



WAYNE STATE UNIVERSITY

Board of Governors
Health Affairs, Research &
Economic Development Committee
February 14, 2025

The Past Ten Years -The Way Forward

- In 2014 Karmanos Cancer Institute (KCI) was in financial trouble and was acquired by McLaren the same year
- Clinical operations streamlined with positive margins for 9 years in a row
- NCI funding per NIH RePORT decreased from \$20.9M in 2014 to \$10.9M in 2022 (48% decrease)
- Faculty retention and recruitment were a major challenge
- Goal: To increase scientific impact according to National Cancer Institute metrics, working closely with Wayne State University and McLaren Health Care



Center Director Since 2023



Boris Pasche, MD, PhD

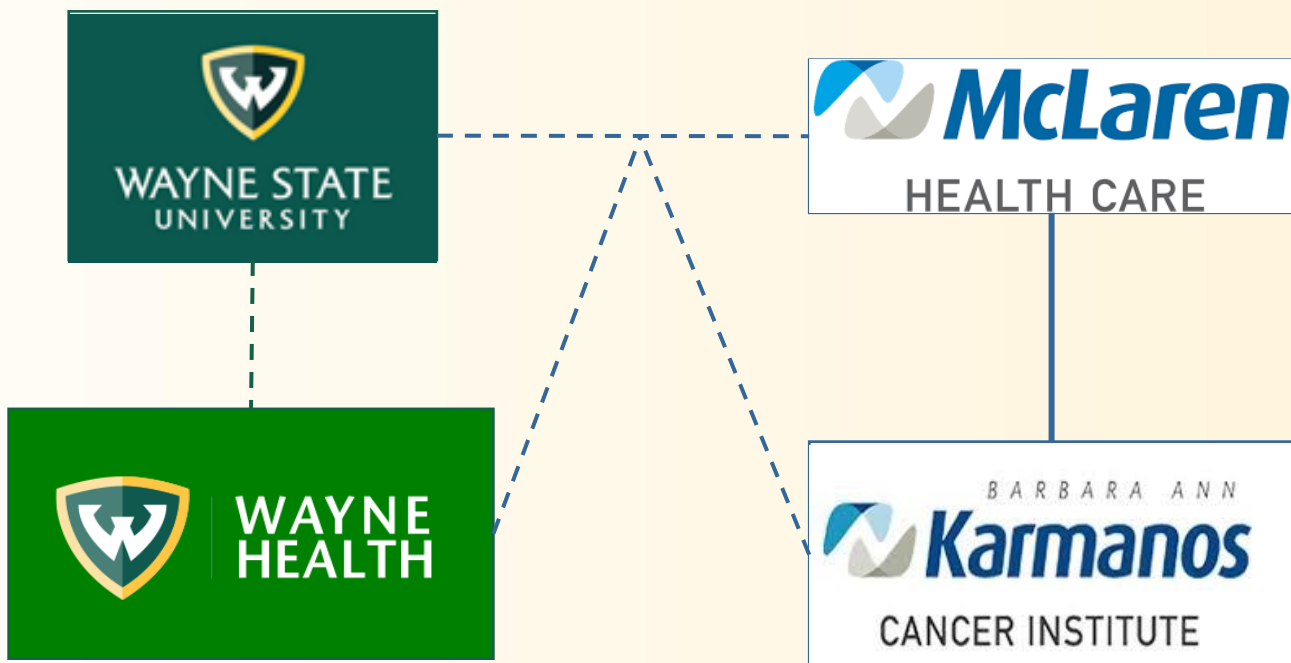
Chair of Department of Oncology and Associate Dean for Cancer Programs at Wayne State University

- Coordination of all cancer research at the University
- Assignment of tenured faculty lines
- Educational activities
- Faculty development

President & CEO of Institute

- Center & Institute appointments and membership
- Oversight of Institutional and CCSG Funds
- Overall strategic planning
- Control of clinical space (500,000 sq ft)
- Control of research space (120,000 sq ft)
- Alignment of research and patient care across all cancer care delivery sites
- Philanthropy



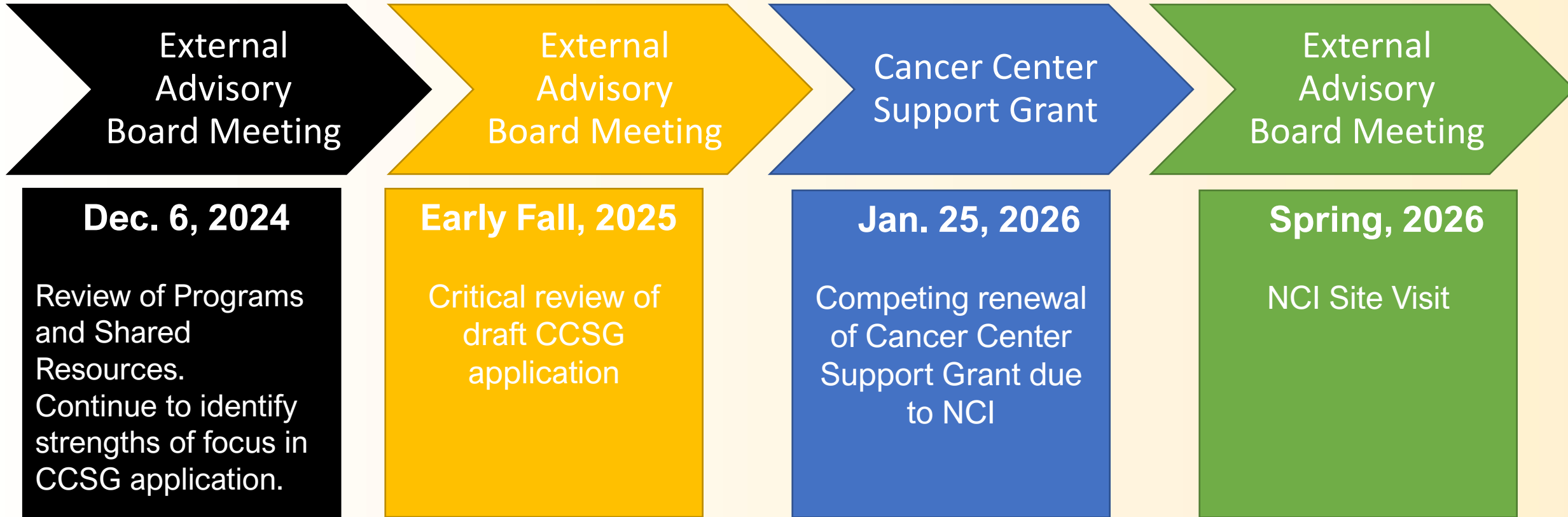


- WSU/WH and McLaren/KCI--Joint excellence for our community
- WSU holds the Cancer Center Support Grant (CCSG) from the National Cancer Institute (NCI)



Cancer Center Support Grant (CCSG) Timeline

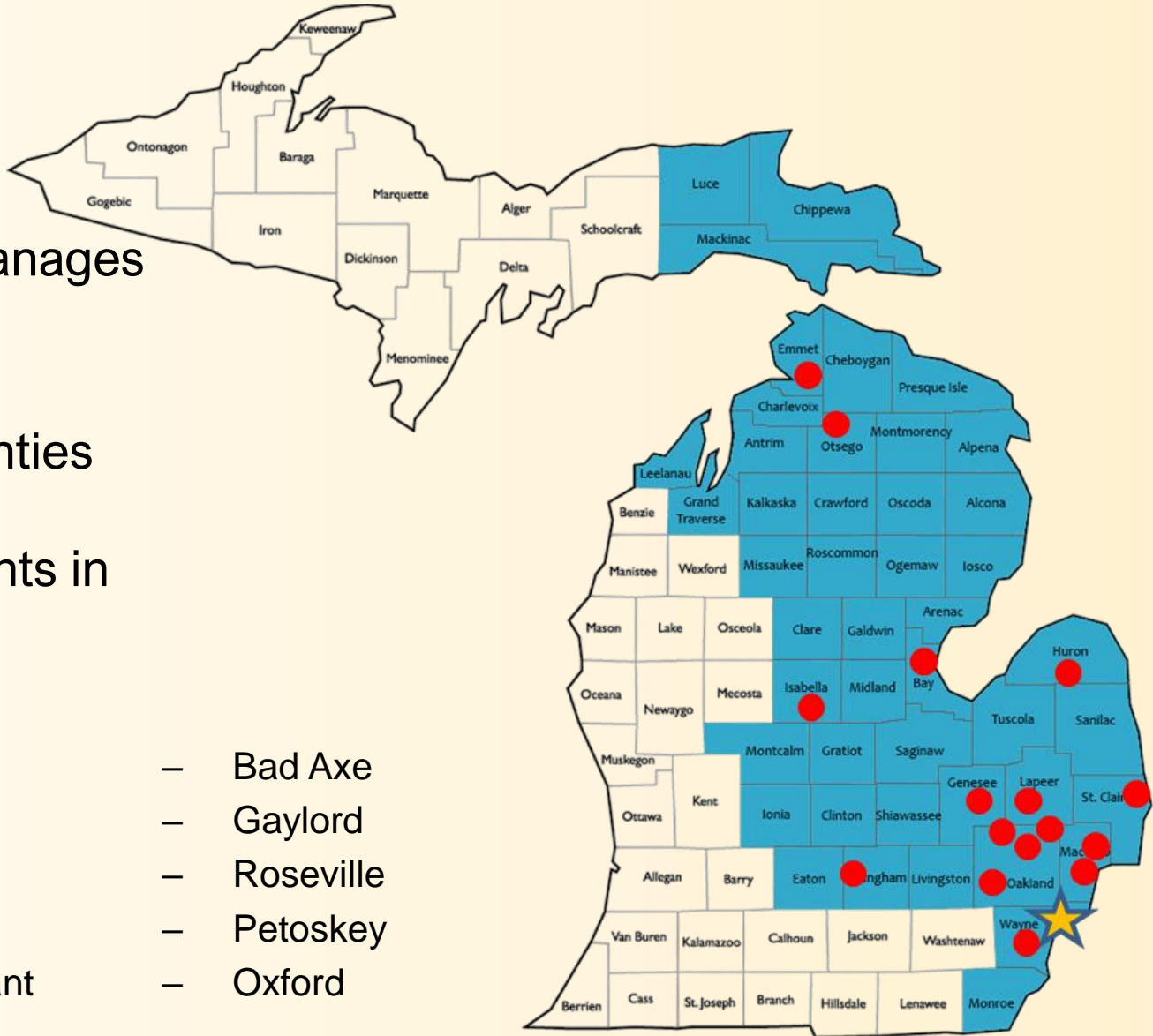
The next 18 months...



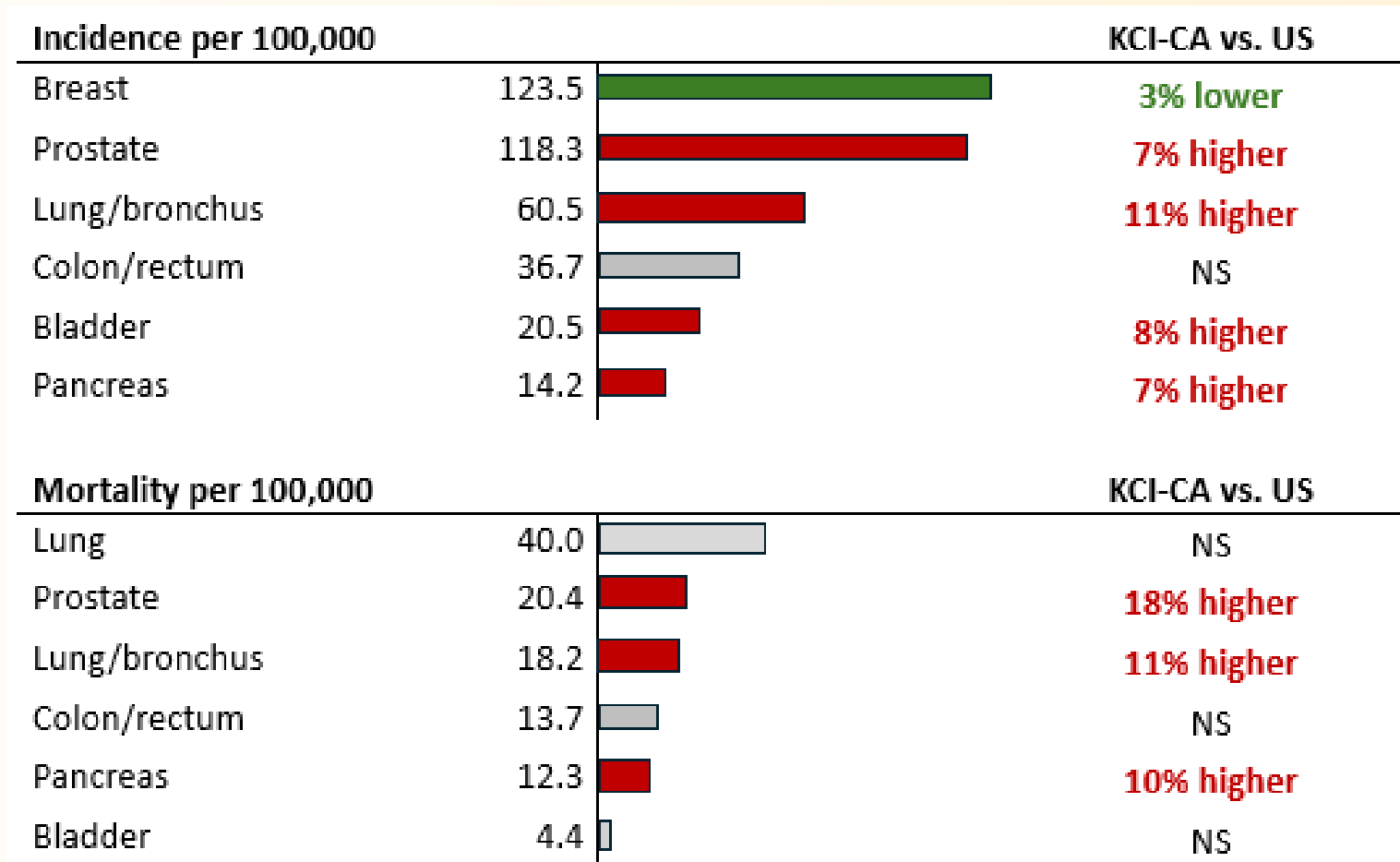
Scope of KCI's Enterprise & Catchment Area

- Part of McLaren Health Care, KCI manages the oncology service line throughout network
- 95% of our patients are from 46 counties (Michigan has 83 total)
- KCI serves 37% of new cancer patients in this region
- Treatment Locations in MI, 17 sites:

★ Detroit	– Flint	– Bad Axe
– Farmington Hills	– Lapeer	– Gaylord
– Mount Clemens	– Dearborn	– Roseville
– Clarkston	– Port Huron	– Petoskey
– Pontiac	– Mount Pleasant	– Oxford
– Lansing	– Bay City	



Cancer Burden: Incidence and Mortality



Michigan Cancer Surveillance Program, 2016-2020

Cancer Risk Factors and Screening In Catchment Area (CA)

Risk factors (%)						
	KCI-CA	Detroit	SE	East	Central	North
Current cigarette smoker	18.4	24.8*	15.9	22.2*	18.8	19.9
Former smoker	27.0	18.3*	27.5	29.2	26.5	31.9*
No leisure physical activity or exercise, past month	24.2	31.8*	21.6	28.7*	23.7	25.5
Obesity	35.9	38.5	34.1%	41.0*	36.9	32.8

Screening (%)					
	Detroit	SE	East	Central	North
Ever had a mammogram	87.4	94.3	92.3	93.9	90.9
Ever had a PSA test	45.6	63.5	60.9	45.5	56.2
Ever had a sigmoidoscopy or colonoscopy	72.8	77.6	79.5	82.6	75.4

Michigan Behavioral Risk Factor Surveillance System, 2019-2021



May 2020 Site Visit

135 Scientific Members

Direct, Cancer-Related Funding

\$67.1M

Overall

\$22.3M

Peer Reviewed

1888 Publications (over 5 years)

14% Impact Factor ≥ 10

December 2024 EAB

129 Scientific Members

Direct, Cancer-Related Funding

\$54.7M

Overall

\$21.6M

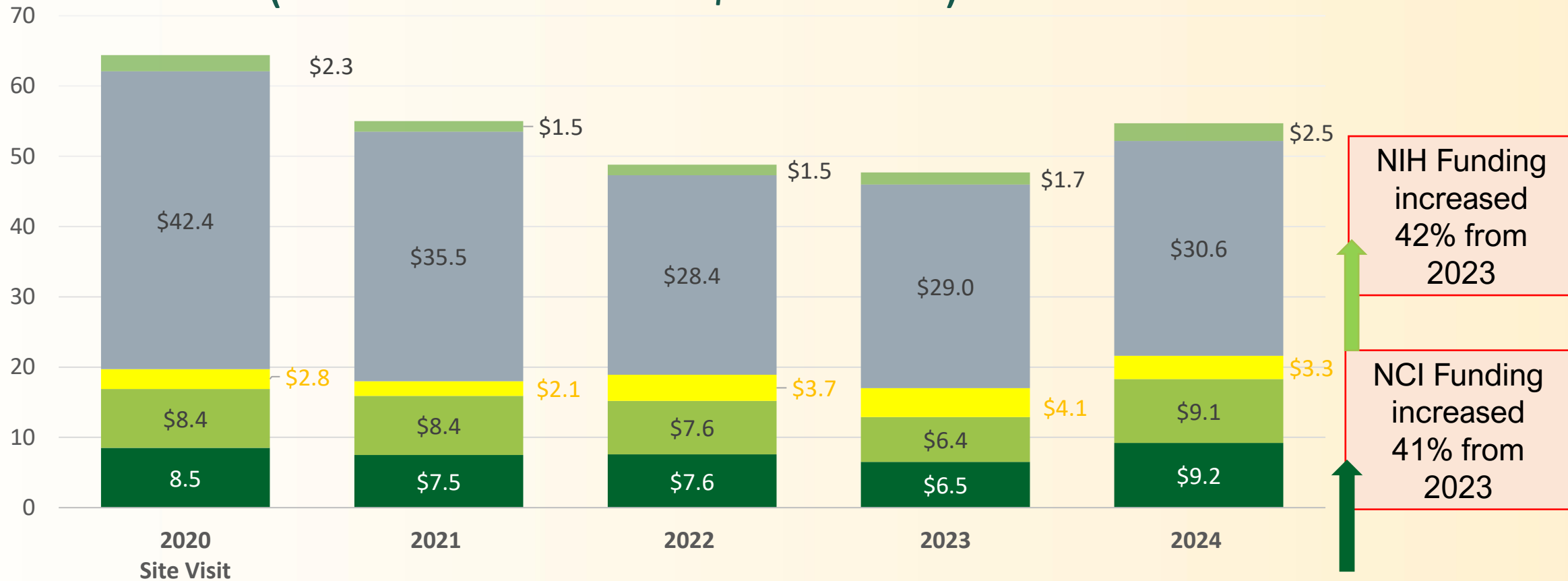
Peer Reviewed

2128 Publications (over 5 years)

16% Impact Factor ≥ 10

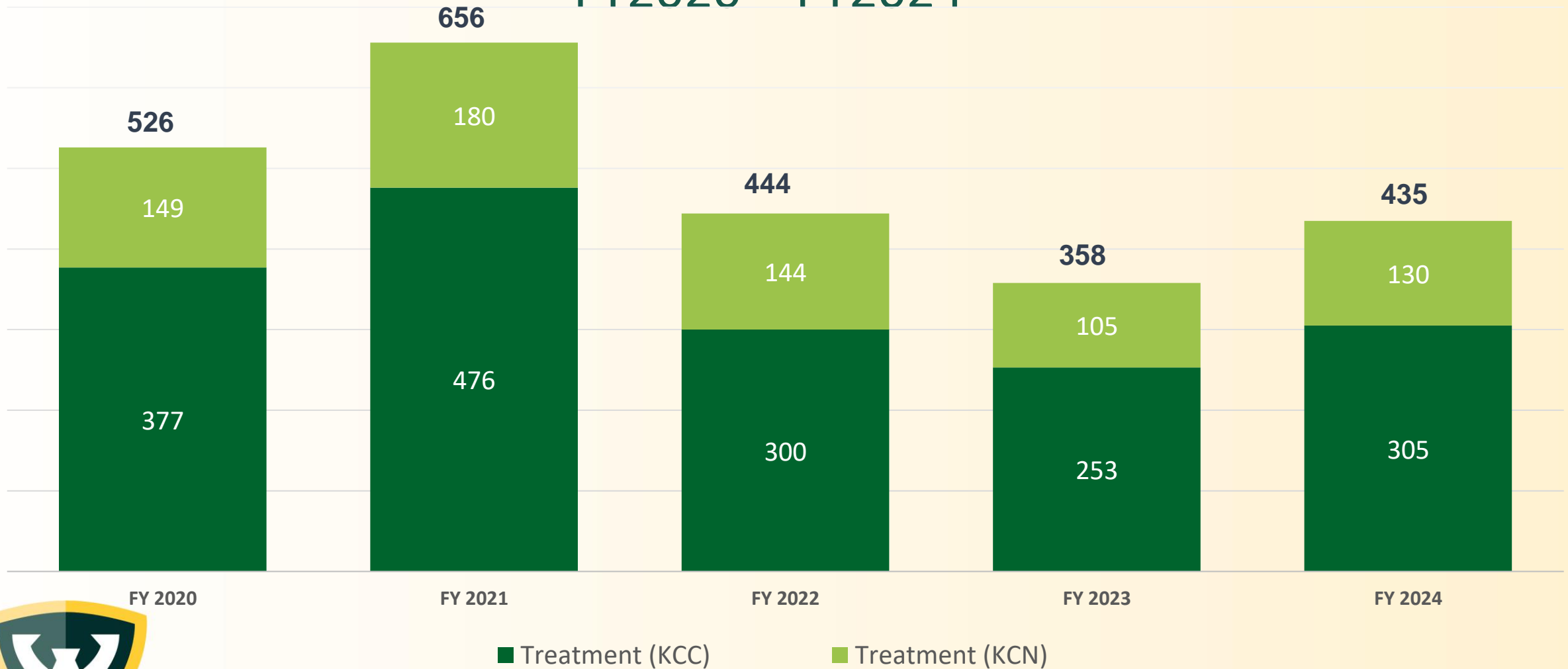


EXTRAMURAL FUNDING 2020 – 2024 (DIRECT COST* IN \$MILLION)



■ NCI
 ■ Other NIH
 ■ Other Peer
 ■ Industry
 ■ Other Non-Peer

Treatment Clinical Trial Enrollment FY2020 – FY2024



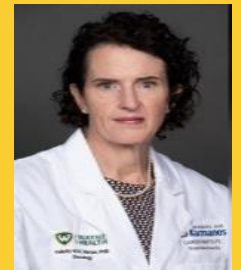
Scientific Highlights



SCIENTIFIC IMPACT: Inherited Genetic Susceptibility to Cancer in African Americans

Wayne State University investigators have shown that African Americans diagnosed with cancer qualified for genetic testing more commonly than other ethnic groups.

- Will identify individuals at higher risk of cancer
- Will provide genetic testing and genetic counseling
- Will likely reduce cancer risk among African Americans



FUNDING

U01 CA199240
X01 HG012908
P01 CA272239

CORES

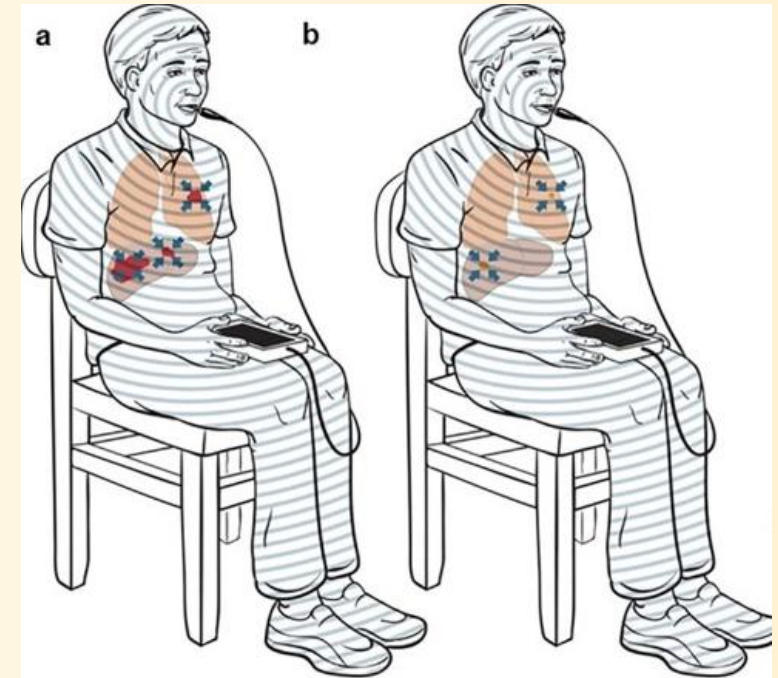
ERC, BBC



SCIENTIFIC IMPACT: FDA Approval: TheraBionic P1 Device

Novel cancer treatment using radiowaves delivered to the entire body by means of a spoon-shaped antenna.

The body antenna concept:
Systemic Delivery of Radio Frequency Electromagnetic Field in Humans.



This allows systemic targeted treatment of cancer without adverse events.

TheraBionic received FDA approval for “Treatment of persons ≥ 18 years of age with advanced hepatocellular carcinoma (HCC) who fail first and second line therapy”.
First patient receiving treatment at KCI with FDA-approved device



1. Device carrying case;
2. Therapeutic device;
3. Docking station for wireless charging;
4. Patient spoon;
5. Power supply;
6. Activation card



Recruitment



Impactful Recruitments



Azeddine Atfi, PhD

Professor, Oncology

Molecular Therapeutics Program

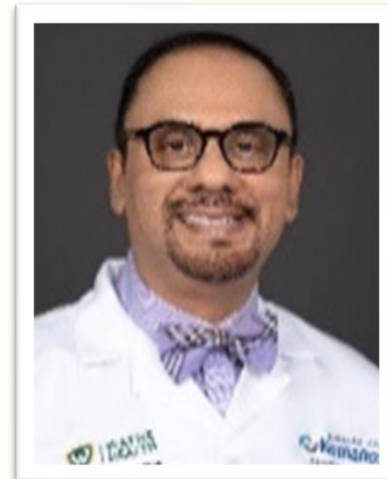
Start Date: February 2025

Expertise: Cachexia (malnutrition in cancer patients), pancreatic cancer

Funding: R01 (11/2028), R01 (6/2025), R01 (9/2024)

Leadership Role: Deputy Center Director

- Oversight of Shared Resources
- Strategic Direction



Wasif Saif, MD, MBBS

Professor, Oncology

Leadership Roles: Deputy Center Director

- Leader Phase I MDT Program, one of the largest program in the nation
- Director Eisenberg Center for Translational Therapeutics
- Co-leader GI malignancies and neuroendocrine tumors MDT



Impactful Recruitments



Meser Ali, PhD

Professor, Oncology - Molecular Therapeutics Program

Start Date: May 2024

Expertise: imaging, MRI

Funding: NCI R01 (3/2027)



Jagadananda Ghosh, PhD

Professor, Oncology - Tumor Biology and Microenvironment Program

Start Date: March 2025

Expertise: cancer biology, human tumors grown in mice

Funding: NCI R01 (4/2028), DOD

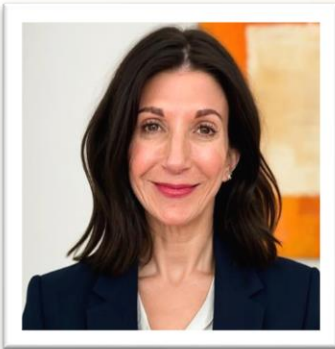


Impactful Recruitments



Craig Cole, MD

Associate Professor, Oncology - Molecular Therapeutics Program and Office of Cancer Health Equity and Community Engagement
Expertise: Multiple Myeloma



Lara Sucheston-Campbell, PhD

Professor, Oncology - Population Studies and Disparities Research Program
Co-Leader of the Heme Malignancies MDT

Start Date: December 2024

Expertise: Genomics, Ovarian Cancer, Heme malignancies

Funding: U01 (project PI)



Essential Characteristics



Physical Space

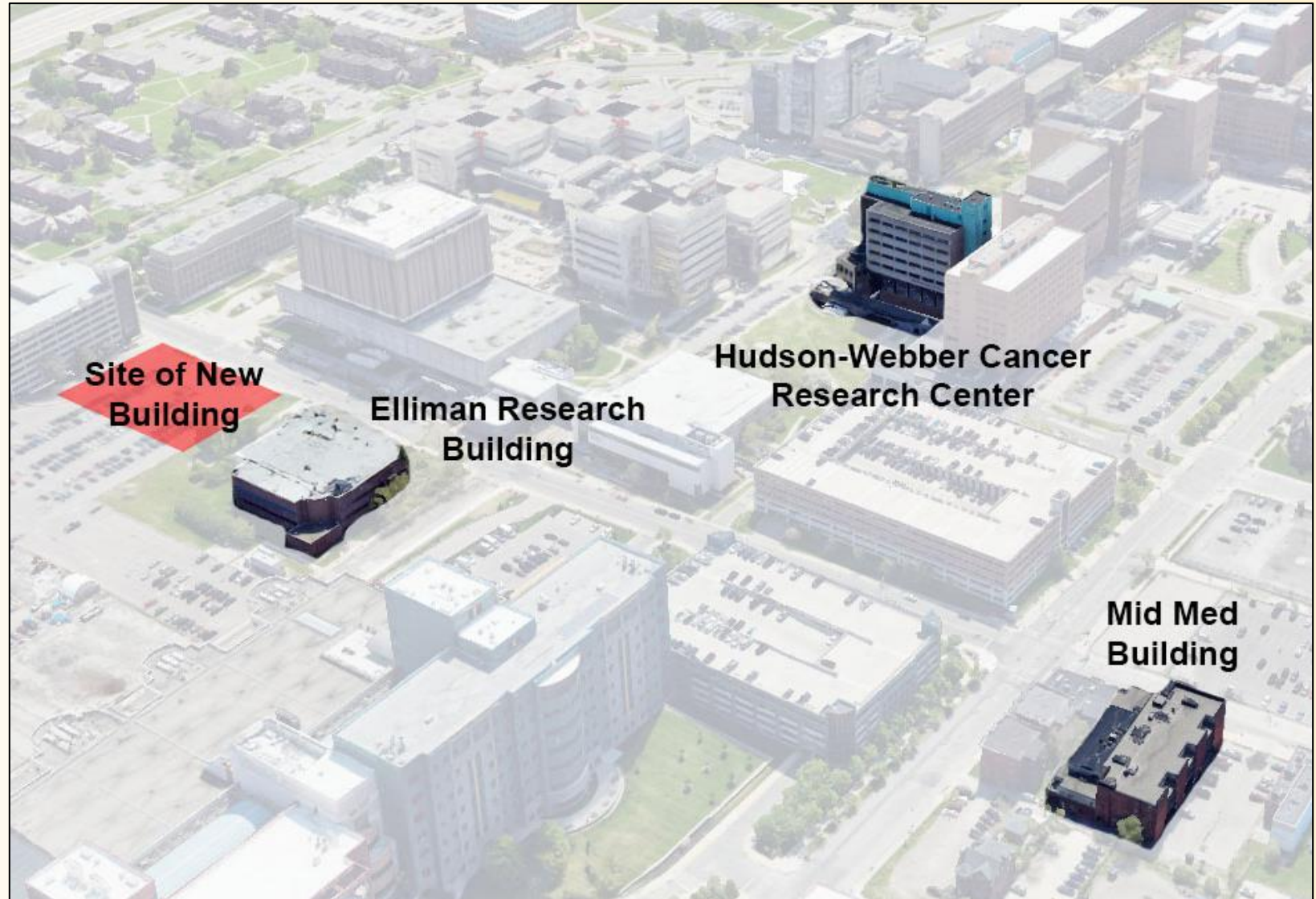
Research: 120,000 sq ft

Main Buildings:

- Hudson-Webber
- Elliman
- MidMed

2024 Growth

- New Research Building under development
 - > \$200M funding secured
 - \$100M from State of MI
 - \$100M from WSU



Transdisciplinary Collaboration and Coordination

Growth of Multi-Project P01 / SPORE* Grants

Number of MPI awards:

9 (2015) → 15 (2020) → 23 (2024)

NEW AWARDS

- P01 “Genetic Variation in Cancer Risk and Outcomes in African Americans” MPI: Schwartz (PSDR), Beebe-Dimmer (PSDR). **FUNDED. \$9,619,417. 2024 – 2029.**
- P20 “DIODE: Disparities in Immuno-oncology Outcomes Detroit” MPI: Gibson (TBM), Purrington (PSDR). **FUNDED. \$703,806. 2024 – 2026.**



*Specialized Project Of Research Excellence



Thank you!

