exhibits, eight digital interactives, and an award-winning online exhibition showcasing UNMC achievements and Nebraska health sciences history.



### Resources & Databases

- 54,000 journal titles
- 71,000 full-text books
- Anatomical models
- Jim and Karen Linder Maker Studio
- Citation management
- DigitalCommons@UNMC
- Mobile apps
- Oral history program
- Point-of-care clinical tools
- Research impact
- Rare books and special collections for research

### Statewide Health

- The library's Consumer Health Information Resource Service program assists NE residents or patients, and their families, in finding information on health and wellness topics.
- Library resource access for UNMC health professions faculty preceptors across the state

### Affordability

- Member of University of Nebraska Consortium of Libraries
- Shared library system catalog
- Consortial cost-sharing negotiations
- Open Nebraska partner for textbook cost savings ~\$972,000 (2020-present)

## Munroe-Meyer Institute Director



**Karoly Mirnics, MD, PhD**

**karoly.mirnics@unmc.edu; 402-559-5702**

Karoly Mirnics, MD, PhD, is director of the UNMC Munroe-Meyer Institute, which transforms the lives of individuals with intellectual and developmental disabilities. Dr. Mirnics obtained his MD from the University of Novi Sad School of Medicine in his hometown in 1986 and his PhD from Semmelweis University in Budapest, Hungary. He completed his postdoctoral fellowship at the University of Pittsburgh.

Dr. Mirnics established his own laboratory in 2000 at the Department of Psychiatry at the University of Pittsburgh, where he rose to the rank of associate professor in 2006. That year, his laboratory moved to the Department of Psychiatry at Vanderbilt University in Nashville. In 2010, he was named James G. Blakemore Professor of Psychiatry, and he also served as the departmental vice chair for research and associate director of the Vanderbilt Kennedy Center.

Dr. Mirnics has a broad background in molecular neurobiology of brain diseases, with more than 20 years of experience in various molecular biology techniques. His research group is actively pursuing projects that include transcriptome changes across human brain diseases, animal models of neurodevelopmental and psychiatric disorders, effects of maternal immune activation and environment on gene expression, and neuroprotection by activity.

To illustrate his innovativeness and willingness to explore unconventional research: He was the first to perform a DNA microarray analysis of brain tissue, pioneered molecular pathway analyses, characterized immune system dysfunction in schizophrenia and autism, pioneered in situ proteomics in neuroscience, developed a new microarray platform, identified neuroprotection of enriched environment in Alzheimer's Disease models, holds a patent for RGS4 as a schizophrenia susceptibility gene, and developed a novel transgenic mouse technology, using BAC-driven, miRNA-mediated silencing in vivo. He has collaborated with more than 30 groups of investigators over the past 10 years.



# Munroe-Meyer Institute



With approximately **230,000 people with disabilities in the state of Nebraska**, the need for specialized programs and support services to improve their quality of life is vital. The Munroe-Meyer Institute's mission is to be world leaders in transforming the lives of all individuals with disabilities and special health care needs, their families and communities through outreach, engagement, premier educational programs, innovative research and extraordinary patient care.

## NEW BUILDING

- Opened in **spring of 2021** after renovations to former FirstData building at 6902 Pine St., Omaha
- **220,000-square-foot** facility
- Estimated **\$86 million** building renovation project was supported by the State of Nebraska and private donations
- **State-of-the-art** facility designed to be accessible and family-centric, to simplify and enhance client experience.

## CLINICAL

MMI provides extraordinary interdisciplinary, family-centered services for persons with disabilities and complex health care needs across their lifespan.



MMI has more than **35 provider locations** with 18 outside Omaha with more than **50 types of services** provided.



MMI provides diagnosis and treatment to approximately **15,000 children and adults** annually.



MMI has more than **90,000 clinical visits** annually, including telemedicine.



MMI served patients in **74 of 93 Nebraska counties** as well as in a dozen other states.

## EDUCATION:

The institute trains individuals in the medical and therapeutic management of individuals with disabilities and complex health care needs through interprofessional educational experiences, outreach training and onsite technical assistance. MMI has fellowships across several disciplines, an MMI-PhD program in applied behavioral analysis, and train graduate students in multiple disciplines through the Medical Sciences Interdepartmental Area program.



Interdisciplinary training in 2022 had **1907 students, interns, residents and post-doctoral fellows**. Of those 407 were long-term trainees participating in more than **300 hours of training**.



Annually, more than **130 courses** and seminars taught by our faculty and staff.

## RESEARCH:

MMI conducts basic, translational and clinical research with the goal to transform the diagnosis, care and treatment of individuals with all types of disabilities and complex health care needs.



MMI has **56 active grants**, many of them collaborations with other universities, community organizations and the state and federal government. Federal grant funding totaled more than **\$5.9 million** in 2022.

## COMMUNITY OUTREACH:

MMI provides statewide technical assistance and consultation to Nebraska public schools and other programs across the state that provide services to children, youth and adults with disabilities.



MMI had more than **8,800 participants** in workshops, conferences, teleconferences and other community education activities in domestic and international forums.



MMI also received more than **\$6.2 million** in philanthropic contributions in the last calendar year.



### MMI's \$42 million annual budget includes three major federal grants:

- University Center of Excellence in Developmental Disabilities Education, Research and Service
- Leadership Education in Neurodevelopmental and Related Disabilities (LEND)
- Science Education Partnership Award (SEPA)

# Eppley Institute for Research in Cancer and Allied Diseases Director



**Kenneth H. Cowan, MD, PhD**  
kcowan@unmc.edu; 402-559-4238

Kenneth H. Cowan, MD, PhD, became the director of the Fred & Pamela Buffett Cancer Center (formerly the UNMC Eppley Cancer Center) and the Eppley Institute for Research in Cancer and Allied Diseases in August 1999. The Fred & Pamela Buffett Cancer Center, created in 1983, is an NCI-designated clinical cancer center, uniting cancer researchers throughout the UNMC campus into a larger single entity. The Eppley Institute was founded in 1961. Dr. Cowan is the sixth director in the institute's 40-year history. The Eppley Institute for Research in Cancer and Allied Diseases is a division of the University of Nebraska Medical Center with 27 basic science laboratories headed by principal investigators focused on cancer research.

Prior to this, since completing his residency training at Texas Southwestern Affiliated Hospitals in Dallas, Dr. Cowan spent 21 years in the Public Health Service at the National Cancer Institute. Since 1988, he served as chief of the medical breast cancer section, medicine branch. In his NCI position, he was responsible for overseeing laboratory researchers and clinical staff involved in basic and clinical research in breast cancer.

A New York City native, Dr. Cowan earned his undergraduate degree at the University of Rochester in Rochester, NY, and his medical and doctorate degrees from Case Western Reserve University in Cleveland. He has authored more than 240 papers for scientific journals and has been an invited guest lecturer at numerous scientific conferences.

## Incoming Director



**Joann B. Sweasy, PhD**, an internationally recognized comprehensive cancer center director and an expert in the genetics, cell biology and biochemistry of DNA repair, will serve as the next director of the Fred & Pamela Buffett Cancer Center and the Eppley Institute for Research in Cancer and Allied Diseases.

A National Institutes of Health-funded researcher since 1994, Dr. Sweasy currently is director of the University of Arizona Cancer Center in Tucson. As UACC director, she led the center to renewal of its National Cancer Institute-Comprehensive designation in 2022.

Dr. Sweasy will begin her UNMC roles on Nov. 1 and succeed Ken Cowan, MD, PhD, who has led the cancer center since 1999.

Dr. Sweasy serves as a member of the NCI-subcommittee A, the panel that reviews all NCI cancer centers, and is vice president/president-elect of the American Association of Cancer Institutes.

Her research has been funded continuously by the National Institutes of Health since 1994 for her research on the genetics, cell biology and biochemistry of DNA repair and the roles of aberrant DNA repair in cancer and autoimmunity. For this work, she was awarded the 2016 Environmental Mutagenesis and Genomics Society Award, as well as many other national awards and recognitions.

Dr. Sweasy earned her bachelor's degree from Arcadia University and her doctoral degree from Rutgers, The State University of New Jersey. She was a postdoctoral fellow at the University of Washington. She then was appointed as an assistant professor in the department of therapeutic radiology at the Yale University School of Medicine, eventually earning tenure and serving as vice chair of the department and the Ensign Professor of Therapeutic Radiology. Dr. Sweasy joined the University of Arizona Cancer Center as director in 2019.



# Eppley Institute

## Eppley Institute for Research in Cancer & Allied Diseases

The Eppley Institute for Research in Cancer and Allied Diseases was founded in 1960 with funds from the Eugene C. Eppley Foundation, National Institutes of Health and the University of Nebraska. Dr. Henry M. Lemon was recruited as the first director. He reported to the Dean of the College of Medicine.

The purpose of the Eppley Institute, dedicated in 1963, was to provide a research center that could perform and encourage fundamental studies leading to a better understanding of the causes of cancer, the improvement of methods for diagnosis of cancer and improvement of methods for the treatment and prevention of cancer and similar disorders.

In 1972, by action of the Nebraska Legislature, the Eppley Institute became an independent research institute with the director reporting to the Chancellor of UNMC, rather than to the Dean of the College of Medicine.

In 1973, the Eppley Foundation, in collaboration with the National Cancer Institute (NCI) and UNMC, funded the construction of the Eppley Science Hall, which added 30,000 square feet of research space to the Institute.

In 1983 Dr. Edward Bresnick was appointed Director of the Institute. During his tenure, the Eppley Institute was awarded a Laboratory Cancer Center Support Grant from the NCI in 1983, which was renewed for five years in 1987. The award of this grant designated the Eppley Institute as a Laboratory Cancer Research Center. Under the leadership of Dr. Bresnick, the faculty was expanded to include cell and molecular biologists.

In August 1999, Dr. Kenneth H. Cowan became the director of the Eppley Institute for Research in Cancer and Allied Diseases and the Fred & Pamela Buffett Cancer Center (formerly the Eppley Cancer Center). Since completing his residency training at Texas Southwestern Affiliated Hospitals in Dallas, Dr. Cowan spent his entire career at the NCI before coming to UNMC. From 1988 to 1999, he was chief of the Medical Breast Cancer Section, Medicine Branch, and was a captain in the Public Health Service, which includes physicians in the National Institutes of Health.

The Eppley Institute currently has 31 faculty members who conduct basic science research. The Cancer Research Doctoral Program (CRDP), offered through the Eppley Institute, is the cornerstone of a National Cancer Institute-supported Cancer Biology Training Program at UNMC. The CRDP is one of the seven programs within the Interdisciplinary Graduate Program in Biomedical Sciences (IGPBS) and includes over 100 faculty from the Eppley Institute and other basic and clinical departments within UNMC. There are currently 52 students in the CRDP Program.



# Fred & Pamela Buffett Cancer Center

## Fred & Pamela Buffett Cancer Center

The Fred & Pamela Buffett Cancer Center (formerly the Eppley Cancer Center) is the only National Cancer Institute (NCI)-designated cancer center in Nebraska, a distinction held by only 72 cancer centers in the country. This recognition means the most current and innovative treatment options are available to all patients through the integration of cutting-edge cancer research into state-of-the-art care. The Fred & Pamela Buffett Cancer Center has held its NCI designation since 1984.

Well-established multidisciplinary research programs in the Cancer Center include the Targets, Modulators and Delivery Program (TMDP), the Cancer Biology Program (CBP), the Gastrointestinal Cancer Program (GICP) and the Cancer Prevention and Control Program (CPCP). These programs focus on discovering the mechanisms which cause cancer to develop and translating these discoveries into new approaches for early detection of cancer and new therapies for cancer treatment and cancer prevention as soon as possible.

The Fred & Pamela Buffett Cancer Center has over 200 members who conduct basic and clinical research and provide patient care throughout the University of Nebraska system. Over 140 new faculty have been recruited to the Fred & Pamela Buffett Cancer Center since 1999, when the current director, Kenneth Cowan, MD, PhD joined the organization. Extramural funding for Cancer Center members has increased from \$19 million in 1999 to over \$60 million today.

The \$323 million Fred & Pamela Buffett Cancer Center opened in June 2017. The facility was named in recognition of a gift from Pamela Buffett, through her foundation, the Rebecca Susan Buffett Foundation. Pamela's husband, Fred "Fritz" Buffett, died in 1997 after fighting kidney cancer. This state-of-the-art facility consists of the Suzanne and Walter Scott Research Tower, a 10-story, 98 laboratory research tower; the C.L. Werner Cancer Hospital, an eight-story, 108 bed inpatient treatment center and a multidisciplinary outpatient center which includes clinics, radiation oncology, surgery, radiology, a 24/7 treatment center and lab. Unique in its design, the Buffett Cancer center puts clinical providers in close proximity with research colleagues with the goal of more efficiently translating research in the laboratory to novel therapies for patients in the clinic.

The Fred & Pamela Buffett Cancer Center facilitates collaboration between researchers and clinicians, with the building being specifically designed to house everything associated with cancer in one area on campus, making it convenient for patients.

Joann B. Sweasy, PhD, an internationally recognized comprehensive cancer center director and an expert in the genetics, cell biology and biochemistry of DNA repair, has been named the next director of the Fred & Pamela Buffett Cancer Center and the Eppley Institute for Research in Cancer and Allied Diseases. Dr. Sweasy will begin in her new roles on Nov. 1, replacing Ken Cowan, MD, PhD, who has led the cancer center since 1999.

## Child Health Research Institute Executive Director



**Ann Anderson Berry, MD, PhD**  
**alanders@unmc.edu; 402-559-6750**

Ann Anderson Berry, MD, PhD, is division chief of neonatology at Children's Hospital & Medical Center and executive director at the Child Health Research Institute. At UNMC, she is the department of pediatrics vice chair of research and the Dr. John and Patti Sparks Chair of Pediatric Research. She also is the vice president of research at Children's Hospital & Medical Center.

Dr. Anderson Berry earned her medical degree at Creighton University School of Medicine. She completed her residency in pediatrics at the UNMC/Creighton Residency Program and her neonatology fellowship at University of Utah School of Medicine in Salt Lake City, Utah. Dr. Anderson Berry received her PhD in medical nutrition through the Medical Sciences Interdepartmental Area program at UNMC. She leads an active research group with Corrine Hanson, PhD, associate professor, Medical Nutrition Education Division in UNMC's College of Allied Health Professions.

# The Child Health Research Institute (CHRI)

Formed in 2017 by the Board of Regents at UNMC & Children's Hospital and Medical Center, CHRI has quickly grown and serves as the pediatric research enterprise of both institutions.

With a vision to improve the health of children everywhere, we offer comprehensive research study support from conceptualization to dissemination of investigator discoveries worldwide.

***"As a prospective student with even a hint of interest in pediatrics or research, knowing that UNMC has an...organization like CHRI would have been a game changer." – Taylor Kratchovil MD, UNMC '22***

Investments in research empower our pediatric investigators to make groundbreaking discoveries that impact the lives of children across Nebraska, the US, and the globe.

CHRI develops clinician-scientists taking cutting-edge innovations from the bench to the bedside.

CHRI trains students with state-of-the-art technology, and serves as a pipeline for aspiring physicians, scientists, and allied health professionals enrolled at University of Nebraska Medical Center.



***Scan to  
Learn more***

## 400+

Members



## 300+

Studies



## 1000+

Patients  
Recruited

Annually



## 100+

Students  
Trained

Annually



# Global Center for Health Security Director



**John J. Lowe, PhD**

**[jjlowe@unmc.edu](mailto:jjlowe@unmc.edu); 402-552-3001; @Prof\_Lowe**

John-Martin Lowe, PhD, is the director of the Global Center for Health Security, assistant vice chancellor for health security training and education, and professor of Environmental, Agricultural and Occupational Health at the University of Nebraska Medical Center. At the University of Nebraska Medical Center, he leads research and training initiatives to advance environmental risk assessment and infection control for high consequence pathogens.

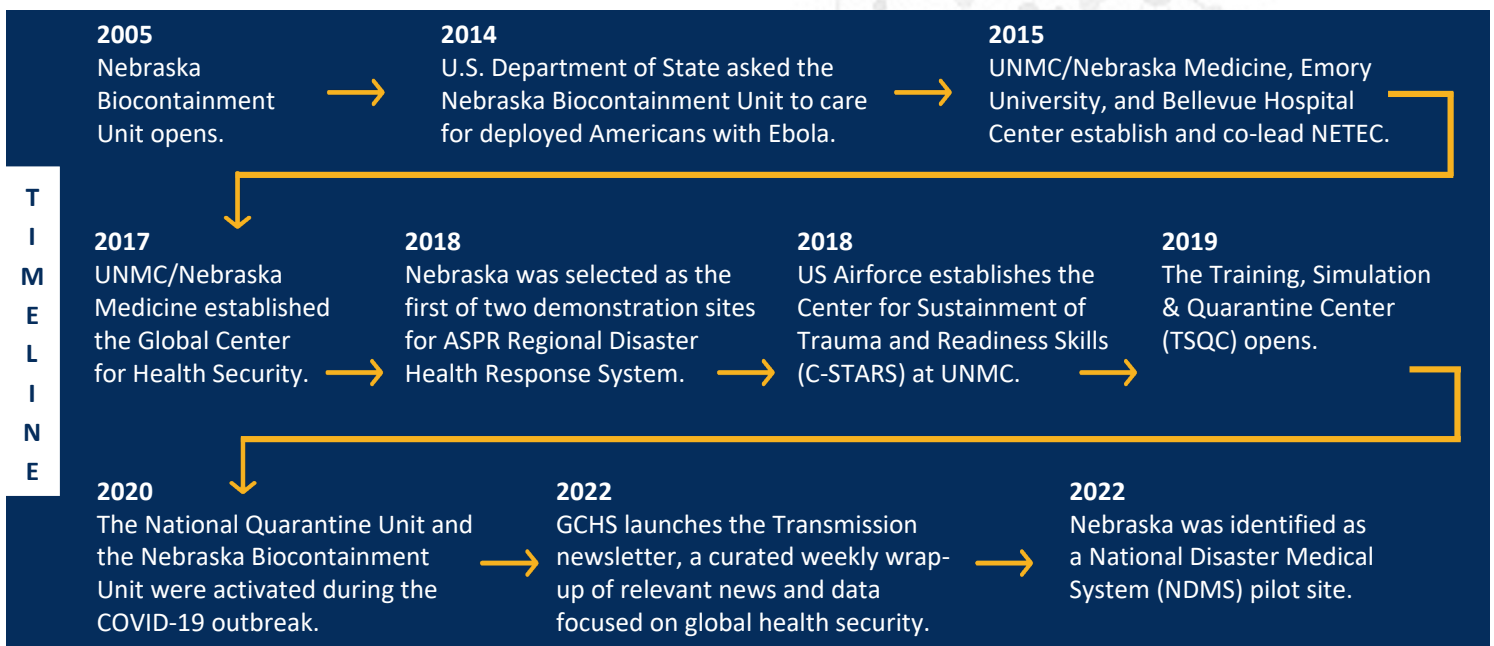
As a virologist and environmental exposure scientist, John Lowe, PhD, has worked extensively throughout the U.S., Africa, Asia and Europe as an educator, researcher and in health emergency risk management related to infectious disease, infection control and emergency response. His expertise focuses on infectious disease risk assessment and management of risk for clinical, community and industrial environments. Dr. Lowe also has extensive experience in emerging pathogens and health security. He is co-PI for the U.S. National Emerging Special Pathogens Training and Education Center, established an international network for emerging infectious diseases, and served lead investigator for a multi-country bio-surveillance network in Africa. He has experience in a broad range of health security topics from surveillance, public health response and clinical response to health emergencies. Dr. Lowe led successful COVID-19 efforts in 2020 at the National Quarantine Unit and Nebraska Biocontainment Unit to provide monitoring and care for repatriated U.S. citizens exposed to and infected with SARS Coronavirus 2. He also led early and continued efforts to characterize the transmission dynamics of SARS Coronavirus 2 which were presented in a joint meeting hosted by the Academy of Medicine and American Public Health Association on April 15, 2020.

Dr. Lowe has co-authored numerous book chapters and scientific papers on control and response to emerging pathogens. He also provided technical consultation and participated in infection prevention and control as well as industrial hygiene in over 23 countries to a variety of industry sectors including healthcare, food production, hospitality, finance, and insurance for issues related to emerging pathogens including Ebola virus disease and COVID-19.



The University of Nebraska's Global Center for Health Security (GCHS) was established in 2017 to provide a platform for health system preparedness, recognition, and response to catastrophic public health emergencies while also providing comprehensive capabilities in research, education and training, and health system operations.

The GCHS has become an invaluable national and international resource for the management of high consequence infections. In February of 2020, 57 repatriated Americans from Wuhan, China, and 13 Diamond Princess cruise ship passengers were evacuated and brought to Nebraska, where they were housed in the nation's only federally-funded quarantine unit (The National Quarantine Unit) and the Nebraska Biocontainment Unit.



## GCHS Domains

**CLINICAL** The Global Center for Health Security is the premier U.S. institution for management of high-consequence infections. Further, clinical capabilities exist in all hazards and all domains of CBRNE (Chemical, Biological, Radiological, Nuclear, and high yield Explosives).

**RESEARCH** The GCHS has laser-focused existing work by our leading scientists in fields like chemical weapons, drug discovery and public health. Through our partnerships and preparation, the Global Center for Health Security is forging advances in biopreparedness and in moving critical, life-saving discoveries out of the lab and into clinical trials.



**EDUCATION & TRAINING** Our expertise is now sought worldwide and officially sanctioned by the U.S. government. The GCHS is the home base to the national Training, Simulation, and Quarantine Center and the Nebraska Biocontainment Unit.

**INNOVATION & EXTERNAL PARTNERSHIPS** The GCHS has partnered with many academic groups at UNMC and external partners to tackle the most pressing problems in emerging infectious diseases. Critical research in the fight against COVID-19 was naturally a major focus the last few years, but many other studies of importance have also underscored the innovative, progressive approach that is truly at the heart of every GCHS project.



# GCHS Leadership



**John Lowe**  
**PhD**  
Director



**Dossy Felts**  
**MBA, MHA, FACHE**  
Associate Director of  
Administration and  
Operations



**James Lawler**  
**MD, MPH, FIDSA**  
Associate Director of  
International Programs  
and Innovation



**Rachel Prudhomme**  
**MBA**  
Associate Director of  
Business and Finance



**Joshua Santarpia**  
**PhD**  
Associate Director of  
Academic Affairs



**Lauren Sauer**  
**MSc**  
Associate Director  
of Research



**Elizabeth Schnaubelt**  
**Lt Col, USAF, MD**  
Director,  
C-STARS Omaha



**Shelly Schwedhelm**  
**MSN, RN, NEA-BC**  
Associate Director of  
Emergency Management  
and Clinical Operations



**Chris Kratochvil**  
**MD**  
Senior Advisor &  
Distinguished Chair



Learn more about our  
Leadership Team



# Core Programs

## **National Emerging Special Pathogens Training and Education Center (NETEC)**

- Sets the gold standard for special pathogen preparedness and response across U.S. health systems; drives best practices, closes knowledge gaps, develops resources.
- Defining core capabilities for the tiered system and creating a robust regional hub and spoke model through the National Special Pathogen System (NSPS).

## **Region VII Disaster Health Response Ecosystem (R7DHRE)**

- Create a flexible, self organized, grassroots disaster readiness network across Region VII.
- Specialty teams include behavioral health, biological, chemical, pediatric, radiological and trauma.



## **Region VII Special Pathogen Treatment Center (RESPTC)**

- Since 2005, the Nebraska Biocontainment Unit (NBU) has led the nation in special pathogen preparedness and response by continuously delivering high quality care for patients with highly hazardous communicable diseases.
- Assists facilities for preparedness via educational videos, webinars, workshops, targeted technical assistance, and exercises.

## **Public Health Training Service (D-SAFE)**

- United States Public Health Service partnership with UNMC GCHS/University of Texas Health Science Center at Houston, and Texas A&M University to create and implement Public Health Service Deployment Safety Academy for Field Services (PHS D-SAFE).
- Provides personal safety and security training to USPHS officers that may be deployed to environments with potential for exposure to high consequence infectious diseases.

## **National Disaster Medical System Pilot Program (NDMS)**

- Strengthens interoperable partnerships across the NDMS to care for the U.S. combat casualties by increasing medical surge capabilities and capacity.
- Strives to establish a collaborative network of federal and civilian partners to inform and enhance system-wide medical surge capacity, capability, and interoperability.

## **National Infection Control Strengthening (NICS)**

- Focuses on strengthening infection prevention and control programs in healthcare facilities in underserved areas to develop innovative programs, services, and product development strategies to strengthen IPC nationally and globally.







# Core Capabilities

## **Emerging Pathogens Lab**

- A CLIA-certified, high-complexity clinical laboratory
- Bridges infectious diseases diagnostic development with patient-and community-centered implementation strategies.
- Collaborates with public and private partnerships to support equitable access to high-quality infectious disease testing and counter measures clinical research.
- Developed one of the first SARS-CoV-2 diagnostic assays in the U.S.

## **Training, Simulation, and Quarantine Center (TSQC)**

- Provides a biocontainment unit training center, emergency operations center, multipurpose room for incident management and skills training.
- The only federally-funded, 20-bed National Quarantine Unit in the U.S.

## **Nebraska Quarantine Unit**

- Designed to provide quarantine to individuals exposed to highly hazardous communicable diseases.
- Consists of 20 single-occupancy rooms with negative air pressure systems, ensuite bathrooms, exercise equipment, and Wifi connectivity.

## **Nebraska Biocontainment Unit**

- Provides care for patients with highly hazardous infectious diseases
- Offers education via courses, webinars, video, and zoom conversations on relevant topics to share knowledge and expertise.

## **Deployable Teams**

- Ability to rapidly staff and deploy teams of technical experts responsive to the needs of response organizations, federal partners, and international non-governmental organizations.
- Focus on agile, forward-leaning, advanced teams that can meet the subject matter or operational need of hazards.
- Teams have been deployed to a myriad of technical areas including decontamination, PEE, research, emergency management, and special pathogens response.

## **GCHS Ethics Advisory Committee**

- Provides analysis and resolution of ethical issues extending to bioethics issues within research, clinical, and public health ethics.
- Resolved multiple issues involving crisis standards of care during the COVID-19 pandemic

## **Special Pathogens Research Network (SPRN)**

- Network of U.S. institutions with high-level clinical isolation units committed to development and maintenance of rapid response clinical research infrastructure.
- Rapidly implements special pathogens clinical trials and expands access to investigational new drug protocols.





## Affiliates and Programs

### **Strengthening Healthcare Infection Prevention and Control (SHIPC) - Scholar Program**

- UNMC/NM partnership to accelerate work initiated with original NICS award.
- Focuses on targeting innovation to address persistent challenges in infection control outcomes.

### **Omaha Center for Sustainment of Trauma and Readiness (C-STARS)**

- United States Air Force School of Aerospace Medicine training platform in partnership with UNMC/Nebraska Medicine.
- Prepares United States Air Force medical personnel to respond to highly hazardous communicable disease to ensure operational readiness and maintain clinical currency.

### **Nebraska Drug Development Pipeline by NSRI**

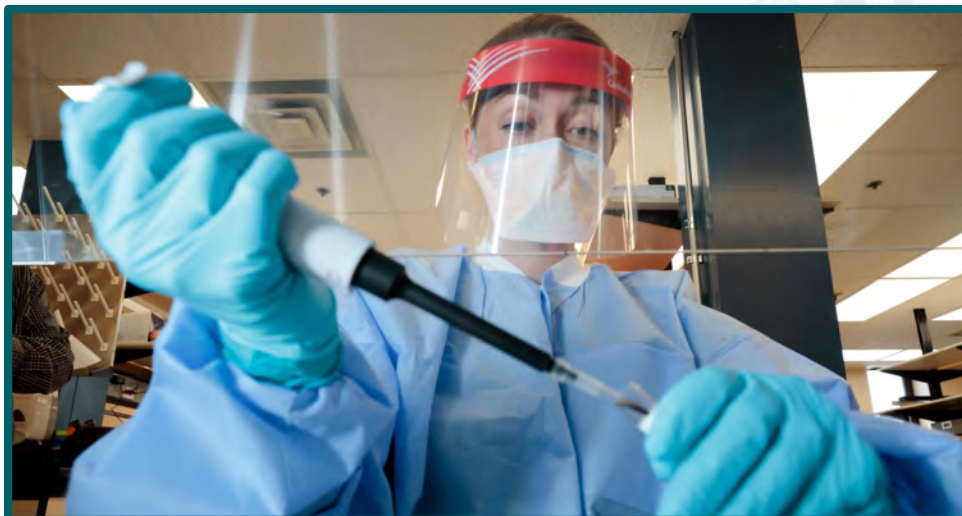
- Collaborations between the Defense Health Agency and Armed Forces Radiobiology Research Institute tasked NSRI to move potential drug candidates to clinical trials.
- NSRI project aims turn the University of Nebraska into a “virtual pharmaceutical company.”

### **Austere Environment Consortium for Enhanced Sepsis Outcomes (ACESO)**

- A multinational, multidisciplinary team of military and academic institutions in the U.S., Uganda, and Ghana with clinical research sites in Africa and Asia.
- The consortium to improve treatment and survival for sepsis patients in resource-limited conditions.

### **Global Infectious Disease Preparedness Network (GIDPN)**

- Partnership with institutions with high-level isolation units in Singapore, Germany, South Korea, and China to develop clinical trials network and clinical response force to ensure rapid exchange of information and resources during pandemics.
- Goal of local and worldwide health system and public health preparedness.





# Affiliates and Programs

## Center for Staphylococcal Research

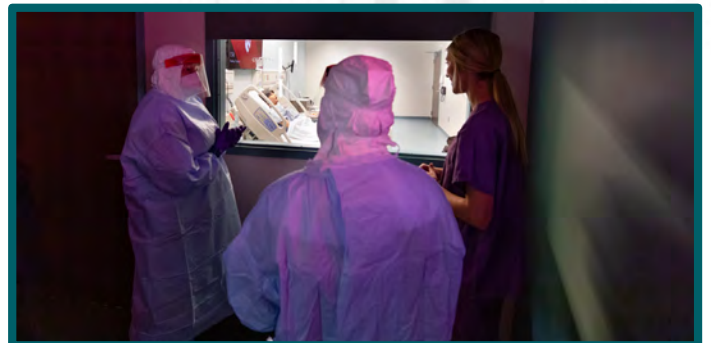
- The nation's first research center dedicated to staphylococcal research and translation treatment strategies.
- Nationally-lauded clinicians and scientists strive towards innovative strategies to defeat deadly staph infections.

## Bioinformatic Research Education Pipeline

- United States Army Medical Research Institute of Infectious Diseases program to prepare scientists to work in Department of Defense's next-generation sequencing technologies for immunology, genomics, and infectious disease research.
- Protects U.S. service members from biological threats and tests deployable therapies.

## Nigeria Preparedness Initiative

- A collaboration of the Joint Africa Research Group, U.S. and Nigerian military, researchers, and clinicians.
- Prepare Nigerian clinicians in health system preparedness and to safely treating high consequence infections using the "Nebraska Method."



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## iEXCEL



### **Pamela J. Boyers, PhD**

**Associate Vice Chancellor for Clinical Simulation; Assistant Professor, Surgery UNMC**  
**pamela.boyers@unmc.edu; 402-559-2444**

Dr. Pamela Boyers' professional interest is to ensure that health care professionals (at all levels of training) are highly prepared to provide the safest possible patient care. This interest includes paying close attention to the well-being of health care professionals – and how they learn to work efficiently and effectively in health care teams.

Concerned with the escalating number of avoidable deaths due to medical error, Dr. Boyers focus is upon transforming the education of health care professionals through the adoption of modeling and simulation. She has provided national and global leadership in the concept of creating interprofessional simulation centers. This includes the design, staffing and operations of these centers as well as studying the return on investment. Her professional goals are to advance interprofessional collaboration and see health care move toward a competency-based model of training.

Having served in medical education leadership positions at the University of North Carolina, The Ohio State University, OhioHealth and the University of Toledo, Dr. Boyers is currently leading efforts at UNMC to *"improve human performance and effectiveness in health care."* This involves creating the Davis Global Center in Omaha – this five-level facility houses an interprofessional simulation center that incorporates a replicated health care system – from home to hospital and back - where the transfer of patients and "hand-offs" can be practiced. The Davis Global Center also houses multiple modeling and simulation modalities including XReality (including holographic) technologies, thereby embracing modeling, simulation and visualization to stimulate new methods of teaching, learning and conducting research and development.

A lifelong medical educator with significant experience in designing and operating medical simulation centers, Dr. Boyers is well-published and speaks nationally and internationally about transforming the education of healthcare professionals. She enjoys collaborating with other high reliability organizations, including the military, to help identify best training practices related to improving quality, safety and lowering costs.

Dr. Boyers previously served for many years as one of the public members for the American Board of Medical Specialties (ABMS) and is an active member of the National Training Simulation Association (NTSA): Patient Safety Workgroup.





### **Ben Stobbe**

**Assistant Vice Chancellor, Clinical Simulation iEXCEL**  
**benjamin.stobbe@unmc.edu; 402.559.8410**

Ben Stobbe's responsibilities include the administrative, operational and fiscal management for UNMC clinical simulation centers, including the oversight of the design, construction and equipping of the Davis Global Center, iEXCEL's physical entity. Mr. Stobbe also serves as a critical liaison between iEXCEL and Nebraska Medicine to identify and improve educational and clinical outcomes through simulation training.

He previously served as the administrative director/business manager at the University of Toledo Interprofessional Immersive Simulation Center (UT-IISC) and as a clinical instructor in the Colleges of Surgery and Nursing. Additional positions held by Mr. Stobbe include: administrative director, Center for Medical Education and Innovation; trauma program manager, Riverside Methodist Hospital; trauma case manager, Riverside Methodist Hospital; and he served 10 years as a staff nurse in neurology, critical care step-down, trauma and vascular thoracic surgery at Riverside Methodist Hospital.

Stobbe is a registered nurse with a master's in business administration from the University of Phoenix. With his significant clinical background and simulation center administration experience, Stobbe provides expert business direction and unique simulation knowledge to contribute to the transformation of education for health professionals. He is also skilled in developing community, military and faculty support for the advancement of simulation activities in the clinical setting.



### **Jenni Bouckhuyt, BMS, CST**

**Director, Simulation Operations, iEXCEL**  
**jenni.bouckhuyt@unmc.edu; 402-552-2083**

Jenni Bouckhuyt, BMS, CST, is director of simulation operations for the iEXCEL program at UNMC. She joined the iEXCEL team in 2018 with the main responsibility of getting the advanced surgical program equipped, employed and in a successful state of upward progression. In her current role, she oversees the unique areas of simulation to include advanced surgical, clinical, human patient and mobile simulation. She manages human resource responsibilities for the iEXCEL program, as well as interprofessional education, administration staff and student workers. She has a leadership role in contributing to the development of current strategy that encompasses both the academic and business mission to improve human performance and effectiveness.

Prior to moving into higher education, Bouckhuyt spent 20 years in the clinical arena as a certified surgical technologist and a certified first assistant, specializing in pediatric neurosurgery, oral maxillofacial and craniofacial surgery, followed by a stint as a regional associate for a medical device company specializing in neurosurgery and facial trauma.



## Davis Global Center

Global leadership in improving human performance and effectiveness

The **Dr. Edwin G. & Dorothy Balbach Davis Global Center (Davis Global Center)** serves as headquarters for iEXCEL. This multi-level, 192,000 gsf clinical simulation facility became fully operational in 2020 on the University of Nebraska Medical Center campus in Omaha, Nebraska. The Global Center for Health Security is located within the Davis Global Center, sharing simulation and visualization assets and staff expertise.

Proximal to the UNMC colleges and Nebraska Medicine, the Davis Global Center serves as the catalyst for an integrated statewide, national and global simulation initiative. All five levels of the facility work together as one collaborative unit to create safe, innovative and experiential training environments as well as a venue for research and business development.

### Davis Global Center Capabilities: A Replicated Total Healthcare System

- 3D, augmented/virtual reality (AR/VR) technologies, including a holographic theater
- Dedicated spaces for the creation of innovative teaching modules and videos
- Designed to practice the transfer of patients between levels of care (“hand-offs”)
- Replicated clinics, hospitals, ambulatory and home care units for simulating incidents, events and patient care scenarios
- Opportunities for training to competency before encountering real-life patient care and emergency response situations
- Surgical skills procedure rooms/operating bays with fresh tissue simulation for practicing high-level, complex patient care procedures
- Collaboration with other disciplines, especially STEAM (science, technology, engineering, arts and mathematics) initiatives
- Tele-education, tele-presence and tele-mentoring capabilities
- Hosting and educating teams of interdisciplinary practitioners and learners – of all disciplines and at all levels of training
- Highly-specialized training in health security and biopreparedness in the Global Center for Health Security

### Lower Level: iEXCEL Simulated Community Care

- Home care unit for training in emergency response, home safety evaluations and transfer from home to hospital
- Ambulance bay to practice transportation of patients and transfer of care from emergency medical services (EMS) to the hospital

### Ground Level: Global Center for Health Security

- 6-bed biocontainment clinical training and simulation unit for professionals to learn to care for and conduct procedures for patients with highly infectious diseases
- 20-bed National Quarantine Unit
- Multi-purpose room with emergency operations center (EOC) capabilities and training facility

### Level 1: iEXCEL Visualization and Virtual Reality

- 3D, AR/VR technologies to inspire and foster curriculum innovation and collaborations with industry and military
- Holographic Theater (70 seats): holographic stage produces extraordinary virtual images
- iEXCEL Helix: 200-degree 2D curved screen is an interactive, digital iWall displaying images individually or collaboratively with other sites
- iEXCEL Laser CAVE 5: Fully immersive, five-sided 3D laser cave expands learning and research and development opportunities

### Level 2: iEXCEL Interprofessional Simulation

Realistic simulated hospital units where clinical competencies and team communication are learned, practiced and tested with lifelike simulators and real-world clinical equipment.

- The Acute Care Unit has a realistic, simulated operating room (OR), a labor and delivery room, patient rooms and a pediatric unit
- The Critical Care Unit has a realistic, simulated emergency department, trauma unit, intensive care unit and imaging room
- Procedural Skills Labs
- Pre-briefing and debriefing rooms for session preparation and review of recorded sessions

### Level 3: iEXCEL Surgical and Interventional Skills

Advanced surgical skills training in replicated ORs using fresh tissue and surgical simulators. The facility provides a venue for collaboration with industry for training workshops and research and development.

- Surgical Skills Suite with 20 OR bays and a command center for recording and broadcasting locally, nationally and globally
- Hybrid OR/Interventional Suite for surgical training sessions
- Surgical Skills Labs with surgical simulators to practice and improve essential skills including hand-eye coordination, depth perception and suturing

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**The Davis Global Center is home to the EON/iEXCEL Virtual Reality Innovation Academy (VRIA) and Simulation in Motion-Nebraska (SIM-NE).**



**Virtual Reality Innovation Academy (VRIA)** provides AR/VR skills training to students looking to enhance their careers. The course includes an intensive study in the underpinnings of various focus areas such as AR/VR, 3D content creation, coding and project management. Students also experience a project-based learning period, providing the opportunity to be part of a team project and build confidence in their skills. Upon completion, students will receive an AR/VR Developer Certification. This program is a collaboration between iEXCEL and EON Reality.



**Simulation in Motion-Nebraska (SIM-NE)** is a statewide, mobile education system bringing state-of-the-art hands-on training, using high-fidelity human patient simulators, to pre-hospital and hospital professionals throughout Nebraska. SIM-NE provides standardized high-quality training to ensure consistent outcomes to rural EMS agencies and critical access hospital emergency rooms across the state. The program caters offerings to different communities with a variety of courses that can be customized to meet local needs.



# iEXCEL<sup>SM</sup> Program in the Davis Global Center

*Global leadership in improving human performance  
and effectiveness in health care*



iEXCEL is distinguishing Nebraska by creating a transformational model for health professions education, training and research. This model incorporates, a wide range of modeling, simulation and visualization technologies set in safe, simulated health care settings. The aim is to provide the safest and highest quality of patient care through precision training for all health care professionals, at all levels of training.

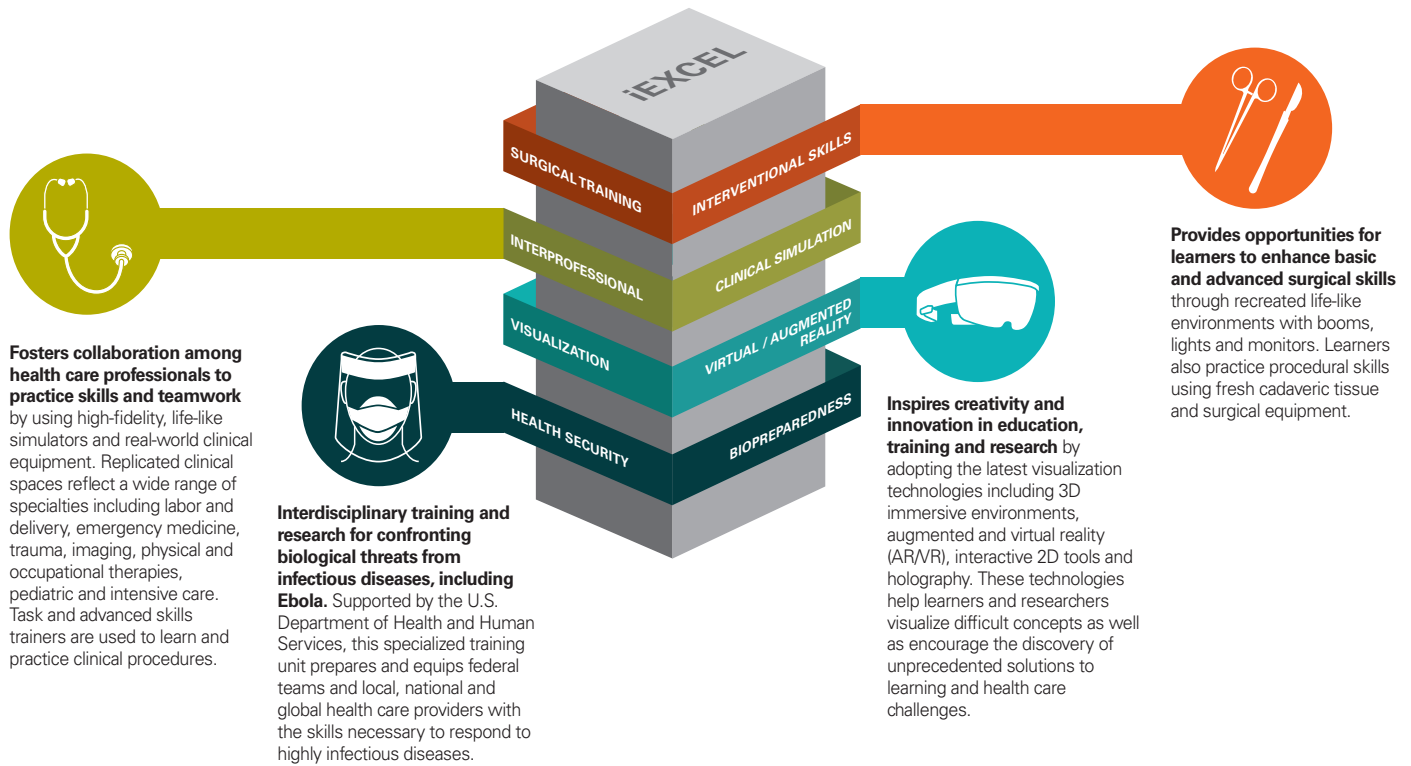
iEXCEL aims to:

- Improve patient outcomes by reducing medical errors and improving the safety, quality and costs of health care
- Create an educational model for the health professions that serves the new generation of digital learners
- Address health care provider and technology (STEM) shortages by offering specialized and advanced training courses
- Stimulate unique workforce and economic development opportunities for Nebraska
- Drive global innovation, commercialization and tech transfer opportunities

The Dr. Edwin G. & Dorothy Balbach Davis Global Center (Davis Global Center) serves as the headquarters for iEXCEL. This multi-level, 192,000 sq. ft. clinical simulation facility became fully operational in March 2020 on the University of Nebraska Medical Center campus in Omaha, Nebraska. iEXCEL collaborates with the Global Center for Health Security located within the Davis Global Center, thus sharing simulation, visualization and data capture assets, as well as simulation expertise.

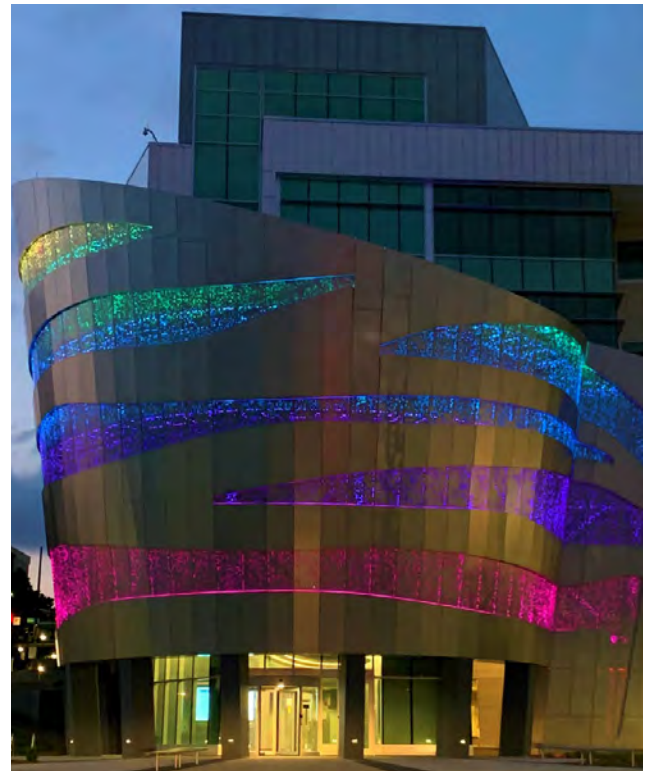


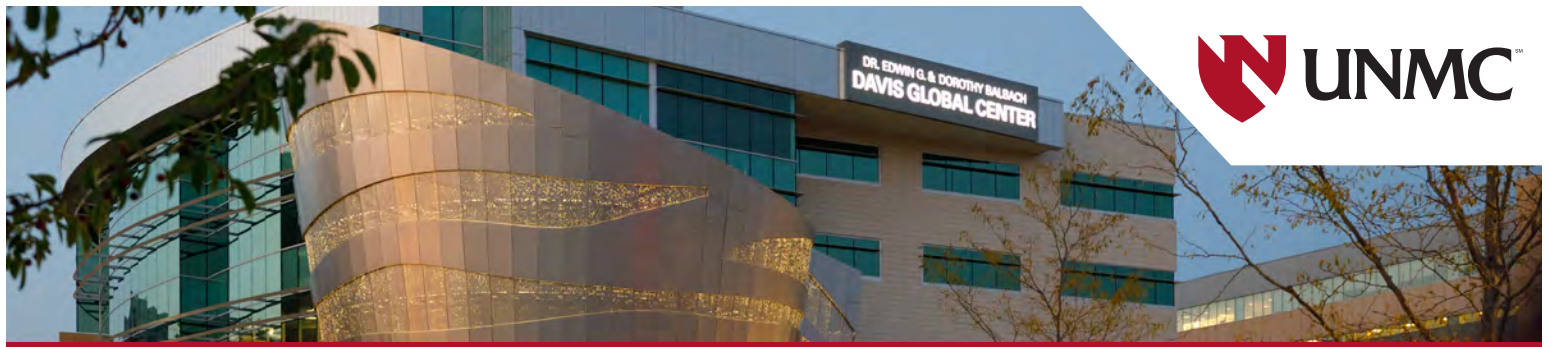
The Davis Global Center serves as the hub for a statewide network of interconnected simulation centers. These conjoined centers (Scottsbluff, Norfolk, Kearney, Lincoln and Omaha) promote experiential training opportunities and stimulate new and unique research endeavors made possible by the availability of advanced modeling, simulation and visualization technologies. Collectively, these technologies will accelerate the development of a transformational model for individuals and interdisciplinary teams, at all levels of training and skills refreshment.



### iEXCEL and the Davis Global Center:

- Contribute to the Nebraska workforce and economic development.
- Create well-paying jobs and projecting revenue generation of \$39.3 million annually in economic impact for Nebraska. (Tripp Umbach, 2016)
- Attract new businesses and industries to Nebraska.
- Offer specialized training opportunities in simulation technology, 3D and augmented/virtual reality (AR/VR) content development.
- Collaborate with industry and the community to provide new research and development opportunities for faculty and learners.
- Result in new and relevant learning methods, including 3D and AR/VR content, clinical and surgical training modules, and research and development opportunities.
- Provide ongoing training and develop new health care processes and products in partnership with Nebraska Medicine to benefit health care professionals and improve patient outcomes.
- Ensure proficiency in training, education and practice, meeting the needs of learners of all levels of training.
- Dedicated to rural outreach using advanced collaboration technologies and simulation mobile units.





# iEXCEL

Improving human performance and effectiveness in health care

## Davis Global Center Visualization & Simulation Technology



### An Infinity Wall

The atrium features a 23-foot-tall Infinity Wall, the largest Crystal LED wall in the western hemisphere. This wall stimulates innovation in teaching, learning and research as a versatile tool for video, digital assets, cutting-edge presentations and more.



### Clarkson Regional Health Services Holographic Theatre

In bringing learning to life, iEXCEL utilizes the first holographic theatre in any academic institution in the world. Using the latest in Direct View LED displays, theatre productions transform learning via lectures and presentations as immersive holographic 3D content.



### Home Instead Helix

Connected to UNMC campuses throughout Nebraska, large interactive touchwalls facilitate group collaboration and experiential learning. The largest installation is the Home Instead Helix, a 20-foot wide, 280-degree curved environment comprised of 30 interactive panels.



### Laser CAVE - 5

The Laser CAVE is a first-of-its-kind laserilluminated, five-sided fully immersive space. The visual fidelity and high pixel density creates a "full-body" experience for users involving sight, sound, physical movement and interaction. Over 70 million pixels surround the user within this 10 feet by 10 feet by 10 feet space.



# iEXCEL Visualization & Simulation Technology



## 3D Workbenches

3D Workbenches are self-contained units that combine augmented and virtual reality (AR/VR) for individuals or small groups. Experiential learning with 3D visuals, infrared eye tracking and haptic feedback facilitate kinesthetic immersion. The compact size and ease of use promotes self-directed learning for students to practice at their own pace.



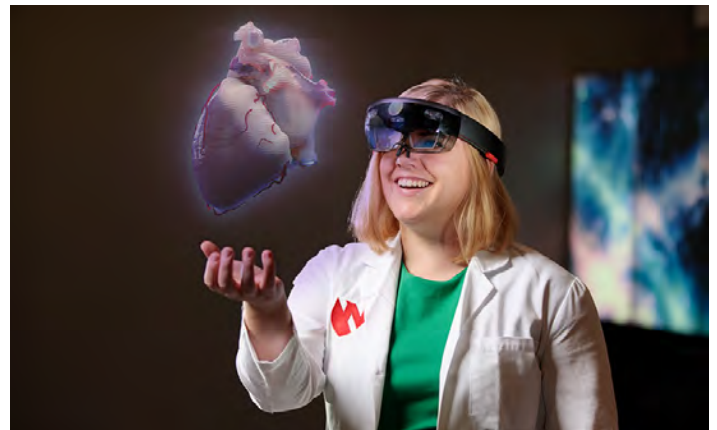
## 3D CADWalls

The 3D CADWalls are active three-dimensional displays coupled with motion capture technology to allow for a variety of experiences for learners. The large screen size and 3D effect allows groups of students to simultaneously experience content together, while infrared tracking facilitates precise interactions for single users.



## Advanced Clinical & Surgical Simulation

The design of the Davis Global Center replicates the entire healthcare system. Human patient simulators, task trainers, virtual reality simulators and standardized patients are all utilized to create experiential hands-on training sessions. The facility is a certified Society of American Gastrointestinal and Endoscopic Surgeons (SAGES) testing center complete with FLS, FES and FUSE testing capabilities.



## Augmented Reality (AR) & Virtual Reality (VR)

Learners are able to visualize complex concepts and simulate healthcare scenarios using a variety of head mounted displays (HMD) with augmented reality (AR), virtual reality (VR) and mixed reality. The iEXCEL visualization team collaborates with faculty, students and clinicians to create realistic, high-fidelity content for these emerging platforms.



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## Munroe-Meyer Institute Director



**Karoly Mirnics, MD, PhD**  
**karoly.mirnics@unmc.edu; 402-559-5702**

Karoly Mirnics, MD, PhD, is director of the UNMC Munroe-Meyer Institute, which transforms the lives of individuals with intellectual and developmental disabilities. Dr. Mirnics obtained his MD from the University of Novi Sad School of Medicine in his hometown in 1986 and his PhD from Semmelweis University in Budapest, Hungary. He completed his postdoctoral fellowship at the University of Pittsburgh.

Dr. Mirnics established his own laboratory in 2000 at the Department of Psychiatry at the University of Pittsburgh, where he rose to the rank of associate professor in 2006. That year, his laboratory moved to the Department of Psychiatry at Vanderbilt University in Nashville. In 2010, he was named James G. Blakemore Professor of Psychiatry, and he also served as the departmental vice chair for research and associate director of the Vanderbilt Kennedy Center.

Dr. Mirnics has a broad background in molecular neurobiology of brain diseases, with more than 20 years of experience in various molecular biology techniques. His research group is actively pursuing projects that include transcriptome changes across human brain diseases, animal models of neurodevelopmental and psychiatric disorders, effects of maternal immune activation and environment on gene expression, and neuroprotection by activity.

To illustrate his innovativeness and willingness to explore unconventional research: He was the first to perform a DNA microarray analysis of brain tissue, pioneered molecular pathway analyses, characterized immune system dysfunction in schizophrenia and autism, pioneered in situ proteomics in neuroscience, developed a new microarray platform, identified neuroprotection of enriched environment in Alzheimer's Disease models, holds a patent for RGS4 as a schizophrenia susceptibility gene, and developed a novel transgenic mouse technology, using BAC-driven, miRNA-mediated silencing in vivo. He has collaborated with more than 30 groups of investigators over the past 10 years.

# The Munroe-Meyer Institute - past, present and future -



**Károly Mirnics, MD, PhD**

Director and Hattie B. Munroe Professor  
Munroe-Meyer Institute for Genetics and Rehabilitation



University of Nebraska  
Medical Center™

## Our mission is...

... to be world leaders in **transforming** the lives of all individuals with disabilities and complex health care needs, their families and the **community** through outreach, **engagement**, premier **educational programs**, innovative **research** and extraordinary **patient care**.



# MMI Facts & Figures



More than

**17 Disciplines**

**5** supporting philanthropic boards



Approximately

**520 Employees**

One of 67 federally designated University Center of Excellence in Developmental Disabilities Education, Research and Service (UCEDD).

One of 52 Leadership Education in Neurodevelopmental and related Disabilities (LEND) programs.

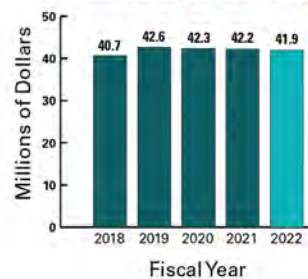


## Revenue Sources

- Clinical service reimbursement
- State/local/school grants & contracts
- Philanthropic/other funds
- Federal grants & contracts
- State appropriation

Annually, more than **\$41 million** budget, with more than **\$18 million** in federal, state and local grants and contracts and **\$6.2 million** in philanthropy.

## MMI Budget 2018 – 2022



## CLINICAL SERVICES

Approximately

**90,000**  
Yearly Services



serving clients across the lifespan with 54% taking place in the community.

In 2022, more than **353 volunteers** provided approximately **13,000 service hours**.



MMI has more than **35 provider locations** with 17 outside Omaha with more than 50 types of services provided.

**30** Recreational Therapy Programs and Clubs

Serving approximately **535 families and participants** annually.

Providing more than **25,100 hours of service**.

## COMMUNITY OUTREACH



More than **140** community service activities provided to **7,166 participants**.



Approximately

**2,880 Hours**

of technical assistance.





## EDUCATION & RESEARCH

More than

# 8,800 Participants

in workshops, conferences, teleconferences and other community education activities in domestic and international forums.

**Types of students trained:** high school, undergraduate, graduate, predoctoral interns, post-doctoral fellows/residents, family advocates, self-advocates, first responders, IDD and community service providers and educators

**Disciplines trained:** applied behavior analysis, counseling, child development, dentistry, education, family medicine, genetic counseling, law, medical genetics, nursing, occupational therapy, pediatrics, physical therapy, psychology, public health, recreation, social work and speech

Long-term trainees served: 407  
Short-term students served: 1,500

Federally funded core training programs: 4

Graduate programs: 2

Certification programs: 20

Noncertification training programs: 13

Research training programs: 2

Continuing education programs: 5

Professional in-service training programs: 5

MMI receives approximately

# \$5.9 MILLION

federal research funding annually.



## 56 Active Projects

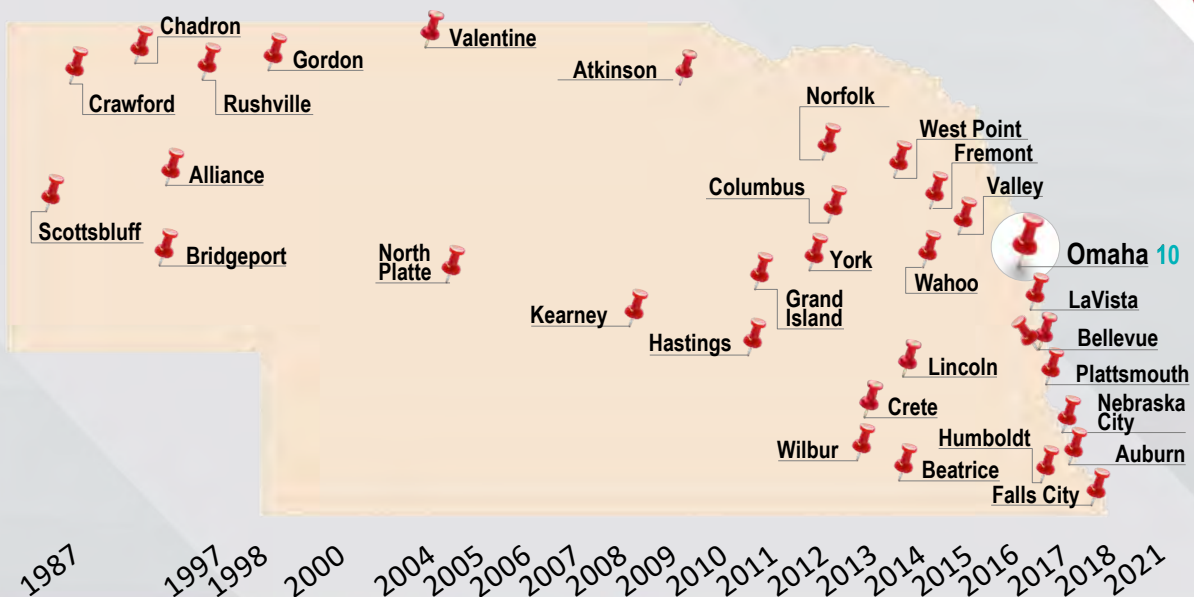
|                     |                                    |
|---------------------|------------------------------------|
| <b>Funding Type</b> | 12 Federal                         |
|                     | 14 State                           |
|                     | 10 Foundation/ Non-Profit          |
|                     | 10 External University/ Hospitals  |
|                     | 10 Internal to UNMC/ NU Foundation |

## 77 Applications

57 External, 20 Internal  
38 Funded (49% Success Rate)



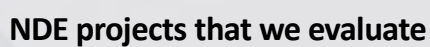
## MMI Rural Outreach Behavioral Health Clinics



We established and we are the **national model** for rural behavioral health!





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## A \$91M UNIQUE HOME with unique features and services



- Expansion from 87,000 to 220,000 sq ft with 700 parking spots
- Full-size gymnasium, two pools, indoor water park, multiple playgrounds
- New model – patient-focused outpatient center
- New integrated Center for Autism Spectrum Disorders (iCASD)
- Greatly expanded and unique services
- Healing art

*“Build us a play place where healing happens”*

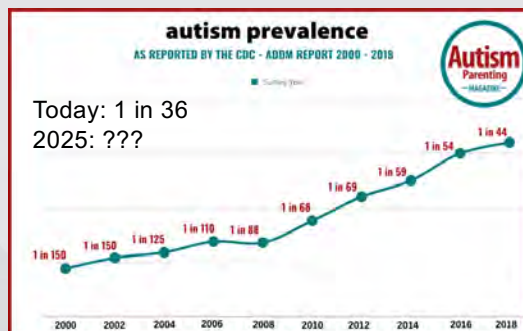
### 2022 Healthcare Design Showcase Award



# AUTISM



- It is a silent epidemic and pandemic
- 1 in 36 children in the U.S. is diagnosed with an autism spectrum disorder (ASD), according to 2020 data.
- Boys are four times more likely to be diagnosed with autism than girls.
- The need is endless, the resources are limited



## Economic burden of ASD in the US



## Autism Care for Toddler In Omaha North (ACTION)



*Ames Shopping Center, at 5050 Ames Avenue*

- Followed the first ACT clinic model at 90<sup>th</sup> and Q Streets
- Angel donor gift of \$2M
- 7,920 square feet diagnostic and treatment clinic for autism
- Provides 10-20 hrs of services week/child
- Ages 2-5, early intervention services using applied behavior analysis (ABA)
- Full capacity: 18-20 children with ~25 providers
- Opened in May of 2021



# Grow and expand!



 University of Nebraska  
Medical Center™

## VISION



- Growth all four pillars of our activities
- Reduce wait list for all existing services
- Establish new services while remaining fiscally viable
- ACT Clinic NETWORK (next: Fremont)





Home page:

About MMI: <https://www.unmc.edu/mmi/about/index.html>

Healthcare design award:

<https://healthcaredesignmagazine.com/featured-firms-projects/munroe-meyer-institute/#slide-1>

For a **building tour**, please contact Melonie Welsh, Director of Community Engagement at MMI ([melonie.welsh@unmc.edu](mailto:melonie.welsh@unmc.edu))





*We believe that we can measure the humanity of  
a society by how it takes care of individuals with IDD.*



**University of Nebraska  
Medical Center™**

OCT. 5 PRESENTATIONS TAB  
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## NU Board of Regents public presentations



**Jeffrey P. Gold, MD**

Chancellor

[jeffrey.gold@unmc.edu](mailto:jeffrey.gold@unmc.edu), 402-559-4201, @jeffreypgold

Jeffrey P. Gold, MD, is a nationally recognized leader and tireless advocate for transforming higher education, academic medicine and health care delivery across the public and private higher education spectrum.

He became the eighth chancellor of the University of Nebraska Medical Center, vice president of the University of Nebraska System and chair of the board of UNMC's principal clinical care academic health system partner, Nebraska Medicine, in early 2014.

In July 2021, Dr. Gold also was named provost and executive vice president of the University of Nebraska System, in addition to his ongoing UNMC/Nebraska Medicine responsibilities. In this role, Dr. Gold is the chief academic officer of the University of Nebraska System of approximately 50,000 learners, over \$750 million of research and liaison to the Board of Regents for all aspects of academic affairs.

As UNMC's chief executive officer, Dr. Gold is responsible for all aspects of campus leadership, program quality and operations, including seven colleges, two degree-granting institutes, the entire professional staff and faculty of more than 6,000 and 4,700 health professions students. Additionally, Nebraska Medicine has more than 8,500 employees and an operating budget of more than \$2.3 billion.

The combined annual economic impact of the "500-mile campus" academic health center with 37 Centers of Excellence exceeds \$6.4 billion and employs more than 52,000. During this time, the UNMC enrollment has grown by just more than 43%, the sponsored research programs by more than 300% and the clinical programs by more than 150%.

In his systemwide roles as provost and executive vice president, Dr. Gold oversees all undergraduate, graduate and professional academic education, research and experiential programs as well as the student support areas for the University of Nebraska system campuses, approximately 50,000 students, more than \$750 million in research and a combined economic impact of over \$10 billion.

From May 2017 to June 2021, Dr. Gold also served as chancellor of the University of Nebraska Omaha, the state's only public metropolitan university and its most diverse campus. The UNO complex has seven thriving colleges, an enrollment of more than 13,000 undergraduate students, 3,000 graduate students, a broad public service mission and two NCAA Division I-A athletic programs. Following more than four highly successful years of growth and prominence at UNO, in 2021, he stepped down to assume the University of Nebraska System provost and executive vice president responsibilities across all undergraduate, graduate and professional programs.

Dr. Gold holds a tenured faculty appointment at the rank of professor in the UNMC College of Medicine, as well as in the UNMC College of Public Health, where his active research interests in health care policy, population health and epidemiology are concentrated. He also leads several key economic development boards for the state and the university system, including the Greater Omaha Chamber, University Technology Development Corp, the University Technology Transfer Corp, Nebraska Enterprises Corp, UNeTech Corp, and several others.

Prior to joining UNMC, Dr. Gold served as chancellor of the University of Toledo's academic and clinical health sciences, which includes the colleges of Medicine, Nursing, Pharmacy, Health Science and Human Service, and Graduate Studies. In that role, Dr. Gold had full leadership responsibility of the clinical, education and research programs, the faculty practice plan and the integrated hospital and ambulatory health care delivery system.



NU BOARD OF REGENTS, OCTOBER 2023

# UNMC Update and 5-Year Future Vision

“Building the *HEALTHIEST* NEBRASKA”

Jeffrey P. Gold, M.D.  
Chancellor, UNMC



University of Nebraska  
Medical Center

NU BOARD OF REGENTS, OCTOBER 2023





# WE ARE NEBRASKA MEDICINE & UNMC

Our mission is to lead the world in transforming lives  
to create a healthy future for all individuals and  
communities through premier educational programs,  
innovative research and extraordinary patient care.



# WE ARE NEBRASKA MEDICINE & UNMC

Our values reflect who we are and why we're here.



Innovation



Teamwork



Excellence



Accountability



Courage



Healing



# ***UNMC UPDATE & VISION***

...transforming lives to create a healthy future for all ...

- ❖ TRANSFORMING LIVES YESTERDAY
- ❖ TRANSFORMING LIVES TODAY
- ❖ TRANSFORMING LIVES TOMORROW

## **Transforming Lives**

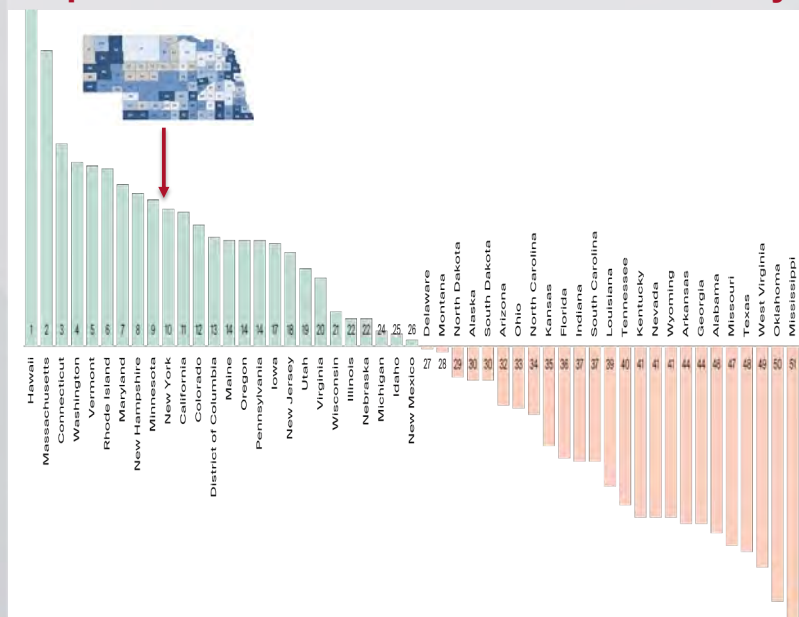
**-Building the *HEALTHIEST* Nebraska**



## Our state depends on the five key determinants of health for our rural and urban communities



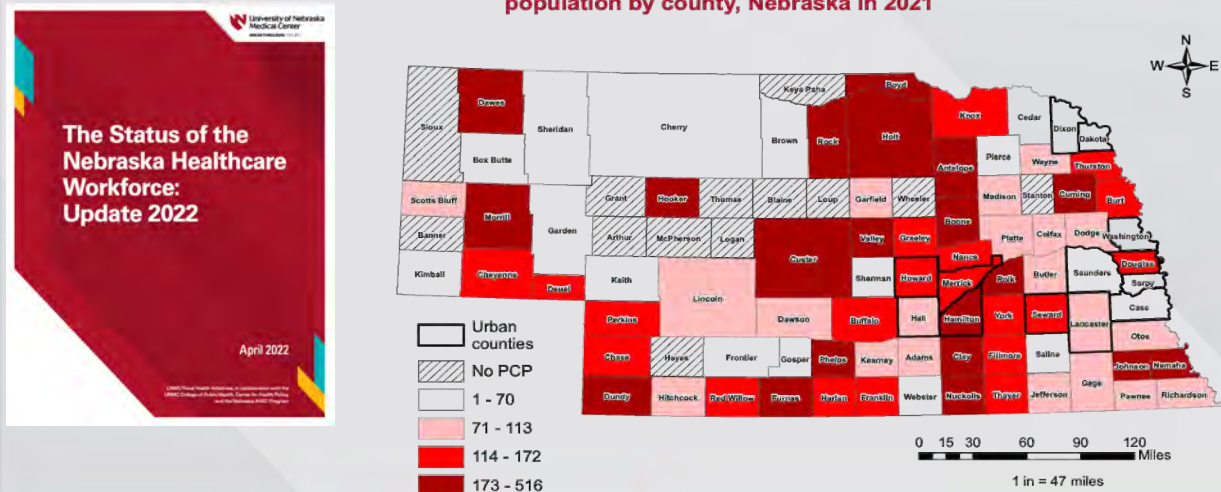
## Nebraska continues to see reduced overall health status when compared to other states with wide variability across the 93 counties





## The number and distribution of Nebraska healthcare workforce does not support the current needs particularly in primary care specialties

Figure 1. Number of active primary care physicians per 100,000 population by county, Nebraska in 2021



## The number and distribution of Nebraska healthcare workforce does not support the current and future health of our communities



The data used in this report are from the University of Nebraska Medical Center Health Professions Tracking Services (HPTS) and State of Nebraska licensure data for 2021. For comparison purposes, we also provide data for 2017 and 2019. As in previous reports, we examine the following health professions:

- Physicians
- Physician Assistants
- Advanced Practice Registered Nurses, Registered Nurses and Licensed Practical Nurses
- Dentists and Dental Hygienists
- Pharmacists and Pharmacy Technicians
- Emergency Medical Technicians
- Physical Therapists
- Occupational Therapists
- Medical Nutrition Therapists
- Respiratory Care Practitioners
- Speech-Language Pathologists
- Audiologists
- Medical Radiographers
- Chiropractors
- Podiatrists
- Optometrists



The number and distribution of Nebraska Healthcare Workforce directly relates to healthcare access in rural and urban communities



## IV. Summary and Recommendations

Since the 2020 report "The Status of the Healthcare Workforce in the State of Nebraska," the distribution of the healthcare workforce has shown modest improvements but only for a few professions. Overall, the healthcare workforce trends point to continuing challenges to delivering health care in rural regions.<sup>11</sup> For example, although the relative distribution of OB/GYN physicians has improved since 2019, there are still 44 counties that lack obstetrical and gynecologic coverage. Moreover, the number of OB/GYN physicians continues to decline. Similar declining trends can be observed for all the physician types since 2019; the number decreased from 4,971 in 2019 to 4,906 in 2021. As concerning, most of the specialties examined in the report are increasing in average age. Among physicians, 19.4% are now aged 61 years and older, compared to 18.6% in 2019.

UNMC Transforming Lives Yesterday  
-Building on our legacy







# WE ARE NEBRASKA MEDICINE & UNMC



# WE ARE NEBRASKA MEDICINE & UNMC



## WORKFORCE PIPELINE

Access to Care  
Quality of Care  
Cost of Care



Quality of Life  
Life Expectancy  
Economic Vitality  
Community Vitality

Implemented by NU in 2012, ***BUILDING A HEALTHIER NEBRASKA*** created key public private partnerships to enhance health care workforce across the state and set a model for future growth



## Legislative proposal aims to improve health care, develop workforce

The University of Nebraska is taking a leading role in a four-part legislative proposal that would improve health care, drive workforce development and job creation, and create new opportunities for students in health fields across the Cornhusker state.

Announced by NU President James B. Milliken, state senators and other university leaders Jan. 18, the "Building a Healthier Nebraska" initiative seeks a \$91 million investment from the state's cash reserves. The funds would support capital projects in Omaha, Lincoln and Kearney, and be leveraged with more than \$300 million in additional support from private donors, patient revenues and other sources.



The University of Nebraska is taking a leading role in the "Building a Healthier Nebraska" initiative.

### Nebraska Today THU.

JAN. 19, 2012

[Grew named to lifetime post in National Academies](#)

[Legislative proposal aims to improve health care, develop workforce](#)

[Register for SAS training by Jan. 20](#)

[Readers asked for feedback on UNL news](#)

[Volunteers needed for tax assistance program](#)

EMAIL US



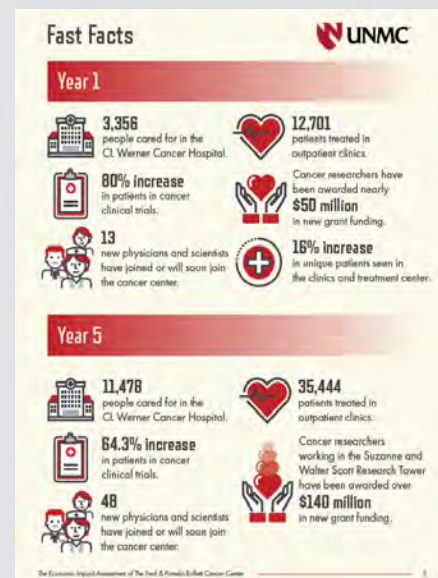
The legacy of **BUILDING A HEALTHIER NEBRASKA** has been many successful public private partnerships to enhance workforce, research bioscience and care across the state as a model the future



|                                                |  |
|------------------------------------------------|--|
| JOE & MILLIE WILLIAMS SCIENCE HALL             |  |
| EDWIN G & DOROTHY B DAVIS GLOBAL CENTER        |  |
| LOZIER CENTER FOR PHARMACY SCIENCE & EDUCATION |  |
| UNMC CENTER FOR DRUG DISCOVERY                 |  |
| ROBERT S WIGTON HERITAGE CENTER                |  |
| MUNROE-MEYER INSTITUTE                         |  |
| UNK-UNMC HEALTH EDUCATION PHASE I AND PHASE II |  |
| HAL & BEVERLY MAURER COLLEGE OF PUBLIC HEALTH  |  |
| COLLEGE OF NURSING LINCOLN CAMPUS              |  |
| FRED & PAMELA BUFFETT CANCER CENTER            |  |



By example, the FPBCC has successfully addressed cancer care and continues to grow UNMC academic missions



## Transforming Lives Today -Implementing our mission



## Transforming Lives Today -UNMC fast facts



**500** mile wide campus

**4,555** students, fall 2023



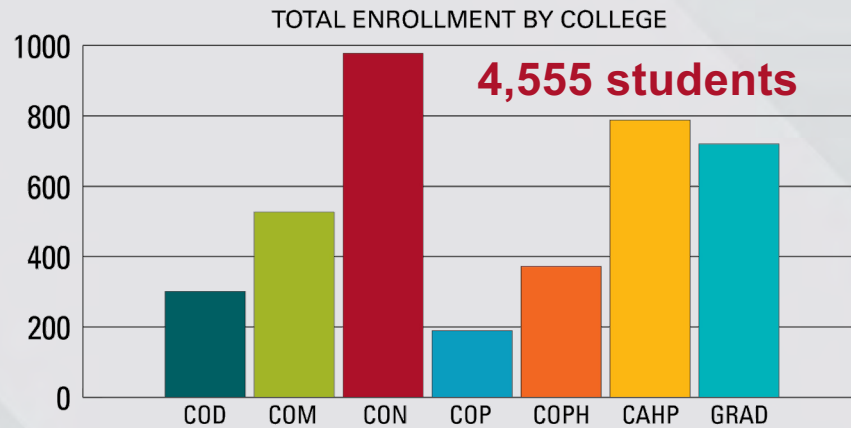
**6,279** employed by UNMC  
(5,385 FTE) August 2023



**\$970 million** operating  
budget (2023-24)

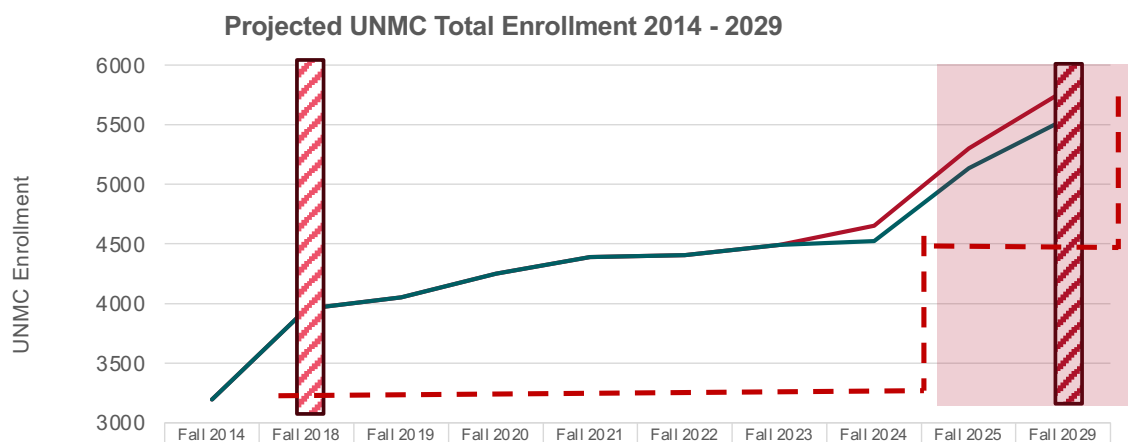
**\$250.5 million** in total sponsored  
awards (fiscal year 2023)

## UNMC enrollment increases every year for 23rd straight year, up 3.4% AY 2024



In addition, UNMC has 680 resident physicians (house officers) in training.

## UNMC enrollment program increases projected for the future five years

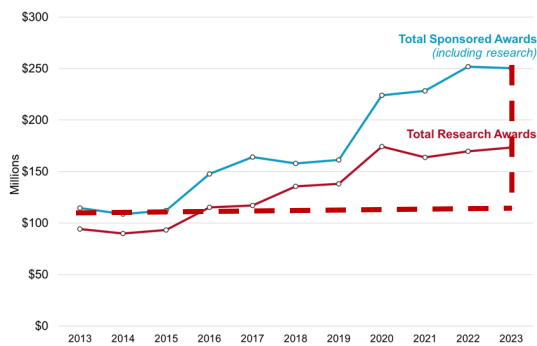


# UNMC sponsored research increases year over year



## Total Research Awards

▲ Increased by 2% to \$173.4M

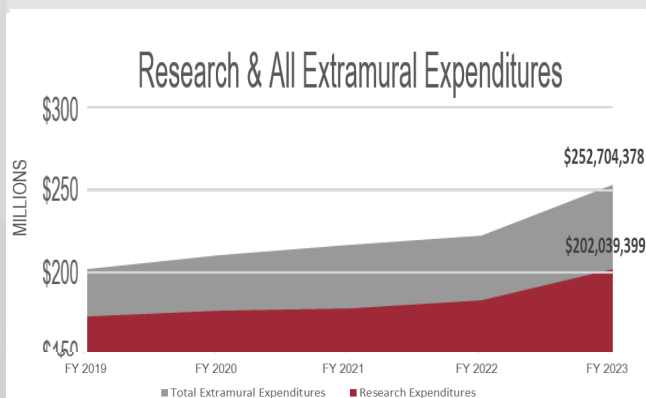


## Total Sponsored Awards

■ Reached \$250.4M / year

| Research                                | FY2023<br>Q1 - Q4  | FY2022<br>Q1 - Q4  | YTD as % of<br>Prior Year |
|-----------------------------------------|--------------------|--------------------|---------------------------|
| Federal grants and contracts            | 111,013,647        | 116,049,360        | 96%                       |
| Federal subcontracts <sup>1</sup>       | 24,603,945         | 17,929,719         | 137%                      |
| Industry grants and contracts           | 21,207,253         | 24,521,628         | 86%                       |
| State grants and contracts              | 6,536,910          | 2,956,953          | 221%                      |
| Other external funding <sup>2</sup>     | 10,084,550         | 8,276,352          | 122%                      |
| <b>Research Subtotal [A]</b>            | <b>173,446,305</b> | <b>169,734,012</b> | <b>102%</b>               |
| <b>Non-Research</b>                     |                    |                    |                           |
| Instructional grants and contracts      | 13,035,066         | 13,415,429         | 97%                       |
| Public Service grants and contracts     | 59,847,782         | 67,210,324         | 89%                       |
| Other extramural funding                | 3,163,250          | 557,763            | 567%                      |
| <b>Non-Research Subtotal [B]</b>        | <b>76,046,098</b>  | <b>81,183,516</b>  | <b>94%</b>                |
| <b>Sponsored Awards Total [A] + [B]</b> | <b>249,492,403</b> | <b>250,917,528</b> | <b>99%</b>                |
| <b>Other Restricted Funds</b>           |                    |                    |                           |
| Gifts/Donations                         | 959,969            | 977,958            | 98%                       |
| <b>Other Restricted Funds Total [C]</b> | <b>959,969</b>     | <b>977,958</b>     | <b>98%</b>                |
| <b>Grand Total [A] + [B] + [C]</b>      | <b>250,452,372</b> | <b>251,895,486</b> | <b>99%</b>                |

# UNMC research expenditures increase year over year



## Research Expenditures

▲▲ Increased by 14% to \$252M

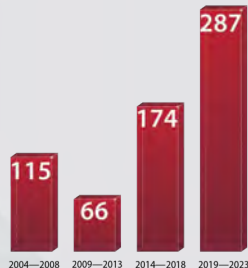
| Quarterly Sponsored Programs and Research Expenditures Report |  | FY 2023<br>July-June<br>Q1-4 | FY 2022<br>July-June<br>Q1-Q4 | FY23 YTD<br>As % of<br>FY22 |
|---------------------------------------------------------------|--|------------------------------|-------------------------------|-----------------------------|
| <b>Sponsored Programs Expenditures: Total Costs</b>           |  |                              |                               |                             |
| <b>Research</b>                                               |  |                              |                               |                             |
| Federal grants and contracts                                  |  | 102,955,911                  | 94,548,656                    | 109%                        |
| Federal subcontracts <sup>1</sup>                             |  | 22,502,968                   | 20,199,853                    | 111%                        |
| Industry grants and contracts                                 |  | 8,908,635                    | 7,480,320                     | 119%                        |
| State grants and contracts                                    |  | 2,018,828                    | 2,190,590                     | 92%                         |
| All other external funding <sup>2</sup>                       |  | 6,757,170                    | 5,972,119                     | 113%                        |
| <b>Research Subtotal</b>                                      |  | <b>143,143,512</b>           | <b>130,391,537</b>            | <b>110%</b>                 |
| <b>Non-Research</b>                                           |  |                              |                               |                             |
| Instructional grants and contracts Expenditures               |  | 12,306,797                   | 8,501,230                     | 145%                        |
| Other Sponsored Activities grants and contracts Expenditures  |  | 38,358,182                   | 30,503,034                    | 126%                        |
| <b>Non-Research Subtotal</b>                                  |  | <b>50,664,979</b>            | <b>39,004,265</b>             | <b>130%</b>                 |
| <b>Sponsored Programs Expenditures Total Cost = [A]</b>       |  | <b>193,808,491</b>           | <b>169,395,802</b>            | <b>114%</b>                 |
| <b>State-Aided Research Expenditures</b>                      |  |                              |                               |                             |
| Tobacco Settlement                                            |  | 5,994,229                    | 6,762,947                     | 89%                         |
| Nebraska Research Initiative                                  |  | 4,564,281                    | 3,670,522                     | 124%                        |
| Other Departmental Research <sup>3</sup>                      |  | 16,446,024                   | 16,443,485                    | 100%                        |
| Cost Share <sup>4</sup>                                       |  | 906,300                      | 890,639                       | 102%                        |
| <b>State-Aided Research Expenditures Total = [B]</b>          |  | <b>27,910,833</b>            | <b>27,767,592</b>             | <b>101%</b>                 |
| <b>Restricted Research Expenditures</b>                       |  |                              |                               |                             |
| Pro Fees/ DDIF <sup>5</sup>                                   |  | 13,256,748                   | 10,646,986                    | 125%                        |
| NU Foundation                                                 |  | 5,914,990                    | 4,863,250                     | 122%                        |
| Other Restricted Research Funding <sup>6</sup>                |  | 11,813,316                   | 9,364,955                     | 126%                        |
| <b>Restricted Research Expenditures Total = [C]</b>           |  | <b>30,985,054</b>            | <b>24,875,191</b>             | <b>125%</b>                 |
| <b>Grand Total = [A] + [B] + [C]</b>                          |  | <b>252,704,378</b>           | <b>222,038,585</b>            | <b>114%</b>                 |



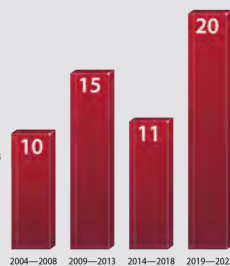
# UNMC research commercialization increases year over year since 2004



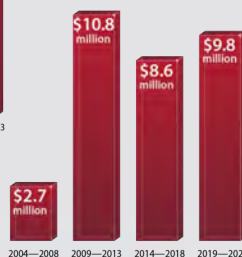
Total Patents



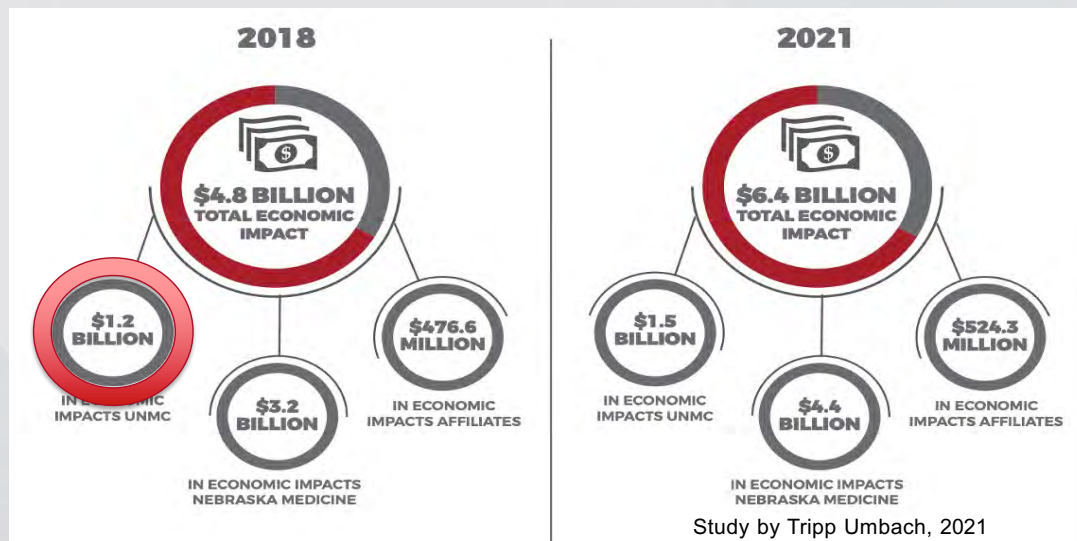
Startups



Total Revenue



# UNMC economic impact and H3 jobs increase from 2018 to 2021



## UNMC Live Green sustainability metrics improve year over year



Current as of May 2023; [dashboard.livegreennebraska.com](https://dashboard.livegreennebraska.com)

## Advanced Simulation: Davis Global Center bringing learning to life



- Established operations within the state-of-the-art 192,000 sq. ft. interprofessional simulation center in Spring of 2020 – the Davis Global Center, home of the iEXCEL.
- Hosted over 140,000 interprofessional students, faculty, health care professionals and special guests at the Davis Global Center since opening in 2020.
- Facilitated over 7,000 mixed modality simulation and visualization sessions within the Davis Global Center
- Established partnerships with 40+ surgical, technology and education industry collaborators.



# Health Security: Facing the 21<sup>st</sup> century threats



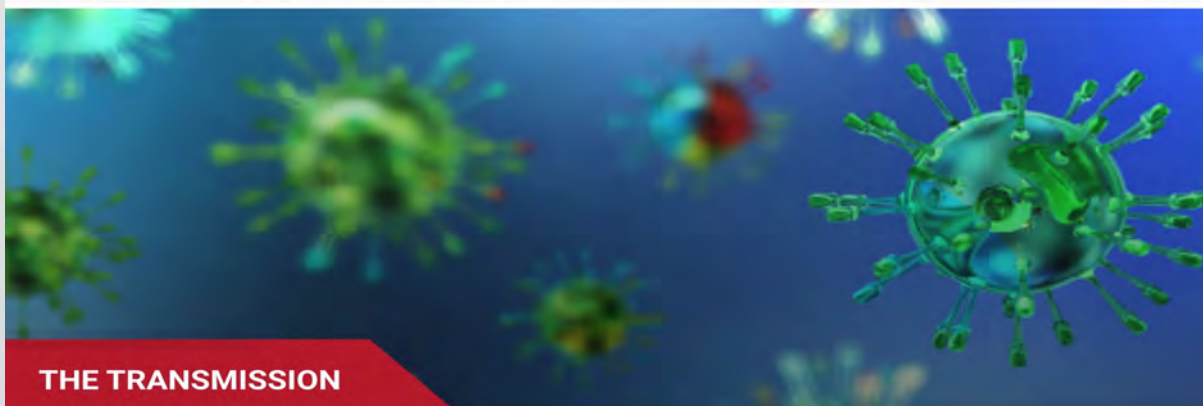
# Health Security: Facing the 21<sup>st</sup> century threats



Global Center for Health Security

UNMC

[Our History](#) [Domains](#) [Programs](#) [Health Emergencies](#) [The Transmission](#)



THE TRANSMISSION



# Helping the Most Vulnerable: Autism Care for Toddlers (ACT) Clinics



**Vision:** *National model for diagnosing & treating autism in rural communities*

**Background:** At least one in 34 children born today will be diagnosed with autism (ASD). Early intervention is critical for the outcome, but rural areas have virtually no access to ASD care.



We have **opened two ASD ACT Clinics** and will open the third next year and one per year annually for the next five or more years.

**Each clinic:**

- 8,000-10,000 square feet diagnostic and treatment clinic for ASD
- Ages 2-5, early intervention services using behavior analysis
- Full capacity: 18-25 children with ~25 providers each site

**Goal:** Establish five or more new state-of-the-art ACT clinics networked across rural areas of the state of Nebraska in the next 5 years.

# UNMC proudly provides student health care services in partnership

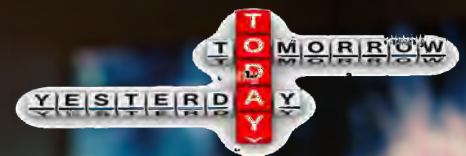
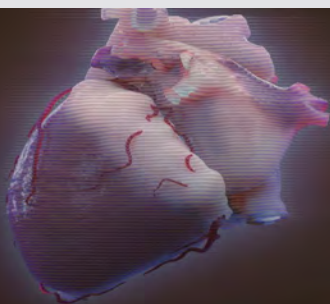




## UNMC proudly provides Sports Medicine health services in partnership

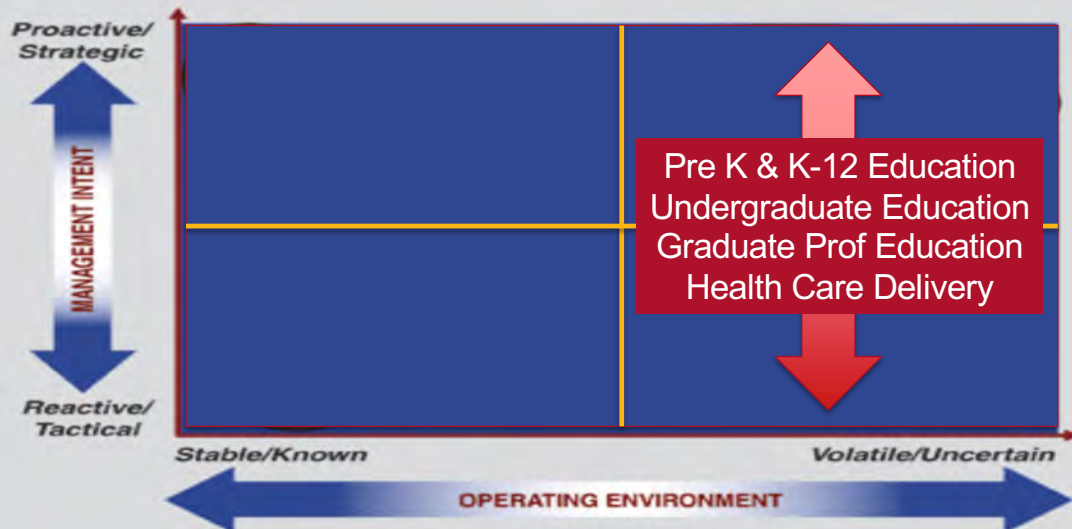


## Transforming Lives Tomorrow -Building & Rehearsing the Future



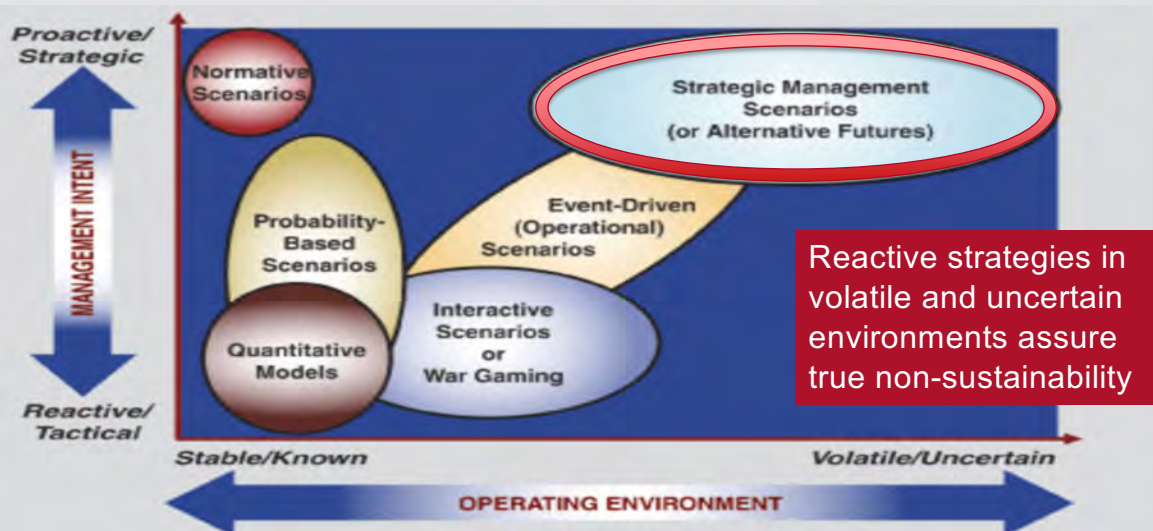
# Creating the future

## Alternative Futures Planning: 2023-30



# Creating the future

## Alternative Futures Planning: 2023-30



# Creating the future

## Alternative Futures Planning: 2023-30



### Core Planning Question

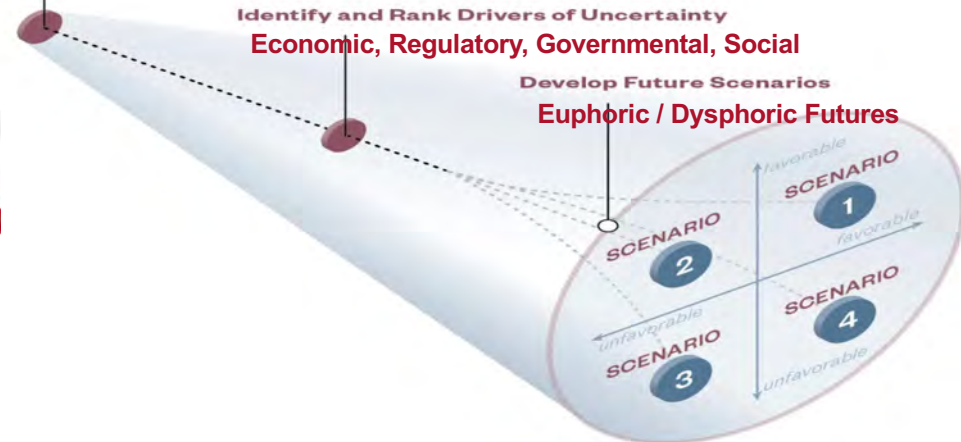
Viability of Annual UNMC Goals & Strategies

Identify and Rank Drivers of Uncertainty

Economic, Regulatory, Governmental, Social

Develop Future Scenarios

Euphoric / Dysphoric Futures



# Creating the future

## Alternative Futures Planning: 2023-30



**1. EDUCATIONAL LEARNER FOCUS:** Establish UNMC and its educational programs as the most learner-centered university in health professions and interprofessional education.

|                                     |    |
|-------------------------------------|----|
| ● Viable in Future Utopian Scen...  | 24 |
| ● Viable in Future Dystopian Sce... | 20 |
| ● Eliminate Goal                    | 0  |
| ● Recommend Changes                 | 1  |



**2. RESEARCH SCOPE & PROMINENCE:** Increase the research scope, prominence and impact of UNMC as a top tier academic health sciences center.

|                                     |    |
|-------------------------------------|----|
| ● Viable in Future Utopian Scen...  | 24 |
| ● Viable in Future Dystopian Sce... | 15 |
| ● Eliminate Goal                    | 0  |
| ● Recommend Changes                 | 0  |





# Creating the future Strategic Planning: 2023-26

UNMC | Nebraska Medicine

UNePlan 3.0  
Strategic Planning

UNePLAN | MY PLAN | MY INITIATIVES | DASHBOARD

| Plan Year | # Initiatives | # Complete | % Completed |
|-----------|---------------|------------|-------------|
| 2022      | 843           | 463        | 78%         |



|                                          |                                 |               |
|------------------------------------------|---------------------------------|---------------|
| Goal 1: Educational learner focus        | Educational Learner Focus       | 77% completed |
| Goal 2: Research scope and prominence    | Research Scope & Prominence     | 78% completed |
| Goal 3: Clinical excellence              | Clinical Excellence             | 71% completed |
| Goal 4: Community engagement             | Community Engagement            | 73% completed |
| Goal 5: Inclusion, diversity & belonging | Inclusion Diversity & Belonging | 80% completed |
| Goal 6: Economic development             | Economic Development            | 77% completed |
| Goal 7: Organizational culture           | Organizational Culture          | 82% completed |
| Goal 8: Organizational leadership        | Organizational Leadership       | 78% completed |

Creating the  
future...

THE ONLY WAY TO PREDICT THE  
FUTURE IS TO CREATE IT.

*A. Lincoln*



# Creating the future

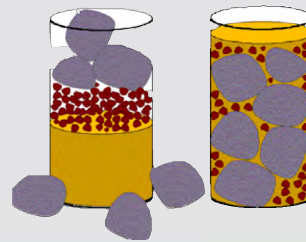
## Strategic Planning: 2023-26



### UNMC ANNUAL PLANNING PROCESS

- BIG Rocks Priority Setting
- Alt Futures Stress Testing
- Goal and Strategy Resetting
- Campus Wide Commentary
- NU OOP Review & Updates
- Operational Initiative Setting

- Stanford Design Thinking
- GAP Breakthrough Thinking
- Future Scenario Planning
- LEAN Design Thinking



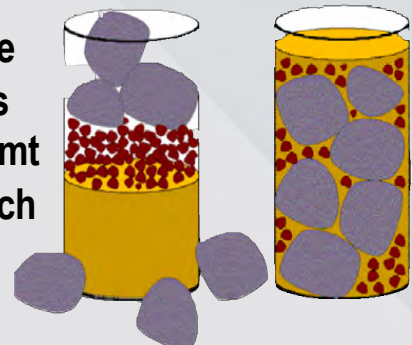
# Creating the future

## Strategic Planning: 2023-26



### UNMC ANNUAL PLANNING PROCESS

- BIG Rocks Priority Setting →
  - Alt Futures Stress Testing
  - Goal and Strategy Resetting
  - Campus Wide Commentary
  - NU OOP Review & Updates
  - Operational Initiative Setting
- Campus Culture
  - UNMC Facilities
  - Information Mgmt
  - Clinical Research



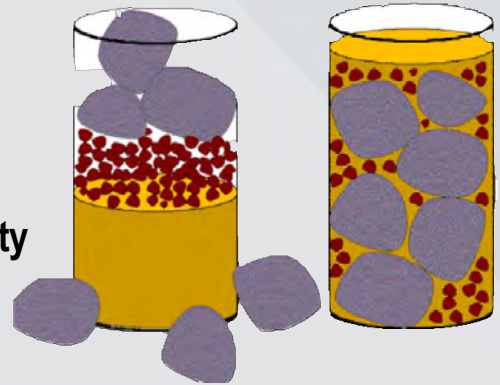
# Creating the future

## Strategic Planning: 2023-26



- Breakthrough Conferences
- BIG Rocks Process Priorities

- Campus Culture →
- UNMC Facilities
- Information Mgmt
- Clinical Research
- Campus Culture
- Mentoring
- Career Dev
- Wellbeing
- Gender Equity
- NAM Plan



## Campus Culture

### Strengthening the focus on well-being



#### FOUR BASIC PRINCIPLES

- You are not ever alone
- Support is always available
- Learn with & from others
- Extend & expect grace

## Campus Culture: NAM Action Collaborative on Well-Being



- Launched in October 2022 by the National Academy of Medicine
- Built on six years of collaboration, 200+ organizations and public input led by the NAM, AAMC, ACGME & US Surgeon General
- Outlines roadmap to better support current and future care providers and in so doing, safeguard the nation's health
- UNMC is among the early adopters of the plan
- UNMC serves as co-chair on NAM's Steering Committee on Mobilizing National Stakeholders
- UNMC is providing implementation software for US roll out of the National Plan for Health Workforce Well-Being

## Campus Culture: NAM Action Collaborative on Well-Being



### THE SEVEN PILLARS OF THE NAM NATIONAL PLAN

- Create and sustain positive work and learning environments and supportive culture
- Support mental Health and reduce stigma
- Engage effective technology tools
- Invest in measurement, assessment, strategies, and research
- Address compliance, regulatory & policy barriers for daily work
- Institutionalize well-being as a long-term value
- Recruit and retain a diverse and inclusive health workforce

# Creating the future

## Strategic Planning: 2023-26



- Breakthrough Conferences
- BIG Rocks Process Priorities

- Campus Culture

- UNMC Facilities

- Information Mgmt

- Clinical Research



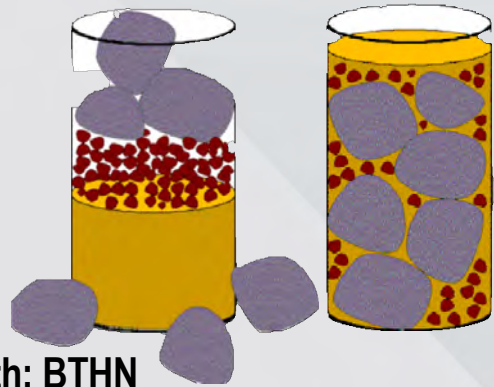
- UNMC Facilities

- UNK HSEC

- The Catalyst

- The CORE

- Project Health: BTHN



## UNMC Facilities

## UNK-UNMC Healthier Rural Nebraska



RENDERING





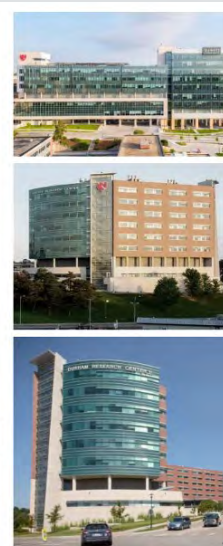
# UNMC Facilities

## Saddle Creek Catalyst Innovation Hub



# UNMC Facilities

## Campus Operations & Research Excellence



# UNMC Facilities

## Project Health: Building the *HEALTHIEST*NEBRASKA

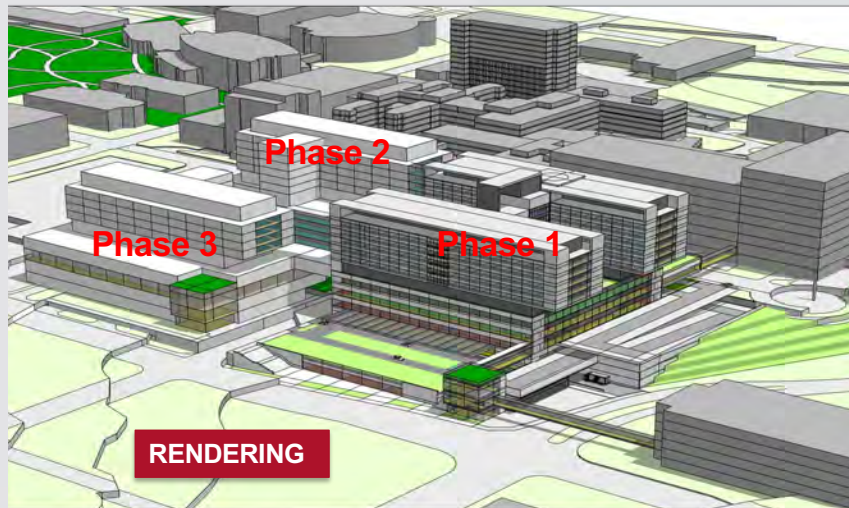


Project Transformation  
Nebraska (NEXT)

Phase 1: HEALTH: Building  
the *HEALTHIEST*NEBRASKA

Phase 2: National Federal  
Partnerships

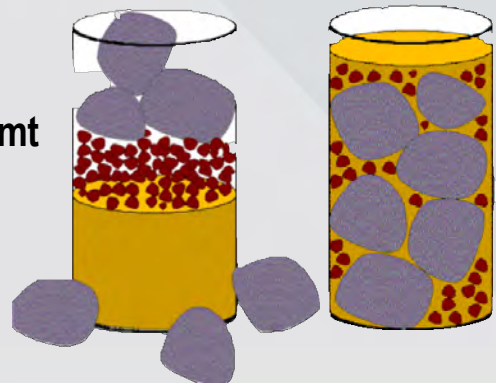
Phase 3: Regional Federal  
Partnerships



## Creating the future Strategic Planning: 2023-26



- Breakthrough Conf's
- BIG Rocks Process Priorities
  - Campus Culture
  - UNMC Facilities
  - Information Mgmt →
  - Clinical Research
- Information Mgmt
  - Security
  - Research
  - Education
  - Clinical

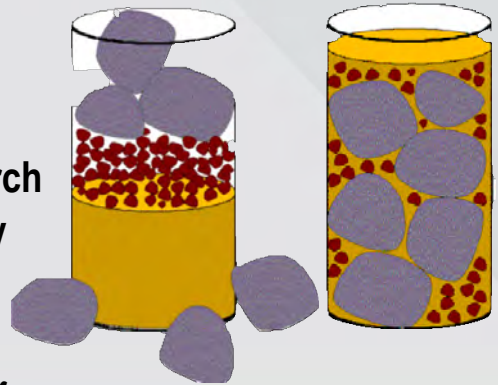


# Creating the future

## Strategic Planning: 2023-26



- Breakthrough Conferences
- BIG Rocks Process Priorities
  - Campus Culture
  - UNMC Facilities
  - Information Mgmt
  - Clinical Research →
- Clinical Research
  - Community
  - Regulatory
  - Security
  - Phase 1 Ctr

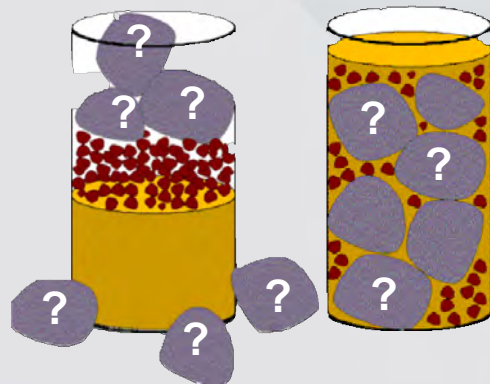


# Creating the future

## Proposed Strategic Planning: 2024-27



- Breakthrough Conferences (AI, Tech Transfer, Mentorship)
- BIG Rocks Process Priorities\*
  - Campus Culture & Mentoring
  - Generative Augmented Intel (AI)
    - Education, Research
    - Clinical, Business Dev
    - Implementation Ethics
  - Strategic Growth
    - Project Health: BTHN
    - Rural Health & Wellness
    - Comprehensive Designation





# Transforming Lives Tomorrow



-Teamwork obtains uncommon results



## Teamwork attains... ...uncommon results



"**Teamwork** is our ability to **work together** toward a common vision. The ability to direct individual accomplishments toward organizational objectives.

**It is the only fuel that allows common people to attain uncommon results."**

*– Andrew Carnegie*



## Teamwork attains uncommon results



Dele Davies, MD



Anne Barnes



Chris Kratochvil, MD



Michael Ash, MD



Ken Bayles, PhD

# THANK YOU

"There is no better team than the one here in Nebraska."

## Teamwork attains uncommon results



Gerald Kugel,  
DMD, PhD



Kyle Meyer,  
PhD



Bradley  
Britigan, MD



Lepaine Sharp-  
McHenry, DNP



Keith Olsen,  
PharmD



Ali S. Khan,  
MD, MPH



Emily Glenn



Karoly Mirnics,  
MD, PhD



Ken Cowan,  
MD, PhD

# THANK YOU

"There is no better team than the one here in Nebraska."

## Teamwork attains uncommon results



Thank you to members of Facilities  
Management and Planning;  
Strategic Communications;  
Information Technology; the  
Chancellor's Office; and many,  
many others for making the Board  
of Regents visit a success!

# THANK YOU

"There is no better team than the  
one here in Nebraska."

## Teamwork with our students led to UNMC's first mascot - Ellie



# UNMC LABS

# Teamwork with UNMC Students and Faculty & Staff



- ❖ ***Rural Health Education Program Impact***
  - ❖ Katie Schultis, MS IV
- ❖ ***Experiential Center for Enduring Learning***
  - ❖ Pamela Boyers, PhD
- ❖ ***Pancreatic Cancer Center of Excellence***
  - ❖ Sunil Hingorani, MD, PhD
- ❖ ***Child Health Research Institute Impact***
  - ❖ Ann Anderson Berry, MD, PhD

**...transforming lives to create a healthy future for all ...**



University of Nebraska  
Medical Center



Nebraska  
Medicine





Discussion ?





**Katie Schultis****UNMC Student Senate President and Student Regent****kaitlyn.schultis@unmc.edu; 402-300-1921**

Katie Schultis is a fourth-year medical student from the small town of Diller, Nebraska, population 260. She completed her undergraduate studies at the University of Nebraska at Kearney. Schultis is committed to using her medical expertise to improve health care access and outcomes for rural populations. She was elected UNMC Student Senate President and Student Regent for the 2023-2024 academic year, demonstrating her commitment to student advocacy and the betterment of higher education in Nebraska. Schultis plans to pursue a career in urology.

# Rural Health Education Tracks: Impact & Update from a 4th- Year Medical Student

**Katie Schultis**

College of Medicine



University of Nebraska  
Medical Center™

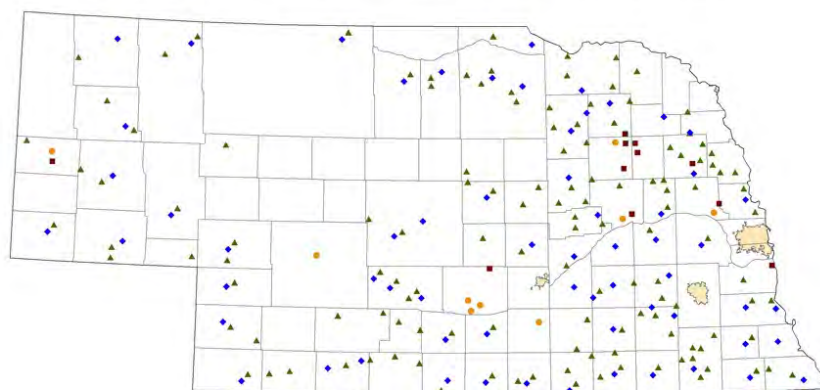
## Overview

1. Challenges in Rural Healthcare
2. Overview of Rural Health Education Tracks
3. Personal Journey
4. Innovations & Future Directions



# Challenges in Rural Healthcare

Selected Rural Healthcare Facilities in Nebraska

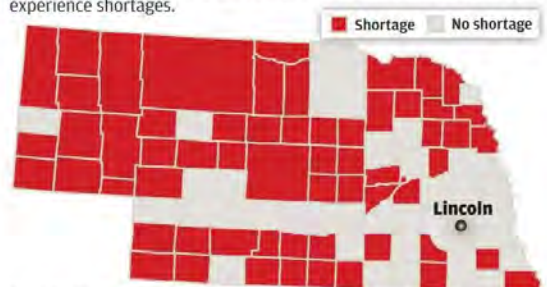


- ◆ Critical Access Hospital
- ▲ Rural Health Clinic
- Federally Qualified Health Center Site in Rural Area\*
- Short Term/PPS Hospital in Rural Area\*
- \*Non-Rural Area (U.S. Census Bureau Urban Area with a population of 50,000 or more)



### Not enough doctors

While there have been improvements in the number of doctors working in Nebraska in the last decade, rural communities continue to experience shortages.



### Treatment providers

Thirty-two of 93 counties have no mental health providers.

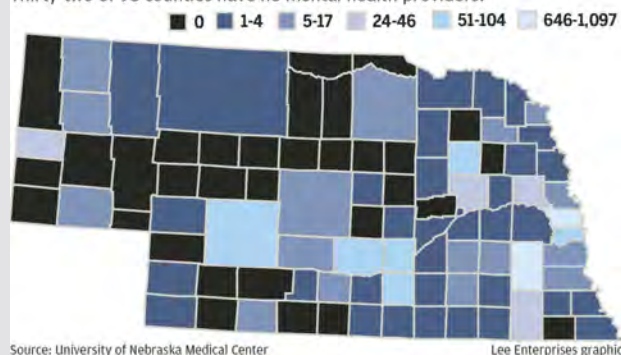
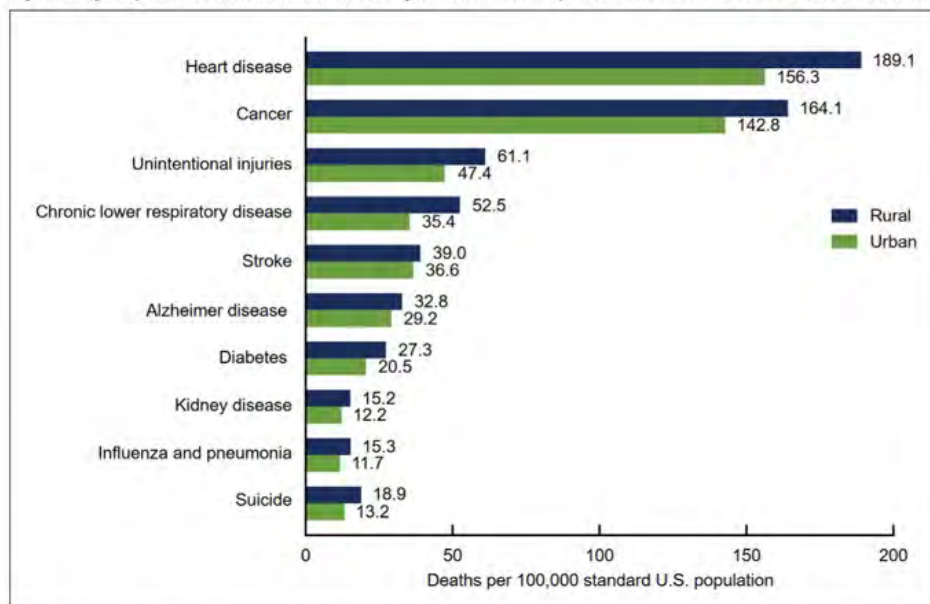


Figure 3. Age-adjusted death rates for the 10 leading causes of death, by urban-rural classification: United States, 2019

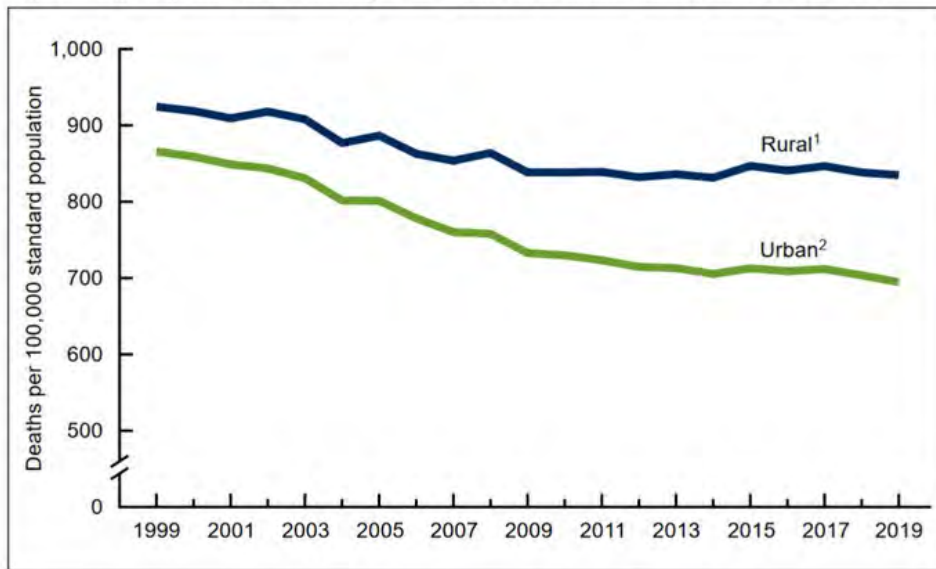


NOTES: Urbanicity of county of residence is based on the 2013 NCHS Urban-Rural Classification Scheme for Counties; see Data source and methods. Causes of death are ranked according to the number of deaths for the total population. Rates for all causes in rural areas were significantly higher than rates in urban areas ( $p < 0.05$ ). Access data table for Figure 3 at: <https://www.cdc.gov/nchs/data/databriefs/db417-tables.pdf#3>. SOURCE: National Center for Health Statistics, National Vital Statistics System, Mortality.





Figure 1. Age-adjusted death rates, by urban-rural classification: United States, 1999–2019



<sup>1</sup>Significant decreasing trend from 1999 through 2010; stable trend from 2010 through 2019 ( $p < 0.05$ ).

<sup>2</sup>Significant decreasing trend from 1999 through 2019, with different rates of change over time ( $p < 0.05$ ).

NOTES: Urbanicity of county of residence is based on the 2013 NCHS Urban-Rural Classification Scheme for Counties; see Data source and methods. Access data table for Figure 1 at: <https://www.cdc.gov/nchs/data/databriefs/db417-tables.pdf#1>.

SOURCE: National Center for Health Statistics, National Vital Statistics System, Mortality.

## Rural Communities at Risk

Widening Health Disparities Present New Challenges in Aftermath of Pandemic



138

Rural hospital closures  
over the course of the  
last 11 years

453

Facilities  
vulnerable  
to closure

[www.chartis.com](http://www.chartis.com)



# Rural Health Education Tracks

## KHOP & RHOP



Kearney Health Opportunity Program (KHOP)



Rural Health Opportunity Program (RHOP)





## Mission

- To **address the special needs of rural Nebraska** by encouraging rural residents to pursue a career in the health care fields.



## Program Overview



Must be from **rural Nebraska** and have a **desire to return** to practice medicine there.



Receive a **full tuition scholarship** for coursework.



Follow a **special curriculum** and participate in **professional development activities** that will prepare them for UNMC.



Receive **admission to their specified healthcare program** at UNMC upon satisfactory completion of all requirements.



## Programs Available

- Dentistry
- Dental Hygiene
- Medical Laboratory Science
- Medicine
- Nursing
- Occupational Therapy
- Pharmacy
- Radiography
- Physical Therapy
- Physician Assistant



## Advantages



Financial assistance to cover the cost of tuition.



Admission into UNMC upon completion of their program.



Academic support, such as tutoring, mentoring, and access to learning resources.



Opportunities to connect with other students and professionals in the healthcare field.



Gain valuable experience working in a rural healthcare setting.



# UNMC College of Medicine Tracks



## Advanced Family Medicine Training Program

A four-year program that requires a one year "rural procedures" fellowship and a commitment to practice in rural Nebraska.

## Primary Care Program

Offers students the opportunity to either specialize in Family Medicine or Internal Medicine at the conclusion of the PGY-1 Primary Care Internship year.

## Benefits

- M4 year includes tuition waiver and stipend.
- Guaranteed match at UNMC.



# Personal Journey



## Diller, Nebraska



Diller  
Population: 260

## Diller-Odell High School



UNIVERSITY OF NEBRASKA **UNK** KEARNEY

Diller  
Population: 260



Kearney  
Population: 34,000



Omaha  
Population: 500,000





# Innovations & Future Directions



# Innovations & Future Directions







UNIVERSITY OF  
**Nebraska**  
Medical Center





**Pamela J. Boyers, PhD**

**Associate Vice Chancellor for Clinical Simulation;  
Assistant Professor, Surgery UNMC  
pamela.boyers@unmc.edu; 402-559-2444**

Dr. Pamela Boyers' professional interest is to ensure that health care professionals (at all levels of training) are highly prepared to provide the safest possible patient care. This interest includes paying close attention to the well-being of health care professionals – and how they learn to work efficiently and effectively in health care teams.

Concerned with the escalating number of avoidable deaths due to medical error, Dr. Boyers focus is upon transforming the education of health care professionals through the adoption of modeling and simulation. She has provided national and global leadership in the concept of creating interprofessional simulation centers. This includes the design, staffing and operations of these centers as well as studying the return on investment. Her professional goals are to advance interprofessional collaboration and see health care move toward a competency-based model of training.

Having served in medical education leadership positions at the University of North Carolina, The Ohio State University, OhioHealth and the University of Toledo, Dr. Boyers is currently leading efforts at UNMC to *"improve human performance and effectiveness in health care."* This involves creating the Davis Global Center in Omaha – this five-level facility houses an interprofessional simulation center that incorporates a replicated health care system – from home to hospital and back - where the transfer of patients and "hand-offs" can be practiced. The Davis Global Center also houses multiple modeling and simulation modalities including XReality (including holographic) technologies, thereby embracing modeling, simulation and visualization to stimulate new methods of teaching, learning and conducting research and development.

A lifelong medical educator with significant experience in designing and operating medical simulation centers, Dr. Boyers is well-published and speaks nationally and internationally about transforming the education of healthcare professionals. She enjoys collaborating with other high reliability organizations, including the military, to help identify best training practices related to improving quality, safety and lowering costs.

Dr. Boyers previously served for many years as one of the public members for the American Board of Medical Specialties (ABMS) and is an active member of the National Training Simulation Association (NTSA): Patient Safety Workgroup.



**Sunil Hingorani, MD, PhD**

**Nancy Armitage Pancreas Cancer Presidential Chair  
Director, Pancreatic Cancer Center of Excellence  
Professor, Division of Oncology & Hematology**

Sunil Hingorani, MD, PhD, a highly accomplished and internationally recognized pancreas cancer researcher and clinician. He is the inaugural recipient of the Nancy Armitage Pancreas Cancer Clinical Research Presidential Chair and the first director of the Pancreatic Cancer Center of Excellence at UNMC and Nebraska Medicine.

At UNMC, Dr. Hingorani conducts and oversees a comprehensive translational research program, while also leading development of a real-time, multi-disciplinary clinic for pancreas cancer patients at Nebraska Medicine.

Dr. Hingorani's research success is well-documented. He helped develop the first mouse models to accurately mimic human pancreas cancer from its precancerous inception to its advanced stages. Dr. Hingorani has used these models to identify genetic events, signaling pathways and collaborating cell types that contribute to the aggressiveness of ductal adenocarcinoma, the most common and deadly form of pancreas cancer. Dr. Hingorani has made multiple breakthroughs in his lab that have informed the course of his latest phase of research, as well as that of others, and his lab is testing these ideas in a novel Murine Clinical Trials Program to identify those strategies most likely to succeed in patients.



## ***Pancreatic Cancer Center of Excellence (PCCE)***

**Nebraska University Board of Regents Meeting  
05 October 2023  
Omaha, NE**

**Sunil R. Hingorani, MD, PhD**  
University of Nebraska Medical Center Nebraska Medicine  
Fred & Pamela Buffett Cancer Center  
Omaha, NE



**University of Nebraska  
Medical Center**

## ***Pancreatic Cancer Center of Excellence (PCCE)***

- Unprecedented public – private partnership initiated by “challenge” funds from Nebraska State Legislature and met by UNM / NM / NF and community business leaders and philanthropists
- Publicly stated mandate is to cure pancreatic cancer
- To achieve this goal we will:
  - Create new operating structures and models for delivery of care
  - Create new modes of interactions between basic scientists and clinicians
  - Elevate standard for preclinical data to advance a strategy into the clinic
  - Continue and expand upon the notable strengths in RAP and Early Detection (PCDC)



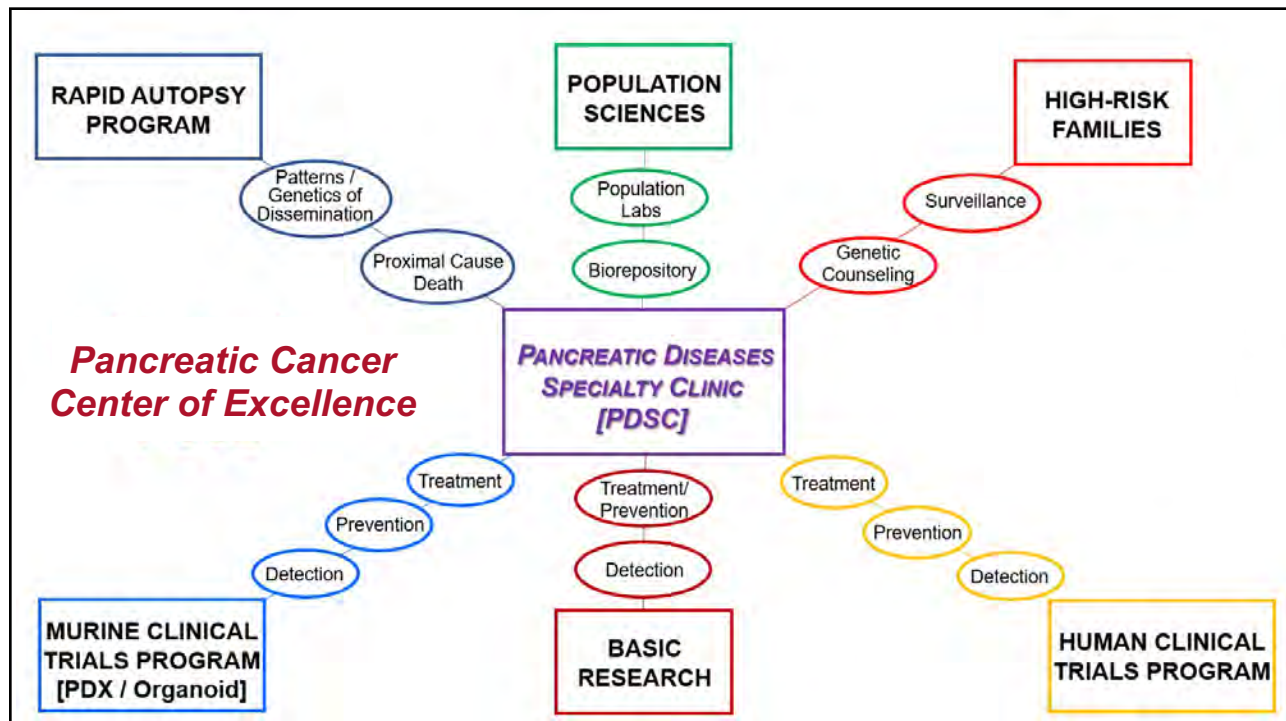
## ***Pancreatic Cancer Center of Excellence (PCCE)***

### **MISSION STATEMENT**

To transform the “state of the art” for pancreas cancer care by making molecular diagnoses of pancreas cancer subtypes at the earliest possible stages and treating with patient-specific therapies.

### ***PCCE: Year 1***

1. Redesigned and deployed new model of care delivery – the Pancreatic Diseases Specialty Clinic (PDSC) – emphasizing real-time, multidisciplinary thinking into management plan AND a “1-stop shopping” experience for the patients and their families (and which also serves as a powerful teaching tool for the disease for students, residents and fellows)
2. Held our first annual PCCE Retreat in January 2023 – and all-day affair off-campus to discuss the overarching mission and distinct components of the effort with lots of discussion and input
3. Applied to and accepted into Precision Promise National Trials Consortium
4. Awarded dual Center of Excellence status by National Pancreas Foundation (NPF) for *both* Basic Science Discovery and Clinical Care
5. Selected as a “Scout” or “Incubator” site by the Canopy Collective (dedicated to expanding and teaching the multidisciplinary care model to other centers across the country)
6. Launched a new translational research conference – 20 / 20 / 20 Ideas Into Action – dedicated to advancing “ready-for-translation” ideas into the clinic
7. Transferred and reconstructing the Murine Clinical Trials Program (MCTP) which serves as the preclinical engine for Precision Promise



## Child Health Research Institute Executive Director



**Ann Anderson Berry, MD, PhD**  
**alanders@unmc.edu; 402-559-6750**

Ann Anderson Berry, MD, PhD, is division chief of neonatology at Children's Hospital & Medical Center and executive director at the Child Health Research Institute. At UNMC, she is the department of pediatrics vice chair of research and the Dr. John and Patti Sparks Chair of Pediatric Research. She also is the vice president of research at Children's Hospital & Medical Center.

Dr. Anderson Berry earned her medical degree at Creighton University School of Medicine. She completed her residency in pediatrics at the UNMC/Creighton Residency Program and her neonatology fellowship at University of Utah School of Medicine in Salt Lake City, Utah. Dr. Anderson Berry received her PhD in medical nutrition through the Medical Sciences Interdepartmental Area program at UNMC. She leads an active research group with Corrine Hanson, PhD, associate professor, Medical Nutrition Education Division in UNMC's College of Allied Health Professions.

# The Child Health Research Institute (CHRI)

**Ann Anderson Berry MD, PhD**

Executive Director, CHRI

Professor, UNMC Department of Pediatrics



University of Nebraska  
Medical Center™

## The History of CHRI





# CHRI Structure



## CHILD HEALTH RESEARCH INSTITUTE AREAS OF EMPHASIS

GLOBAL HEALTH



GENETICS, DEVELOPMENT,  
EXPOSURES & INJURIES



PEDIATRIC CANCER



### VISION

Every child will have an equal opportunity for a healthy life.

### MISSION

To improve the health of children everywhere through innovative research, collaborative discovery, community engagement and advocacy.



LIFESPAN DISEASES



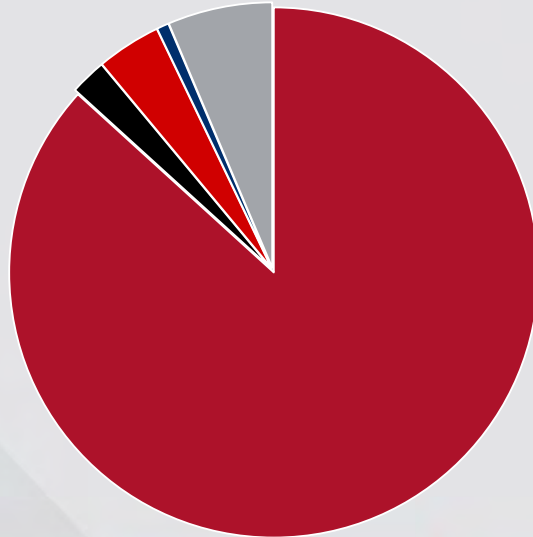
HEART DISEASES



HEALTH SERVICES, POLICY  
& POPULATION HEALTH

## CHRI Membership

- UNMC
- UNO
- UNL
- UNK
- Other



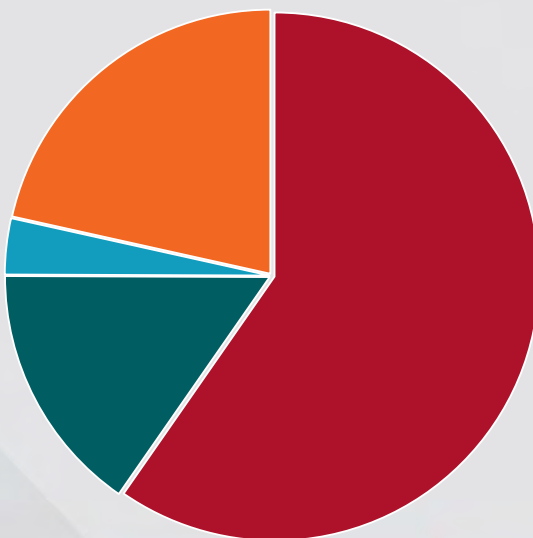
**409**

Members spanning  
all NU campuses



## CHRI Membership

- Full
- Associate
- Affiliate
- Trainee



**409**

Members spanning  
all roles

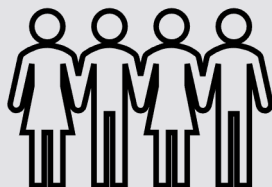


## CHRI Investigator Resources



**30**

Study Coordinators  
Database Staff



**1**

Biostatistician

**2**

Grants Budgeting  
Staff



**2**

Scientific Writers

## CHRI Funding Opportunities



**\$50,000**

Annual Pilot Grants  
(CHRI & PCRG)

**\$50,000**

Annual Health Equity Grant

**\$15,000**

Annual "Mini" Grants  
(Students eligible)

# CHRI Funding Opportunities



**\$150,000/yr**

CHRI Scholar Awards  
(3-year duration)

## CHRI Scholars



### *Former Scholar*



Gwenn Skar, MD

*\$960,000  
NIH K award*

### *Current Scholars*



Jeffrey Salomon, MD

*\$230,000  
AHA CDA*



Eric Peeples, MD, PhD

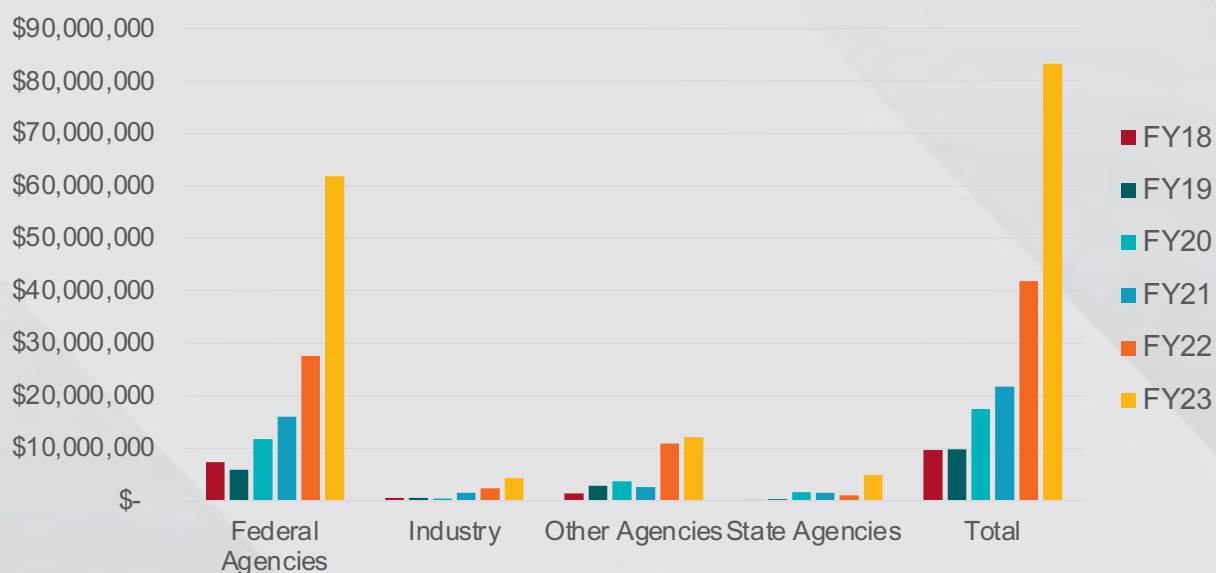
*\$7.9M  
NIH R01 (Co-I)*



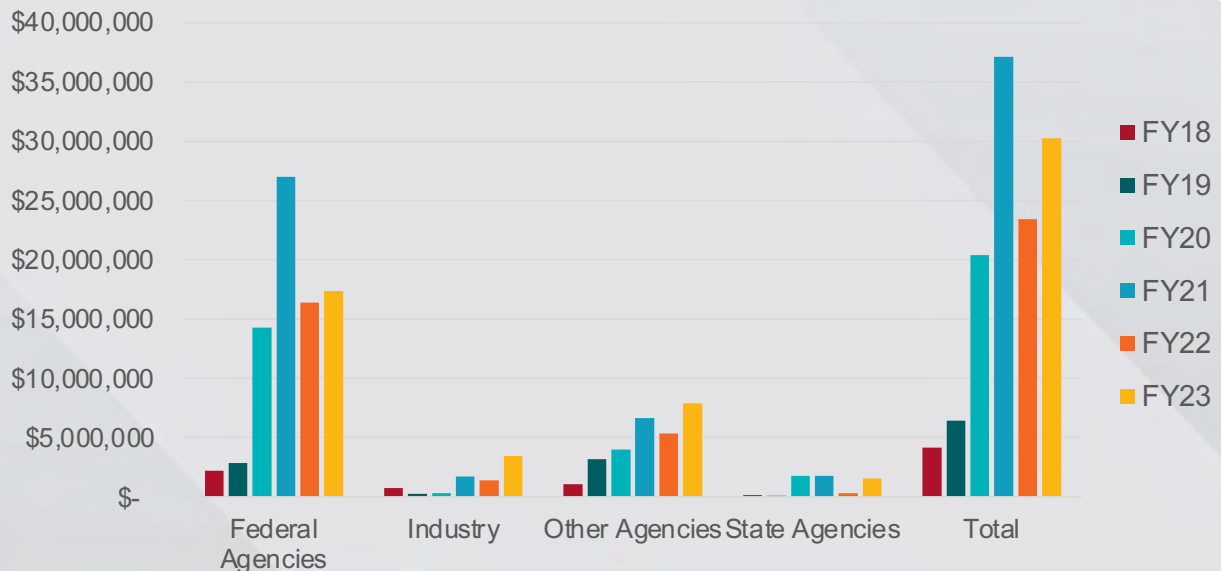


## CHRI Extramural Funding

## CHRI Extramural Applications



## CHRI Extramural Awards



## CHRI Philanthropic Funding

**\$300,000**

Supporting Pediatric  
Cancer Research, donated  
by Jakefest/Kiewit  
(over two years)

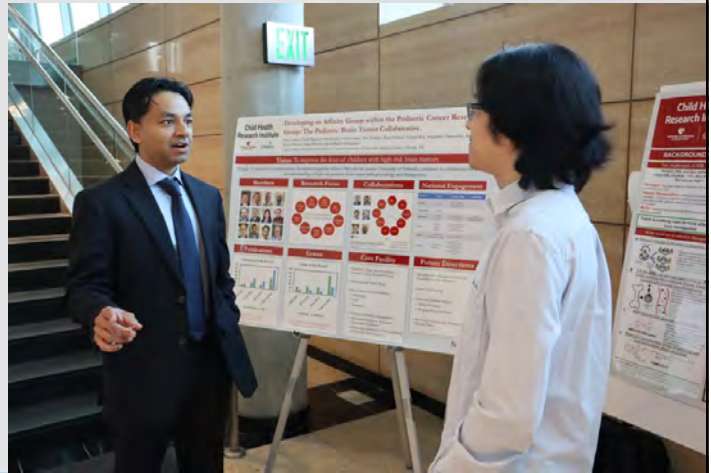


## CHRI Philanthropic Funding



# \$3.5 million

Supporting Pediatric Cancer  
Research, donated  
by Team Jack  
(since FY2018)



## CHRI State Funding



# \$4.5 million per year

in state appropriations for  
Pediatric Cancer Research

*+\$2.7M/year starting in  
FY23 biennium via LB814*



# Pediatric Cancer Research Group NIH Funding 2016-2023



# Annual CHRI Scientific Conference



**120**

Scientists from  
across the region



## Annual CHRI Events



- CHRI Pediatric Research Forum
  - Features 80-100 projects annually from trainees supported by faculty



## Annual CHRI Events



### Pediatric Cancer Research Symposium



# CHRI Community Engagement



Girls Inc,  
Completely Kids  
NorthStar



# CHRI Pipeline Development



**47**

Summer Undergraduate  
Research Students

**62%**

are NU Students

**50%**

of 2020 cohort are currently  
enrolled or working at UNMC



# CHRI Pipeline Development



Medical Student  
Summer  
Research Program



# CHRI Pipeline Development



- Faculty recruitment
  - Neo and ID faculty
  - Committed funds for faculty packages
- Crucial recruitment arm for faculty mentors for our pediatric investigators
  - Harris R01
  - Krishnan R01







## CHRI Impacts Nebraska Families







UNIVERSITY OF  
**Nebraska**  
Medical Center



ADDITIONAL RESOURCES TAB  
WILL BE INSERTED HERE

## Mission

### We are Nebraska Medicine and UNMC.

Our mission is to lead the world in transforming lives to create a healthy future for all individuals and communities through premier educational programs, innovative research and extraordinary patient care.

## Vision

### The partnership of UNMC and Nebraska Medicine will be a world-renowned health sciences center that:

- Delivers state-of-the-art health care
- Advances our historic commitment to community health
- Prepares the best-educated health professionals and scientists
- Embraces the richness of diversity to build unity
- Ranks among the leading research centers
- Creates economic growth in Nebraska

## Values

Our values reflect **who we are** and **why we're here**.

### ITEACH



### Innovation

Search for a better way. Seek and implement ideas and approaches that can change the way the world discovers, teaches and heals. Drive transformational change.



### Teamwork

Respect diversity and one another. Communicate effectively and listen well. Be approachable and courteous. There is no limit to what we can achieve when we work together.



### Excellence

Strive for the highest standards of safety and quality in all that you do. Work to achieve exceptional results.



### Accountability

Commit. Take ownership. Be resilient, transparent and honest. Always do the right thing and continuously learn.



### Courage

Make the tough decisions. Have no fear of failure in the pursuit of excellence. Admit mistakes and learn from them.



### Healing

Show the empathy you feel. Be selfless in caring for patients, one another and the community.

# UNMC 2024-2027 Strategic Plan

## Goal 1.0

### Educational Learner Focus

*Establish UNMC and its educational programs as the most learner-centered university in health professions, biomedical and interprofessional education.*

#### Strategy 1.1

**Globally lead health care education by providing an innovative, competency-based, and individualized curriculum.** Globally lead health care education by providing an innovative, competency-based, and individualized curriculum that meets the life-long learning needs of each UNMC learner.

#### Strategy 1.2

**Strengthen programs with K-12 schools, community, and state colleges.** Work with K-12 schools, community, state and other Nebraska colleges, and University of Nebraska campuses to engage students in Nebraska and beyond in health care careers and establish strong career pathway programs to build a highly motivated and inclusive health professions workforce.

#### Strategy 1.3

**Provide professional development for a faculty that expands UNMC current & future programs.** Actively recruit, educate, and employ those faculty needed to advance UNMC professional education, biomedical and health care research and public health. Provide continuing education programs that meet current and future workforce needs.

#### Strategy 1.4

**Continuously evolve resources for the Interprofessional Experiential Center for Enduring Learning (iEXCEL).** Work with college curriculum committees to expand undergraduate and graduate academic program integration with iEXCEL. Continually assess educational and outcomes for iEXCEL in experiential learning to meet the educational goals and learning styles of each UNMC learner. Accelerate commercialization opportunities that protect iEXCEL intellectual property and enhance iEXCEL business development with the public and private sectors.

#### Strategy 1.5

**Prepare UNMC health profession learners to be lifelong learners and leaders.** Prepare all UNMC health profession learners to assume leadership roles in patient safety, prevention of medical errors, health care redesign, and the use of advanced technology including artificial intelligence and advanced simulation that improve health outcomes locally and globally.

#### Strategy 1.6

**Assure UNMC Digital Campus technology and support is continually advanced for all academic units at UNMC.** Provide active and adaptive learning of trainees, increase educational outreach to community and statewide Nebraska colleges to reduce technology related barriers, and evaluate the impact of emerging technologies (such as AI & ChatGPT) on the learning environment.

#### Strategy 1.7

**Establish additional training pathways for all UNMC colleges and institutes.** Develop and implement new degrees, stackable certificates and non-credit programs offering a solid foundation of experiential learning. Pathways include clinical and research aspects of global health security, advanced cancer screening, novel drug discovery, and improved outcomes of health care.



### Strategy 1.8

**Accelerate strategic & sustainable growth of graduate medical education programs.** Work with all clinical partners to develop strategic and sustainable growth of graduate medical education (GME) programs to assure the quality of future clinical programs, as well as faculty to meet regional health care needs. Effectively utilize the supplemental Federal CMS resources to expand and strengthen rural and urban GME programs.

### Strategy 1.9

**Mature the Center for Community-based Education and Preceptor Excellence.** Mature the administrative and technology structures to ensure excellence in preceptor and community-based learning experiences to ensure access to the current and future needs for high quality clinical learning experiences for students and community/clinical partners throughout the State of Nebraska and beyond.

## Goal 2.0

### Research Scope & Prominence

*Increase the research scope, prominence, and impact of UNMC as a top tier academic health sciences center.*

### Strategy 2.1

**Assure high impact research collaboration for UNMC with our academic and clinical partners.** Strengthen research collaboration between UNMC and with our academic and clinical partners in clinical trials, industry collaboration, population health, outcomes research and formation of clinical/translational science partnerships locally and globally.

### Strategy 2.2

**Grow UNMC university-wide biomedical informatics research.** Enhance UNMC university-wide biomedical informatics infrastructure to further develop biomedical, public health, clinical and translational research, to leverage deep-learning, machine-learning and augmented intelligence.

### Strategy 2.3

**Increase extramurally funded, sustainable, high impact research programs in current and emerging areas of research excellence.** Build upon existing strengths and enhance existing collaboration through new partnerships both internal and external to UNMC.

### Strategy 2.4

**Expand educational research in the science of teaching and learning.** Expand research in the science of teaching and learning, including educational pedagogy, curricular design, and delivery, as well as interprofessional experiential learning to determine those factors that improve individual educational, intercultural, and well-being outcomes.

### Strategy 2.5

**Strengthen and implement initiatives in cancer prevention and population health.** Define and implement the community specific statewide research, educational and outreach initiatives in cancer prevention and population health that will result in increased community prevention, early diagnosis, consistent with NCI Comprehensive Center designation requirements for the Fred and Pamela Buffett Cancer Center.

### Strategy 2.6

#### **Globally lead the in human performance research in advanced simulation environments.**

Globally lead the in human performance research in AI as well as in AR/VR and advanced simulation environments, including innovative basic, clinical, and transformational research strategies to assess human-factors performance to assure high-quality, high reliability health care.

### Strategy 2.7

#### **Utilize the UNMC Rural Health Center to assess and enhance rural Nebraska health care.**

Assess and enhance health care delivery in rural Nebraska. Utilize the UNMC Rural Health Center to assess rural Nebraska health care outcomes and workforce needs, coordinate pathway programs for new students, and promote and enhance the quality and stability of rural health workforce.

### Strategy 2.8

**Extend access to clinical trials including in rural and urban underserved communities.** Engage in partnerships that can conduct clinical trials across the state with local and regional health facilities to provide clinical trials of importance to Nebraskans.

### Strategy 2.9

#### **Grow our relationship with the University Institutes to provide more opportunities for research.**

Expand research collaboration and infrastructure support for our University Institutes (Buffett Early Childhood Institute, Daugherty Water for Food Institute, National Strategic Research Institute) partners leveraging the relationships and contracting capabilities of UNMC philanthropic and Federal entities.

## Goal 3.0

## Clinical Excellence

*Establish UNMC and our clinical partners as an academic health system that provides the highest-quality care, recognized for outstanding patient outcomes, and compassionate, patient-centered care.*

### Strategy 3.1

#### **Build relationships with our clinical partners to improve patient health outcomes by implementing new care models.**

Strengthen existing relationships with clinical partners to reduce health care disparities, improve patient health, and health care access and delivery to all Nebraskans.

### Strategy 3.2

**Utilize interprofessional practice to provide optimal patient care environments.** Collaborate across the disciplines to ensure an interprofessional practice model across all UNMC Colleges, Institutes and programs in conjunction with our clinical partners to provide optimal learning and patient care in all clinical care settings.

### Strategy 3.3

#### **Achieve top decile performance in all quality clinical outcomes and patient experience.**

Achieve top decile or higher performance in high reliability benchmarked outcomes for clinical quality, patient safety and patient experience across the clinical enterprises of our clinical partners. Use high fidelity simulation, virtual reality and artificial intelligence learning to sustain the top decile performance.

### Strategy 3.4

**Assure timely access to UNMC clinical care services.** Assure patient-centered and timely access to inpatient and outpatient clinical care services while simultaneously assuring proficiency with enhancing the experiential factors of advanced technologies for patients, families, and health care professionals.

### Strategy 3.5

**Improve virtual telehealth patient outreach through use of AI, wearable & mobile devices.**

Expand UNMC virtual telehealth and telemonitoring medical and behavioral programs including use of augmented intelligence systems and mobile/wearable devices to assist UNMC providers and other clinical partners improve patient outreach and clinical care.

### Strategy 3.6

**Mature planning and implementation of the Phase I of Nebraska Medicine Project NExT.**

Enhance the key program and facility planning of the Nebraska Medicine first phase of Project NExT assuring clinical partnerships related to the clinical, research and educational programs that are mission critical for UNMC. Mature the fiscal planning and partnership support structures for Project NExT Phase I.

### Strategy 3.7

**Utilize the Rural Health Center to align UNMC with state-wide partners.** Utilize the Rural Health Center to align the clinical strategies and planning for UNMC and its colleges with state-wide educational and clinical partners to identify new models of health care delivery through assessment of population health, health access disparities, social determinants of health and health literacy. To include necessary changes to state-wide health policy that improve the health of all Nebraskans and reduce health care costs.

### Strategy 3.8

**Utilize evidence-based, personalized precision medicine to enhance clinical outcomes.**

Develop and utilize evidence-based, personalized precision medical protocols and practices that assure the UNMC patients and clinical partners have direct and quality contact time with health care providers. Monitor the outcomes and continually improve the evidence-based standards of practice.

## Goal 4.0

## Community Engagement

*Provide a healthier future for all Nebraska communities through increased community engagement.*

### Strategy 4.1

**Develop & expand public-private partnerships with state departments and agencies.** Work closely with the Office of the President and sister campuses to create and expand public-private partnerships with state departments and agencies to promote statewide population health assessments and increase Nebraskans engagement in healthy activities with the goal of improving health equity, reducing disparities related to access to care to and make Nebraska the healthiest state in the Union.

### Strategy 4.2

**Work with public & private partners to diversify & strengthen the Nebraska economy.**

Continually work with the Office of the President and our sister campuses as well as other public and private organizations to diversify and strengthen the Nebraska economy. Partner with a wide

spectrum of health care organizations to provide incentives, including tuition debt reimbursement of health care professionals who seek employment in underserved urban and rural Nebraska communities and serve as preceptors of health profession students and residents.

#### **Strategy 4.3**

**Strengthen UNMCs federal and state and local involvement in support of academic health care.** Strengthen UNMCs federal and state legislative involvement and advocacy in supporting health care, health professions education, biomedical research, and population-based care delivery, facilities, policy, and planning in partnership with the Office of the President.

#### **Strategy 4.4**

**Strengthen the Global Center for Health Security impact in research, practice, and education.** Strengthen UNMCs national and global leadership in High Reliability Health Security and Biocontainment research and education/training programs of the Global Center for Health Security. Continue to build and strengthen federal, state, and local collaborations.

#### **Strategy 4.5**

**Promote UNMC as the multimedia information resource for rural, national, and global health.** Promote UNMC as the data rich digital health multimedia resource for rural, national, and global health issues. Strengthen UNMCs communication and engagement with urban and rural Nebraskans to make them aware of health and wellness resources and educational opportunities.

#### **Strategy 4.6**

**Strengthen state-wide programs to reduce rural and urban health care disparities.** Strengthen state-wide planning and ensure programs that support urban and rural communities, community and state colleges, as well as our clinical partners to continually improve health care access and quality across Nebraska.

### **Goal 5.0**

## **Inclusion, Diversity & Belonging**

*Ensure that UNMC is an exemplary culturally sensitive and inclusive organization in its mission of transforming lives through preeminent education, innovative research, and extraordinary care.*

#### **Strategy 5.1**

**Strengthen UNMC culture to enhance the recruitment, engagement, and mentorship of faculty, students, and staff.** Increase retention, recruitment, engagement and mentorship of all faculty, students, and staff by enhancing best practices of engagement across all UNMC and Nebraska Medicine programs and sites.

#### **Strategy 5.2**

**Develop, and partner with communities to promote enhancement of cultural understanding with those we serve.** Enrich the environment of engagement and collaboration in communities served through programs that promote a culture of inclusion based upon the authentic identities of students, residents, staff, faculty and the communities we serve.

#### **Strategy 5.3**

**Continually evaluate outcomes of Inclusion, Diversity, and Equity (IDE) initiatives.** Continue to evaluate ongoing and new opportunities of IDE structures at UNMC at the unit and campus level. Review health professions curricula and accreditation standards to assure IDE content is effectively addressed.



#### Strategy 5.4

**Assure that all students, faculty, and staff are welcome to model their authentic identity.**

Assure that all students, faculty, and staff may own and model their authentic identity in a welcoming, collaborative, and inclusive culture at UNMC. Exemplify the recruitment and retention of an engaged university health care workforce.

#### Strategy 5.5

**Mentor local and on-campus champions to lead programs that promote inclusion, diversity, and belonging.**

Develop additional programs that help eliminate unconscious/implicit bias to distinguish UNMC as an inclusive and diverse organization. Develop and mentor local champions to lead programs that sustain exemplary inclusion in the learning and working environments.

### Goal 6.0

## Economic Development

*Diversify and strengthen the regional and global economic impact of UNMC's educational, research and clinical programs.*

#### Strategy 6.1

**Increase intellectual property development, protection and commercialization of UNMC research.**

Increase the number of new inventions and foster novel intellectual property development programs to ensure that new discoveries can be developed into products that have a positive impact on health and health care.

#### Strategy 6.2

**Utilize UNeTech Institute/public-private partnerships to strengthen faculty collaboration.**

Expand mutually beneficial and sustainable technology development programs that utilize the UNeTech Institute and public-private partnerships in collaboration with faculty, students, UNeMed, iEXCEL, University of Nebraska campuses, the business community, military, and others.

#### Strategy 6.3

**Identify new capital sources to support our mission to increase regional economic vitality.**

Work with community partners to identify early, middle, and late-stage venture capital opportunities to support our technology transfer and commercialization efforts to enhance the quality of life for students, faculty, staff, patients, and visitors, and increase the economic vitality of Nebraska.

#### Strategy 6.4

**Develop partnerships with advanced technology companies and multi-media organizations.**

Develop new and sustainable partnerships with advanced technology and multi-media public and private organizations to develop new products that improve the efficiency of clinical care delivery.

#### Strategy 6.5

**Grow and sustain expanded research facilities and services.** Grow and sustain research facilities and services to support university-wide researchers and promote external business collaborations in biomedical science education and research that leverage machine learning in research and clinical care.

#### Strategy 6.6

**Diversify UNMC revenues by commercializing market ready technology and services.** Expand public-private partnerships, UNMC commercialization structures and other business relationships to enhance UNMC revenues by commercializing marketable technology, services, and resources. Embrace opportunities created in partnership with the Catalyst-Innovation Hub facility.

## Goal 7.0

# Organizational Culture

*Strengthen faculty, student and employee loyalty, satisfaction, and wellness by enhancing organizational programs and culture.*

### Strategy 7.1

**Make UNMC “THE” preferred working and learning environment.** Make UNMC “THE” preferred working and learning environment by implementing programs of belonging, personal growth, career enhancement and leadership development to strengthen employee loyalty, engagement, and satisfaction. Enhance the UNMC climate by promoting high quality faculty/student advising relationships and supervisor/employee interactions. Use data from Climate Surveys, Engagement Surveys, and other sources to develop programs and track outcomes over time.

### Strategy 7.2

**Enhance and coordinate customer friendly services delivered by UNMC.** Enhance and coordinate customer friendly services delivered by UNMC, clinical and campus partners for our faculty, staff, students, alumni, patients, and community partners. This includes the implementation of the full benefit of the NU System Culture Surveys, Information Management Governance Council and other initiatives.

### Strategy 7.3

**Implement forward thinking professional development programs for faculty and staff.** Implement professional development programs for faculty and staff by focusing on nontraditional “Design Thinking” and “Extraordinary Thinking.” Utilize Design Thinking to evaluate and transform education, research, campus operations, and clinical programs processes and outcomes of all UNMC colleges and institutes.

### Strategy 7.4

**Utilize broad, global, and innovative communication strategies.** Utilize broad, global, and innovative communication strategies, including social media Utilize traditional and innovative communication strategies that address the needs of all UNMC constituents.

### Strategy 7.5

**Reduce individual and organizational risks of UNMC and our business partners.** Reduce individual and organizational risks of UNMC and our clinical and business partners by enhancing employee knowledge and accountability of high-reliability processes, procedures, and systems and through establishing a culture of accountability and excellence. Achieve this by using the annual UNMC Risk Assessment and Risk Mitigation Strategies process as examples of means to achieve this outcome.

### Strategy 7.6

**Make UNMC the healthiest campus in the US to be a student, staff, or faculty member.** Enhance personal and professional wellness through reduction of issues that create burnout in our faculty, students, residents, and staff. Improve work-life integration by considering the needs and roles and responsibilities of employees in determining and offering flexible work site arrangements.

### Strategy 7.7

**Establish the “Culture of One” for UNMC and our clinical partners.** Establish the “Culture of One”, one message for UNMC and key clinical partners as accountable high-reliability organizations that focus on the quadruple aim and strive to eliminate all preventable harm.

## Strategy 7.8

### **Celebrate & reward staff, students and faculty who exemplify the iTEACH values.**

Acknowledge, celebrate, and reward staff and faculty who exemplify the iTEACH values in the delivery of education, research, and clinical care. Build the iTEACH values into our educational, career development and assessment structures.

## Goal 8.0

### **Organizational Leadership**

*Ensure exemplary campus-wide organizational leadership and management for planning, program development and implementation of all the UNMC mission-driven strategic goals and initiatives.*

## Strategy 8.1

### **Enhance UNMC professional development programs to strengthen leadership performance.**

Continually enhance UNMC leadership development programs that increase the effectiveness and diversity of current and future leadership teams and strengthen the performance of current and new faculty and staff leaders in the arenas of educational, administration, mentorship, fiscal, operational, safety, compliance, and management.

## Strategy 8.2

### **Strengthen strategic planning & operations of all UNMC academic & business units.**

Strengthen the continuous strategic planning and operations of all UNMC academic and business units by utilizing well-defined institutional goals, strategies, metrics, and a utilization of timely dashboard outcomes reports from all academic and business unit plans.

## Strategy 8.3

### **Implement, enhance, and communicate stakeholder accountability for the UNMC Facilities**

**Master Plan.** Implement, continually enhance, and widely communicate broad stakeholder accountability for the UNMC Facilities Master Plan. These processes should include UNMC updates involving all key stakeholders. Base processes on rapidly evolving work models and workforce needs, continually assessing changes in UNMC space requirements and configurations for education, research, clinical and work environments.

## Strategy 8.4

**Identify and implement new opportunities for philanthropic support.** Jointly identify and implement new programs, facilities, processes, and outcomes for philanthropic support in partnership between UNMC and NU Foundation to enhance the coordination planning and implementation of the "Only in Nebraska" capital campaign.

## Strategy 8.5

**Strengthen stewardship of public and private resources across all missions of UNMC.** Work with the Office of the President to develop, strengthen and communicate broad-based sustainable strategies that enhance the stewardship of public and private resources across educational, research and clinical missions of UNMC.

## Strategy 8.6

**Engage in succession planning for key leadership roles across UNMC and our clinical partners.** Extend UNMC innovative leadership development, mentorship, coaching and other programs for emerging leaders. Formalize succession planning for key leadership positions.

### **Strategy 8.7**

#### **Widely extend innovative leadership development, mentorship and coaching opportunities.**

Widely extend UNMC innovative leadership development, mentorship, coaching and other programs for our faculty, staff, students, and other learners.

### **Strategy 8.8**

#### **Strengthen the use of the UNePlan & UNeVal Planning and Performance Evaluation software tools.**

Strengthen the use of the UNePlan strategic planning software and UNeVal Performance Evaluation software tools to provide a dynamic planning, self-assessment and leadership evaluation tool focused on career development and work-life integration and resiliency.





# Economic Impact of the University of Nebraska Medical Center

February 2022





# Mission

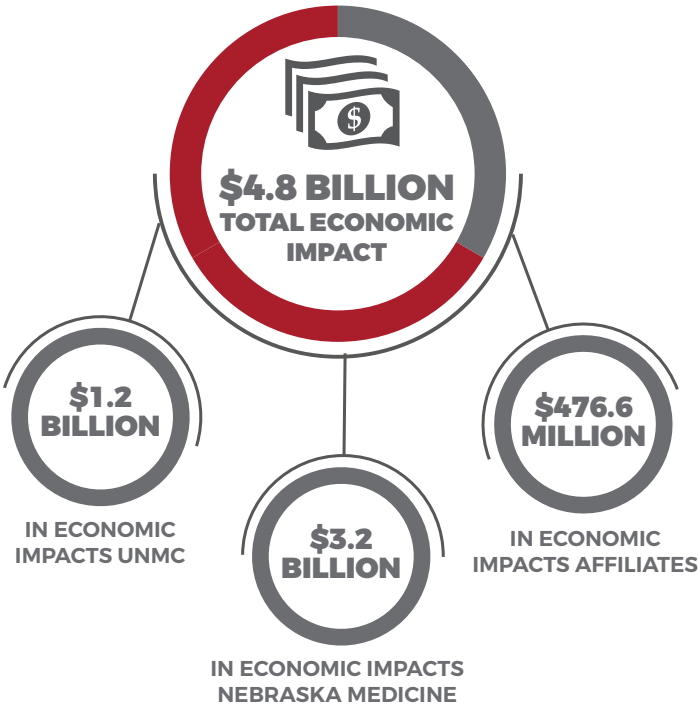
We are UNMC and Nebraska Medicine.

Our mission is to lead the world in transforming lives to create a healthy future for all individuals and communities through premier educational programs, innovative research and extraordinary patient care.

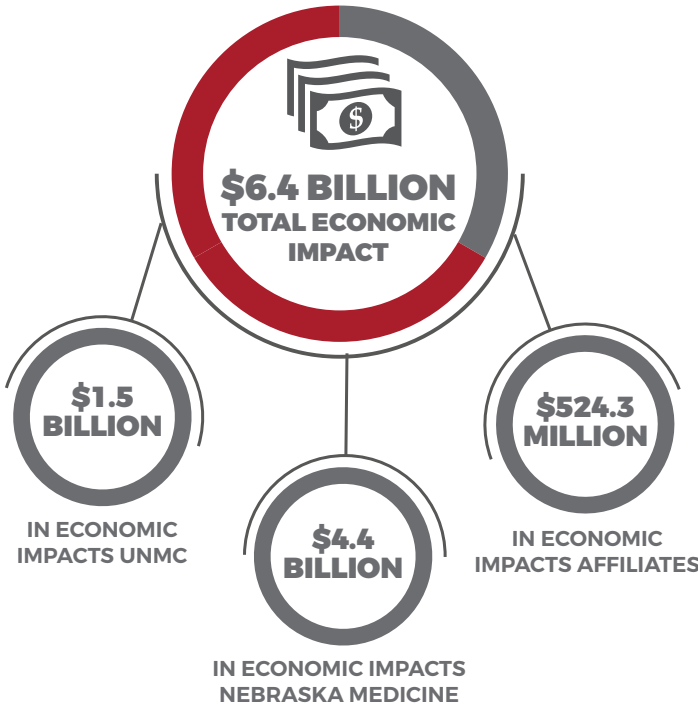


# Annual Economic Impact of the University of Nebraska Medical Center

2018



2021



• In 2021, \$36.76 in economic impact is generated in the Nebraska economy for every \$1 provided by the State of Nebraska's general fund appropriations for UNMC and Nebraska Medicine.





# The University of Nebraska Medical Center (UNMC)

Founded in 1869 and chartered as the state's first medical college in 1881, the University of Nebraska Medical Center (UNMC) became part of the University of Nebraska in 1902. UNMC trains more health professionals than any other institution in the state. Committed to providing exceptional education, UNMC is dedicated to training the future health care workforce to improve the health of Nebraskans and beyond through its premier educational programs, high-quality patient care, innovative research, and technology.

UNMC creates an environment of diversity, equity, and inclusion for all faculty, staff, and students. UNMC's goal is an inclusive campus environment where every individual feels welcomed, valued, and supported providing training and development opportunities to cultivate the skills needed to effectively engage, communicate, and collaborate with others across differences.

As a major economic engine for the state, UNMC embraces the richness of its diverse community. Nearly half of Nebraska's physicians, dental professionals, bachelor-prepared nurses, and allied health professionals have graduated from UNMC. Underscoring UNMC's commitment to its "five-hundred-mile campus" across Nebraska, the percentage of medical school graduates who practice in rural areas ranks fifth in the nation among all medical schools. UNMC creates an environment of diversity, equity, and inclusion for all our faculty, staff, and students where the campus environment ensures every individual is welcomed, valued, and supported. UNMC, an academic health science center, offers world-class health care. Highly trained and experienced faculty provide the latest research advancements.



# The University of Nebraska Medical Center (UNMC)

With its clinical partner, Nebraska Medicine, UNMC provides services in over 50 specialties and subspecialties, including cancer, neurosciences, heart disease, and others. UNMC's experts also provide dental care and services for physical and developmental disabilities.

UNMC is the home of cutting-edge research and clinical facilities, including the Fred & Pamela

Buffett Cancer Center, and has become a world leader in the global fight against Ebola in the areas of patient care and research.

UNMC has six colleges, two institutes, and a graduate studies program, serving more than 4,000 students in more than 60 programs.



# Economic Impacts

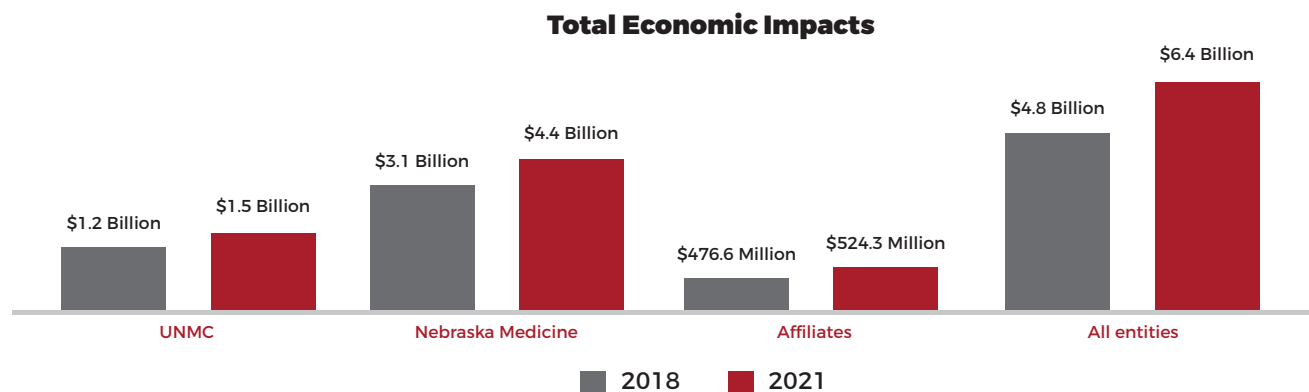
Instrumental to the state's economic success, UNMC, Nebraska Medicine, and their affiliates<sup>1</sup> are essential to the medical center's operations directly or indirectly impacting residents of Nebraska daily through clinical care services, operational spending, and research.

UNMC, Nebraska Medicine, and affiliates grow Nebraska business volume in two ways:

- Direct expenditures for goods and services by UNMC, employees, students, out-of-state patients, and visitors. This spending supports local businesses, which in turn employ local individuals to sell the goods and provide the services that UNMC/Nebraska Medicine and their affiliates need.
- Indirect spending within Nebraska. The businesses and individuals that receive direct payments from UNMC, Nebraska Medicine, and their affiliates re-spend this money within Nebraska, thus creating the need for more jobs.

The overall economic impact on the state from UNMC, Nebraska Medicine, and affiliates in Nebraska in FY21 totaled \$6.4 billion.

## Economic Impacts of UNMC, Nebraska Medicine, and Affiliates



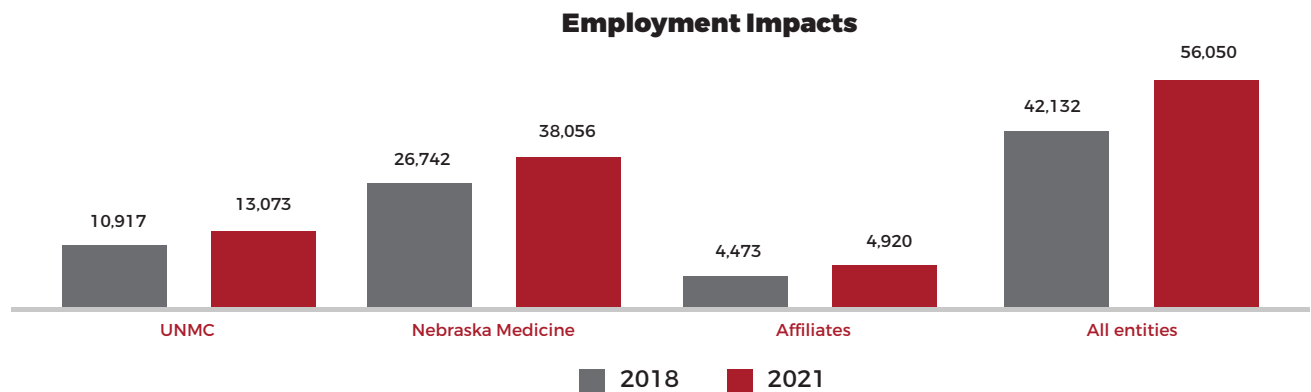
<sup>1</sup> Affiliates consist of Children's Hospital and Medical Center and the Omaha VA Medical Center.

# Workforce Impacts

UNMC in FY21 in conjunction with Nebraska Medicine and their affiliates supported 56,050 jobs in the Nebraska economy. These jobs included not only direct employment from UNMC, Nebraska Medicine, and affiliates but also indirect jobs created through the supply chain and equipment vendors, laborers for the construction, contractors, and renovation of facilities. Jobs were created at restaurants, hotels, and retail stores.

Other sectors of the economy impacted include health care (i.e., physician, hospitals, and dental offices); nursing and residential care facilities; real estate establishments; and non-residential commercial construction, restaurants, retail, and wholesale trade businesses. UNMC, Nebraska Medicine, and affiliates also support thousands of jobs statewide in many sectors of the Nebraska economy.

## Employment Impacts of UNMC, Nebraska Medicine, and Affiliates

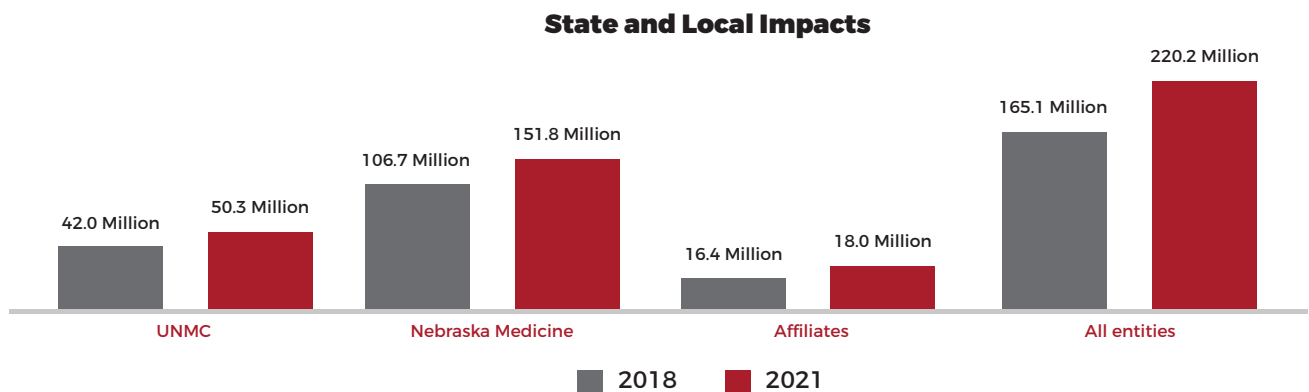




# State and Local Tax Impacts

In FY21 UNMC, Nebraska Medicine, and affiliates generated \$220.2 million in state and local tax revenue. Spending within the state from UNMC, Nebraska Medicine, and their affiliates generate government revenue in the form of sales tax, corporate net income tax, and other business taxes paid by the companies receiving revenue from UNMC, Nebraska Medicine, and their affiliates.

## State and Local Tax Impacts of UNMC, Nebraska Medicine, and Affiliates .....



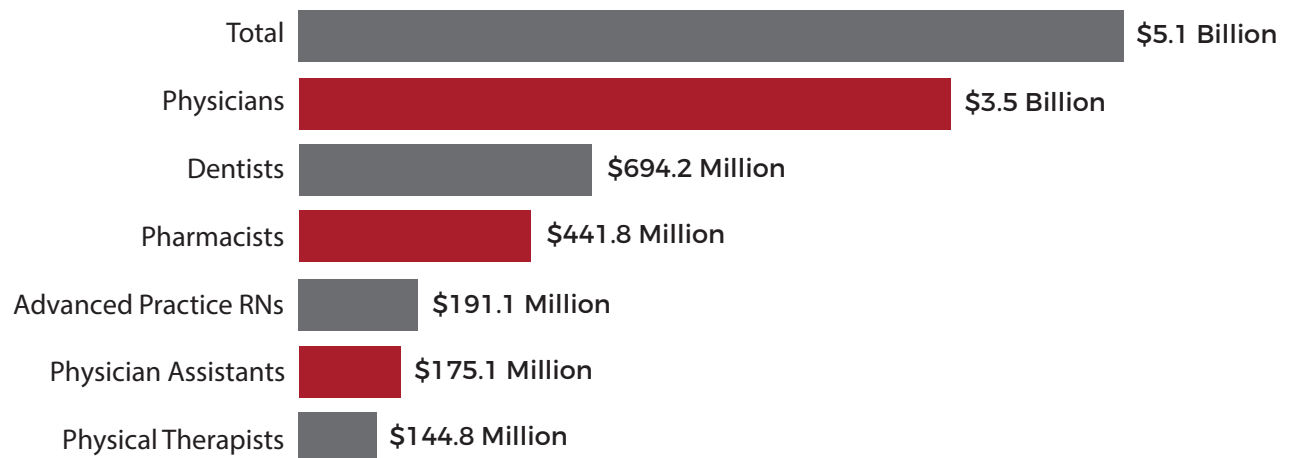


# Alumni Generate Additional Impacts

Practicing in rural and urban areas throughout the state, graduates meet the health care needs of Nebraskans and create an economic impact. UNMC graduates working throughout Nebraska generate an economic impact of \$5.1 billion.

## Economic Impact of UNMC Graduates Working in Nebraska .....

### Alumni Impacts



# Business Spin-off Impacts

The total economic impact from the 23 patents issued to researchers at UNMC in FY21 is estimated to boost the Nebraska economy annually by approximately \$200 million over the next 10 years. UNMC reported five startups in FY21:

1. Ensign Pharmaceutical Inc.
2. Shabri LLC
3. Precision Syringes LLC
4. Goldenrod Therapeutics
5. Advanced Nano Therapies Inc.

These companies are expected to generate an annual economic impact on the state of Nebraska of approximately \$50 million in five years based on national growth standards and create approximately 450 new jobs. All economic impact projections in this section are in addition to the \$1.5 billion operational impacts of the UNMC in FY21.



# Study Methodology

## About IMPLAN

Tripp Umbach estimated the economic impact of UNMC using IMPLAN (IMpactAnalysisforPLANing), an econometric modeling system developed by applied economists at the University of Minnesota and the U.S. Forest Service. The IMPLAN modeling system has been in use since 1979 and is currently used by more than 500 private consulting firms, university research centers, and government agencies. The IMPLAN modeling system combines the U.S. Bureau of Economic Analysis' Input-Output Benchmarks with other data to construct quantitative models of trade flow relationships between businesses and between businesses and final consumers. From this data, one can examine the effects of a change in one or several economic activities to predict its effect on a specific state, regional, or local economy (impact analysis). The IMPLAN input-output accounts capture all monetary market transactions for consumption in each time period. The IMPLAN input-output accounts are based on industry survey data collected periodically by the U.S. BEA and follow a balanced account format recommended by the United Nations.



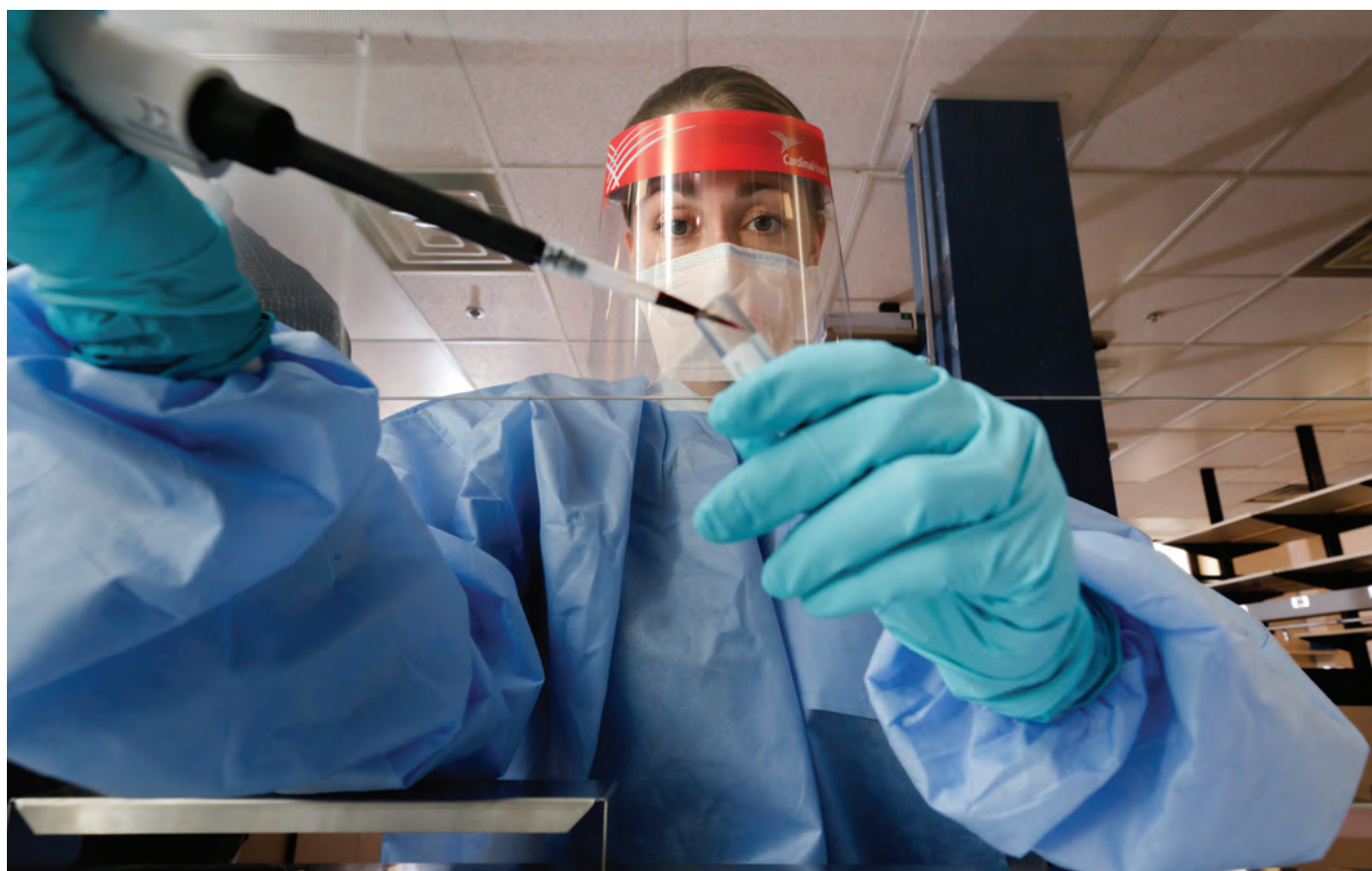
**Tripp  
Umbach**



# Study Methodology

IMPLAN's Regional Economic Accounts and the Social Accounting Matrices were used to construct state-level multipliers, which describe the response of the state economy to a change in demand or production because of the activities and expenditures of UNMC. Each industry that produces goods or services generates demand for other goods and services, and this demand is multiplied through a particular economy until it dissipates through "leakage" to economies outside the specified area. IMPLAN models discern and calculate leakage from local, regional, and state economic areas based on workforce configuration, the inputs required by specific types of businesses, and the availability of both inputs in the economic area. Consequently, economic impacts that accrue to other regions or states because of a change in demand are not counted as impacts within the economic area.

The model accounts for substitution and displacement effects by deflating industry-specific multipliers to levels well below those recommended by the U.S. Bureau of Economic Analysis. In addition, multipliers are applied only to personal disposable income to obtain a more realistic estimate of the multiplier effects from increased demand. Importantly, IMPLAN's Regional Economic Accounts exclude imports to an economic area, so the calculation of economic impacts identifies only those impacts specific to the economic impact area, in this case, the state of Nebraska. IMPLAN calculates this distinction by applying Regional Purchase Coefficients (RPC) to predict regional purchases based on an economic area's particular characteristics. The RPC represents the proportion of goods and services that will be purchased regionally under normal circumstances, based on the area's economic characteristics described in terms of actual trade flows within the area.







[www.unmc.edu](http://www.unmc.edu)



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