

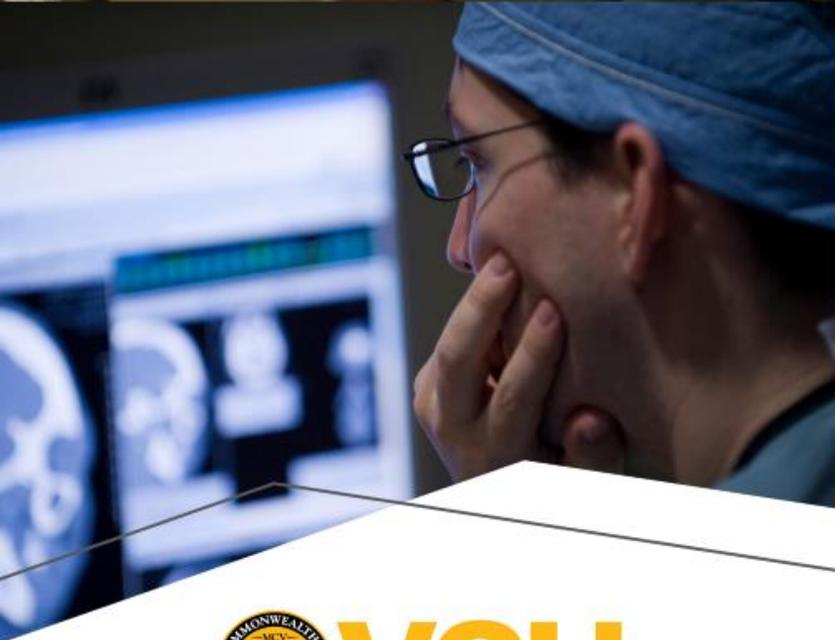
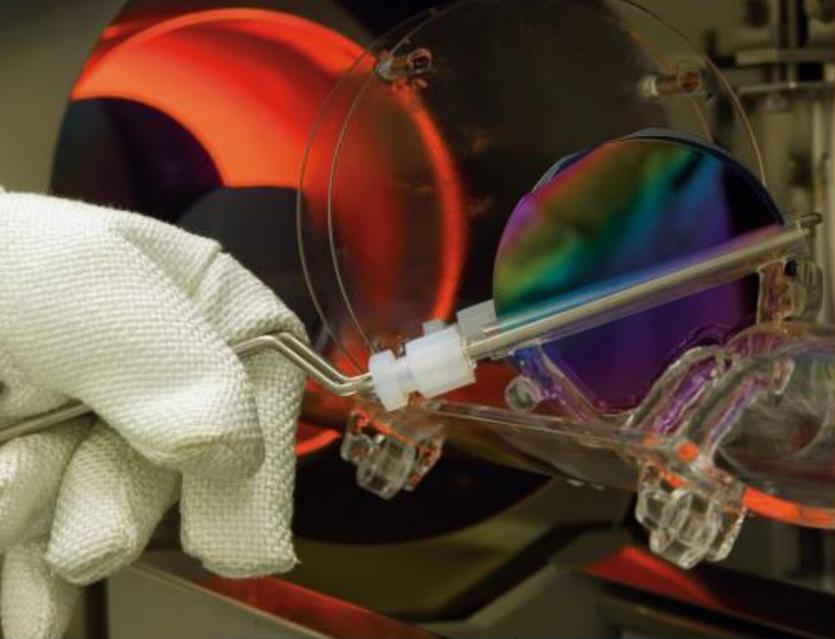
# VCU Research and Strategic Priorities

*Faculty Senate Meeting, Sept 3, 2019*

Srirama Rao, Vice President for Research and Innovation



**VCU** Office of Research  
and Innovation



**Perspectives of research across the MCV  
and MP campuses...**

...seeking input and feedback in developing  
VCU's Strategic Research Priorities



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VCU is a premier urban, public research university and academic health center committed to:

- inclusion, access and excellence
- innovative and transformative learning
- impactful research
- exceptional patient care
- beneficial community impact

**“National Prominence in Research”**  
***QUEST 2025 – Together We Transform***

# Development of VCU's strategic priorities to attain national prominence in research by 2025

- ❖ What are the current or aspirational areas of excellence research?
- ❖ What should our goals be to advance VCU's overall research enterprise?
- ❖ What are the resources, infrastructure and investments needs to accomplish significant programmatic improvements in the research enterprise?
- ❖ What will it take to substantially increase VCU's research funding and expenditures?
- ❖ What is required to assist schools and colleges (faculty and trainees) in realizing their strategic goals and full research potential?

# VCU's 'Excellence in Research' At-a-glance



Promote **human health** through cutting-edge basic, biomedical and clinical research



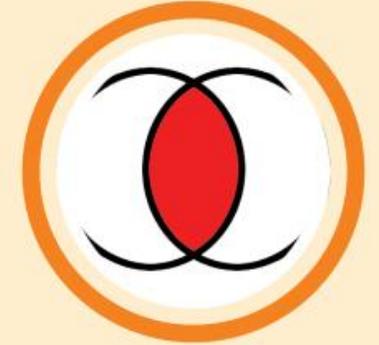
Enhance **equity, well being & social justice** through "community engaged" creative arts, education, humanities, policy, business, and population research



Advance **quality of life** through innovative research and advances in biologic, physical and engineering sciences



Develop a **sustainable ecosystem** through transformational research in environmental sciences



Achieve **societal transformation** through transdisciplinary research in arts, education, engineering, humanities, social and medical sciences

"committed to improving health, well-being, social justice, equity, economic development and our environment"



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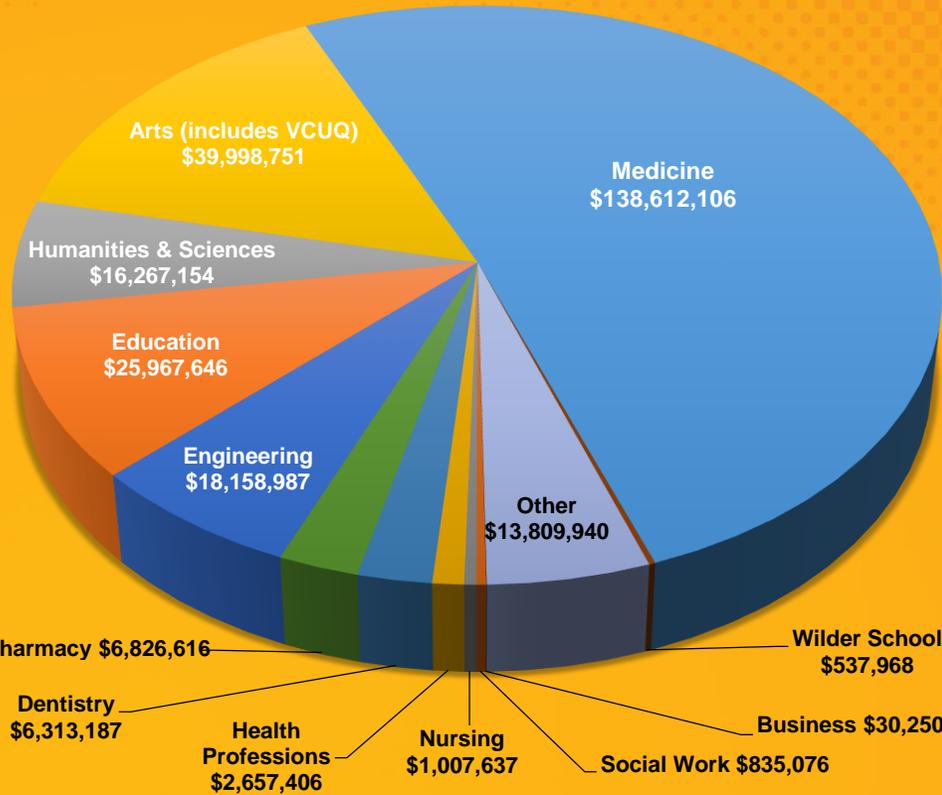
# VCU's Research Metrics and Highlights



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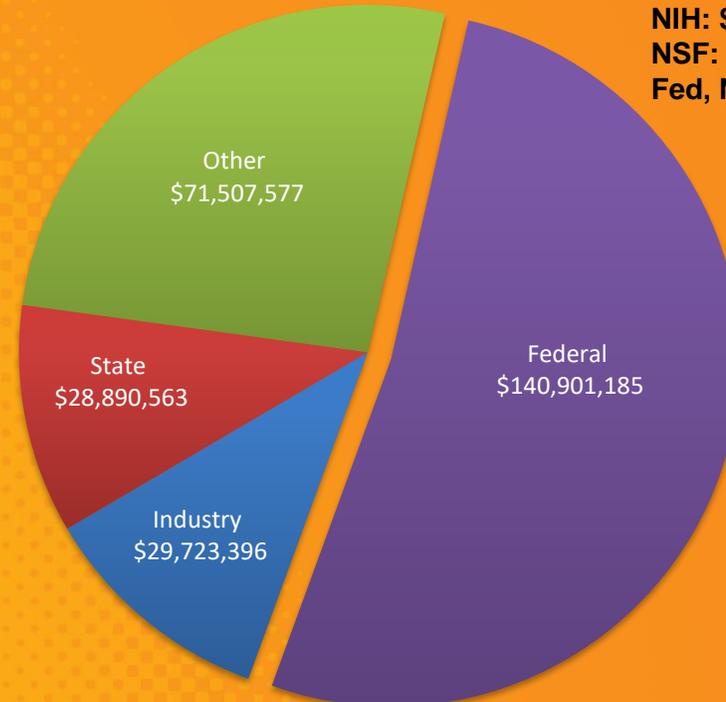
# FY2018 - VCU Sponsored Program Awards

## Funding by Unit



FY 2018 Total: \$271,022,724

NIH: \$78,931,098  
 NSF: \$ 6,167,397  
 Fed, Non-NIH: \$61,970,087



## Funding by Source

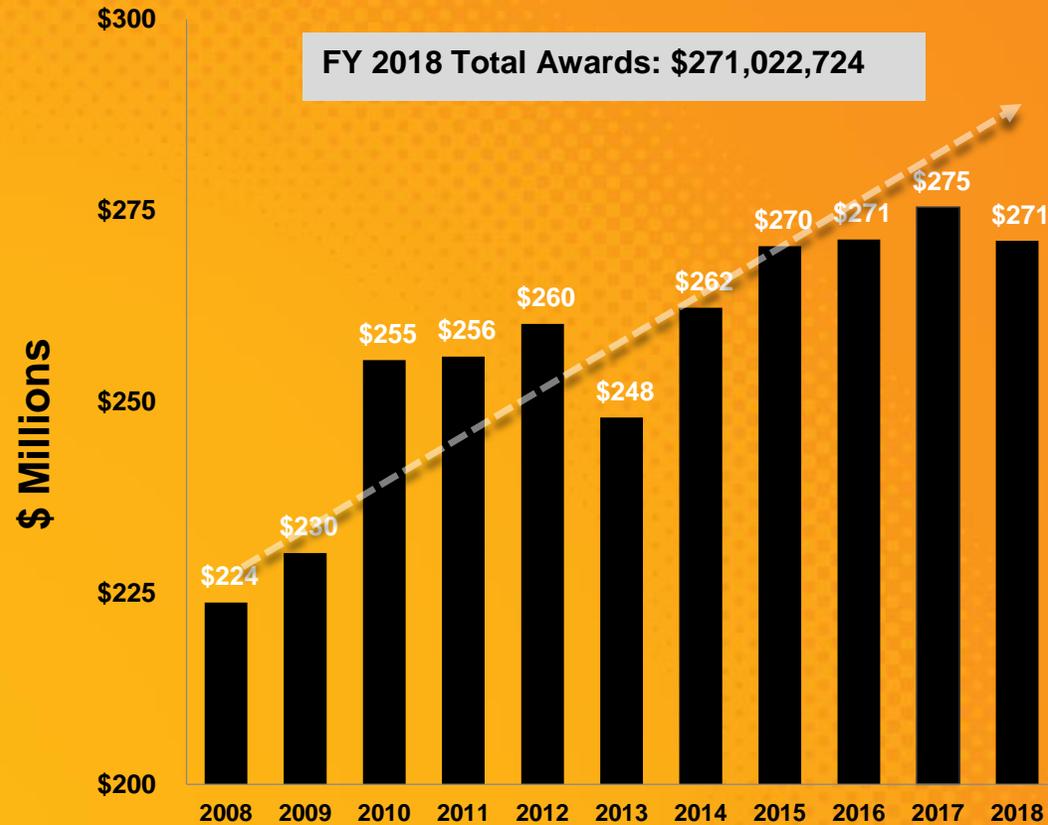
**FY 2018:**  
**\$271,022,724**

**FY 2019 data**  
**is pending**

**Aspirational**  
**Goal >**  
**\$300M**



# VCU Sponsored Program Awards FY 2008-2018

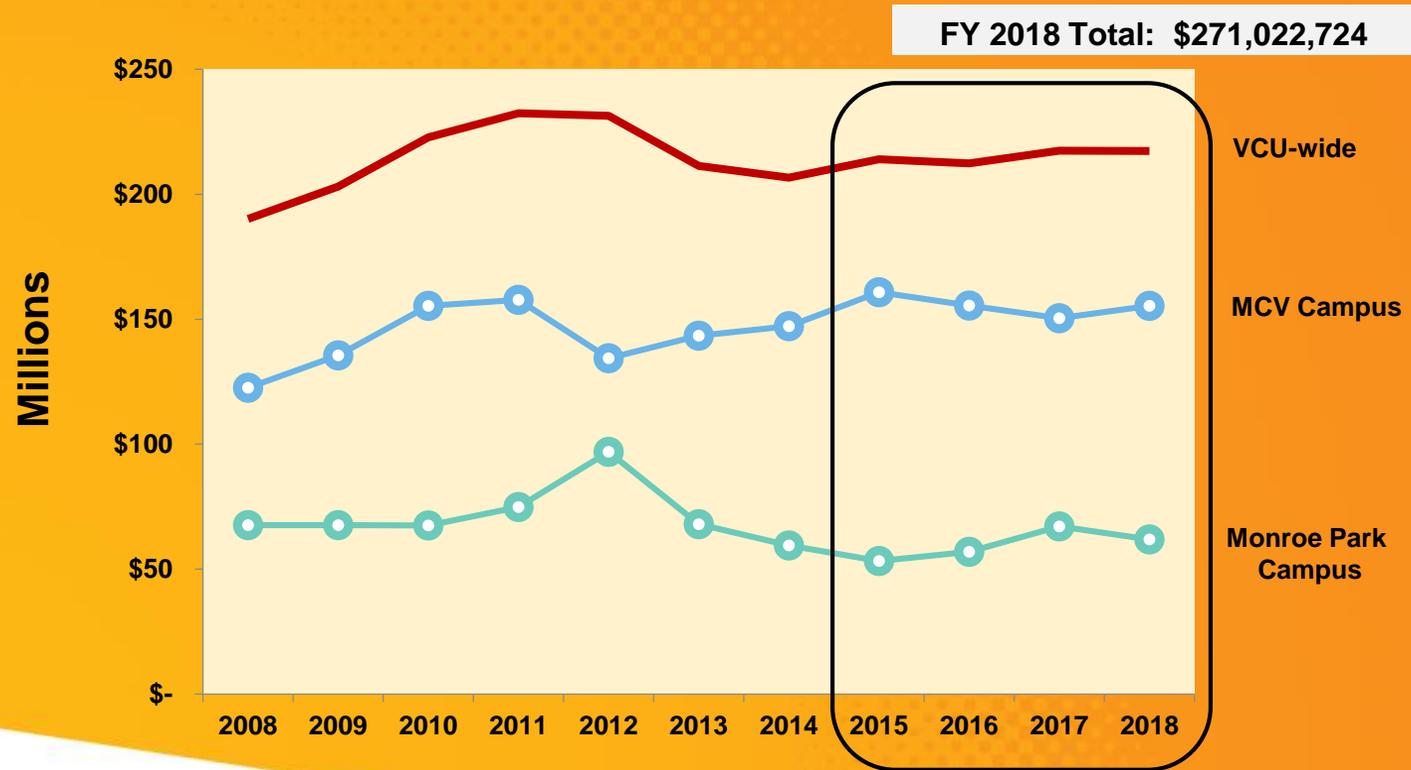


*FY 2019 data will be finalized by end of September 2019*

**Aspirational goal - >\$300M**

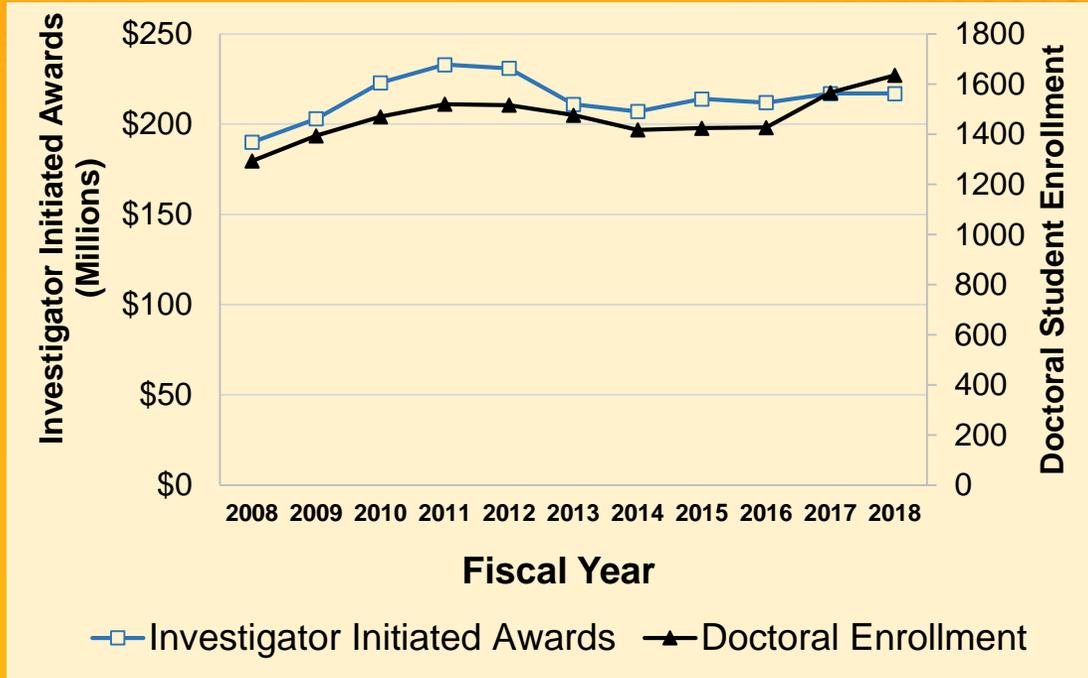


# VCU Sponsored Program Awards: Investigator-initiated Awards by Campus (FY 2008-2018)

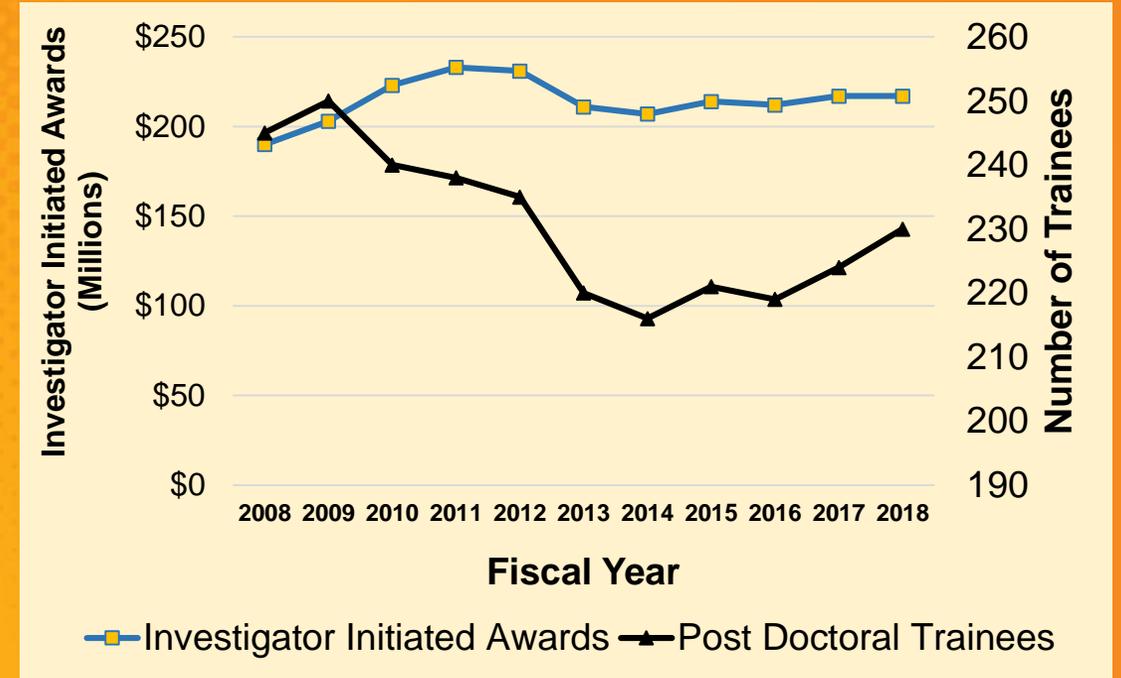


# Doctoral Student Enrollment & Post Doctoral Trainees vs. Investigator Initiated Awards

(a) Doctoral Student Enrollment



(b) Post Doctoral Trainees



# VCU Technology and Commercialization (~10 year impact)

## FY 2018

**134** invention disclosures

**155** patents filed

**30** patents issued

**\$2.7M** in licensing revenue

**29**

new products to market

**>\$24M**

disclosure revenue

**1,200**

invention disclosures

**162**

patents issued

**165**

licenses/options

**40** start ups

(24 still in operation)

FY16: 4

FY17: 4

FY18: 4

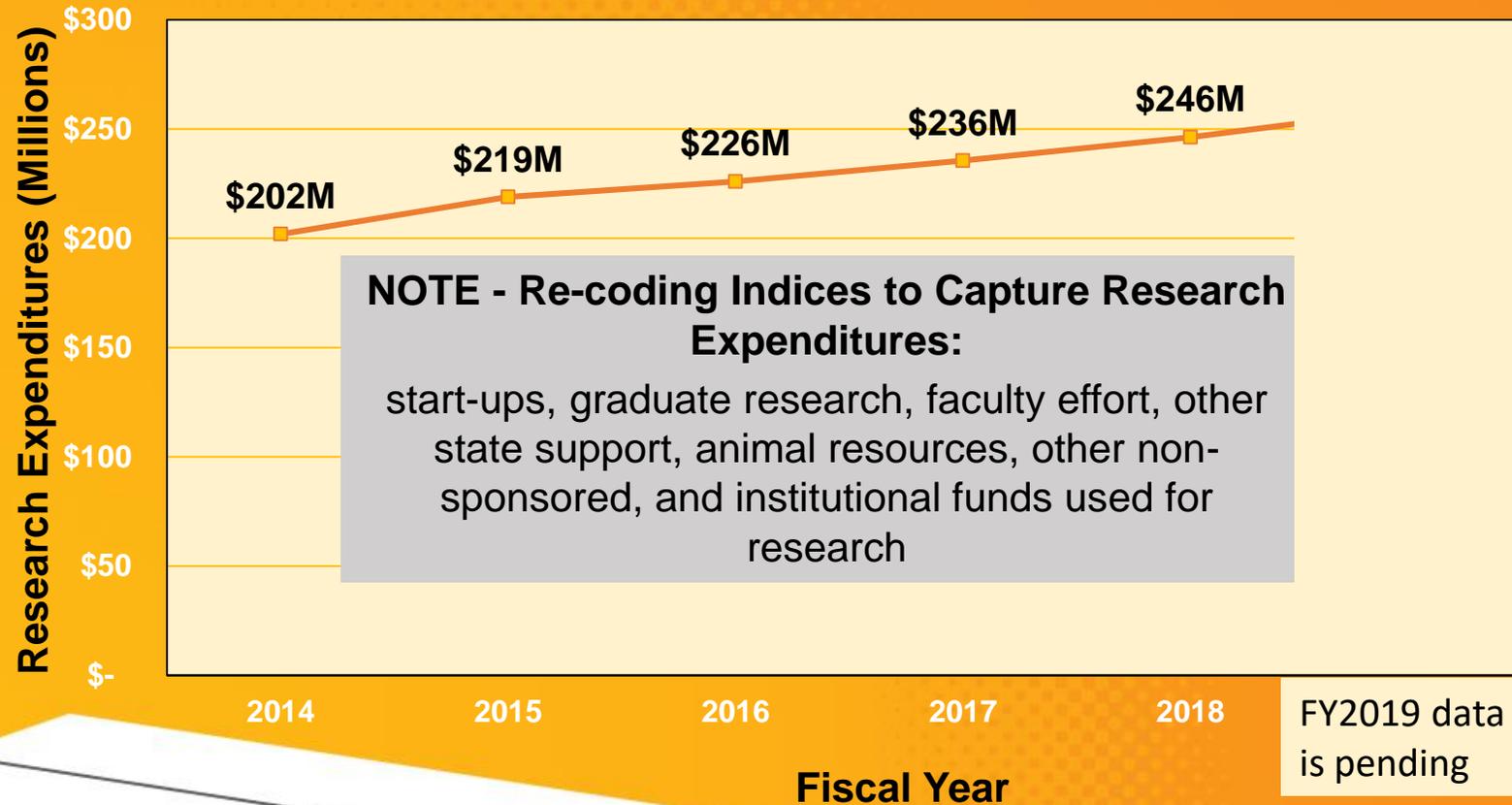
**\$64M**

in equity funding

(2 selected as best university start-up)



# VCU Research Expenditures (used for NSF HERD survey)





# NSF HERD and Blue Ridge National Research Rankings (2018)

## NSF HERD – Public Universities

- Total R&D expenditures (**#67/400**) (all Univs - 97)
- Federal R&D expenditures (**#54/400**) (all univs - 85)

► **Goal: break into top 50 of Public Univs!**

## Blue Ridge (NIH awards received)

- Schools of Pharmacy (**#24/92**)
- School of Dentistry (**#26/50**)
- School of Medicine (**#60/147**)
- Neuroscience (**#33**)
- Addiction (**#15**)



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# Top 50 Graduate and professional programs (health) rankings

## Graduate and first-professional programs:

- 1<sup>st</sup> Sculpture
- 1<sup>st</sup> Nurse Anesthesia
- 2<sup>nd</sup> Fine Arts
- 3<sup>rd</sup> Education — Online
- 3<sup>rd</sup> Glass
- 4<sup>th</sup> Rehabilitation Counseling
- 5<sup>th</sup> Health Care Management
- 7<sup>th</sup> Graphic Design
- 7<sup>th</sup> Painting/Drawing
- 9<sup>th</sup> Ceramics
- 10<sup>th</sup> Printmaking
- 17<sup>th</sup> Occupational Therapy
- 17<sup>th</sup> Pharmacy
- 20<sup>th</sup> Best Education Schools (#26)
- 20<sup>th</sup> Nuclear Engineering
- 20<sup>th</sup> Physical Therapy
- 25<sup>th</sup> Social Work (#30)
- 39<sup>th</sup> Public Affairs (#44)
- 44<sup>th</sup> Doctor of Nursing Practice
- 48<sup>th</sup> Engineering — Online

## Of universities nation-wide, VCU is:

- One of only **43** with an NCI-designated Cancer Center and the Clinical and Translational Science Award
- One of only **54** designated as Community Engaged with “very high research activity” (Carnegie Foundation)



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**Continued need for focusing on strategic research priorities that will result in:**

- Groundbreaking research & societal transformation
- Increased extramural funding and impact
- Continued improvement in our rankings and prominence

# Aspirational goals for national prominence

**Top 20**

urban research university, federal funding

**Top 50**

public research university, federal funding (NSF HERD)

**\$300M**

R&D Sponsored Awards funding

**(5% annual increase)**

**5-10%**

annual increase in FACR funding

**10-20% increase**

in licensing and royalty revenue

**Top 50**

ranked research programs (Blue Ridge and others)

**5-10%**

annual increase student and faculty engagement in research and tech development



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# Strategic Research Priorities Planning (SRPP) – Fall 2019

## Charge to the VCU-wide steering committee:

- Mission and vision that is aligned with VCU's overall research and *Quest 2025 Strg Plan*
- Goals that are aligned with strengths of colleges and schools
- Based of institutional research strengths, identify key signature/thematic programs and targeted areas of focus within each program
- Develop an implementation plan with short- and long-term strategic research priorities
- Achievable goals and plans for tracking progress
- Prepare a report outlining the committee's recommendations by end of Oct/Early Nov 2019



# Strategic Research Priorities Plan (SRPP) Steering Committee:

## • Co-Chairs:

- **Kathleen Rudasill**, PhD, Assoc Dean for Res and Faculty Development, School of Education (Chair, ReDAC)
- **Michael Donnenberg**, MD, Senior Associate Dean for Research and Research Training, School of Medicine (Vice Chair, ReDAC)
- **Beth Angell**, PhD, Dean, School of Social Work
- **Douglas Davis**, Director of Research, School of Business
- **Greg Garman**, PhD, Director, VCU Rice Rivers Center
- **Jill Gordon**, PhD, Douglas Wilder School of Government and Public Affairs
- **Ram Gupta**, PhD, Associate Dean for Faculty Research Development, College of Engineering
- **Nancy Jallo**, PhD, Associate Professor, Department of Family and Community Health Nursing, School of Nursing and President, Faculty Senate
- **Joshua Langberg**, PhD, Associate Dean for Research, College of Humanities and Sciences
- **Aron Lichtman**, PhD, Associate Dean for Research and Graduate Education, School of Pharmacy

- **F. Gerard Moeller**, MD, PhD, Associate Vice President for Clinical Research, Director, WCCTR
- **Aashir Nasim**, PhD, Vice President for Inclusive Excellence
- **Susan Parish**, PhD, Dean, College of Health Professions
- **David Sarrett**, DMD, MS, Dean, School of Dentistry
- **Said Sebti**, PhD, Associate Director for Basic Research, Massey Cancer Center
- **Robert Tombes**, PhD, Vice Provost for Life Sciences and Research
- **Matthew Woolman**, Interim Associate Dean for Innovation, Research, and Graduate Studies, School of the Arts
- **OVRI – Representatives:**
  - **Tina Cunningham**, Associate Vice President for Sponsored Programs, OVPR
  - **Paul Fawcett**, PhD, Director of Research Resources, OVPR
  - **Ivelina Metcheva**, PhD, MBA, Senior Executive Director of Innovation Gateway, OVPR
  - **John Ryan**, PhD, Associate Vice President for Research Development, OVPR

## Co-Facilitators:

- Lydia Klinger**, Project Manager for Research Compliance, OVPR
- Jan Nelson**, Director of Learning/Organizational Development and Culture, HR



# Questions and comments



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