Health Sciences Overview

Nov. 21, 2023





627

STUDENTS IN AY 2023-24

68%
MINNESOTA
RESIDENTS







Degree Programs

DDS

BSDH

DT

MS

PhD

The state's only dental school and the only dental school in the northern tier of states between Wisconsin and the Pacific Northwest.

- Moos Tower Dental Clinics is the largest oral health safety net clinic provider in the state: 55% of visits funded with public program assistance
- The School of Dentistry affiliates with 16 unique clinical sites within MN beyond the Moos Tower clinics
- The Mobile Dental Clinic serves patients at 14 unique sites across the state.



16,040 Patient visits

AT OUTREACH SITES

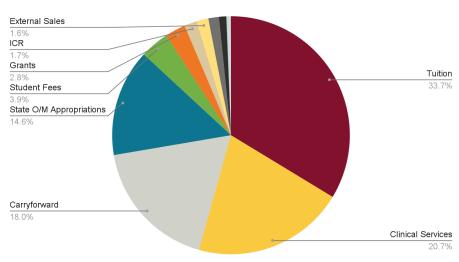
Interprofessional Collaborations & Engagements

- School of Dentistry Hygiene Program & Hospital Rounding Teams (DH/DT/MD)
- An Interprofessional Education & Collaborative Practice Model for Dentistry & Pharmacy (DDS/PharmD)
- Community-University Health Care Center focused on improving interprofessional practice care model (DDS/DNP/MA)
- Veterans Administration develop and implement tools to scale huddle systems meant to manage safety and risk concerns (MHA/DDS/MPH)
- National Center Develop and refine patient, family and community resources focused on mitigating racism and caste within healthcare teams (MN/DDS/OTD)
- Nurse Practitioner Clinic/Dental Therapy collaboration (NP/RN/DT)



MAJOR FUNDING SOURCES





FY 2022

Notable Areas of Research

- Behavioral, Public Health and Educational Research
- Biomaterials, Biomechanics and Technology
- Oral Microbiology,
 Virology, Immunology
 and Cancer
- Systems Biology of the Orofacial Complex
- 5. Clinical and Translational Research

961
STUDENTS IN

STUDENTS IN AY 2023-24

81% MINNESOTA RESIDENTS 221

GRADUATES IN AY 2022-23

45% EMPLOYED IN MINNESOTA

374
TRAINEES AT UMMC
IN AY 2023-24

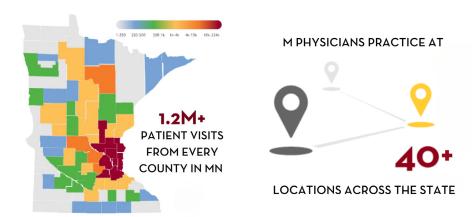
789
RESIDENTS IN AY 2023-24



Degree Programs

MD
DPT
MD/PhD
MD/MPH
MD/MS
JD/MD
MD/MBA
MD/MHI

PATIENT CARE





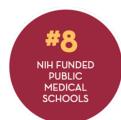
1:5 of MINNESOTA'S TOP DOCTORS ARE M PHYSICIANS

RESEARCH



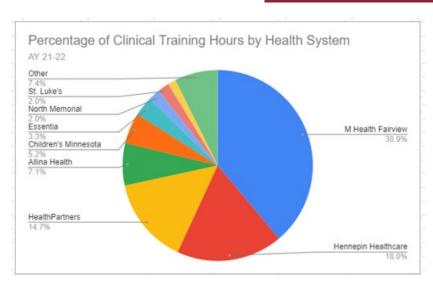
2,830PUBLICATIONS IN 2022

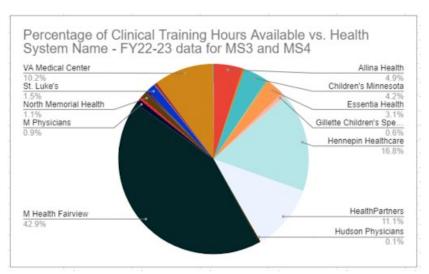




#21
NIH FUNDED
MEDICAL
SCHOOLS

UNDERGRADUATE MEDICAL EDUCATION

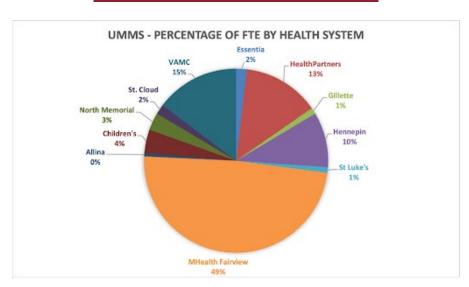




YEAR 1 + 2

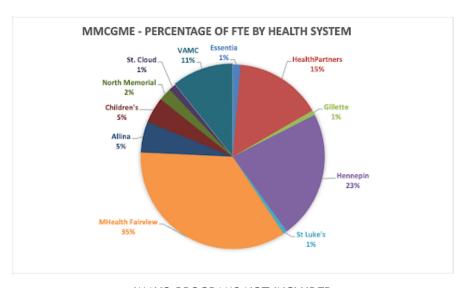
YEAR 3 + 4

GRADUATE MEDICAL EDUCATION



RESIDENCIES AND FELLOWSHIPS BY SPECIALTY TRAINING LOCATION (JULY 1, 2022 - JUNE 30, 2023)

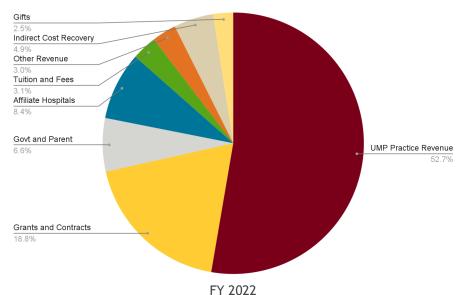
ALL MN SPONSORED ACCREDITED PROGRAMS*



*MAYO PROGRAMS NOT INCLUDED

MAJOR FUNDING SOURCES





Notable Areas of Research

- 1. Neuroscience/Neurology
- 2. Cardiovascular Care and ECMO
- 3. Cancer and Aging
- 4. Primary Care

1,132 STUDENTS IN AY 2023-24









Degree Programs

BSN

MN

DNP

PhD



The State of Minnesota's Nursing School

- State's only PhD program and primary producer of nursing faculty
- 2nd largest full-time DNP program in the nation (Ranked #6 by US News)
- 116 BSN students on the Rochester campus and a vibrant relationship with UMR on nursing/healthcare issues (BSN Program ranked #16)
- Nursing Pathway partnerships with Crookston, Duluth and Morris
- 2nd to Extension on the U's Public Engagement Footprint map
- Doctoral pathway for American Indian/Alaska Native (AI/AN) students resulted in 14 new AI/AN students this fall, largest cohort in nation
- Home to the Center for Nursing Equity and Excellence, which is now the state's nursing workforce center and official voice nationally joining 41 states.





Academic Health Impact Academic-Practice Partnerships - 3 Legs of Mission

(Collaboratories)

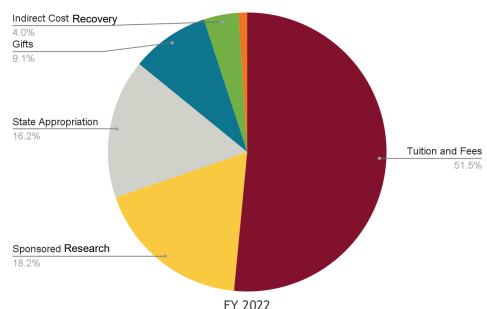
First School of Nursing Collaboratory formed with M Health Fairview in 2015. Received Academic-Practice Partnership Award from American Association of Colleges of Nursing (AACN) and American Organization of Nursing Leaders (AONL) in 2017.

Current Collaboratories:

- Allina Health
- Children's Minnesota
- Essentia Health
- Faith Community Nurse Network
- Minneapolis Veterans Affairs Health Care System
- M Health Fairview
- Mayo Clinic
- Minnesota Hospital Association
- PrairieCare

MAJOR FUNDING SOURCES





Research Examples

Addressing social determinants of health that influence health behaviors, nutrition and obesity of individuals and families living in underserved communities.

Reducing the burden of stroke in African American communities with research that builds trust and improves understanding of stroke risk factors and warning signs.

Discovering how nature-based therapies can improve mental health and overall wellbeing and creating mobile health strategies to monitor symptoms and improve health outcomes.

Harnessing the power of public health data to develop disease-prevention and wellbeing improvement initiatives.

Education, Research and Clinical Engagement Funding

- Academic programs supported through tuition and fees
- Research supported by grants and indirect funds
- Clinical Engagement:
 - Nearly 1,000 clinical placements per year, primarily in Minnesota
 - Students (including doctoral) do not receive payment for clinical work
 - Preceptors do not receive payment for hosting students
 - Practitioner trainees are counted in systems MERC formula
- Shortage of clinical placements is significant barrier to academic program growth

College of Pharmacy



774

STUDENTS IN AY 2023-24



TRAINEES AT UMMC
IN AY 2023-24



24
RESIDENTS IN
AY 2023-24





202

PHARMACY ROTATIONS (INCLUDING IPPE/APPEs)



Degree Programs

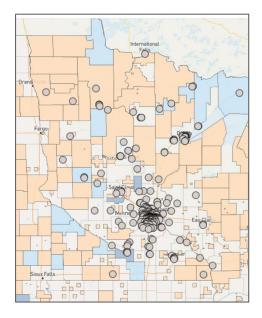
PharmD MS MLS PhD OTD BS Certificate

College of Pharmacy

Partnerships Throughout the State

Medical Laboratory Sciences, Occupational Therapy and Pharmacy programs have robust partnerships throughout the state:

- clinical
- community
- research



>350 clinical sites/partners

~600 students

66 community partnerships

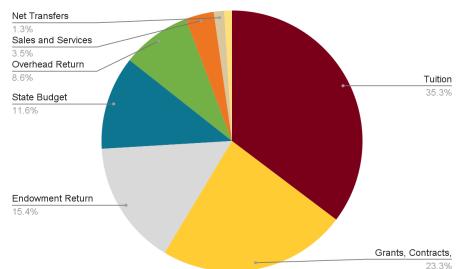
Diversity of College of Pharmacy Partnerships

- Working together to:
 - Improve access to and quality of care
 - Address health disparities
 - Address workforce needs by educating the next generation of practitioners
 - Engage in research that spans patient access and experience, to improve systems of care, understand workforce trends and advance public health
- Examples of partnerships:
 - Pharmacy faculty provide clinical services at seven different clinics, health systems and practice sites across state
 - Federally Qualified Health Center Urban Health Network (FUHN)
 - Wilderness Health
 - Center for Alcohol and Drug Treatment
 - >350 clinical sites (health systems, clinics and community pharmacies)

College of Pharmacy

MAJOR FUNDING SOURCES





FY 2022

Notable Areas of Research

- Substance Use Disorders
- Neuroscience
- 3. Cancer
- 4. Pharmacogenomics
- 5. Clinical and Translational Research
- 6. Progression of a Therapy from Conception to Clinic
- Solutions to Major Global Problems
- 3. Policy and Initiatives in Pharmaceutical Technology, Precision Medicine, Community Engagement, Health Economics, and the Scholarship of Teaching and Learning



School of Public Health

1,014
STUDENTS IN
AY 2023-24









Degree Programs

MPH

MS

MHA

Dual Degrees

Certificates

Minors



School of Public Health: MN Clinical Impact

The School of Public Health (SPH) is a critical component of Minnesota's healthcare environment through:

Training MN's healthcare leaders

Embedding equity in clinical settings

Advancing "upstream" discoveries & innovation

Engaging communities & policymakers

School of Public Health continued

Training

#2 Master of Healthcare Administration (MHA) program in the U.S.

34% MHA alumni work in MN (35% of Executive MHA students are physicians)

200+

MN healthcare orgs employ MHA alumni

Equity

Example: The SPH Center for Antiracism Research for Health Equity and partners developed and launched new clinician training on biasfree and equitable perinatal care to meet the requirements of the Dignity in Pregnancy and Childbirth Act (MN § 144.1461).

Innovation

\$1.1M Avg. funding level per faculty. Much of the school's research is focused on healthcare delivery and

improving patient outcomes.

Engagement

SPH experts partner closely with MN healthcare orgs and are continuously tapped for their expertise by the media and state and federal policymakers.

- Maternal and child health

Top MHA alumni employers in MN:

- MHealth Fairview
- HealthPartners
- Allina Health
- Mayo Clinic
- United HealthGroup
- Hennepin Healthcare
- CentraCare
- Essentia Health
- Medtronic
- North Memorial Health
- Veterans Administration
- Children's Minnesota



Jennifer Myster, MHA, MBA President, Methodist Hospital

Megan Remark, MHA, MBA President, Regions Hospita Sr. Vice President, Health Partner





Deepi Goval, MD, MHA Mayo Physician, Director of American Board of Emergency Medicine

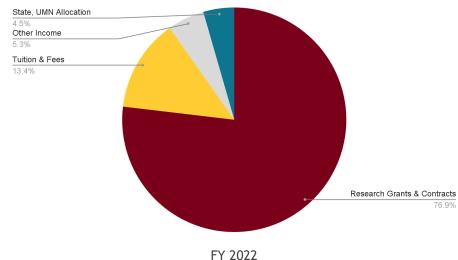
Sabeen Aksari, MD, MHA President of Medical Staff, Fairviev



School of Public Health

MAJOR FUNDING SOURCES





Notable Areas of Research

- Healthcare Delivery and Improving Patient Outcomes
- Rural Health
- Healthcare Organization, Management, and Finances
- Aging
- Maternal and Child Health
- **Chronic Diseases**
- Food and Nutrition
- **Environmental Health**
- Genomics
- **Health Equity**
- Infectious Disease
- Injury
- Mental Health

College of Veterinary Medicine



586 STUDENTS IN

AY 2023-24

51% **MINNESOTA RESIDENTS**

> **53** INTERNS AND RESIDENTS ONSITE IN AY 2023-24

593

EXTERNSHIPS IN AY 2022-23

GRADUATES IN AY 2022-23

52%* **EMPLOYED IN** MINNESOTA

*of those who had accepted employment vs. going on to advanced training



Degree Programs

DVM PhD

MS

Post-Baccalaureate Certificate



College of Veterinary Medicine

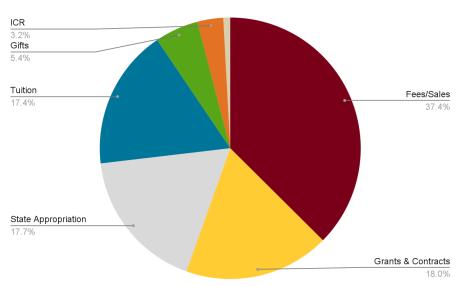


- Comparative medicine is vital to a One Health approach to medicine
 - Oncology, Cardiology, Prion diseases, etc.
 - University of Minnesota has a unique opportunity to lead
- Pet ownership provides health benefits
 - Mental health, blood pressure, cholesterol

College of Veterinary Medicine

MAJOR FUNDING SOURCES





FY 2023

Notable Areas of Research

- Clinical and Translational Research in a Range of Medical Specialties Using Animal Models to Understand both Veterinary and Human Diseases
- 2. Chronic Disease Biology
- Genomics and Computational Biology
- 4. Host-Pathogen Interface
- Microbiomes and Antimicrobial Resistance
- 6. Pathogen Discovery and Surveillance
- 7. Ecosystem Health
- Food Animal Health and Production
- 9. Food Safety and Security



University of Minnesota Driven to Discover®

Crookston Duluth Morris Rochester Twin Cities

The University of Minnesota is an equal opportunity educator and employer.