# Breakfast with the Dean North Dakota Medical Association October 4, 2024

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### Outline of This Morning's Presentation

- Overview of the UND School of Medicine and Health Sciences
  - Status and Recent Accomplishments
  - Financial Status and Upcoming Legislative Session
  - Transition of Leadership
  - Opportunities
  - Challenges



### Our Purpose as a School

"The primary purpose of the University of North Dakota School of Medicine and Health Sciences is to educate physicians and other health professionals and to enhance the quality of life in North Dakota. Other purposes include the discovery of knowledge that benefits the people of this state and enhances the quality of their lives."



Source: North Dakota Century Code

Section 15-52-01

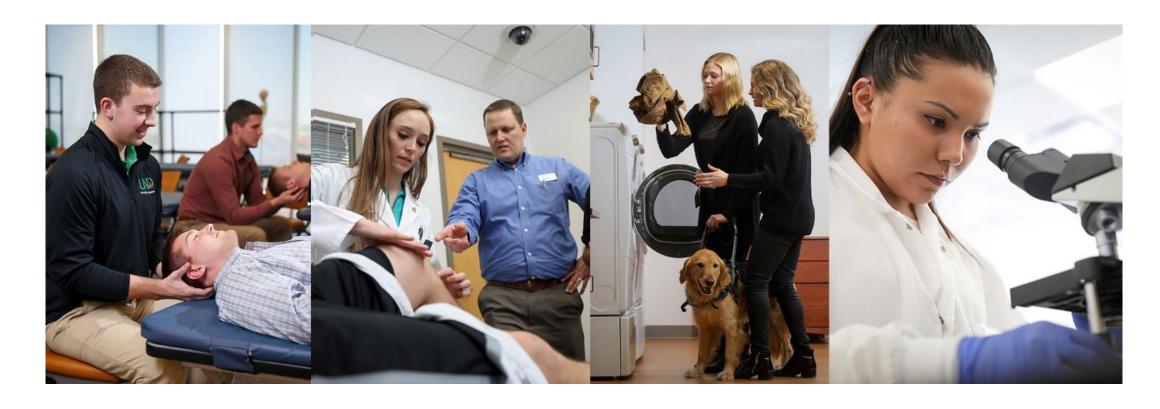
### Who We Are

- 172 full-time academic faculty
- Over 1,350 volunteer faculty members
  - → 2 out of 3 of all physicians in ND!
- 19 benefitted postdoctoral research fellows
- 188 medical residents and fellows
- 295 benefitted staff
- 1,308 students





### What We Do





### UND SMHS Offers a Wide Variety of Programs

#### **Medicine**

- Doctor of Medicine
- Post-MD residency programs in:
  - Family Medicine
    - Rural tracks
  - Internal Medicine
  - Medical Oncology
  - Neurology
  - Geriatrics
  - Surgery
    - Rural track
  - Orthopedic Surgery
  - Psychiatry
    - Telepsychiatry
  - Transitional Year
  - Pediatrics
  - Forensic Pathology

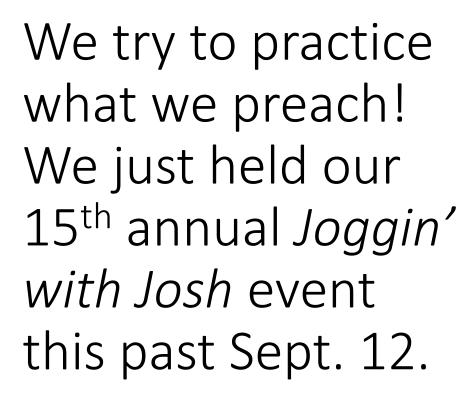
#### **Health Sciences/Related**

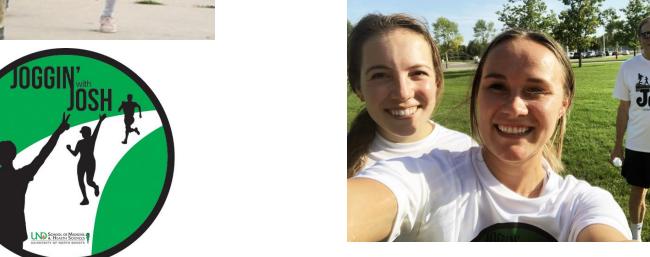
- Physical Therapy
- Occupational Therapy
- Medical Laboratory Science
- Master of Public Health
- Indigenous Health PhD
- Physician Assistant Studies
- Sports Medicine/Athletic Training
- Graduate programs (masters and PhD) in biomedical sciences
- Graduate programs (masters and PhD) in clinical and translational science











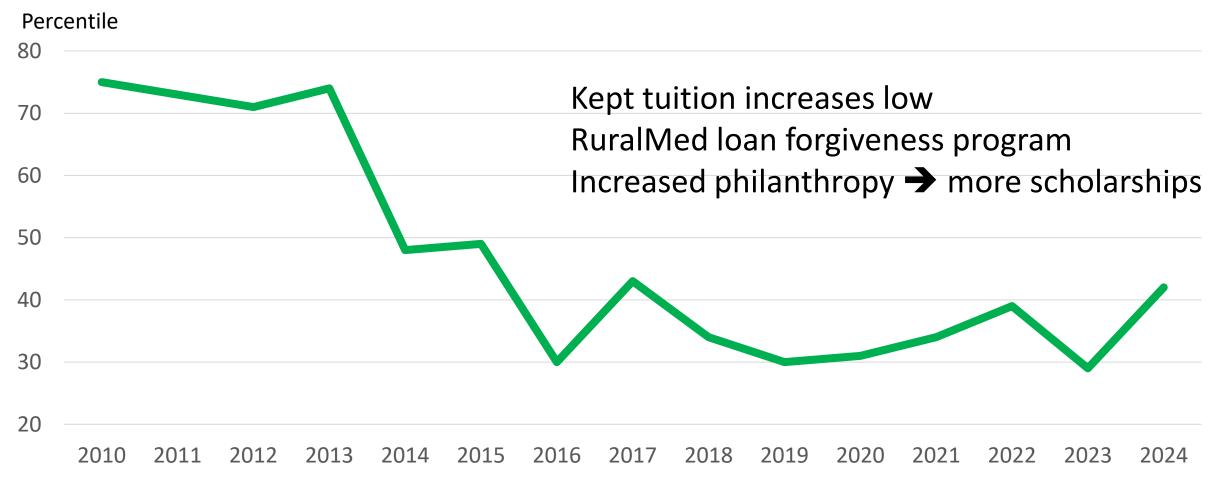


## Composition of Health Sciences and Other Student Classes (Fall 2023)

Program	Undergraduate	Masters	Doctoral	Total
Athletic Training		7		7
Biomedical Sciences		3	35	38
Clinical Translational Sciences		5	6	11
Indigenous Health			50	50
Medical Laboratory Science	255	49		304
Occupational Therapy	53		151	204
Physical Therapy	157		145	302
Physician Assistant Program		65		65
Public Health		46		46
Others	281			281
Total	746	175	387	1,308



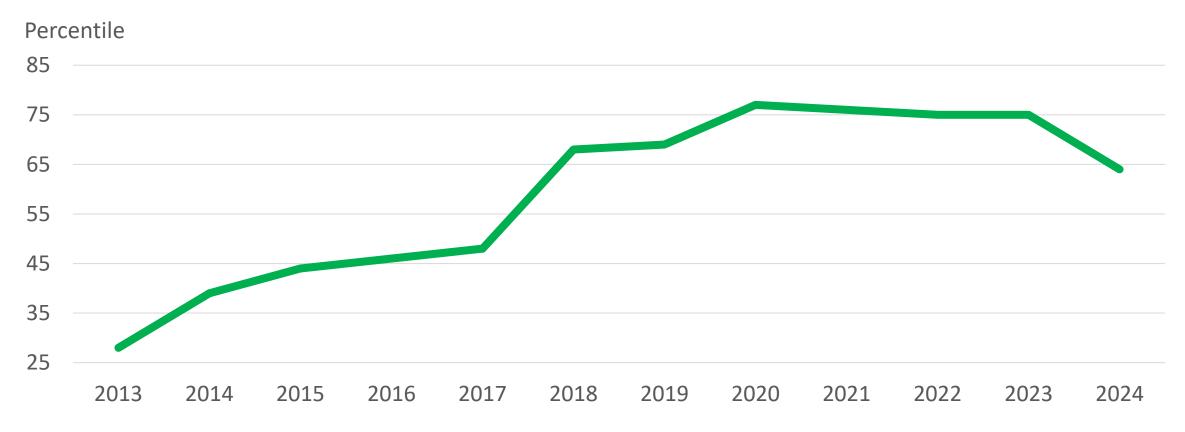
### UND SMHS Medical Student Debt



Source: Missions Management Tools 2010-2024, Association of American Medical Colleges



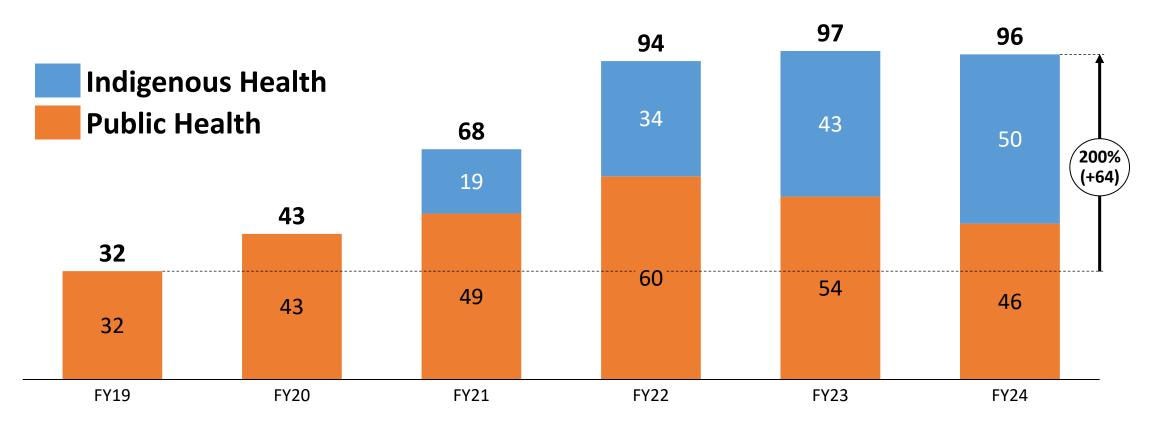
## Retention of UND SMHS Medical Student Graduates for Practice In-State



Source: Missions Management Tool 2013 – 2024, Association of American Medical Colleges



## Number of UND SMHS Public/Indigenous Health Students (Master and Doctoral Degrees)

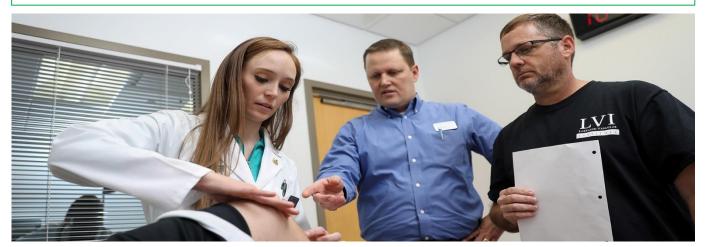


Source: UAP Enrollment Profile in Fall 2023, retrieved on 7/5/2024



### Value of the School to North Dakota

- Providing health care professionals
  - 79% of Family Medicine Physicians
  - 49% of Physicians
  - 44% of Physical Therapists
  - 49% of Occupational Therapists
  - 37% of Physician Assistants
  - 38% of Medical Laboratory Scientists





### **UND SMHS Outcomes**

Metric	Percentile Rank
Percent of graduates practicing in rural areas	99 <sup>th</sup>
Percent of graduates practicing primary care	98 <sup>th</sup>
Percent of graduates training in family medicine	93 <sup>rd</sup>
Percent of graduates who are American Indian or Alaska Native	100 <sup>th</sup>

Source: Missions Management Tools 2024, Association of American Medical Colleges



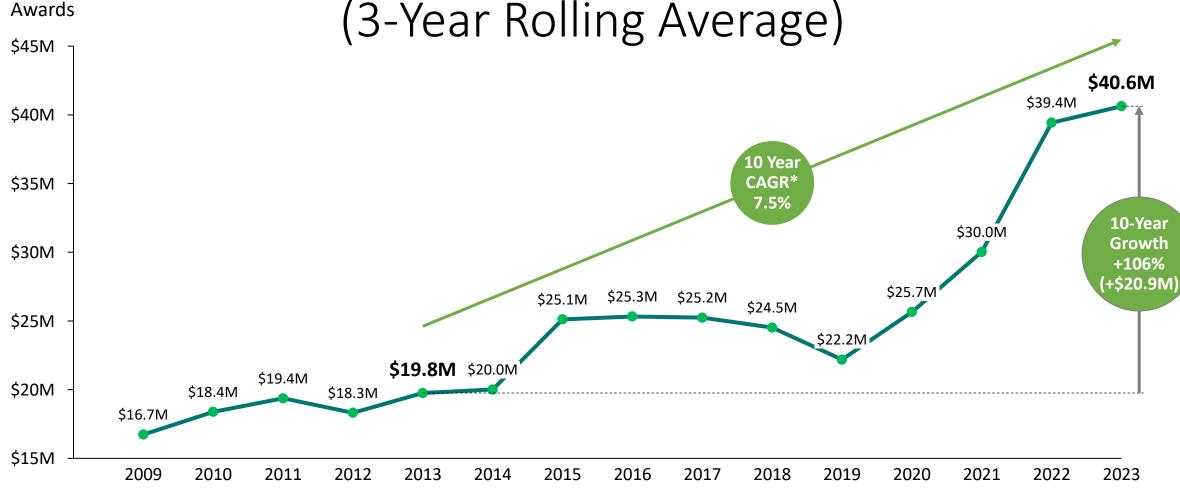
### Research Programs

- We focus on studying diseases of relevance to North Dakota
  - Alzheimer's and other neurodegenerative diseases
  - Diseases of aging
  - Cancer
  - Infectious diseases (vector-borne)
  - Opioid addiction
  - Epigenetics
  - Indigenous health (past trauma)





UND SMHS Sponsored Funding (3-Year Rolling Average)



<sup>\*</sup> CAGR: Compound Annual Growth Rate



### Service to the Community



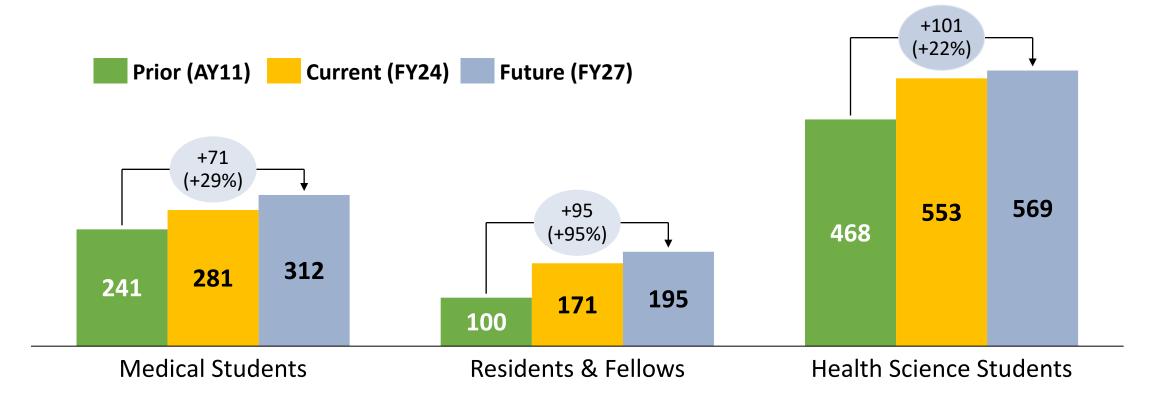
- RuralMed
- Rural Opportunities In Medical Education (ROME)
- Center for Rural Health
  - SCRUBS Academy and camps
- Rural residencies
- SIM-ND
  - Provides simulator training in vans to each quadrant of the state





### Healthcare Workforce Initiative

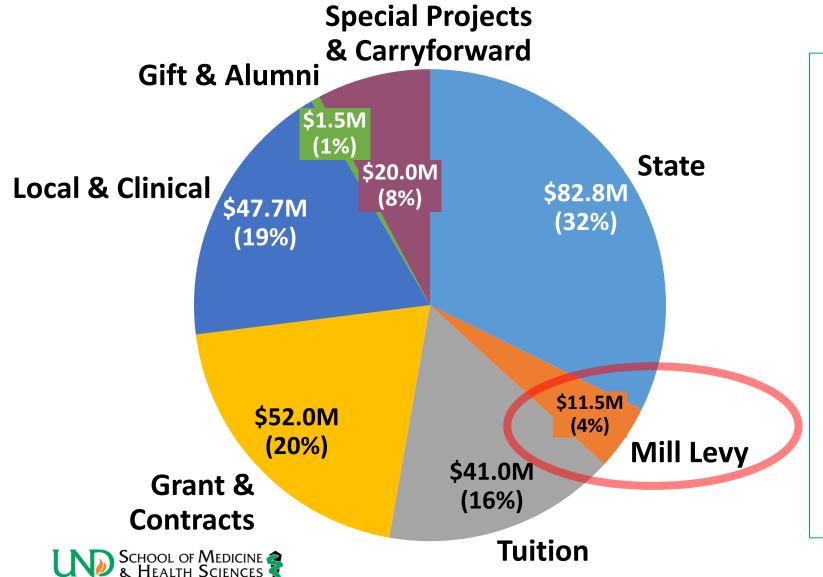
### Growth in Student/Trainee Programs



- Prior and Current student numbers (MD, HS) are based on actual enrollment in the fall semester of each academic year, retrieved from the UND Enrollment Dashboard on 1/16/2024.
- Projected numbers assume full enrollment for MD and all residency programs, and a 3% growth for Health Sciences in FY24-FY27.
- Health Science Student numbers only include degree-seeking students in Athletic Training, Medical Lab Sciences, Occupational Therapy, Physical Therapy, Physician Assistant Studies, and Master of Public Health programs.



### Sources of Revenue for the 2023-25 Biennium



UNIVERSITY OF NORTH DAKOTA

2023-25 Estimated Total Revenue \$256,623,848

(NDUS HB1003 \$237M + SP/CF \$20M)

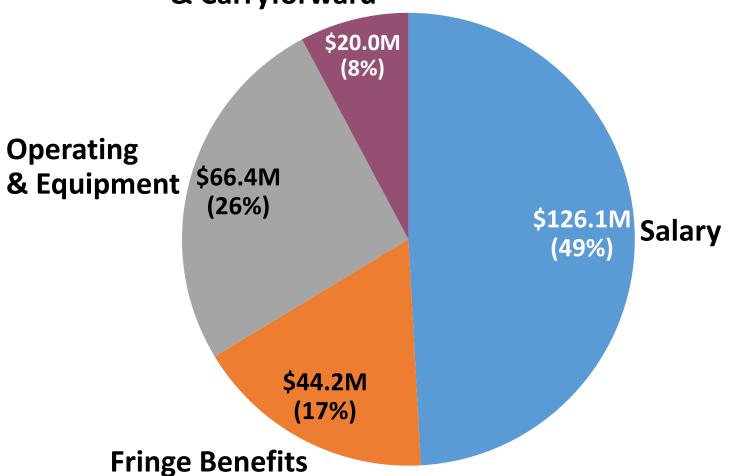
#### **Diversified Funding Sources**

State + Mill Levy 36%
Tuition 16%
Grant & Contract 20%
Local, Clinical, Gift 20%
Special Projects/CF 8%

(Source: HB1003 Schedule 2, OMB Appropriation Report)

### Uses of Revenue for the 2023-25 Biennium





2023-25 Estimated Expenditures

\$256,623,848

(NDUS HB1003 \$237M + SP/CF \$20M)

Salary & Fringe 66%

Ops & Equipment 26%

Special Projects/CF 8%

(Source: HB1003 Schedule 2, OMB Appropriation Report)



### 2025-27 UND SMHS Appropriated Fund Budget

based on base funding formula/general fund request

CMUC Appropriated	2022 25	Colony 9 Donofit	Othor	2025 27	(\$ in Millions
SMHS Appropriated	2023-25	Salary & Benefit	Other	2025-27	Notes
Funding	Budget	Adjustment	Adjustments	Budget	
Revenues					
<b>General Fund</b>	\$72.2	\$2.7	\$8.1	\$83.0	Other adjustments include SCH Equalization Formula and IT Rate adjustments.
General Fund HWI	10.7	0.0	0.0	10.7	
	82.8	2.7	8.1	93.7	Matches NDUS 2023-25 Appropriation to 2025-27 Budget Request
Tuition	40.9	0.0	1.1	41.9	Matches 2025-27 Total Budget Request to NDUS
1 Mil levy	11.4	0.0	0.7	12.1	Estimate annual increase of 3% annually
Total Revenue	\$135.1	\$2.7	\$9.9	\$147.8	
Expenditures					
Salaries	\$83.8	\$9.0	\$0.0	\$92.8	~11% increase from 23-25 biennium, reflecting 6%/4% salary increases
Fringe Benefits	29.0	1.7	0.0	30.6	Estimated FB rate = 32.97% (Last biennium was 31.03%)
·	112.8	10.6	0.0	123.4	
Operating	21.9	0.0	2.0	23.9	Increase in operating costs for Fargo and Minot Campuses
Capital Expenditures	0.4	0.0	0.0	0.4	Contingency
Total Expenditures	\$135.1	\$10.6	\$2.0	\$147.8	
Surplus (Deficit)	\$0			\$0	

#### Notes:

3% budget reduction of \$2.4M on General Fund not included.

Sim-ND additional operating support request of \$2M not included.



## UND Health Professions Facility Masterplan Challenges and Solutions

### Fragmented Programs

### **Strategic Consolidation:**

Relocating and consolidating programs will foster collaboration and optimize space utilization.

### Inefficient Infrastructure

### **Renovation and Modernization:**

Upgrading existing buildings will create contemporary learning environments.

## Limited Growth Potential

### **Targeted Expansion:**

A new addition to the School of Medicine and Health Sciences will support program growth and interdisciplinary learning.



### Health Professions Masterplan: Budget Breakdown

UND CONSOLIDATED HEALTH PROFESSION ADDITION PROJECT	Total Amount All Projects	New Addition & Minor Remodeling of SMHS	Necessary Renovations for Health Profession Programs	STAR Sim Cntr. Remodeled for Simulated Hospital	Northern Plains Cntr. Reconfig. for Psych.& Counseling	Demolition of Columbia Hall & Nursing Building	Campus Steam Extension to SMHS	MEP Decoupling of Research Annex from Columbia Hall
Construction Costs								
General	\$37,385,000	\$33,023,000	\$2,728,000	\$624,000	\$705,000	\$0	\$0	\$305,000
Mechanical	\$17,852,000	\$11,405,000	\$1,563,000	· ·		\$0	\$2,400,000	\$1,725,000
Electrical	\$10,103,000	\$7,698,000	\$767,000	\$187,000	\$158,000	\$130,000	\$500,000	\$663,000
Site Work & Landscaping	\$8,194,000		\$91,000			\$1,289,000	\$5,350,000	\$40,000
Demolition	\$4,609,000	\$0	\$0	\$0	\$0	\$4,609,000	\$0	\$0
IT	\$3,269,000	\$2,776,000	\$151,000			\$0	\$0	\$0
Abatement	\$1,624,000		\$0			\$1,624,000	\$0	\$0
Other	\$152,000	\$0	\$0	\$152,000	\$0	\$0	\$0	\$0
Sub-Total	\$83,188,000	\$56,208,000	\$5,300,000	\$1,675,000	\$1,370,000	\$7,652,000	\$8,250,000	\$2,733,000
Contingency (15%)	\$12,479,000	\$8,431,000	\$795,000	\$251,000	\$206,000	\$1,148,000	\$1,238,000	\$410,000
Escalation for '26/'27 Construction	\$14,309,000	\$9,668,000	\$912,000	\$288,000	\$236,000	\$1,316,000	\$1,419,000	\$470,000
Total Construction	\$95,667,000	\$64,639,000	\$6,095,000	\$1,926,000	\$1,576,000	\$8,800,000	\$9,488,000	\$3,143,000
Soft Costs								
Design Fees	\$11,480,000		\$731,000			\$1,056,000	\$1,139,000	\$377,000
Owner Costs	\$6,899,000		\$458,000	· · · · · · · · · · · · · · · · · · ·		\$606,000	\$654,000	\$217,000
Permits	\$290,000	\$194,000	\$19,000			\$27,000	\$29,000	\$10,000
Advertising	\$0		\$0			\$0	\$0	\$0
Other	\$0		\$0		· ·	\$0	\$0	\$0
Total Soft Costs	\$18,669,000	\$12,639,000	\$1,208,000	\$394,000	\$313,000	\$1,689,000	\$1,822,000	\$604,000
FF&E - Property Costs								
FF&E	\$3,772,000	\$2,819,000	\$459,000	\$330,000	\$164,000	\$0	\$0	\$0
Land Acquistion	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Signage/Branding/Donor Recog.	\$1,100,000	\$900,000	\$150,000	\$50,000	\$0	\$0	\$0	\$0
Total FF&E/Other	\$4,872,000	\$3,719,000	\$609,000	\$380,000	\$164,000	\$0	\$0	\$0
PROJECT TOTALS	\$119,208,000	\$80,997,000	\$7,912,000	\$2,700,000	\$2,053,000	\$10,489,000	\$11,310,000	\$3,747,000

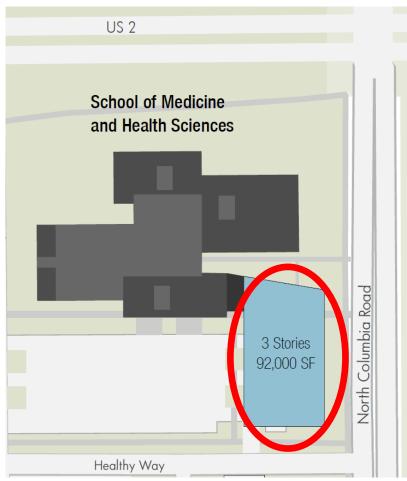


### UND Health Professions Facility Master Plan

- Total project consists of seven distinct components (including construction and demolition) with a cost of \$119.2M, the largest of which is the Health Professions Addition at a cost of \$81.0M (that probably would require a 30% match (\$24.3M) from donors)
- This campus-wide project might be implemented in phases over time as determined by budgetary considerations



### Health Professions Masterplan







## Recommendations from the UND SMHS Advisory Council

The Council is **strongly supportive** of the proposed **Health Professions Facility Masterplan** (especially for the Health Professions Addition) and urged its expeditious implementation as reflected by a 10-1 vote. The Council identified three main reasons for its strong support:

- The proposed additional building would provide needed wet laboratory space to accommodate the epigenetics group that currently is occupying space in soon-to-be demolished Columbia Hall as well as provide further growth
- Allow the nursing program to expand class size to help meet the nursing shortage in the state as well as to facilitate the development of even more collaborative efforts between the two schools
- Reduce the facility square footage on campus and significantly reduce future deferred maintenance costs.



## Hyperbaric Oxygen Therapy (HBOT)



Sigma 36 Hyperbaric Chamber, Perry Biomedical https://perrybaromedical.com/products



### Hyperbaric Oxygen Therapy

- One protocol evaluating post-concussive state finishing up
- · Fargo Essentia: 2 chambers (contract executed)
- · Minot Trinity: 2 chambers (contract pending)
- Grand Forks Altru: Research collaboration (2 clinical chambers)
- · Uncommitted: 1 chamber available to expand the HBOT consortium



## Simulation in Motion-North Dakota (SIM-ND)





### SIM-ND Budget Consideration

- The current funding model for SIM-ND, which relies on contributions from UND SMHS and healthcare partners (Altru, Sanford, Essentia, Trinity Health), is becoming unsustainable.
- Financial pressures are leading partner hospitals to reduce their financial and resource commitments, jeopardizing the program's stability and its ability to meet the increasing demand for on-site medical simulation training across North Dakota.
- To address this challenge, UND SMHS will request from the legislature ongoing operating support of \$2 million starting in the 2025-2027 biennium.



### Big Hairy Audacious Goals (BHAG)

Looking ahead 5 to 10 years (Presented to Governor in April 2024)





### Big Hairy Audacious Goal (BHAG)

Looking ahead 5 to 10 years (Presented to Governor in April 2024)

(\$ in Millions)

	INVESTMENT					
	<b>Each Faculty</b>		Biennium		5 Biennia	
Endowment	\$2.5		\$15		\$75	
Startup package	\$2	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	\$12	x5	\$60	
Salary/fringe support (initial)	\$1	x6	\$6	ХЭ	\$30	
Total	\$5.5		\$33		\$165	

FUNDING					
State	Donor/SMHS	Note			
\$50	\$25	2:1 matching			
\$40	\$20	2:1 matching			
\$30					
\$120	\$45				

- Goal: Expand the research (and with it, the teaching and service)
   activities of the UND SMHS to make it the best community-based
   medical and health sciences school in the country
- How: This will be achieved by a dramatic and innovative major expansion of the research enterprise at the UND SMHS by the addition of 30 new endowed faculty members over 10 years (6 per biennium).



### Transition of Leadership

- The search for my successor is nearly complete
- The Search Committee was led by VP Malloy and Dean Shogren from CNPD and included broad representation from the SMHS, UND, UNDAAF, and the community
- Three finalists visited campus in late August/early September
- The Search Committee has thoroughly compiled feedback and has forwarded its analysis to President Armacost
- It is anticipated that an announcement will be forthcoming shortly with the naming of the new VPHA/Dean and the transition date



### Opportunities

- Additional growth in our research enterprise
  - Artificial intelligence
  - Translational and clinical research (Wadhwani chair)
    - Wearable devices
  - Indigenous health
  - "Big data" analyses
- Further growth in our educational programs
  - Interprofessional education and clinical practice
  - Multi-cultural education and experiences
- Continued expansion of our service functions, especially through the Center for Rural Health



### Challenges

- Limited number of additional clinical training sites at our in-state hospital systems and clinics limits any substantive growth in our student numbers
  - Any growth in especially for-profit health education organizations will intensify this critical consideration (\$)
- Intense competition for recruiting (and retaining) teaching and research faculty → more endowed faculty positions gives us a relative competitive advantage
- Limited "wet lab" growth potential especially if current lab space in Columbia Hall needs to be moved → need for Health Professions annex
- Property tax issue → SMHS is especially vulnerable as we get revenue from a 1 mill levy = \$11.5M per biennium



### Our Goals

- To be the best community-based school in the country
- To continue to be an innovator in education (with a focus on interprofessional teams)
- To continue to develop focused programs of research excellence
- To serve the people of North Dakota and beyond
  - Rural health
  - Healthcare workforce
    - Primary care (especially family medicine)
  - Health advocacy
    - Interprofessional care



### Our Mission for the past 100 years:







