

Health Sciences Overview

Oct. 25, 2023



UNIVERSITY OF MINNESOTA

Driven to Discover®

Delivering On Our Promise to Minnesota

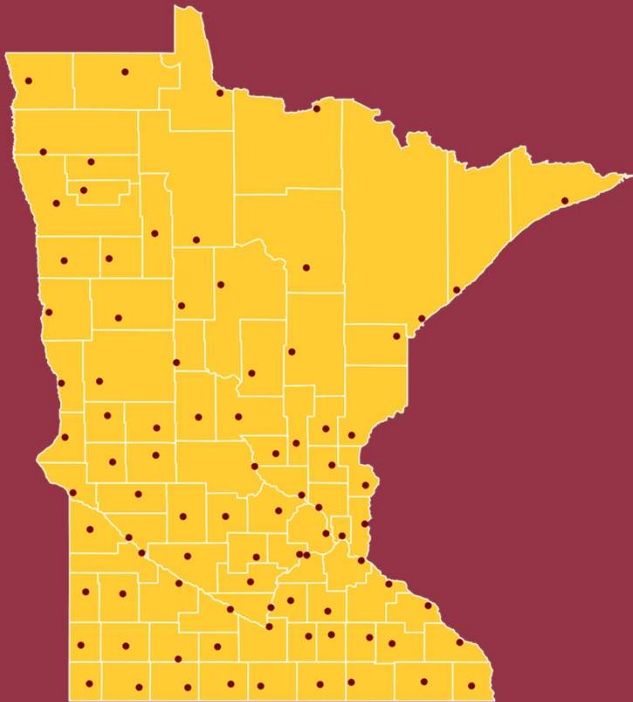
Minnesotans benefit from UMN's breadth and depth of expertise across our health sciences schools and programs.

Together, we:

- Discover new and better treatments and cures
- Deliver a robust educational experience for future health care professionals
- Provide state-of-the-art patient care



UMN Health in Your Community



Our service extends across
the entire state



Caring for underserved
communities



Community-partnered research,
teaching, and engagement



Partnerships with health care
providers across the state



Improving Health Access Across Minnesota

Our health sciences schools partner with communities across the state to advance the health and wellbeing of all Minnesotans.

Examples include:



Rural Physician Associate Program

- Oldest program of its kind
- Goal: Increase the number of primary care physicians in rural Minnesota



Mobile Dental Clinic

- Brings care to people in places where dentistry is scarce
- Serves 1,000+ Minnesotans a year



Metropolitan Physician Associate Program

- Medical students learn how to effectively address the needs of underserved patients in urban communities

Advancing Interprofessional Health Care

Collaborations among health professionals lead to improved patient outcomes. Unfortunately, current funding models don't adequately support interprofessional health care.

Our examples of interprofessional care include:



Student-Run Free Clinics

- Students from multiple health professions care for underserved populations



Community-University Health Care Center

- State's first and oldest community health center
- Serves the medical/dental/mental health care and social service needs for nearly 10,000 patients/year

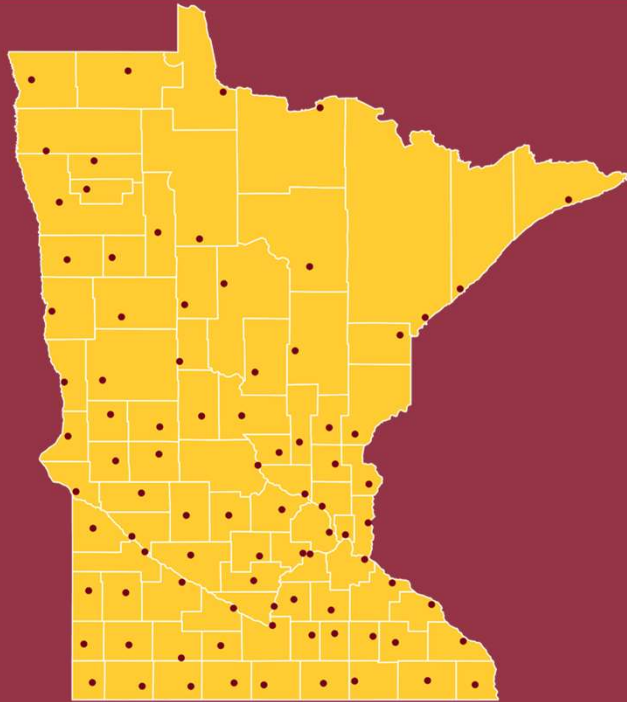


Mobile Health Initiative

- Addresses health disparities and implements innovative models of health care
- Seen thousands of people throughout the state since 2020

Partnerships to Transform Health Care Delivery

Our partnerships across the entire state drive innovation in care,
research, education and training



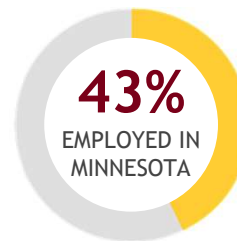
School of Dentistry




600
STUDENTS IN
AY 2023-24




187
GRADUATES IN
AY 2022-23



Degree Programs

- DDS
- BSDH
- DT
- MS
- PhD



School of Dentistry

- The School of Dentistry affiliates with 16 clinical sites within MN.
- The Mobile Dental Clinic serves patients at 14 unique sites across the state.
- In 2022 our Outreach program served 16,040 patients
- Dental, Dental Hygiene, and Dental Therapy students rotate to these clinics for a minimum of 6-8 weeks



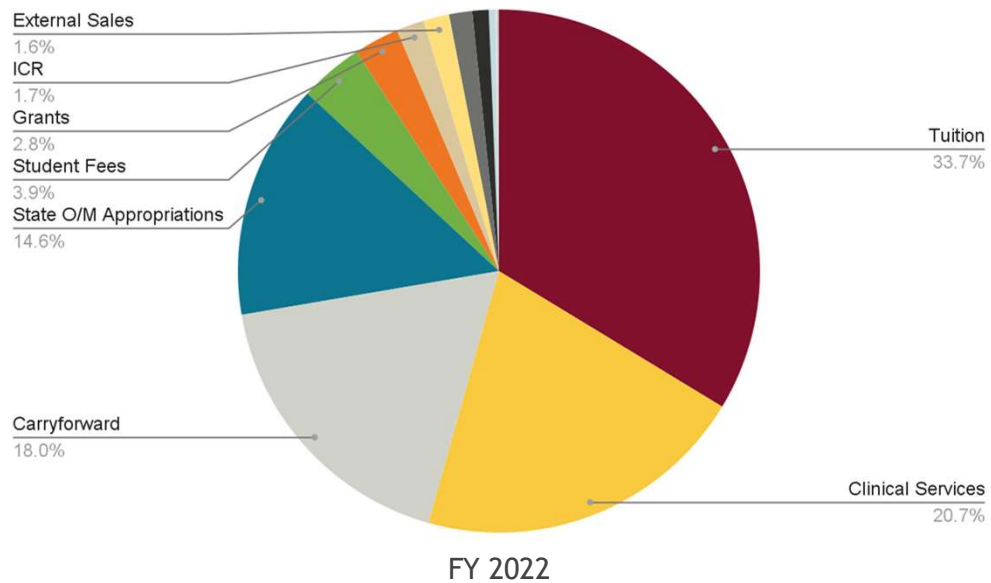
*Apple Valley, Blaine, Eden Prairie, Forest Lake, North Minneapolis, Roseville, South Minneapolis, West St. Paul



School of Dentistry



MAJOR FUNDING SOURCES



Notable Areas of Research

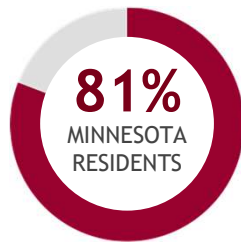
1. Behavioral, Public Health and Educational Research
2. Biomaterials, Biomechanics and Technology
3. Oral Microbiology, Virology, Immunology and Cancer
4. Systems Biology of the Orofacial Complex
5. Clinical and Translational Research




Medical School




961
STUDENTS IN
AY 2023-24




374
TRAINEES AT UMMC
IN AY 2023-24




221
GRADUATES IN
AY 2022-23




789
RESIDENTS IN
AY 2023-24



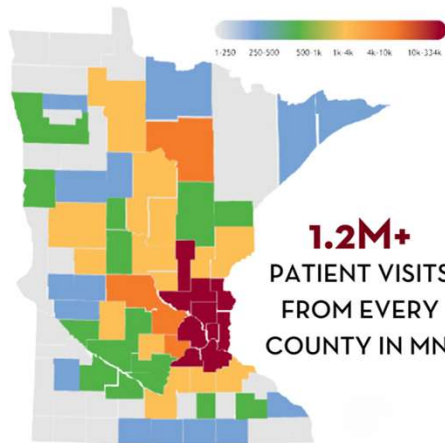
Degree Programs

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



Medical School

PATIENT CARE



M PHYSICIANS PRACTICE AT



LOCATIONS ACROSS THE STATE



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

RESEARCH

\$357M 
SPONSORED RESEARCH IN 2022

2,830
PUBLICATIONS IN 2022



#8

NIH FUNDED
PUBLIC
MEDICAL
SCHOOLS

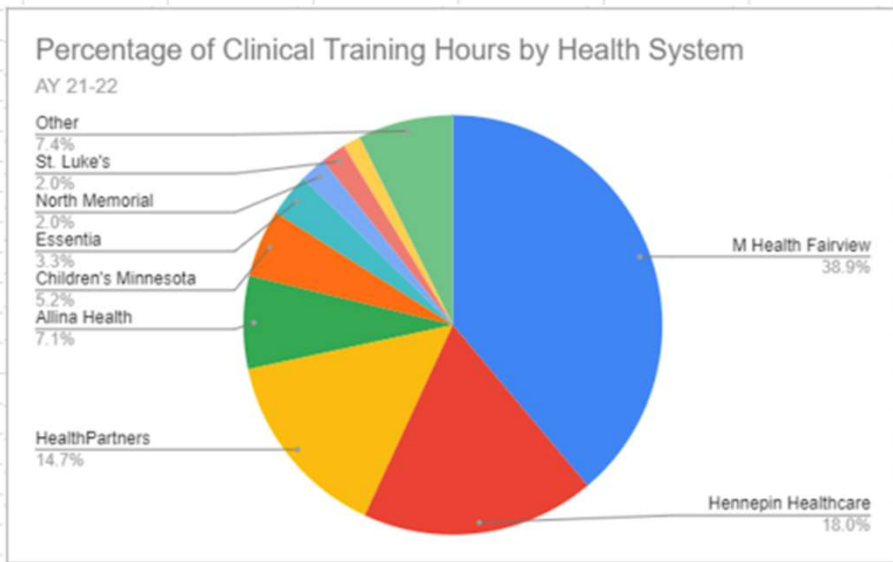
#21

NIH FUNDED
MEDICAL
SCHOOLS

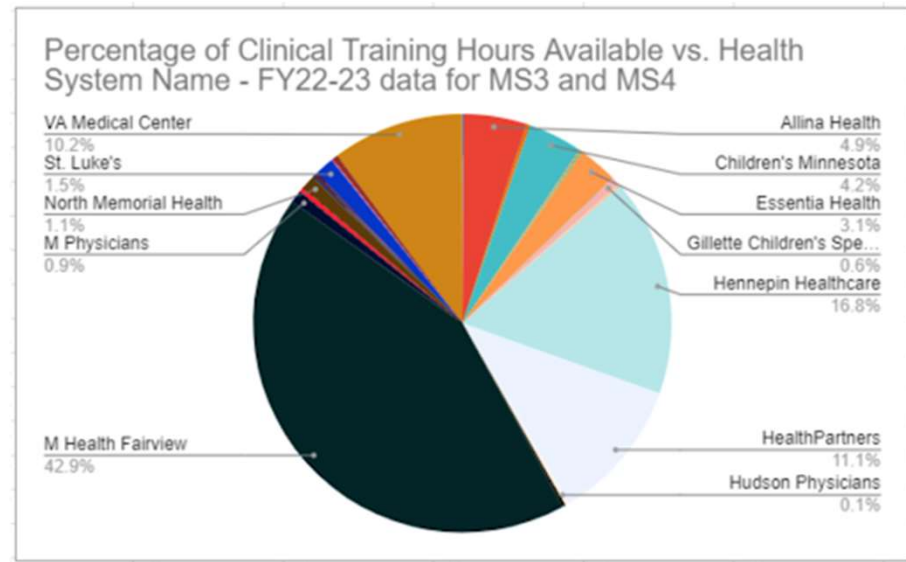


Medical School

UNDERGRADUATE MEDICAL EDUCATION



YEAR 1 + 2

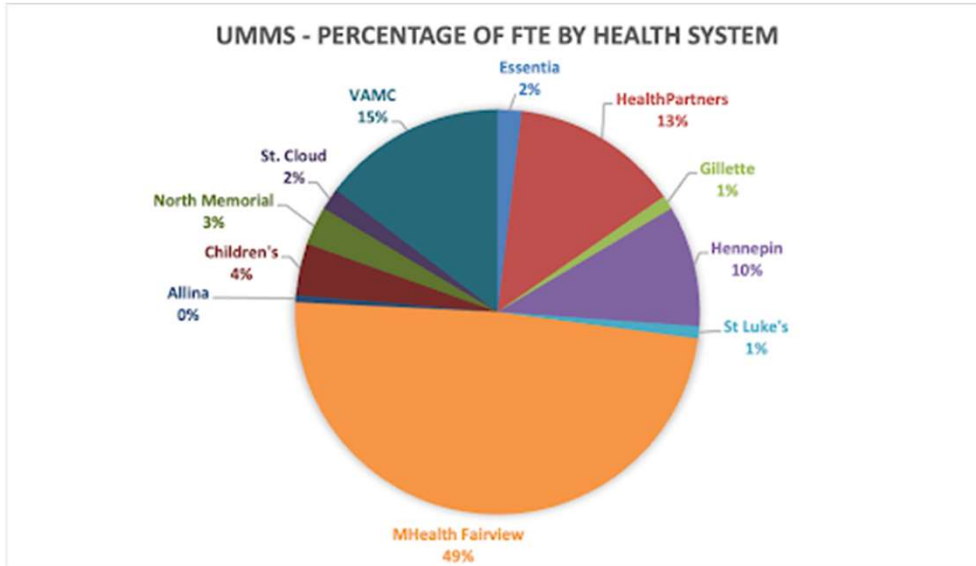


YEAR 3 + 4



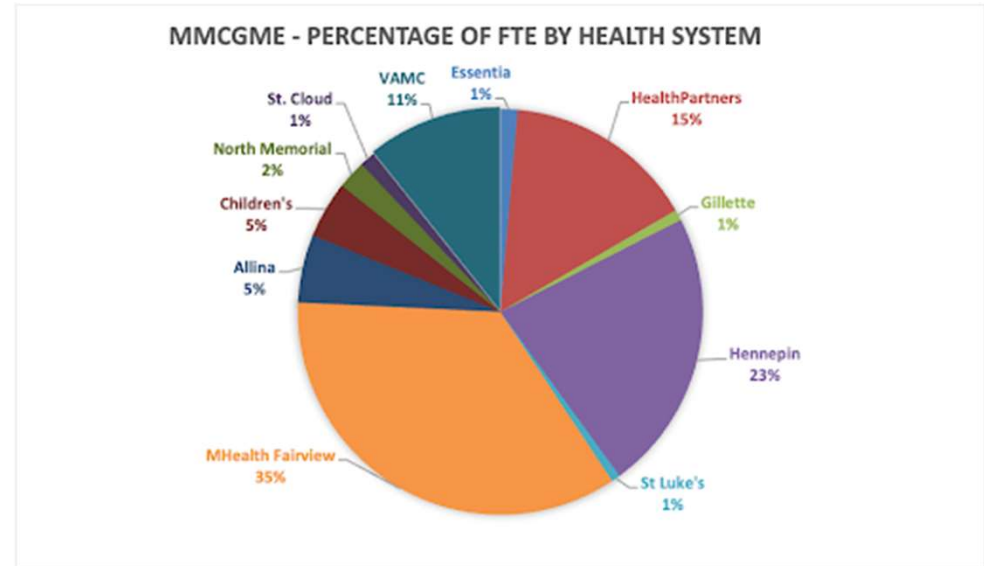
Medical School

GRADUATE MEDICAL EDUCATION



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

ALL MN SPONSORED ACCREDITED PROGRAMS*



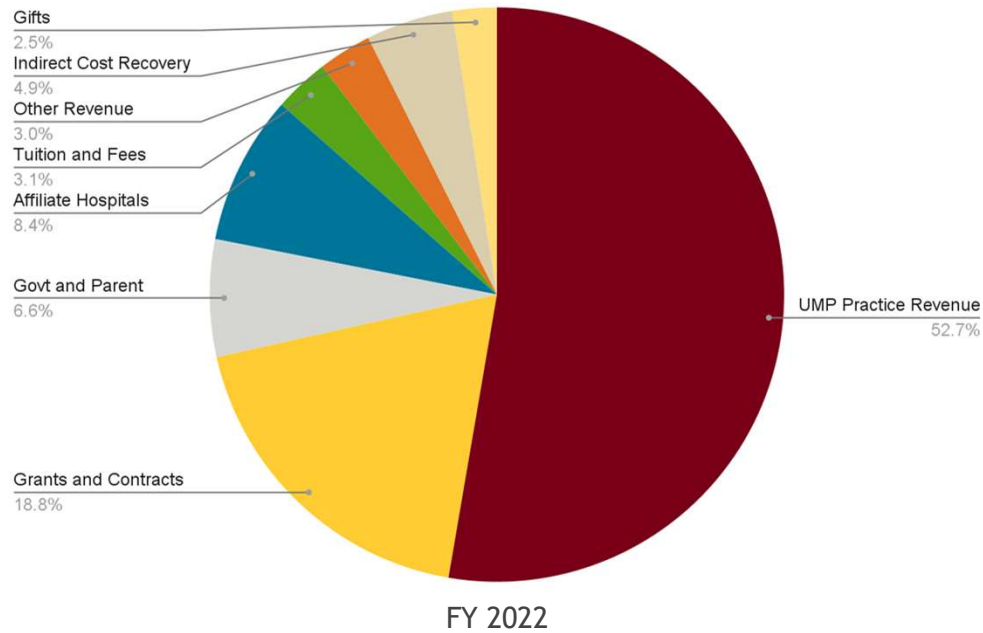
*MAYO PROGRAMS NOT INCLUDED



Medical School



MAJOR FUNDING SOURCES



Notable Areas of Research

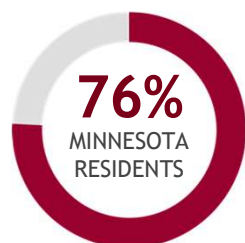
1. Neuroscience/Neurology
2. Cardiovascular Care and ECMO
3. Cancer and Aging
4. Primary Care



School of Nursing




1,132
STUDENTS IN
AY 2023-24




312
GRADUATES IN
AY 2022-23


129
TRAINEES AT UMMC
IN AY 2023-24



Degree Programs

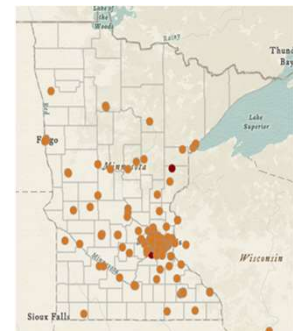
BSN
MN
DNP
PhD



School of Nursing

The State of Minnesota's Nursing School

- The state's only PhD program and the largest source of nursing faculty in Minnesota
- 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.



School of Nursing

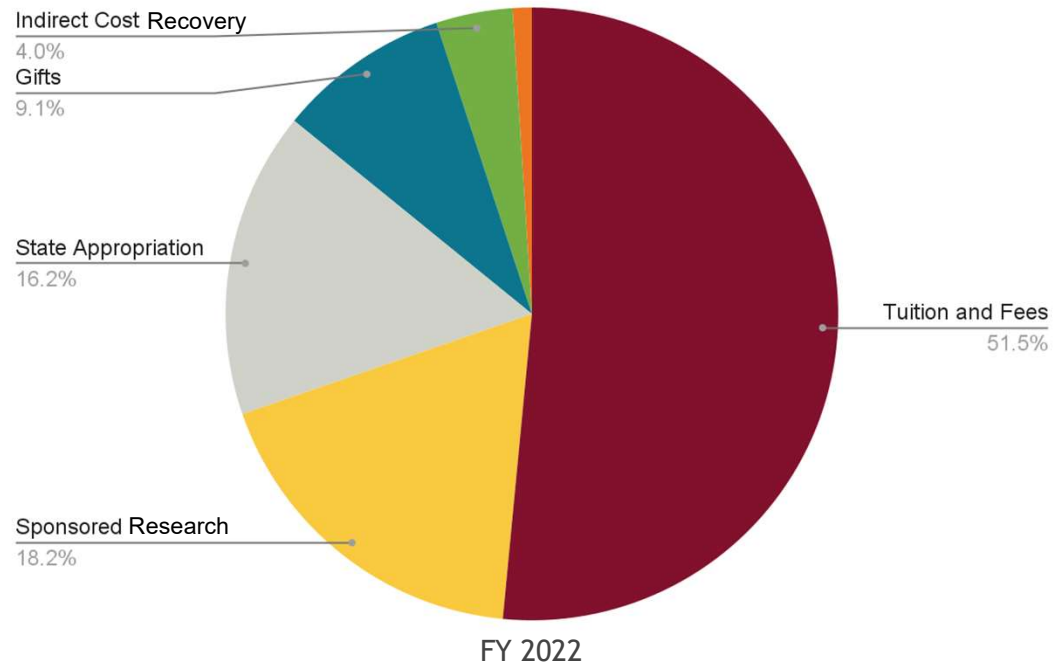
Academic Health Impact Academic-Practice Partnerships - 3 Legs of Mission (Collaboratories)

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



School of Nursing

MAJOR FUNDING SOURCES



Notable Areas of Research

1. Health Promotion Among Vulnerable Populations
2. Prevention and Management of Chronic Health Conditions
3. Symptom Management
4. Health/Nursing Informatics and Systems Innovation



College of Pharmacy




774
STUDENTS IN
AY 2023-24




37
TRAINEES AT UMMC
IN AY 2023-24




24
RESIDENTS IN
AY 2023-24


262
GRADUATES
IN 2022



Degree Programs

- PharmD
- MS
- MLS
- PhD
- OTD
- BS
- Certificate

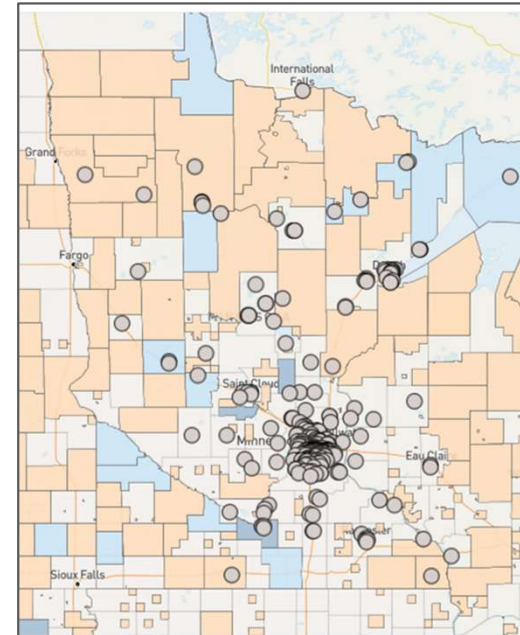


College of Pharmacy

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

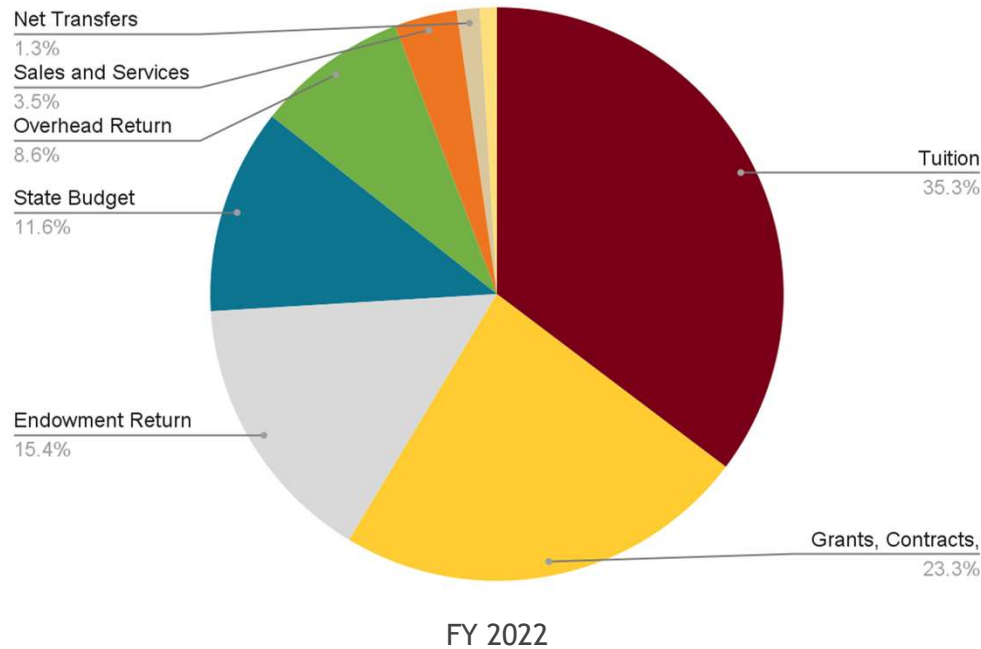
- Working together to:
 - Improve access to and quality of care
 - Address health disparities
 - Address workforce needs by educating the next generation of practitioners
 - Engage in research that spans patient access and experience, to improve systems of care, understand workforce trends and advance 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




Notable Areas of Research

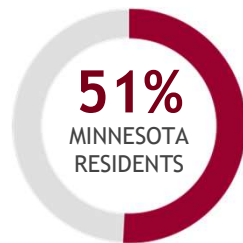
1. Substance Use Disorders
2. Neuroscience
3. Cancer
4. Pharmacogenomics
5. Clinical and Translational Research
6. Progression of a Therapy from Conception to Clinic
7. Solutions to Major Global Problems
8. Policy and Initiatives in Pharmaceutical Technology, Precision Medicine, Community Engagement,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



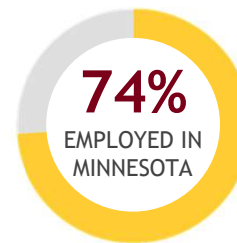
School of Public Health




1,014
STUDENTS IN
AY 2023-24




368
GRADUATES
IN 2022



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**



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 bias-free 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.

Major themes:

- Rural healthcare access
- Healthcare organization, management, and finances
- Long term care
- Maternal and child health

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



Top MHA alumni employers in MN:

1. MHealth Fairview
2. HealthPartners
3. Allina Health
4. Mayo Clinic
5. United HealthGroup
6. Hennepin Healthcare
7. CentraCare
8. Essentia Health
9. Medtronic
10. North Memorial Health
11. Veterans Administration
12. Children's Minnesota



Jennifer Myster, MHA, MBA
President, Methodist Hospital



Megan Remark, MHA, MBA
President, Regions Hospital
Sr. Vice President, Health Partners



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



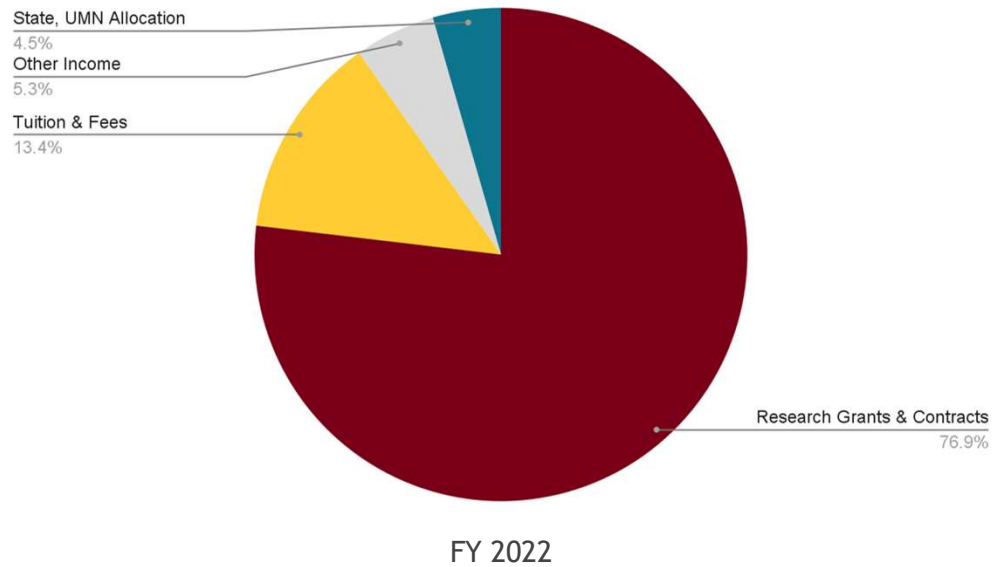
Sabeen Aksari, MD, MHA
President of Medical Staff, Fairview

Engagement



School of Public Health

MAJOR FUNDING SOURCES



Notable Areas of Research

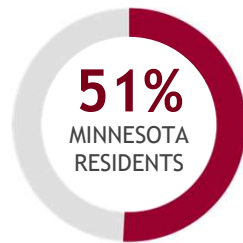
1. Healthcare Delivery and Improving Patient Outcomes
2. Rural Health
3. Healthcare Organization, Management, and Finances
4. Aging
5. Maternal and Child Health
6. Chronic Diseases
7. Food and Nutrition
8. Environmental Health
9. Genomics
10. Health Equity
11. Infectious Disease
12. Injury
13. Mental Health




College of Veterinary Medicine




586
STUDENTS IN
AY 2023-24




53
INTERNS AND RESIDENTS
ONSITE IN AY 2023-24




119
GRADUATES IN
AY 2022-23




593
EXTERNSHIPS IN
AY 2022-23

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



Degree Programs

- DVM
- PhD
- MS
- Post-Baccalaureate Certificate



College of Veterinary Medicine

- Operates 3 hospitals
- 34,000 patient visits last year
- One of the largest academic veterinary medicine programs in the country
- College is ranked #3 in the U.S. for research, #7 for overall program
- Graduating ~100 DVMs annually, Expanding to 125 in 2025.
- Students participate in externships - over 300 placements last year in MN



College of Veterinary Medicine

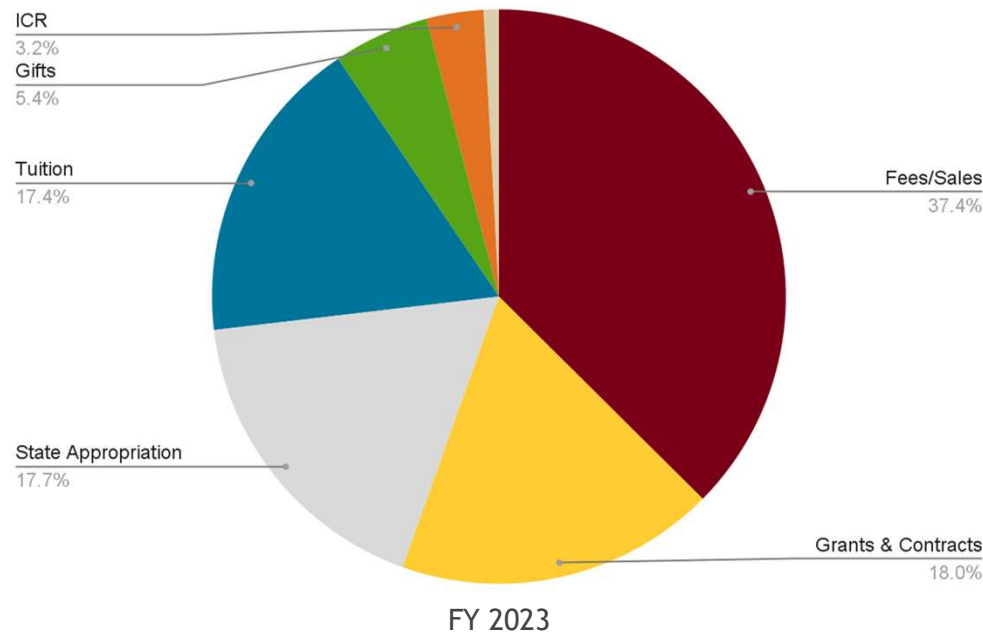


- Comparative medicine is vital to a One Health approach to medicine
 - Oncology, Cardiology, Prion diseases, etc.
 - University of Minnesota has a unique opportunity to lead
- Pet ownership provides health benefits
 - Mental health, blood pressure, cholesterol



College of Veterinary Medicine

MAJOR FUNDING SOURCES



Notable Areas of Research

1. Clinical and Translational Research in a Range of Medical Specialties Using Animal Models to Understand both Veterinary and Human Diseases
2. Chronic Disease Biology
3. Genomics and Computational Biology
4. Host-Pathogen Interface
5. Microbiomes and Antimicrobial Resistance
6. Pathogen Discovery and Surveillance
7. Ecosystem Health
8. 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.