

# URMC Today

## The Impact on Rochester and Beyond

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# Kellie Anderson

Senior Associate Vice President, URMC Advancement  
Moderator

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# The Rochester Experience

Kathy H. Rideout, EdD, PPCNP-BC, FNAP

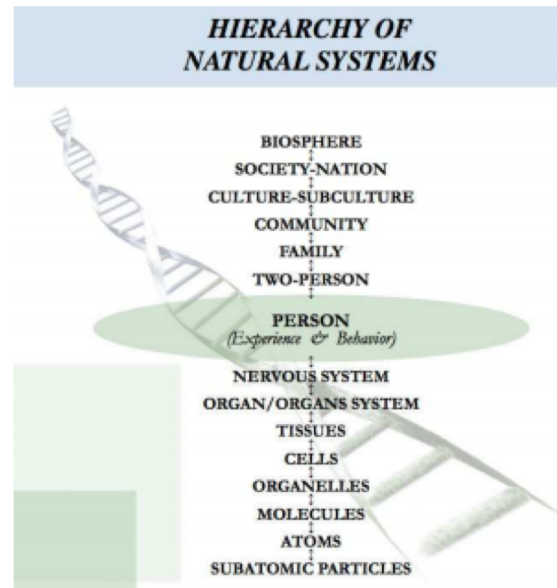
Dean, University of Rochester School of Nursing

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# Pioneers in Education

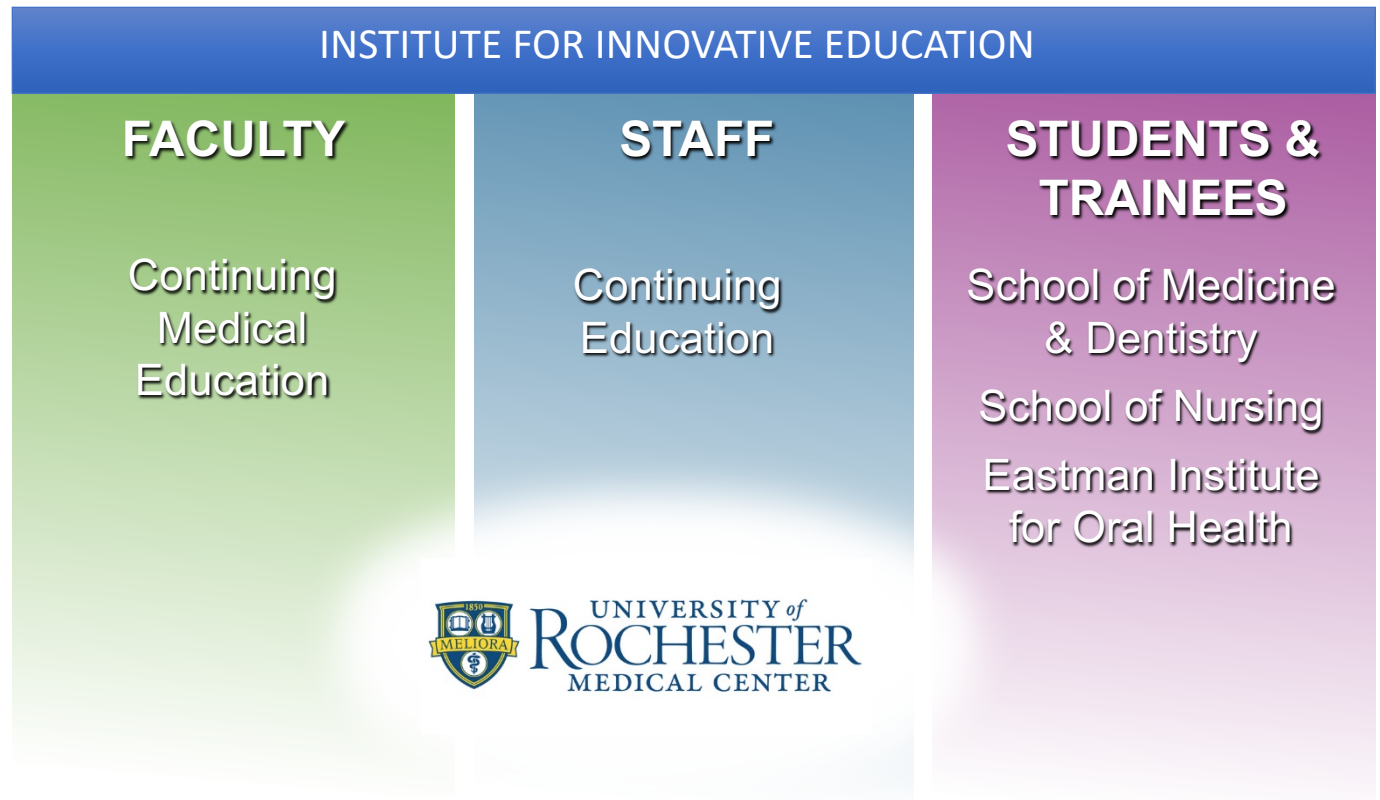
- Biopsychosocial Model
- Nurse Practitioner Program
- Unification Model
- Community Service and Outreach-based Oral Health Education





# Educational Programs of Excellence

- Undergraduate Medical School (MD) **400**
- Graduate Education (MA/MS, PhD, MD-PhD) **500** students + **250** Post-doctoral fellows/associates
- Graduate Medical Education (Residents & Fellows) **750**
- School of Nursing **650**
- Graduate Dental Education (Residents & Fellows) **75**
- Continuing Professional Education **1,600** Faculty



# U.S. News and World Report Rankings

#12- Best Nursing School: Pediatric Nurse Practitioner Program

#17- Best Nursing School: Family Nurse Practitioner Program

#32- Best Medical School: Primary Care

#32- Best Medical School: Research



# Medical Student Curricular Remodel

Currently undergoing a major curricular remodeling, with increased emphasis on:

- Collaborative care
- Technology in medicine
- Professional identity formation



# Residency Training: Quality and Safety of Patient Care Focus

Restructuring clinical training so trainees are best positioned to succeed in tomorrow's health care settings.

- 12 Strong Memorial Hospital units integrated residents into interprofessional quality improvement teams to improve clinical quality and safety outcomes
- Launching Quality Academy to deepen the bench of clinicians trained and dedicated to quality improvement efforts





# Basic Science PhD Curricular Remodel

- Revamped core interdepartmental courses into a single module-based course, allowing for:
  - Greater use of small group-based learning
  - Increased emphasis on self-directed learning



# Expanding Educational Opportunity in Oral Health

- Exploring new degree programs, including an integrated Oral and Maxillofacial Surgery/MD Program and Doctor of Dental Medicine
- Recent education-related grants:
  - HRSA grant \$3.6M aimed to train 100 dentists to be able to provide care to patients with developmental disabilities.
  - HRSA grant \$1M to develop curriculum in urgent care dentistry.



# Meeting the Community's Nursing Needs

- Implementing consistent clinical nursing education and trainings across the regional affiliates, including:
  - Expanding distance-learning programs
- Growing community partnerships to increase nurse practitioner enrollment capacity in areas of identified need (ex. Mental Health).





# Cross-cutting or Foundational Efforts

## Institute for Innovative Education (IIE)-

- Miner Library merged with the CEL under the IIE (renovations underway)
- ECHO tele-mentoring programs centralized under the IIE
- CEL playing key role to implement consistent clinical education and trainings across the regional affiliates



# Research Priorities at URMC

## Research Strategic Plan 2015-2020

Steve Dewhurst  
Vice Dean for Research

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# University of Rochester Research: Overview

## **Research Funding:**

\$341M (*FY2017*)

**Undergrads:** 6,170

**Grad students:** 3,446



## **SMD**

**Research Funding:** \$229M

**NIH Funding:** \$129M

553 Faculty working on grants

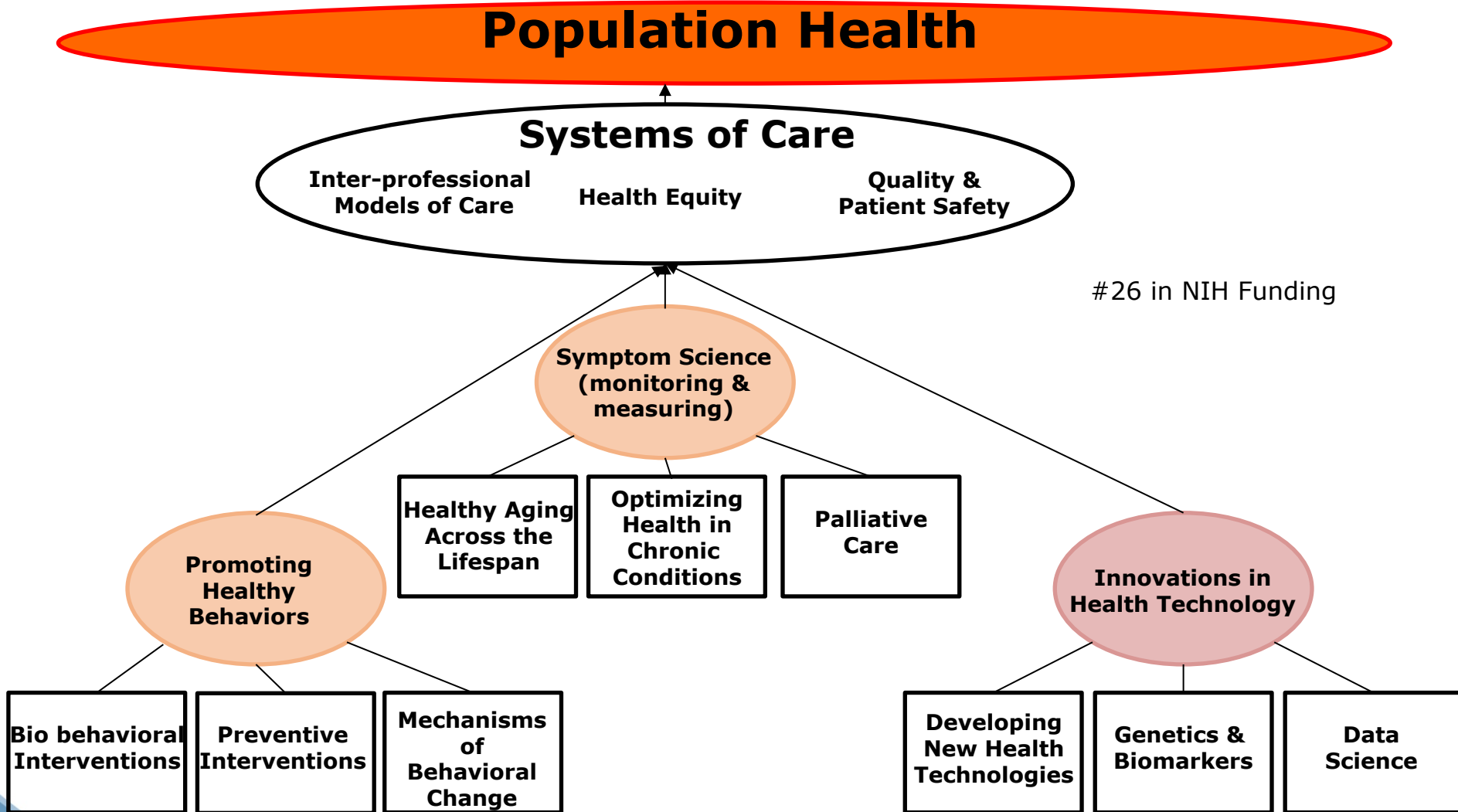
3000 Researchers

# Centrality of Ph.D. Programs

- **Education & Training.** Faculty are here because they love to teach & mentor.
- **Program Size.** SMD is grad student-centric; we have >2x as many PhD students as postdocs. SMD matriculates about 60-70 PhD students a year and has a steady-state class size of ~350 students.
- **Impact.** Grad students are essential to our research mission & to our ability to attract and retain outstanding faculty.



# School of Nursing: Research Priorities



# School of Nursing: Research Priorities

#26 in NIH Funding

## Population Health

### Systems of Care

Promoting Healthy Behaviors

Symptom Science  
(monitoring & measuring)

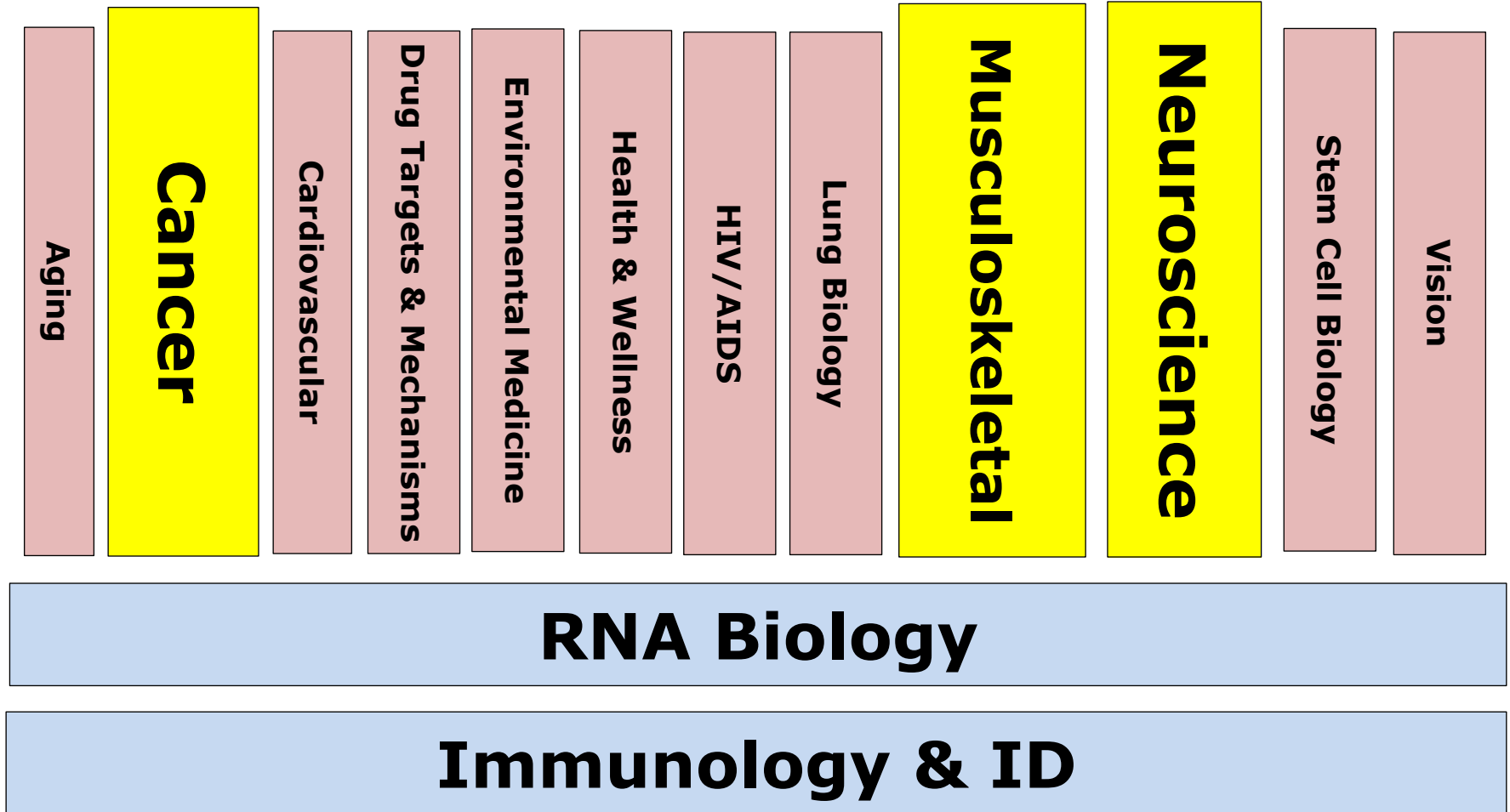
Innovations in Health Technology



### Hyekyun Rhee, PhD, RN: Asthma Self-Management

- **Wearable Automated Device** for Asthma Monitoring (ADAM): monitors symptoms; guides medication & behavioral adjustments.
  - Being developed by a **start-up company**, Health Care Originals.
    - Peer-led Asthma Self-Management for Adolescents (PLASMA)
- **Interactive text messaging system** to help teens and their parents with daily asthma management

# SMD Research Priorities





# Neuroscience: Strategic Approach – Centers of Excellence

The Rochester Alzheimer's  
Disease Research Center

**Kerry O'Banion & Anton Porsteinsson**

The Intellectual and  
Developmental Disabilities  
Research Center (IDDRC)

**Tris Smith & John Foxe**

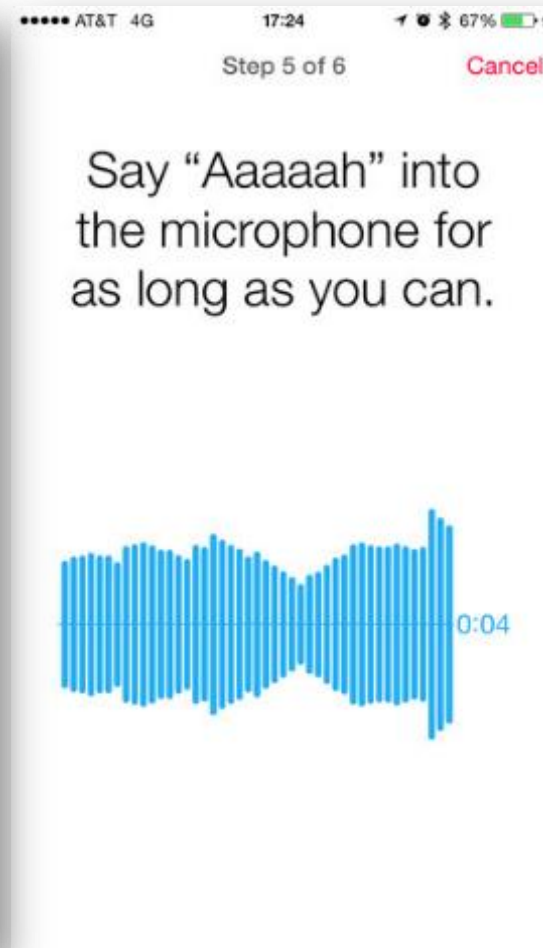
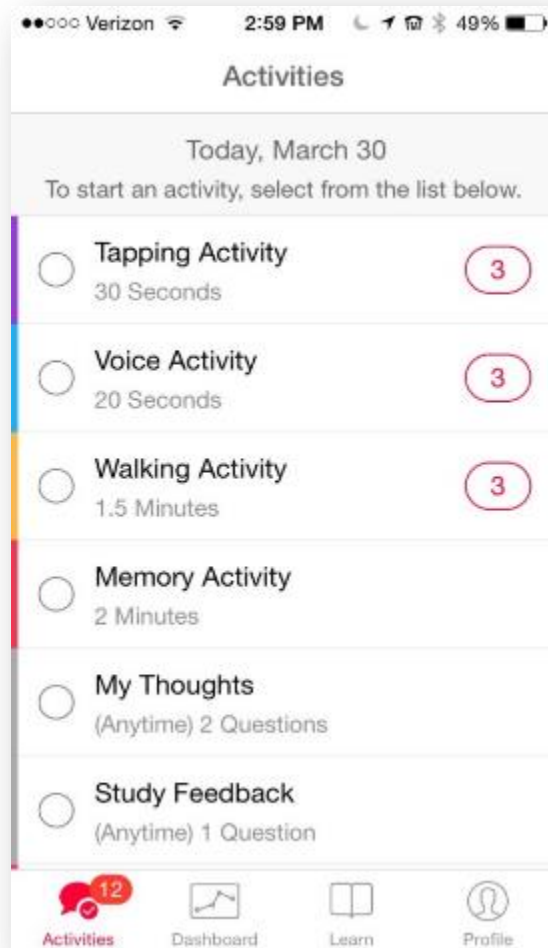
**The Center for  
Health + Technology**

**Erika Augustine & Ray Dorsey**

The Center for  
Neural Augmentation  
and Virtual Reality

**Duje Tadin & Ed Lalor**

# CHeT: Virtual Trials & Telemedicine: Enable surveys, tests, passive monitoring



# Neuroscience: Recruitment



1



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6



7



8



9

## Neuroscience Faculty Recruits:

- 1 Krishnan Padmanabhan, *Salk Institute*
- 2 Farran Briggs, *Dartmouth University*
- 3 Martina Poletti, *Boston University*

## Co-Investment with Biomedical Engineering:

- 4 Ross Maddox, *University of Washington*
- 5 Edmund Lalor, *Trinity College Dublin*

## Co-Recruitment with Pharmacology & Physiology:

- 6 Hugh "Houhui" Xia, *Louisiana State University*
- 7 David MacLean, *University of Texas, Houston*

## Co-Recruitment with Brain & Cognitive Sciences:

- 8 Michele Rucci, *Boston University*

## Co-Recruitment with Clinical & Social Psychology:

- 9 David Dodell-Feder, *Harvard University*

# SON: Recruitment

- **Innovative Approach: Created a post-doctoral fellow to tenure-track assistant professor position** to retain stellar post-docs and accelerate their progress towards tenure.
- Natalie LeBlanc: Sexual health & HIV prevention
- Jennifer Mammen: Tech.-Enabled Asthma Management – telemedicine & smartphone symptom management
- Chen Zhang: HIV prevention in high-risk women; PReP



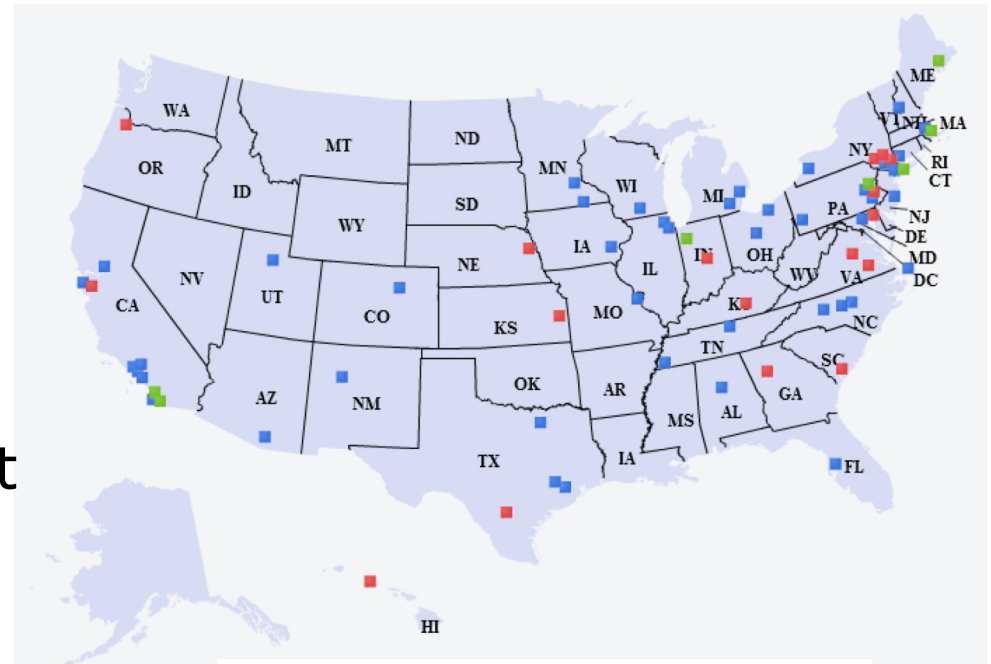
# Cancer: Wilmot Focus is on NCI Designation

## Why does this matter?

- Reputation -> increased patient #s & recruitment; better science; more trials.

## What will it take?

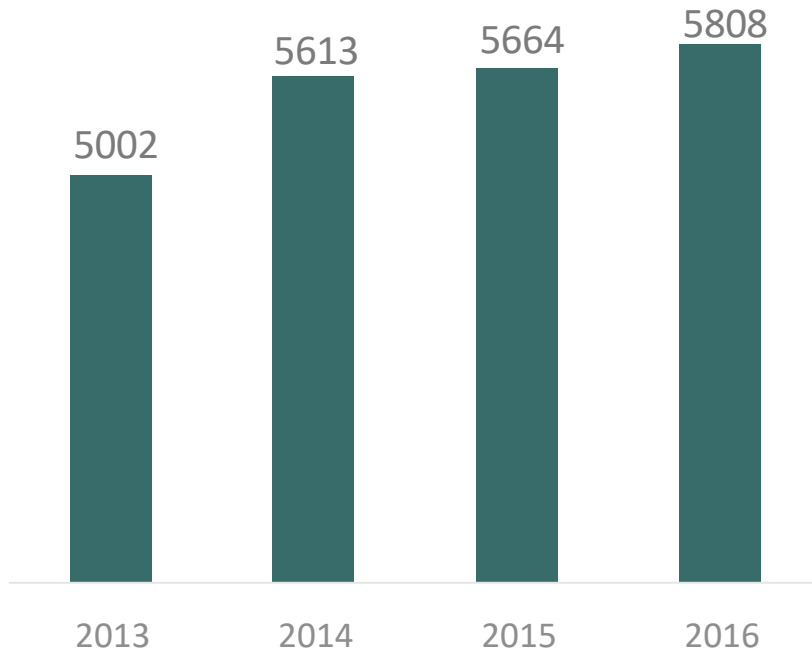
- Strategic hires (e.g., Wilmot Chair, Paula Vertino);
- Increasing patient enrollment in trials;
- Building research programs.














69 NCI-Designated Cancer Centers	
49	Comprehensive
13	Clinical
07	Basic

# Cancer: Wilmot Compares Favorably to Elite Cancer Centers

Total URM System Analytic Cases



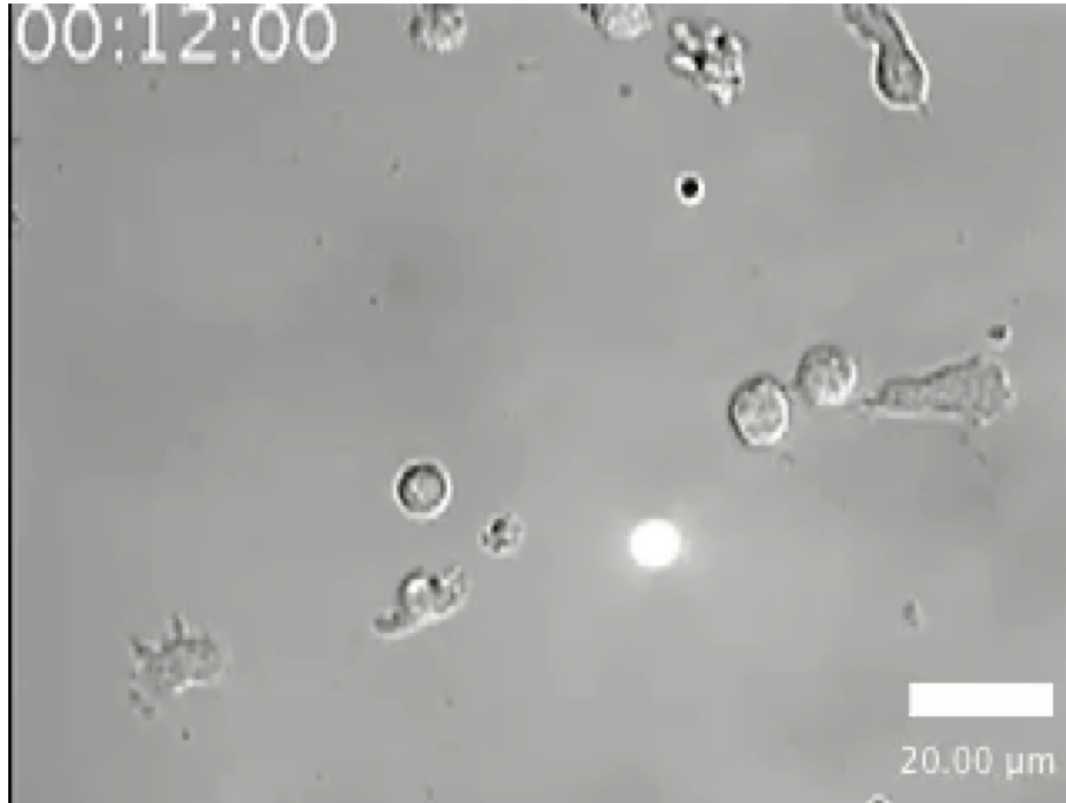
Source: National Cancer Database; U.S News and World Report; volumes do not include all satellites

	Select Peer Institutions	Total NCCs	2017 U.S. News Ranking
	MD Anderson	20,000+	#1
	Sloan Kettering	14,000	#2
	Barnes-Jewish / Wash U.	10,000	#19
	Moffitt	6,300	#9 (#6 in 2016)
	URMC	5,808	Not Ranked Top 50
	UCSF	5,000	#10 (#10 in 2016)
	Rutgers CINJ	4,700	Not Ranked Top 50
	Roswell Park	3,700	#33
	UCLA	3,200	#12 (#5 in 2016)
	USC Norris / Keck	3,040	#15 (#18 in 2016)
	City of Hope	3,000	#21 (#20 in 2016)



# Cancer: Cutting Edge Research

## Optogenetics: Using Light to Attract T Cells



Xu Y, Hyun YM, Lim K, Lee H, Cummings RJ, Gerber SA, Bae S, Cho TY, Lord EM, Kim M. Optogenetic control of chemokine receptor signal and T-cell migration. *Proc Natl Acad Sci U S A.* 2014 Apr 29;111(17):6371-6.



# SMD: Other Areas

## **Musculoskeletal Research**

- #1 NIH funded Orthopaedic research program in the nation
- Leader in: Bone infections; stimulating growth of new bone & cartilage
- Leader in: Patient reported outcomes (PROMIS); >1M patient encounters

## **RNA Biology**

- Lynne Maquat - Canada Gairdner Int'l Award (2015); Nat'l Academy of Medicine (2017)
- Leader in fundamental science; Applications in cancer, neuroscience, ID.

## **Immunology & Infectious Disease**

- Only NIH-funded Respiratory Pathogens Research Center in the U.S.
- 1 of only 5 Centers of Excellence for Influenza Research and Surveillance

# URMC Today Clinical Care

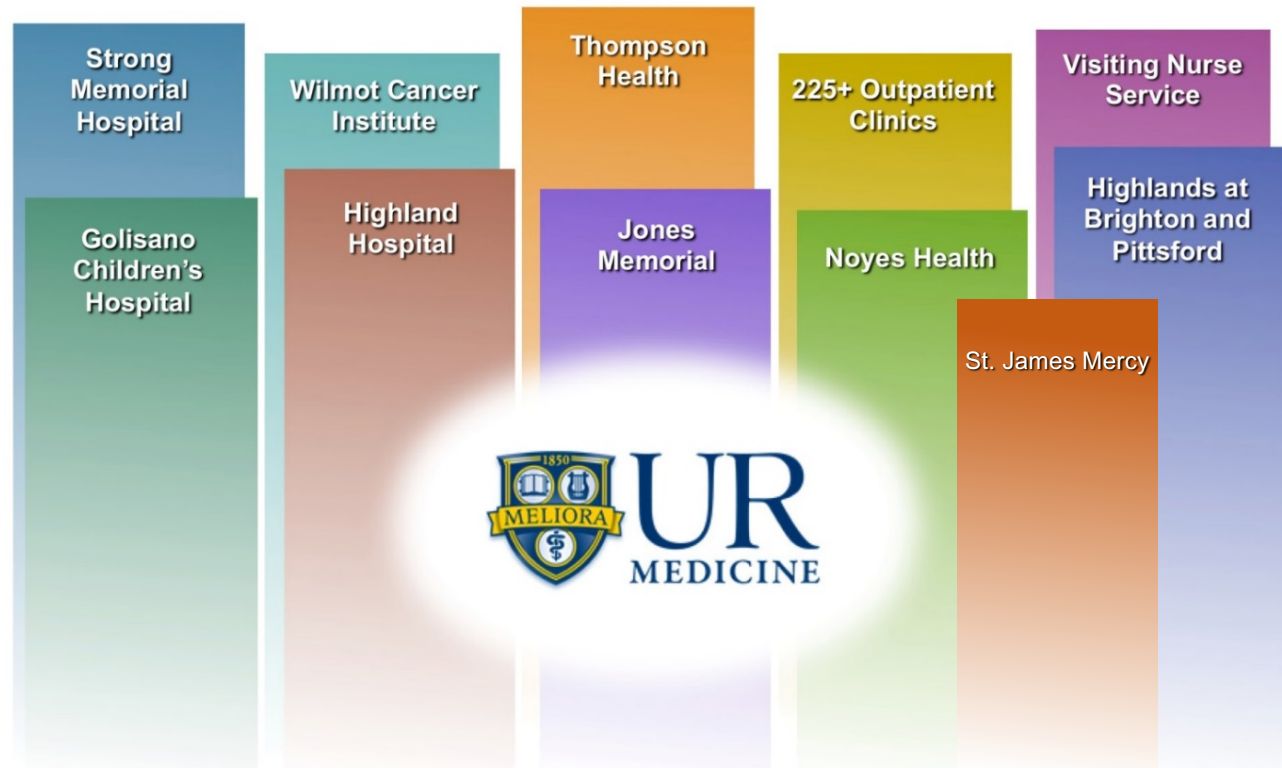
Kathleen Parrinello, RN, PhD  
Executive Vice President and Chief Operating Officer,  
Strong Memorial Hospital

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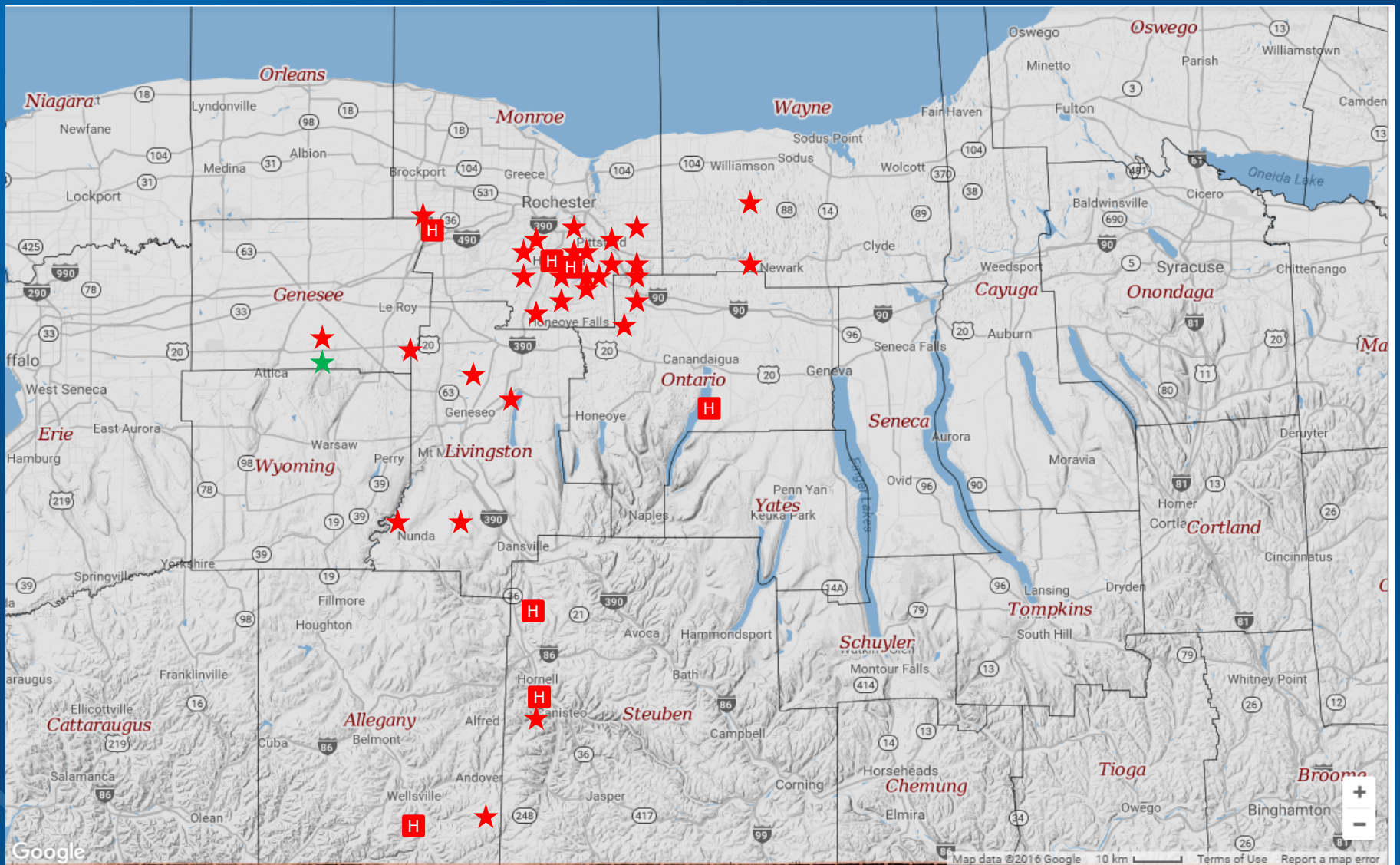


# UR Medicine Clinical Enterprise (FY17)

- 1,349 licensed beds
- 71,962 inpatient discharges
- 233,236 ED visits
- 71,677 urgent care visits
- 47,589 ambulatory surgeries
- 2,500,125 outpatient visits



*Data includes Noyes Health and Jones Memorial which joined UR Medicine in January of 2016.  
Data doesn't include St. James Mercy.*



URMC – Primary  
 Care Offices ~  
 300,000 Lives

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UNIVERSITY of  
**ROCHESTER**  
 MEDICAL CENTER





**UR**  
MEDICINE

**WILMOT**  
CANCER INSTITUTE

Locations





# URMC Regional Activity to-date


*500,000 lives*

Growth through:

- Affiliations and practice acquisitions
- Partnerships
- Management contracts
- AHP – 2,031 clinicians

 Current Affiliate

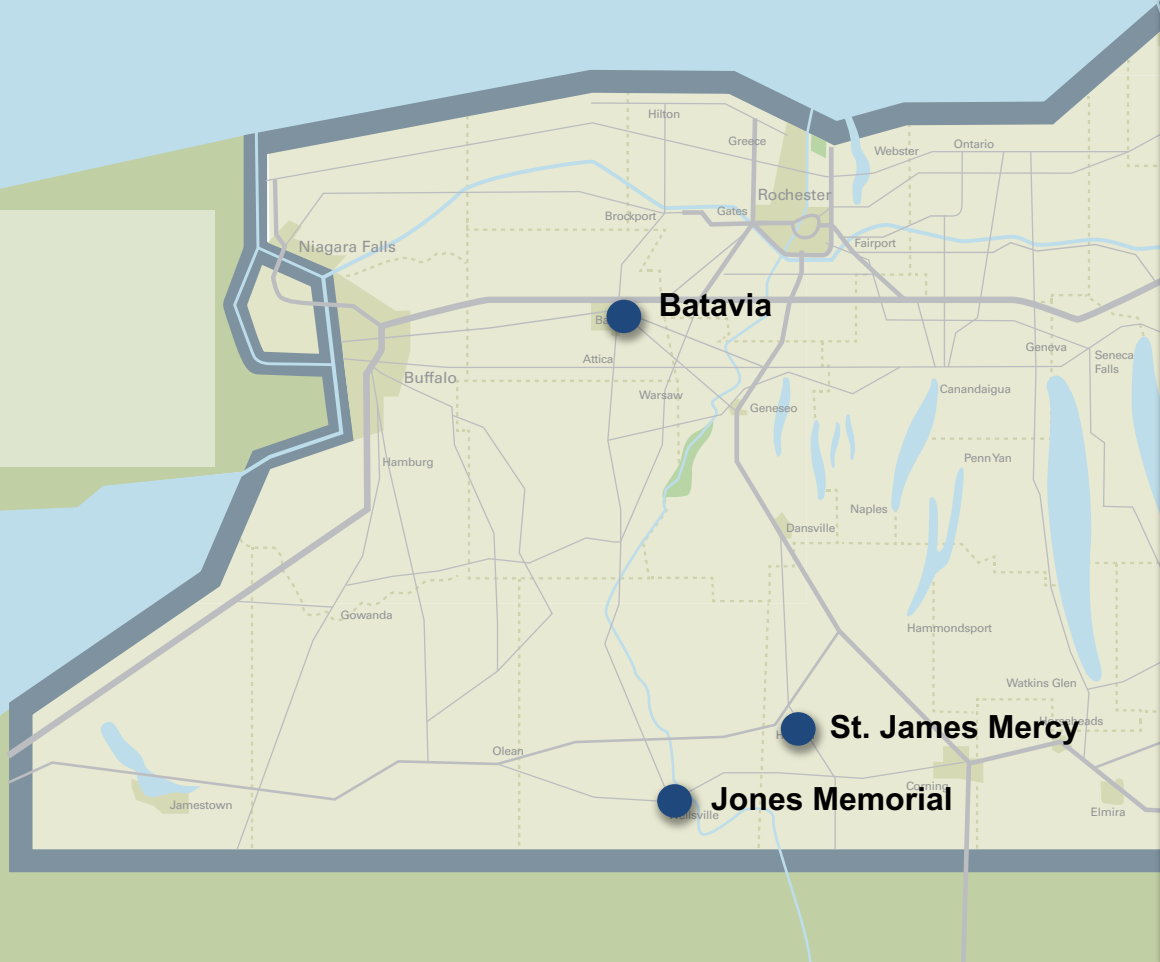
 Management Agreement

 Collaborating Institution



# Telemedicine as a Tool to Regionalize Care

## Telemedicine Suites



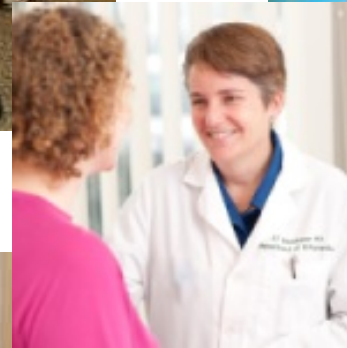
## Active or Emerging Telemedicine Programs

- Tele stroke
- Psychiatry – ECHO & new PCP model
- Pediatric Neurology
- Diabetes Management at Jones
- Reproductive genetics consults
- Pre-surgical evaluation
- Smoking cessation follow-ups at Jones
- Neonatology consults
- Toxicology consults



# Clinical Programs of Excellence

- Pediatrics
- Cancer
- Cardiac
- NeuroMed
- Orthopaedics



# Golisano Children's Hospital

- The region's only children's hospital, serving as the referral center for all seriously ill or injured children from the 17-county Finger Lakes region.
- Approximately 1 in 12 babies born in the region start their lives in our NICU, which is the only Level IV NICU in the region.
- Ranked as a Top 50 children's hospital by US News & World Report in Neonatology, Neurology/Neurosurgery, and Nephrology



# Wilmot Cancer Institute

- Cancer is the second leading cause of death in New York and the U.S.
- Wilmot Cancer Institute features an 86-bed cancer center with 11 outpatient locations throughout the Finger Lakes region.
  - One of New York's largest blood and marrow transplant programs.
  - The Rochester area's only ACOS-accredited breast cancer center.
  - Robust cancer survivorship program.
  - Offers clinical trials of new therapies and options that may not be available anywhere else upstate.



# Cardiology

- Heart Disease is the leading cause of death in New York and the U.S.
- UR Medicine Cardiology is the region's leader in cardiology care, research, and training.
- Program highlights include:
  - The only cardiac transplant service in upstate New York
  - One of nation's leaders in in the development of Ventricular Assist Devices (VADs) for the treatment of heart failure
  - The region's only Atrial Fibrillation Center, providing advanced treatments that often cure atrial fibrillation permanently
  - Our rapid treatment of heart attacks is among the fastest in the nation





# Neuromedicine

- Stroke and Alzheimer's disease are the fifth and sixth leading cause of death in the U.S.
- UR Medicine Neurology and Neurosurgery patient care programs consistently rank in the Top 50 by *US News & World Report*.
- Only Joint Commission-certified comprehensive stroke center in the region.



# Musculoskeletal and Aging

- Upstate New York's aging population has significant healthcare needs related to mobility.
- UR Medicine Orthopaedics offers the largest and most comprehensive center for bone and muscle health in our region.
- The Hip Preservation Program is the largest hip treatment center in the Finger Lakes, and one of the only centers of its kind in the United States.
- The Evarts Joint Center has the Gold Seal of Approval from the Joint Commission.



# Patient Engagement

- ICARE Values – across all of URMC and affiliates
- Open Notes – commitment to patient transparency and engagement in care
- Recognition of patient’s preference regarding “family” participation in care
- New MyURMedicine App provides:
  - Access to MyChart
  - Locations of doctors, locations and services
  - Timely wellness information
- Patient engagement curriculum for all providers, medical and nursing students
- Patient experience scores demonstrate success!







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