MU Health Care Annual Update

Jonathan Curtright, Chief Executive Officer

Steven Zweig, MD, Interim Dean, School of Medicine



University of Missouri System

AGENDA

- Performance Metrics FY 2019
- Operational Excellence
- Our Focus Now and Into the Future
- MU School of Medicine Now and Into the Future
- Q&A

Performance Metrics FY19

University of Missouri System

Performance Metrics FY 2019

- Employee Engagement
- Quality and Safety
- Finances
- Volumes
- Market Share

Employee Engagement

Improved from 70th percentile to 73rd percentile

GREAT
PLACE
PLACE
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO
TO<br

3rd Consecutive Year 2017, 2018, 2019

An Engaged Workforce

People want to work here!

3.5% vacancy rate – down from **7%** a year ago

We're growing our own!

32 **Career Institute** graduates – more than 70 to date

Filling graduate nurse positions! 200 new RNs hired in 2018

People want to stay here!
14.7% turnover – down from
17.1% over the last 12 months

University of Missouri System

Quality and Safety

- Major area of focus for MU Health 12 Clinical Priority Areas
- Vizient/UHC Quality & Accountability Study 27th out of 94
 - Top quartile performance in mortality
 Patient Safety Indicators down from 1.09 to 0.91
 - Readmissions up from 11.2% to 11.8%

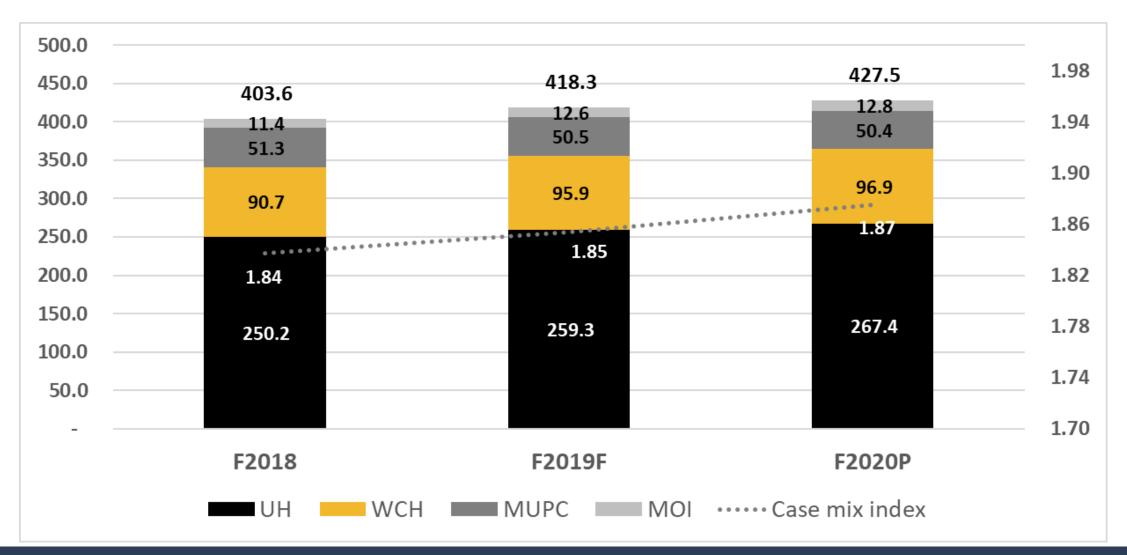
Finances: Ahead of Plan

April FYTD 2019 Net Income of <u>\$70.5M v. plan of \$63.3M</u>

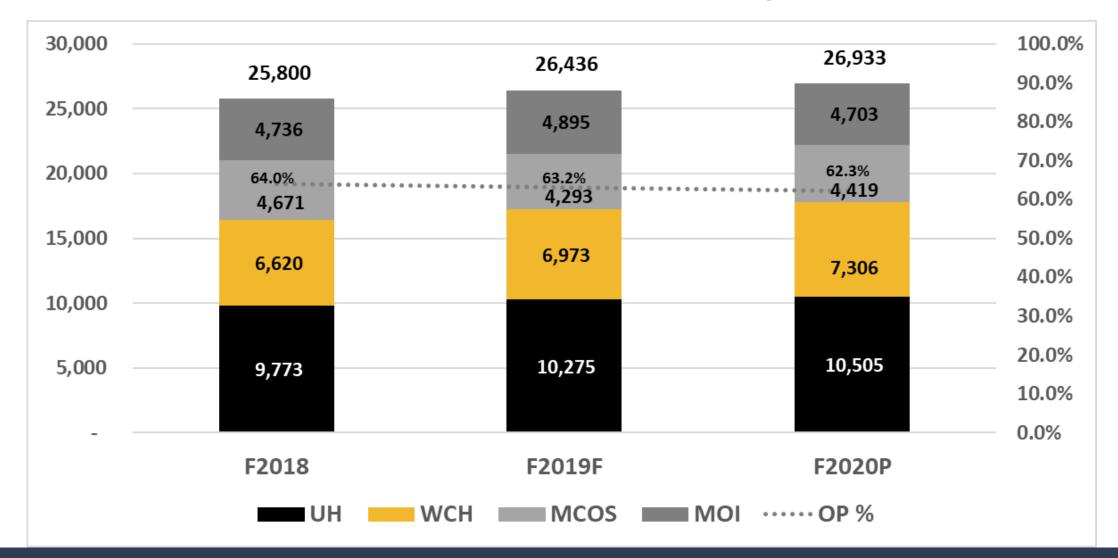
FY 2019 Net Income Forecast of <u>\$84.6 M v. plan of \$78M</u>

• FY 2019 Net Income Margin of **8.0% v. plan of 7.5%**

Patient Utilization: Average Daily Census

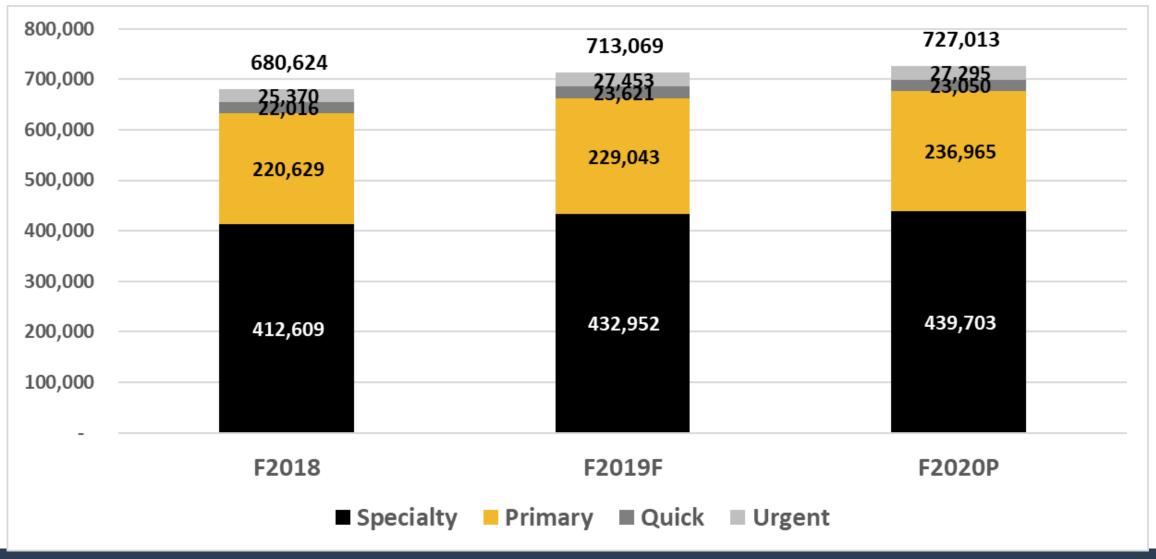


Patient Utilization: Surgeries



University of Missouri System

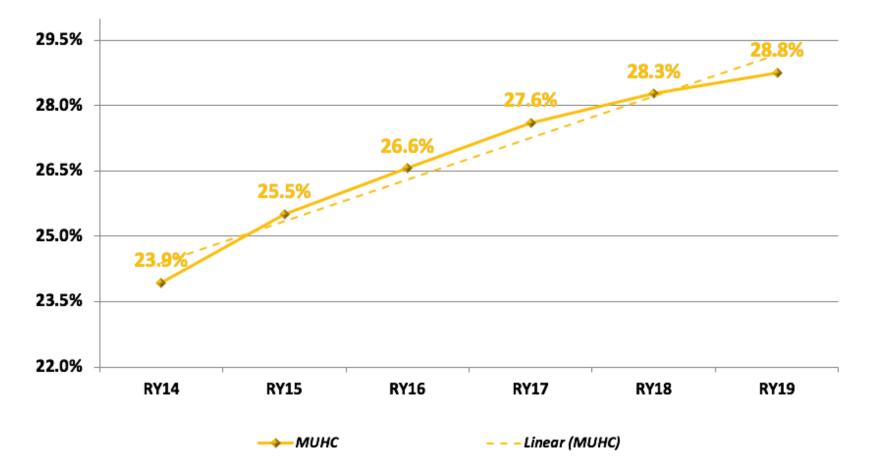
Patient Utilization: Clinic Visits



University of Missouri System

25-County Market Share

20.2% growth in 25-county service area market share RY14 to RY19



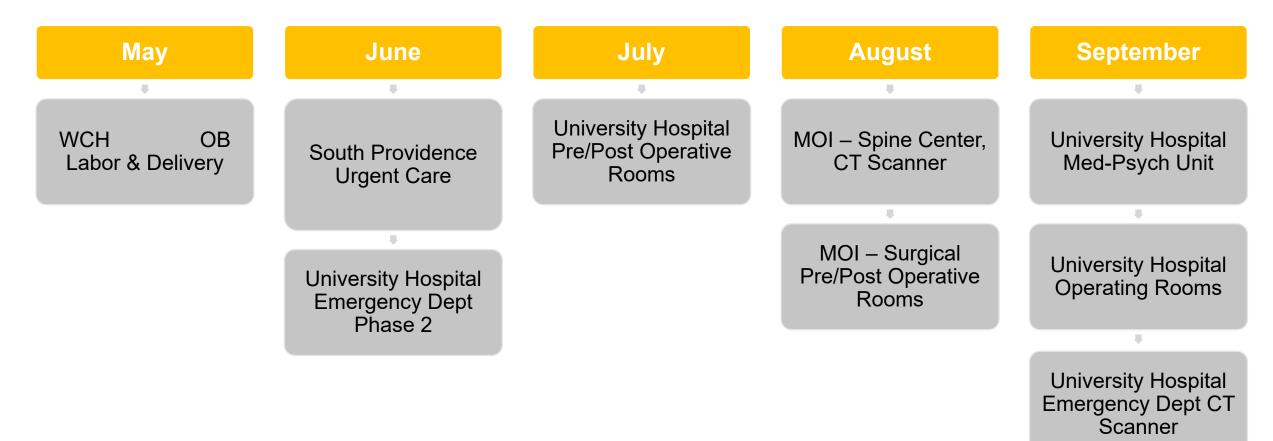
Operational Excellence

University of Missouri System

Throughput Improvements

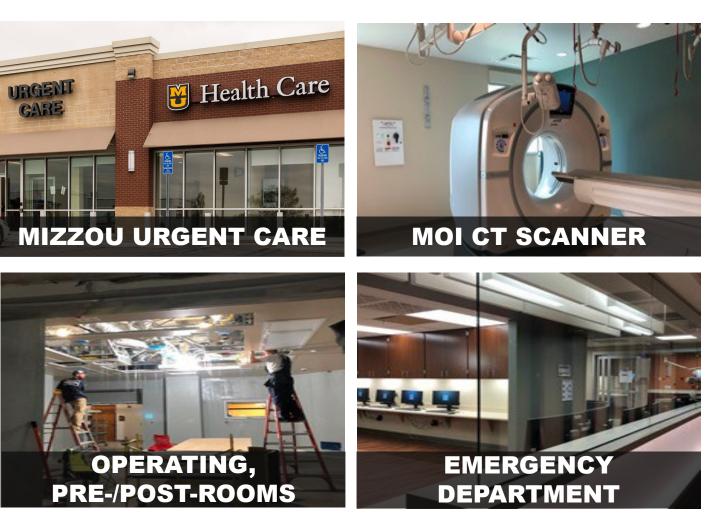
- Teletracking information technology
- Discharged patients at 11 a.m., noon and 2 p.m.
 Medicine, Family Medicine, CV, Neurology, Ortho, Acute Care
- Incremental admissions in afternoon
- Emergency Department "Bridge Unit"
- Future: UH operating rooms, Med-Psych Unit, ED observation unit
- April FYTD Outcomes
 - $_{\odot}$ Patient Deferrals down 60% in Q1 2019 v. Q1 2018 (156 patients) $_{\odot}$ FY 2019 Discharges up 4.2% v. FY 2018
 - $_{\odot}$ FY 2019 FTEs per adjusted occupied bed down 3.4% v. FY 2018

Next Steps: Optimal Space Utilization



University of Missouri System

MU Health Care Facilities Growth



Bottom Line

- 29 hospital beds coming online
- 12 Emergency Department rooms
- 12 exam rooms for Urgent Care
- 6 operating rooms
- 34 pre-/post-rooms
- CT scanner at MOI

Outcomes

- \$45M-\$50M of capital investments
- Allows 3% growth in discharges

Next Steps: Growth of MOI

- University Hospital and Women's and Children's Hospital will shift approximately 15-25 patients to MOI each day
- Occupancy Rates and Volumes
 - Ouniversity Hospital Occupancy Rate 76.5% (and growing)
 - WCH annual deliveries ~2,600 (and growing)
 WCH's NICU volumes ~45-55 per day (and growing)
 MOI occupancy rate 30% (needs to grow)
- Team created to drive appropriate patient volumes to MOI for inpatient and surgical services

Our Focus Now and Into the Future

University of Missouri System

Leadership Focus and Alignment

Quality & Safety	Efficiency & Financial Performance	Strategic Planning
 "Big 12" quality and safety projects 	 Efficiency and Operations 	 Academic Health Center Planning with Kaufman Hall
 Vizient/UHC Quality & Accountability Study Rankings 	 Cost Transformation Net Operating Income and Margin 	 Clinical Scale Strategy
 CMS Stars Ratings 		 Community Hospital Framework

Improvement Activities for Quality and Safety

Daily Huddles



- Daily Huddles in every clinical unit
- Escalation strategies
- Lean tool from Stanford Medicine

Big 12 Clinical Priority Areas								
	CONDITION	EXECUTIVE SPONSOR	MEDICAL DIRECTOR	MGR/DIRECTOR				
9:00	HEART FAILURE	Jeremy Fotheringham	Fatima Samad, MD	Amy Christensen				
9:10	AMI with PCI	Jeremy Fotheringham	A. Kumar, MD	Abby Kemna				
9:20	SEPSIS	Brad Myers	Jonathan Collins, MD	Shawn Phillips				
9:30	PERI-OP BLOOD CLOTS	Brad Myers	Mark Wakefield, MD	Bridgett Robbins				
9:40	ALL-CAUSE READMISSIONS	Keri Simon	K. Hahn-Cover, MD	Heather Turner				
9:50	SPINAL FUSION	Bob Schaal	Theodore Choma, MD	Ginger Schelp				
10:00	COPD	Bob Schaal	Catherine Jones, MD	Aaron Shepherd				
10:10	PRESSURE INJURIES	Mary Beck	S. Hasan Naqvi, MD	John Hornick				
10:20	CABG/Valve	Matt Waterman	Xingyi Que, MD	Kelley Blecha				
10:30	MAJOR BOWEL	Matt Waterman	Eric Kimchi, MD	Ginger Schelp				
10:40	PO RESP FAILURE	Steve Whitt	Quinn Johnson, MD	Katie Merrill				
10:50	HIP/FEMUR SURG	Roger Higginbotham	Brett Crist, MD	Danielle Woods				

Quality and Safety Accountability Structure

Executive leadership

- Chief Quality Officer Dr. Hahn-Cover
- Chief Clinical Officer Dr. Whitt
- $_{\odot}$ Chief Nursing Officer Dr. Beck

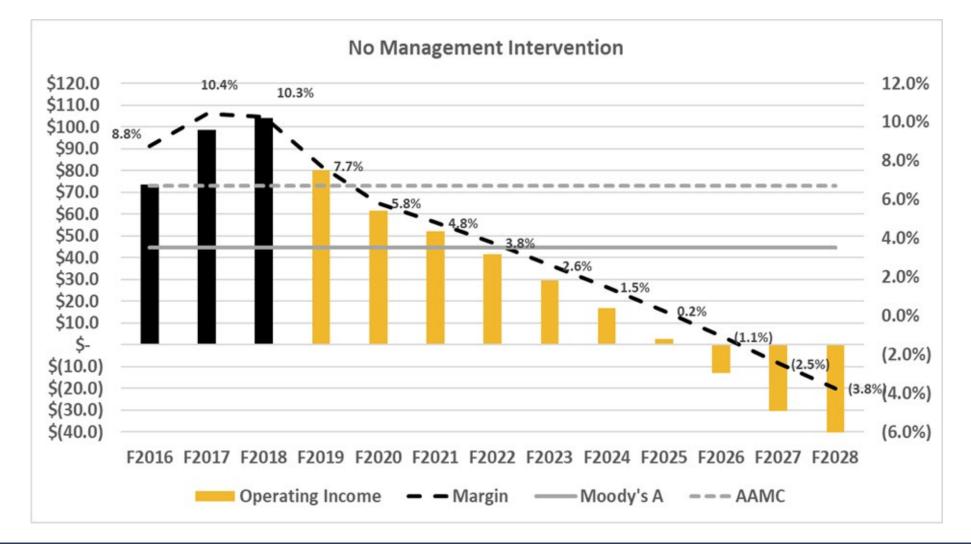
MU Health Care Oversight

- MU Health Care Quality & Patient Safety Committee
- Chaired by Chief Executive Officer Curtright with CQO

University of Missouri Governance

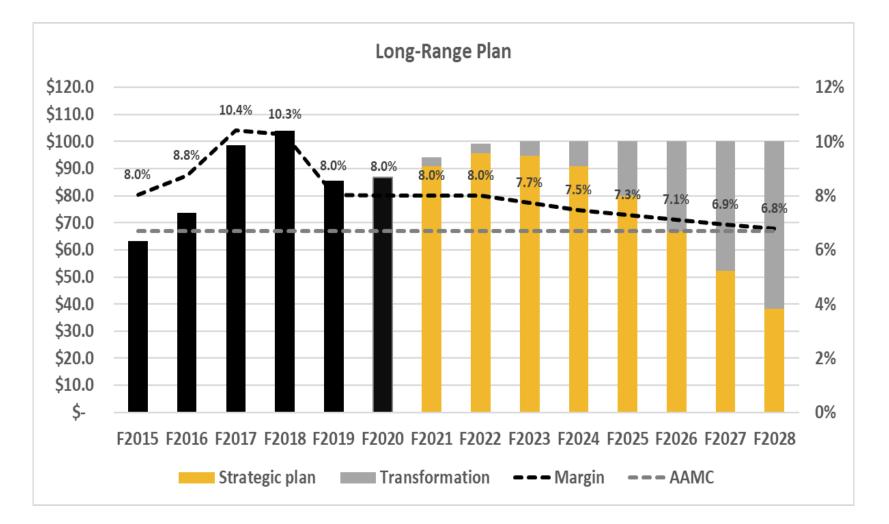
- System President and Chancellor
- Health Affairs Committee
- $_{\odot}$ Board of Curators

Finances With No Intervention



University of Missouri System

Finances with Growth and Expense Management



University of Missouri System

Cost Transformation Progress Update

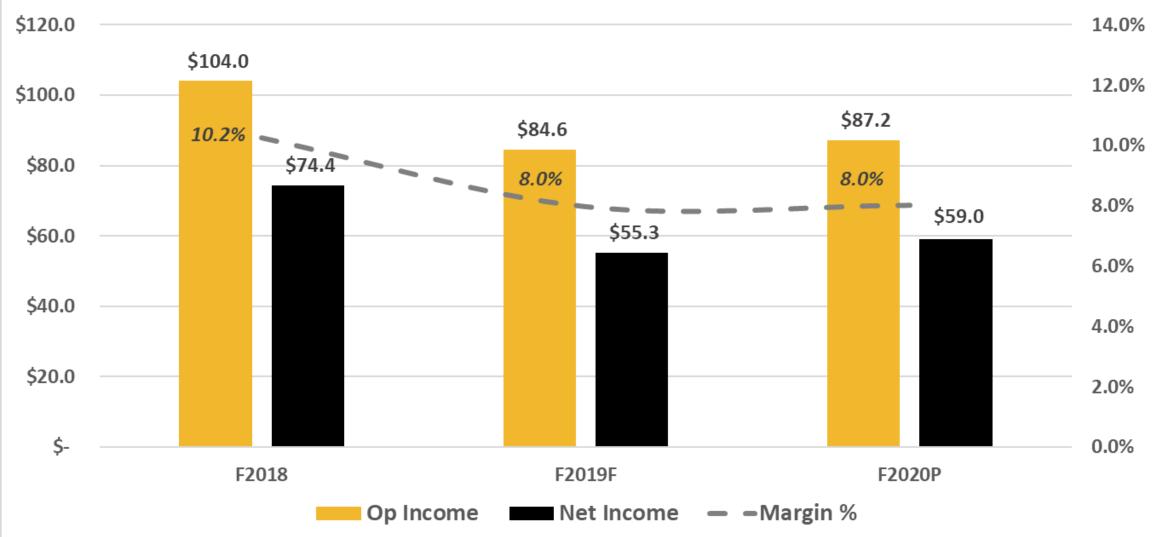
- Decreased costs while growing our clinical practice.
- Reallocated resources in people, facilities and technology.
- Identified \$25M of cost savings 3% of operating expenses.
- <u>Charged cross-functional teams</u> of physicians, nursing leadership and administration identified potential opportunities.







Fiscal Year 2020 Budgeted Net Operating Income



University of Missouri System

MU Health Strategic Planning

- Academic Health System
 Plan
- Kaufman Hall, Consultants
- Academic Work Group (Ramchand)
- Clinical Work Group (Curtright)



Clinical Scale and Community Hospital Framework

MU Health Care Model for scale and service line excellence

Scale key for future success in research, training, practice

Scale through <u>multiple models</u> for growth

Disciplined, systematic process – Framework with criteria

Select clinical service lines with strong potential in 3 missions

Creating an Academic Health System



University of Missouri System



University of Missouri System

MU School of Medicine Now and Into the Future

Steven Zweig, MD, MSPH

Interim Dean, MU School of Medicine

Jack M. Colwill and Winifred S. Colwill Endowed Chair

Professor of Family and Community Medicine

Medical Education

The University of Missouri School of Medicine is fully accredited through 2023-24



LIAISON COMMITTEE ON MEDICAL EDUCATION

University of Missouri System

Pipeline Programs



Undergraduates

Medical Students

High School

University of Missouri System

Admissions: 2019

Growth in underrepresented minority applicants and class members

	Total Applicants	URM Applicants	Total Matriculated	URM Matriculated
2015	2003	251	104	6 (5.3%)
2016	2167	329	104	9 (8.0%)
2017	2266	292	128	13 (10.1%)
2018	2671	420	112	20 (17.8%)
2019	3366	1019	112	

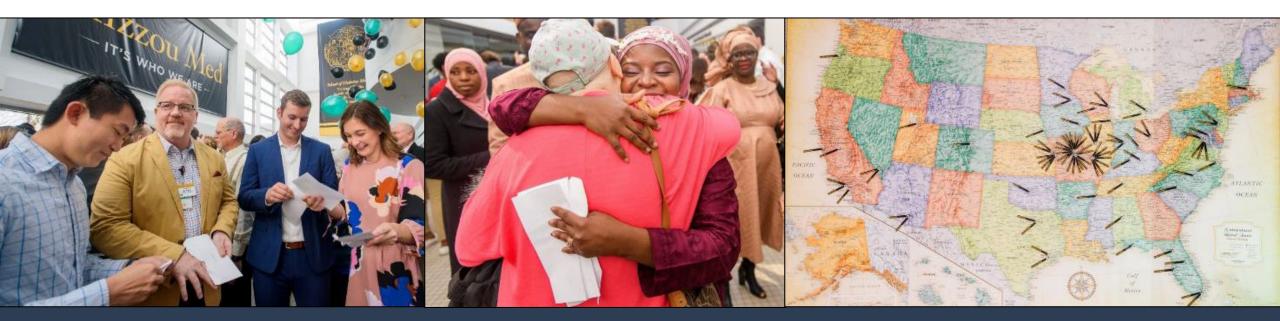
Springfield Clinical Campus



- June 2019, 28 students begin clinical training in Springfield (years 3 and 4)
- The Springfield Clinical Campus is a project with CoxHealth, Mercy Hospital Springfield and the University of Missouri

Class of 2019 Match Day

- 98% residency match rate
- 22% of class will stay at MU for residency training
- 38% will remain in Missouri
- 35% selected in medicine, family medicine and pediatrics



Clinical Faculty Headcount

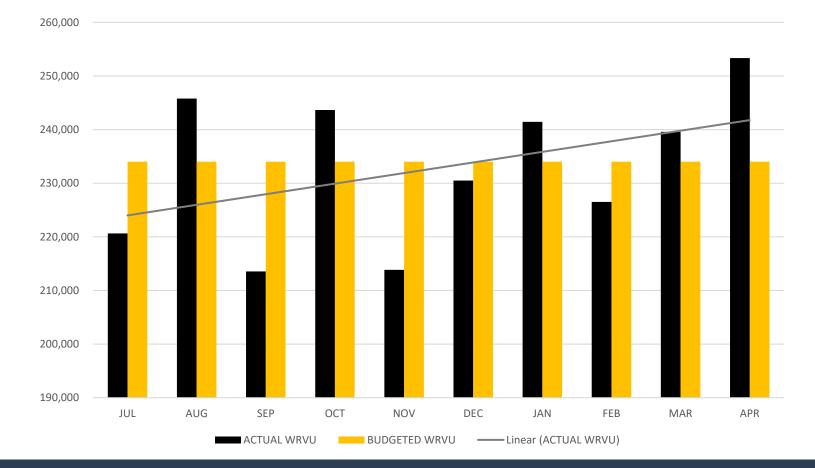
FYTD 2019 February



University of Missouri System

Work RVU

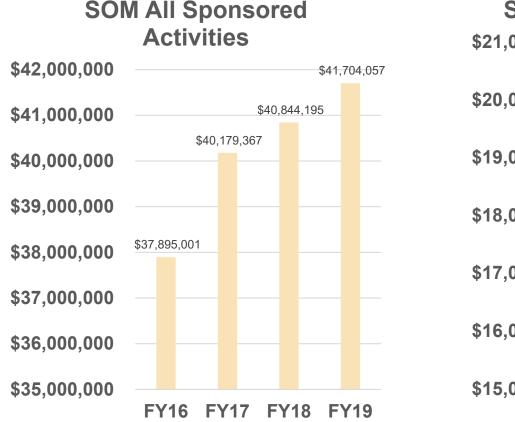
FYTD 2019 April

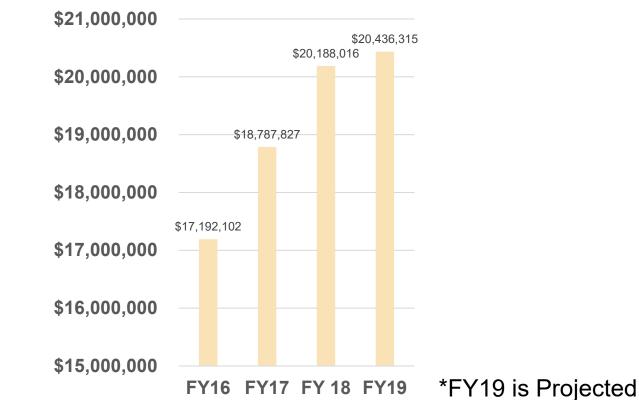


University of Missouri System

School of Medicine Research: Total by Year with FY19 Projection

All Activities Shown in Terms of Shared Credit Expenditures





SOM All NIH Expenditures

Translational Precision Medicine Complex

Projected to open
 October 2021

 Research laboratory with 200,000-245,000 square feet



Strategic Planning for Research

Sharing information

- Profiles on over 200 on Research faculty
- $_{\odot}$ Dean meeting with each department's faculty
- Working with campus on space utilization assessment

Rebuilding infrastructure

- Redesign of Tiger Institute research collaborative
- Reorganization of dean's office sponsored research infrastructure (IT, informatics, biostatistics, clinical trials, cancer trials, etc.)
- Creation of advisory committee of senior researchers

Strategic Planning for Research

Collaborating

- Consultation on determining health system contribution to academic support
- Continued planning with TPMC deans (Bill Fay, MD, SOM rep)
- External consultation and collaboration on comprehensive cancer research center
- Research retreat with chairs and vice chairs for research (including provost)
- Strategic planning with health system and campus on academic health centerprecision health

Strategic investing

- Review of existing new chair plans and investments
- Creation of "funds flow" team for new tenure track faculty
- Developing new umbrella program for PhDs in Translational Bioscience
- Make all new chairs and new faculty strategic hires

Applications to UM for Strategic Research Support

School of Medicine faculty are collaborating with other MU faculty on 10 Tier 1 and Tier 2 proposals

Michael Chapman (SOM: Biochemistry) -Missouri Resource for Cryo-electron Microscopy

David Robertson (MURR) - Radiopharmacology Core

Wes Warren (LSC) - Strategic Investment in NovaSeq Instrumentation

Deborah Anderson (CVM) - Center for Vector-borne and Emerging Infectious Diseases

David Beversdorf (SOM: Neurology/Radiology) - Personalized approaches targeting heterogeneity in autism spectrum disorders

Donald Burke (SOM: MMI) - Tumor Aptamer Theranostics for Antigen Discovery, Immunotherapy, and Targeted Delivery

Timothy Glass (A & S) - Developing a Radiopharmaceutical Pipeline

David Gozal (SOM: Child Health) -Mechanisms of cardiovascular disease in obesity and sleep apnea

Kerry McDonald (SOM: MPP) - Precision Medicine Approaches to Treat Heart Failure in Duchenne Muscular Dystrophy

Thomas Spencer (CVM) - Modeling Early Pregnancy in Humans

University of Missouri System

Goal: Increase Center Grants

Genetic Therapy for Dystrophic Cardiomyopathy K. McDonald, D. Duan, G. Yao, M. Krenz, C. Baines, T. Domeier

Heart Failure with Preserved Ejection Fraction (HFpEF) E. Yeh, C. Bysani, Z. Liu, L. Pulakat, H. Chang

Vascular Stiffening in Type 2 Diabetes L. Martinez-Lemus, J. Padilla, G. Lastra, C. Manrique, C. Bysani

Informatics to Facilitate Caregiver Engagement in Advanced Cancer Care D. Parker-Oliver, M. Popescu, R. Koopman, R. Kruse, K. Washington, C. McCrae, G. Alexander, G. Demiris, S. Halpern, S. Meghani

Immunotherapies to Cure Hepatocellular Carcinoma K. Staveley-O'Carroll, G. Li, S. McKarns, E. Teixeiro, B. Hahm, D. Gil Pages **Team Science**



Expanding Cancer Research Capabilities

- Engaged consultant 12/2018 to evaluate a path for NCI designation
- Develop and support a cancer center infrastructure that enables:
 - Engagement of system and campus level leaders
 - Alignment of strategic initiatives and resources
 - Collaboration across campus(es)
 - Improved recruitment
- Strengthen Clinical Trials Office and grow clinical trials offered
- Develop a strategic plan to position MU for research growth in cancer
- Pursue consortium partnership

Questions?

University of Missouri System