

Expanding Opportunities Through Partnership

Norman E. Hubbard, President





Henry Ford Health

- Vertically integrated health system spanning 550 sites, including 13 acute care hospitals and 50K team members
- One of nation's most respected physician group practices, the Henry Ford Medical Group, with 3.5K+ physicians, scientists, and APPs
- Flagship campus in Detroit is an 877-licensed bed tertiary/quaternary care hospital with Level 1 Trauma, multi-organ transplantation, and \$2.2 billion campus expansion underway
- \$13B in annual operating revenue
- 132K+ 2024 discharges
- Insurance plan with 50K provider partners and 469K members



Michigan State University

- \$992M+ in 2025 total research expenditures
- 100+ research institutes and centers
- 50,000+ undergraduate and graduate students
- No. 9 among public universities and No. 47 in U.S. News & World Report's America's Best Colleges 2025
- Ranked in top 50 research universities for 2024 by Washington Monthly
- Presence in every county in the state of Michigan
- Expansive alumni network totaling ~500K (306K living in Michigan)



MICHIGAN STATE
UNIVERSITY

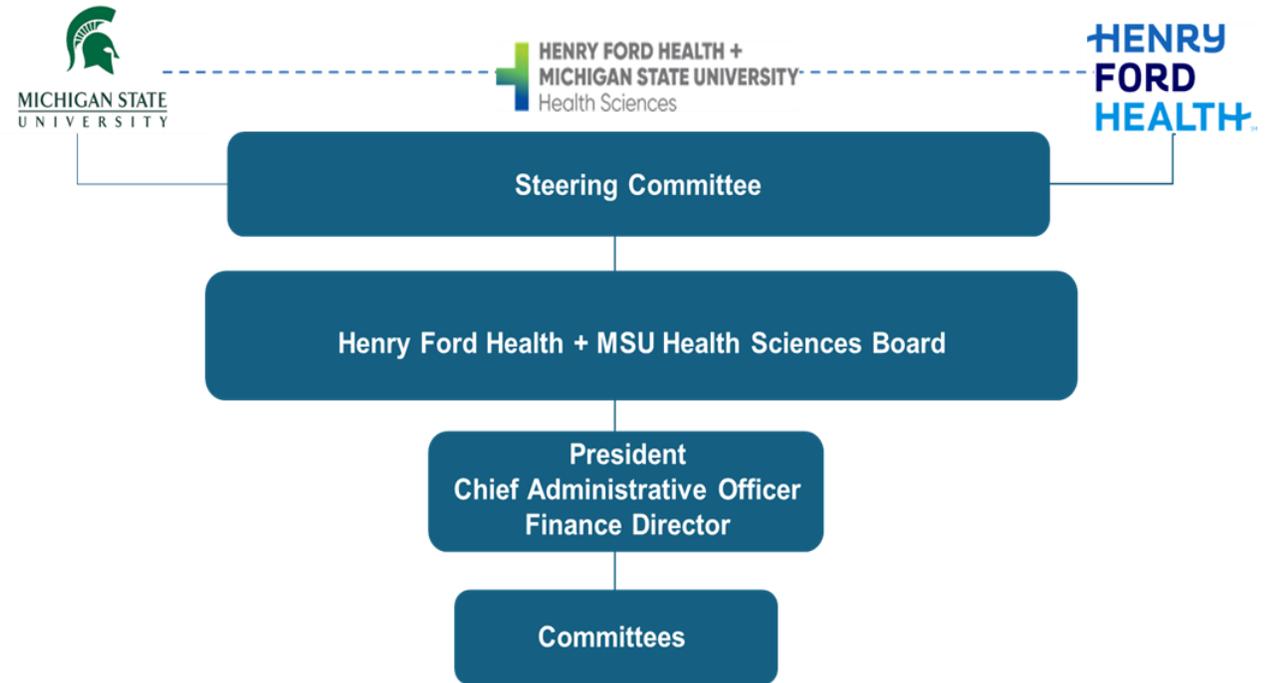
*FY2025 research expenditure figures are presented as submitted to the National Science Foundation (NSF) Higher Education Research and Development (HERD) Survey and are pending NSF acceptance and approval.



Henry Ford Health and MSU have a bold vision to develop an integrated, nationally preeminent academic health enterprise that achieves a vision neither organization could achieve independently.

Partnership Structure

- 30-year affiliation agreement – primary partner, not exclusive
- 501(c)(3) with 50:50 Member interest; provides governance vehicle
- New incremental annual investment
 - 80% research, 20% education
 - 70% cancer, 30% all other research domains
- Continued investment at the level each organization had prior to the partnership
- Integration and joint attribution
 - NIH UEI as Henry Ford + MSU partnership
 - Clinical integration



Steering Committee
MSU President Kevin Guskiewicz PhD, Henry Ford CEO Bob Riney, MSU Board Chair Brianna Scott, Henry Ford Board Chair David Breen, Adnan Munkarah MD, Laura Lee McIntyre, PhD

Henry Ford + MSU Board
Chair: Adnan Munkarah MD, **Vice-Chair:** Norman Hubbard (interim), Joyce deJong DO, Supratik Rayamajhi MD, Lisa Frace, Linda Weglicki PhD RN*, Jennifer Johnson PhD, Eric Scher MD, David Lanfear PhD, Benjamin Movsas MD, Robin Damschroder, Steven Kalkanis MD

President, Norman Hubbard
Chief Administrative Officer, Teri Grieb PhD
Finance Director, Cheryl Verbruggen

ADMINISTRATION & FINANCE
Karen Crosby, CFO MSU Office of Health Sciences
Doug Clark, Senior VP Financial Services for Henry Ford

RESEARCH
Chair:
Doug Gage PhD,
MSU Vice President of Research and Innovation

Vice Chair:
David Lanfear MD,
Henry Ford Vice President of Research & Chief Scientific Officer

CANCER
Co-Chair:
Ben Movsas MD,
Medical Director, Henry Ford Cancer

Co-Chair:
Jeff MacKeigan PhD,
Senior Advisor of MSU Office of Research and Innovation

EDUCATION
Chair:
Eric Scher MD,
Chief Education Officer & Chair, Department of Medicine, Henry Ford

Vice Chair:
Linda Weglicki PhD RN*,
Interim Dean College of Nursing

CLINICAL JOC
Chair:
Steve Kalkanis MD,
Executive Vice President, CEO, Henry Ford Medical Group
CEO, Henry Ford Hospital

Vice Chair:
Joyce deJong, DO,
MSU Dean, College of Osteopathic Medicine

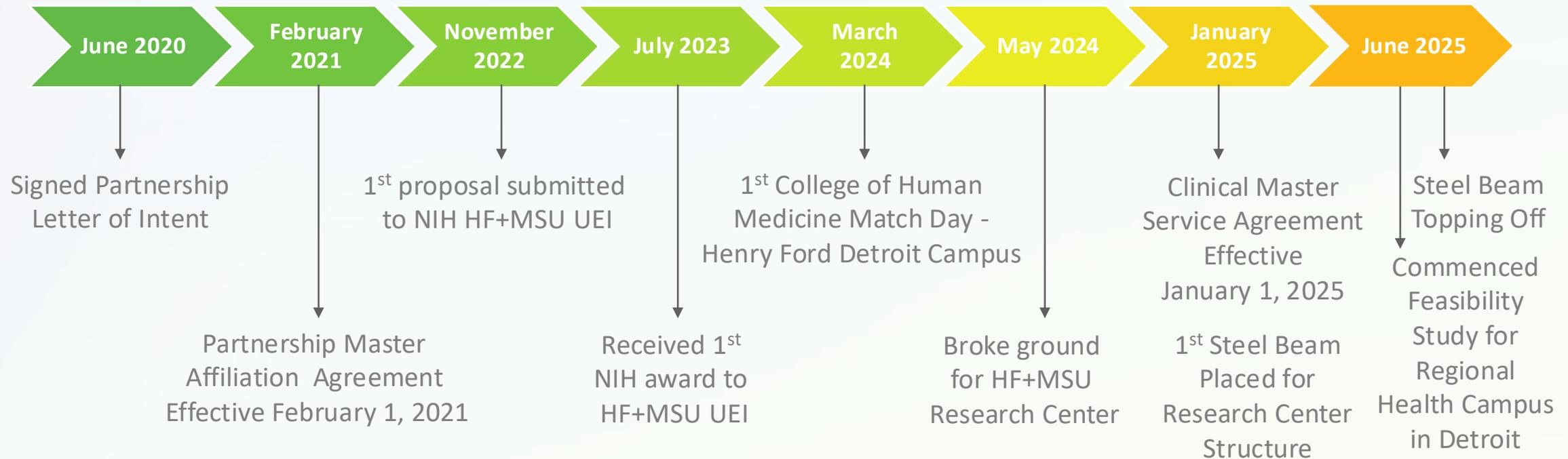
INCLUSIVE EXCELLENCE
Chair:
Krista Walker PhD,
Assistant Dean of Access and Impact, MSU College of Nursing

Vice Chair:
Martina Caldwell MD,
Medical Director of Health Advancement and Professional Excellence, Henry Ford Medical Group

INNOVATION
Co-Chair:
Scott Dulchavsky MD PhD,
Innovation CEO & Chair, Department of Surgery, Henry Ford

Co-Chair:
Chris Contag PhD,
MSU Director, Institute for Quantitative Health Science and Engineering

Partnership Timeline



Stronger Together - Research

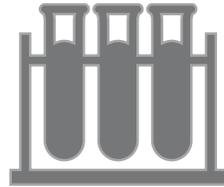


652

Henry Ford Faculty
Appointments at MSU*

152

Researchers



500

Educators/Clinicians/
Clinician Researchers

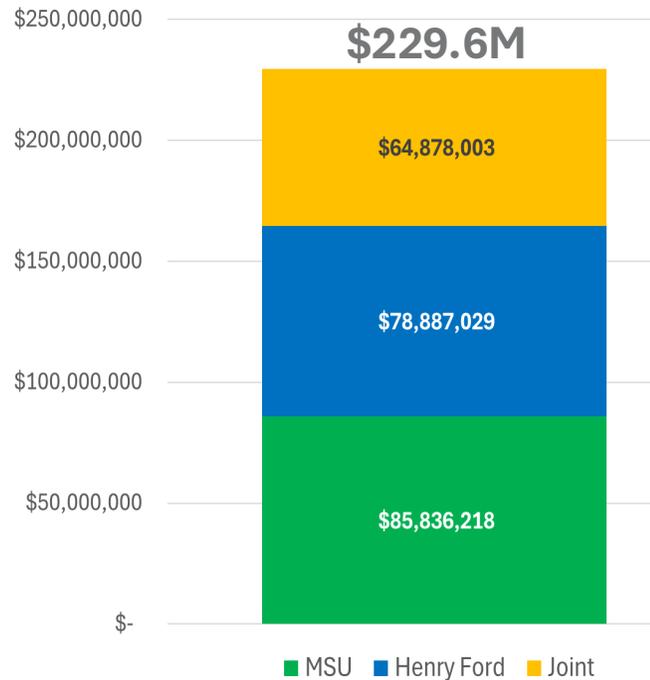


*No-pay, fixed term appointments

233

NIH Awards (2023-2025)

Total Anticipated \$ (NIH Awards 2023-2025)

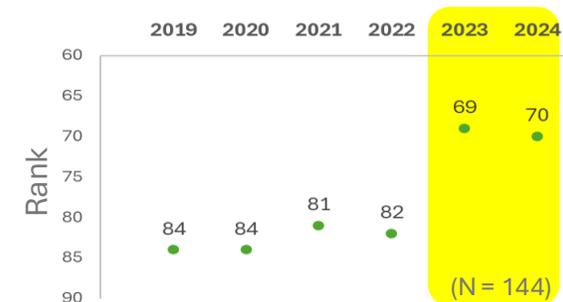


Joint includes Human Medicine, Nat Sci, Nursing, Com Art Sci

NIH Ranking of Medical Schools 2024

| Rank | Name | School of Medicine Award |
|-----------|--|--------------------------|
| 60 | VIRGINIA COMMONWEALTH UNIVERSITY | \$83,779,241 |
| 61 | PENNSYLVANIA STATE UNIV MED CTR HERSHEY | \$76,287,239 |
| 62 | BROWN UNIVERSITY | \$75,053,181 |
| 63 | UNIVERSITY OF NEBRASKA MEDICAL CENTER | \$74,709,217 |
| 64 | AUGUSTA UNIVERSITY | \$71,884,407 |
| 65 | THOMAS JEFFERSON UNIVERSITY | \$71,705,247 |
| 66 | UNIVERSITY OF SOUTH FLORIDA | \$68,745,664 |
| 67 | DARTMOUTH COLLEGE | \$68,028,025 |
| 68 | TULANE UNIVERSITY | \$65,486,391 |
| 69 | UNIVERSITY OF OKLAHOMA HLTH SCIS CTR | \$65,379,802 |
| 70 | MICHIGAN STATE UNIVERSITY & HENRY FORD HEALTH | \$61,616,013 |
| 71 | STATE UNIVERSITY OF NEW YORK STONY BROOK | \$61,578,387 |
| 72 | RUSH UNIVERSITY MEDICAL CENTER | \$60,254,549 |
| 73 | WAYNE STATE UNIVERSITY | \$57,864,645 |
| 74 | UNIVERSITY OF ARKANSAS FOR MED SCIS | \$57,017,452 |
| 75 | UNIVERSITY OF LOUISVILLE | \$54,230,457 |
| 76 | UNIVERSITY OF CONNECTICUT SCH OF MED/DNT | \$51,248,830 |
| 77 | TUFTS UNIVERSITY BOSTON | \$49,814,115 |
| 78 | UNIVERSITY OF NEW MEXICO HLTH SCIS CTR | \$48,613,028 |
| 79 | TEMPLE UNIVERSITY | \$43,254,729 |
| 80 | UNIVERSITY OF VERMONT | |

BRIMR.org NIH Ranking of Medical Schools



Awards include new projects & award increments
Source: Office of Sponsored Programs

Henry Ford + MSU Strategic Research Focus Areas

Strategic Research Domains

Cancer



Neuroscience



Cardiometabolic Health



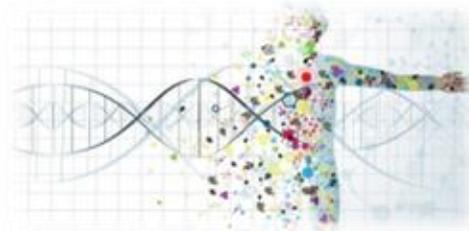
Women's Health



Musculoskeletal
Coming Soon



Crosscutting Themes



Precision
Medicine



Health Disparities,
Rural & Urban



Population/
Public Health

Building Scholarly Communities

Cancer

Cardiometabolic Health

Neuroscience



Musculoskeletal

Women's Health

Innovation



Seed Funding: Deepening Collaborations and Advancing Discovery

To date we have awarded more than **\$2.7 million** and **79 research projects**.

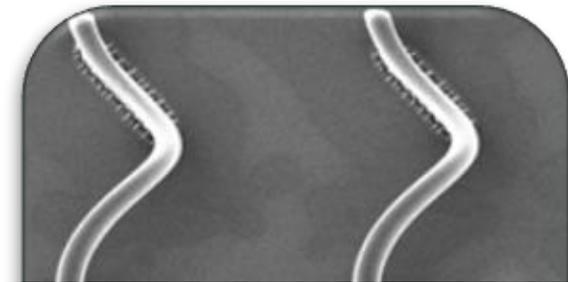
Funding opportunities across:

- Cancer
- Nursing
- Neuroscience
- Cardiometabolic Health
- Research Team & Community Building



Co-PIs: D. Pyeon & Q-S. Mi
\$3 million grant from the National Institute of Dental and Craniofacial Research to study new treatments for head and neck cancer caused by the human papillomavirus (HPV)

New TriMag Microrobots:
Microscopic robots that may make medical procedures, including cancer treatment and



RESEARCH ARTICLE

Rising Star

ADVANCED MATERIALS
www.advmat.de

TriMag Microrobots: 3D-Printed Microrobots for Magnetic Actuation, Imaging, and Hyperthermia

*Liuxi Xing, Yulu Cai, Yapei Zhang, Kevin Mozel, Zhengxu Tang, Tengpeng Tang, Vittorio Mottini, Saumya Nigam, Bryan R. Smith, Ian Y Lee, Tavarekere N. Nagaraja, Ping Wang, Xiangjia Li, Tong Gao, and Jinxing Li**

Affinity Group Funding Mechanisms

1 Team Building

- **Up to \$2,000**
- New connection – at least 1 Henry Ford PI and 1 MSU PI who haven't worked together
- Explore new collaboration
- Joint journal clubs, seminar series, retreat, meet and greets, among others

2 Community Building

- One-time funding, **up to \$10,000**
- New, multidisciplinary gathering of Henry Ford + MSU investigators
- Build community and explore pathways for large grant mechanisms
- Joint conferences, symposia, retreats, or other large (50+) gatherings, among others

2026 Due Dates:

March 31, 2026

July 31, 2026

November 24, 2026

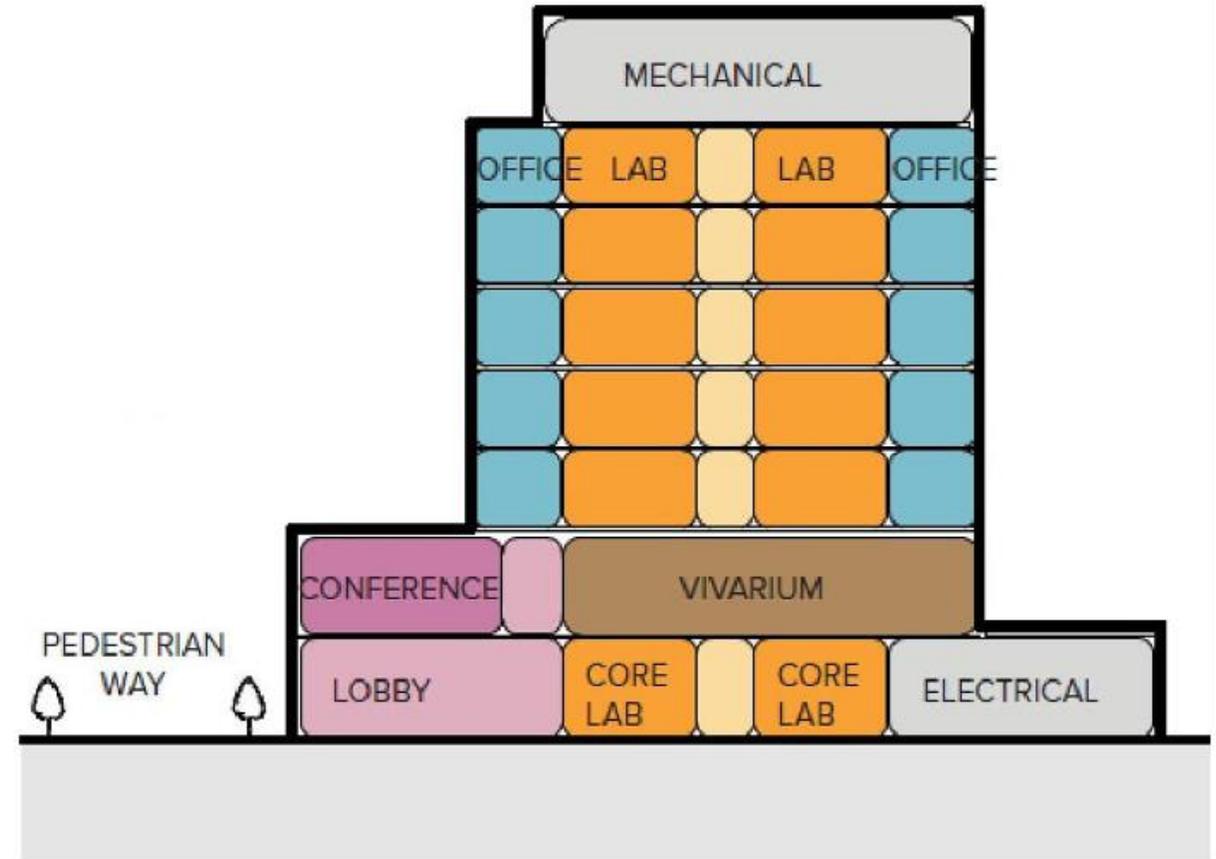
Henry Ford + MSU Research Center

- 335,000-sq-ft Research Center opening Spring 2027
- 80 principal investigators (500+ personnel)
- Cancer, precision medicine, neuroscience, & more
- Vivarium with procedural, behavioral, and surgical suites
- Nick Gilbert Neurofibromatosis Research Institute
- Central research cores
- Translational hub

57
Joint Recruitments



Henry Ford + MSU Research Center

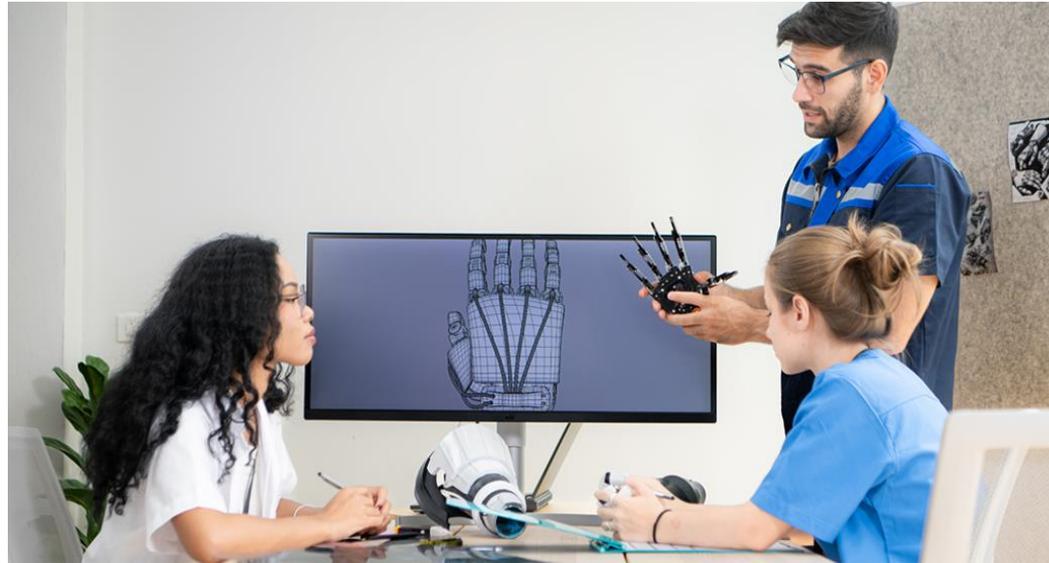


Research Committee 2026 Priorities

- Jointly recruit investigators in strategic areas
- Engage MSU colleges beyond the health colleges
- Codify joint operations of the Research Center
- More fully integrate our research enterprises
- Advance strategic research programs and cross-cutting scientific platforms
- Expand MSU graduate students at Henry Ford Health
- Enhance communication of partnership



Stronger Together - Commercialization



Innovation Hub: Complementary Commercialization Strengths

Clinical Expertise

- Commercialization of HFH innovations
- Clinical subject matter expertise, validation, real world evidence, data
- Pilot and clinical trial site
- Access to expert assessment
- Vetting 80 – 100 companies annually for industry collaborations
- Downstream economic benefit (royalty, future discounts, etc.); most seeking investment

Entrepreneurial Support

- IP guidance and support
- Prototyping and testing
- Access to MSU expertise and infrastructure
- Commercialization strategy including customer discovery and validation
- Incubation and suite of start up programming including EIR's
- 7 Accelerators (1 MedTech specific)
- Non-dilutive grant support
- Access to a vast startup network of services

Complementary
Innovation
Programs

Venture Investment

- Most active Great Lakes Region early-stage investment team
- Red Cedar Ventures and MI Rise - \$50AUM under management for early-stage technology investment
- Funding criteria and ROI framework
- Venture network partnerships
- Vast service provider network and resources
- Health care portfolio and expertise
- Team of investment professionals across all industries

● Henry Ford Health

● Michigan State University,
MSU Research Foundation

Henry Ford + MSU Innovation Fund



Stronger Together - Education



MSU Students Training at Henry Ford

- **Regional Campus for CHM:** provide 3rd and 4th year training at a Henry Ford main hospital for CHM medical students
- **COM Scholarly Activity Clerkship Program:** a new clinical training pilot for MSU DO students with an increased clinical research experience at HFH
- **CON Accelerated Second-degree BSN:** doubled program to enable more MSU nursing students to complete training at HFH campuses



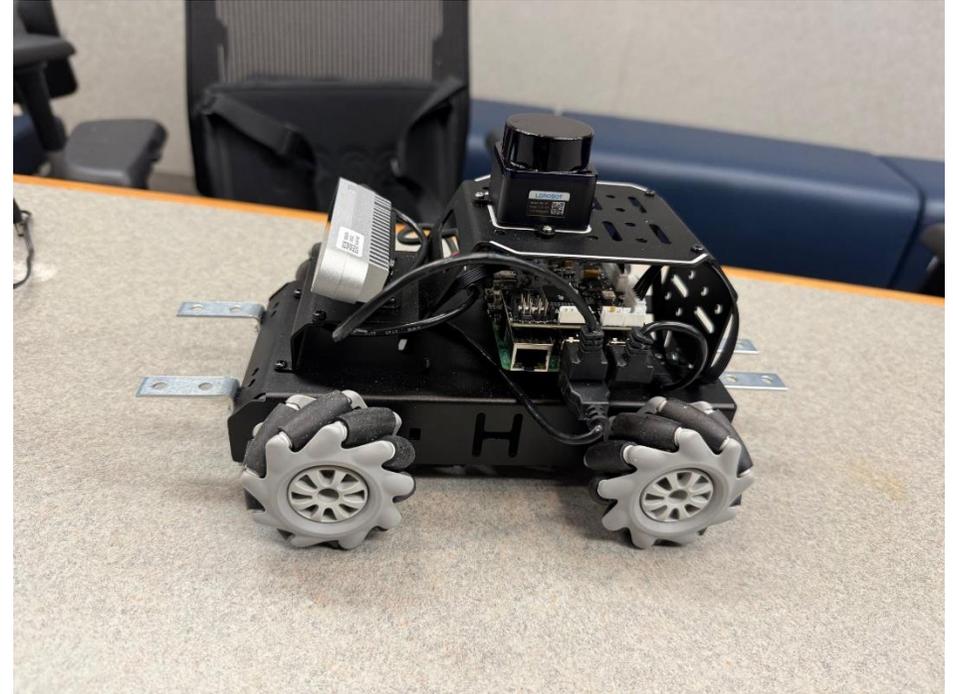
Building a Dynamic, Real-world Learning for Undergraduates

HF sponsored 16 MSU capstone projects in 2025

- Pathology Robotic Transport System
- Research Synergy Vanguard Portal: search to find research areas of interest and expertise
- Organic Waste Digester study
- HAP: At Risk Populations

MSU College of Arts and Letters

- Henry Ford + MSU Artist Residency Program in healthcare
- Exploring hosting rotating sculptures designed by students in the MSU Public Art Studio course



Pre-testing robotic delivery and transport system, which will be integrated into Destination Grand, a transformational expansion of Henry Ford Hospital as part of \$3 billion *Future of Health* initiative

Education Pathways – Reaching High School Students

50 Henry Ford + MSU Scholarships

- Part of Future of Health community commitment, full-tuition for four years (eight semesters) through MSU’s Spartan Tuition Advantage
- \$3,000 annual housing stipend for first two years in MSU’s on campus housing
- Personalized support and mentorship — Detroit M.A.D.E. Scholars Program, which focuses on college transition, graduation and career development

Expanding RYSE MED

- A free health equity and career program that supports Detroit area high school students who face structural barriers to pursuing careers in health care and research; includes immersive, on-site shadowing experiences
- MSU students are encouraged to participate in the program by becoming a student mentor.

Detroit High School Community Engagement with MSU College of Human Medicine



Readying Youth Scientists for Excellence in Medicine, Health Equity, and Discovery (RYSE MED)

Education Committee 2026 Priorities

- Establish and implement a joint vision for a health campus in Detroit.
- Explore clinician/PhD program expansion with placements at Henry Ford Health.
- Scale the Initiative for Nursing Support of Publications and Innovation in Research and Education (INSPIRE) mentorship program.
- Develop nursing educational programs (e.g., post graduate certificate, leadership fellowship, CE/CMEs).
- Leverage and expand existing pathways into the health professions (led by Inclusive Excellence Committee).



Stronger Together - Clinical



Contributions & Benefits Expected from Clinical Integration

CLINICALLY-ALIGNED ENTERPRISE

What MSU Gives

- Shared control over practice operations
- Shared decisions over direction and strategy of clinical practice
- Freedom to pursue some partnerships

What MSU Gets

- Sustainable financial backstop
- Platform for practice plan growth
- Strategic initiative enablement
- Affiliation & co-branding with a nationally-renowned clinical partner
- Access to broader array of clinical settings for applied research
- MSU leadership roles within Henry Ford



Aligned Clinical Leadership



Health Plan (HAP)



Hospitals & Ambulatory Sites



Digital, Retail & Home



Physician Network
(HFMG & MSU Faculty)



Better Capacity to
Address Health Disparities

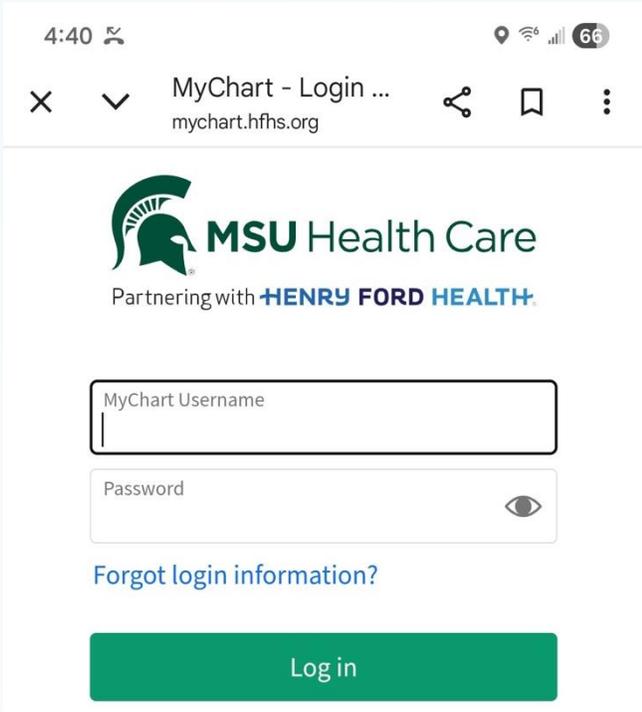
What Henry Ford Gives

- Financial support/coverage to the MSU clinical activities in alignment with operational oversight
- Operational support for MSU clinical activities that complements HCI's current operating model

What Henry Ford Gets

- Expanded provider network and talent pipeline from MSU students
- Market expansion in Central Michigan
- Affiliation & co-branding with a nationally-renowned academic partner
- Enhanced access of bench to bedside research translation
- Henry Ford leadership roles within OHS

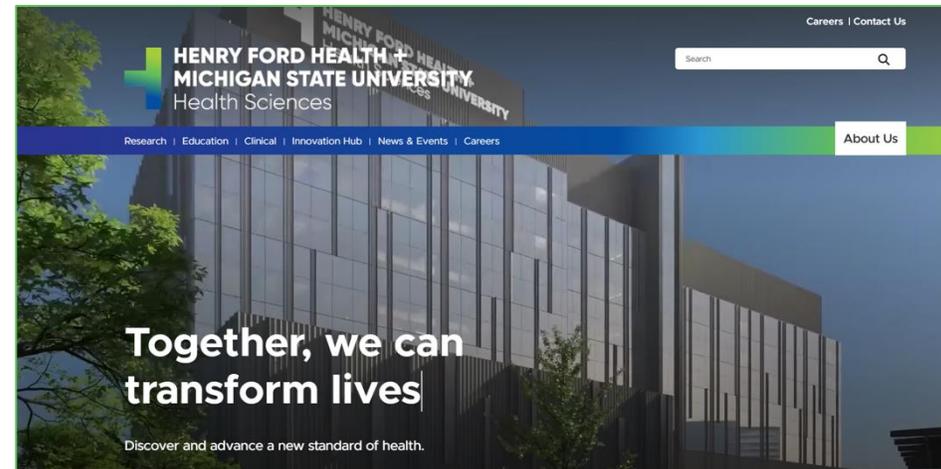
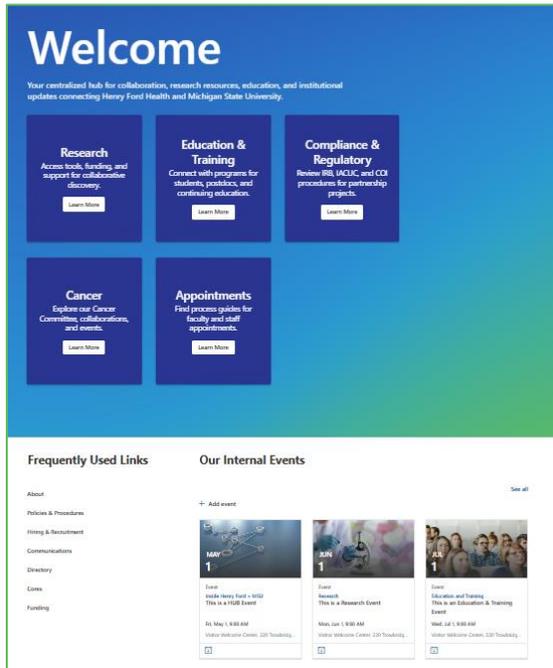
Clinical Integration and Alignment in East Lansing



Epic/MyChart Go-Live Jan. 31

Enhanced Communication Resources

Refreshed website
launching in March
with directory



JOIN monthly
newsletter

henryfordmsu@msu.edu





HENRY FORD HEALTH +
MICHIGAN STATE UNIVERSITY
Health Sciences

HENRY FORD HEALTH +
MICHIGAN STATE UNIVERSITY
Health Sciences



RESEARCH
CENTER

Extra slides

Thank you!

| | | | | | |
|---------------------------|------------------------|----------------------|---------------------|------------------------|-------------------------|
| Adnan Munkarah | D'Angela Pitts | Ilan Rubinfeld | Kara-Lynn Janisse | Mark Smith | Robert Barto |
| Alexandra Deporre | Danielle Bastien | Iram Zaman | Karen Crosby | Martina Caldwell | Robert Pearson |
| Amanda Ishola | Danielle Elswick | Jabbar Bennett | Karen Zastrow | Marwan Abouljoud | Robert Riney |
| Amy Ralston | Darline ElReda | Jackie Iseler | Kathleen Poindexter | Mary Kay Smith | Robin Damschroder |
| Andrea Wendling | Dave Barondes | James Snyder | Katie Cook | Mary Kravutske | Robin DeMuth |
| Angela Chia-Chen Chen | David Allard | Jamie Bernard | Katie Kowalski | Mary Lynn Davis-Ajami | Ronald Chandler |
| Angela Murphy | David Breen | Jaye Clement | Kelly Hodges | Mary Shirkey | Scott Dulchavsky |
| Ann Sheehan | David Kaufman | Jayna Gardner-Gray | Kelly Keenan | Matt Emery | Seth Ciabotti |
| Anna Moore | David Kwon | JC Whitelaw | Kelly Tebay | Matt Saval | Sharon Rouse |
| Arlynn Dailey | David Lanfear | Jeanne Wymer | Kevin Floyd | Michael Bey | Shirish Gadgeel |
| Aron Sousa | Dawn Goldstein | Jeffrey MacKeigan | Kevin Guskiewicz | Michael Grisdela | Stacey Pylman |
| Ashlee Vance | Deb Spencer | Jeffrey Searl | Kim Meeker | Michael Martel | Stacy Abraham |
| Barbara Given | Debalina Bandyopadhyay | Jennifer Gibson | Kimberlydawn Wisdom | Michael Weiner | Stacy Coogan |
| Ben Rybicki | Debra Stieve | Jennifer Gibson-Levy | Kris Allen | Mieka Smart | Stefanie Roberts Newman |
| Benjamin Movsas | Denise Robinson | Jennifer Johnson | Kris Castine | Mike Chopp | Stephanie Stotenbur |
| Bernadette White | Denise White Perkins | Jennifer McCarty | Krisinda Palazzolo | Mike Markel | Stephen Brown |
| Bob Cermak | Dhananjay Chitale | Jerry Kooiman | Krista Walker | Nakia Allen | Steven Kalkanis |
| Bob Riney | Diane Wyatt | Jessica Decker | Kristen Ludwig | Nara Parameswaran | Steven Thomas |
| Brian Schutte | Doug Clark | Jessica Schmidt | Kristen Waarala | Nate Ter Beek | Susan Buchholz |
| Bryan Kelly | Douglas Gage | Jessica Whitney | Kristina Boudreau | Nathan Fitton | Suzanne Schut |
| Catherine Susko | Eileen Hug | Joe Zimmerman | Kristina Sturgill | Nicole Szymzak | Taylor Brazelton |
| Cathy Draus | Elisabeth Mirer | Joel Greenberg | Krystal Owens | Nikhil Goyal | Teri Grieb |
| Charles Haseman | Elizabeth (Betty) Bear | John Deledda | Lamont Jones | Norman Hubbard | Terrie Taylor |
| Charles Hong | Emilio Mottillo | John Furcean | Larissa Miller | Nutrena Tate | Thomas Buekers |
| Chastity Warren | Eric Jennings | John Goudreau | Laura Kuczajda | Pam Hazel | Thomas O'Halloran |
| Cheryl Verbruggen | Eric Scher | John Hollenbeck | Laura McCabe | Pamela Harding | Tom Mikkelsen |
| Chris Contag | Eric Tornig | John LaPres | Leigh Small | Paul Browne | Tommy O'Flynn |
| Chris Surian | Eric Wallis | John McGinnity | Lillian Paciorowski | Paul Kolpasky | Twila Reighley |
| Christine Forester | Erik Braun | John Thelen | Linda Gifford | Philip Philip | ViVek Kak |
| Christine Johnson | Evonne Pedawi | Jon Babage | Lisa Cohen | Qing-Sheng Mi | Walt Esselman |
| Christine Neslund-Dudas | Farzan Siddiqui | Jon Goldstein | Lisa Lowery | Ramandeep Rattan | Wanda Lipscomb |
| Christopher Drake | Gabriel Bernat | Jonathan Braman | Lisa Prasad | Randi Stanulis | Wayne McCullough |
| Christy Vrana-Stevens | Geneva Tatem | Jordan Braciszewski | Liz Lyons | Rebecca Shannon-Kortes | Wendy Kim |
| Christy Wheaton | Geoff Patterson | Joseph Haywood II | Lucas Huffman | Rema Vassar | Wil Allen |
| Cindy Arvidson | Gwen Gnam | Josh Frank | Lyman Mower | Renee Shepherd | |
| Clara Hwang | Gwen Wyatt | Joshua Winowiecki | Manpreet Kaur | Rhonda Conner Warren | |
| Crista Reaves | Henry Lim | Joyce deJong | Margot LaPointe | Richard Bryce | |
| Cristina de Guzman Strong | Hillary Hart | Justin Booth | Marita Gilbert | Rick Neubig | |
| Dan Kelly | Howard Crawford | Justin Norris | Mark Delano | Rob Young | |

Planning Committees – Strategic Research Domains

- 50:50 Henry Ford & MSU faculty
- Define the current landscape of research strengths, resources, and opportunities across Henry Ford Health and MSU
- Develop strategies for how we can realize our potential together
- Limited funding to begin to implement recommended strategies

More information: www.henryfordmsu.org/research

Investing in New BioMolecular Science Slots

- Funded 3 additional graduate students (2024 & 2025)
 - tuition, stipends, & benefits
 - \$10,000 recruiting expenses each year
- Funding 5 slots annually (2026+)
- 10 graduate students rotated at HF in 2025
 - Mix of BMS programs: MGI, GGS, CMB, and others
- 3 students joined HFH labs, including 1 DO/PhD
- Henry Ford PIs actively engaged
 - BMS admissions committee
 - 1:1 interviews
 - HF graduate student journal clubs and socials
 - Detroit-based exam proctoring and more



Equipping Emerging Leaders for Meaningful Impact

Developing future leaders through the HF + MSU Health Innovation Leadership Academy (HILA). Cohort of **24 faculty**, equally representing **Henry Ford** and **MSU**.

HILA Objectives:

- Strengthen interdisciplinary team building
- Promote cross-organizational collaboration
- Drive innovation through interdisciplinary thinking
- Establish lasting networks for impact





Cancer Committee 2026 Priorities

- National search for the HF+MSU cancer center director
- Jointly recruit cancer investigators in strategic areas
- Advance foundational research programs
- Develop a strategic roadmap for Cancer Research Training & Education Coordination component
- Initiate Community Outreach & Engagement program
- Increase base NCI research funding
- Continue building a scholarly community and integrated culture in cancer
- Elevate the standing of the HF+MSU Cancer Center through robust internal and external communications