JOINT VIRGINIA COMMONWEALTH UNIVERSITY
BOARD OF VISITORS
AND
VCU HEALTH SYSTEM AUTHORITY
BOARD OF DIRECTORS

The Commons
907 Floyd Avenue
May 11, 2023

MINUTES

VIRGINIA COMMONWEALTH UNIVERSITY BOARD MEMBERS PRESENT
Mr. H. Benson Dendy III, Rector
Ms. Carolina Espinal, Vice Rector
Mr. Anthony Bedell
The Honorable Peter Farrell (joint membership)
Ms. Ellen Fitzsimmons
The Honorable Todd Haymore (joint membership)
Dr. Vernon Dale Jones
Ambassador Carmen Lomellin (joint membership)
Mr. Edward McCoy
Rev. Tyrone Nelson
Mr. Keith Parker (joint membership)
Dr. Clifton Peay
Ms. Alexis N. Swann
Dr. Shantaram Talegaonkar (joint membership)

VIRGINIA COMMONWEALTH UNIVERSITY BOARD MEMBERS ABSENT
Mr. Andrew Florance
Dr. Tonya Parris-Wilkins

VIRGINIA COMMONWEALTH UNIVERSITY HEALTH SYSTEM AUTHORITY
BOARD MEMBERS PRESENT
Dr. Michael Rao, Chair
The Honorable Lamont Bagby
Dr. Hem Bhardwaj
Mr. Clyde Clark; virtual
Dr. Alice Coombs
Dr. Lisa Ellis
Dr. Lance Hampton
Dr. Marlon Levy
Mr. Timothy McDermott
Virginia Commonwealth University
Virginia Commonwealth University Board of Visitors
and the VCU Health System Authority Board of Directors
Joint Meeting
May 11, 2023 Minutes

Dr. Romesh Wijesooriya

VIRGINIA COMMONWEALTH UNIVERSITY HEALTH SYSTEM AUTHORITY
BOARD MEMBERS BOARD MEMBERS ABSENT
Mr. Joel Bieber
Mr. Steven DeLuca
Mr. Donald Gehring
Ms. Fay Manolios
The Honorable Roxann Robinson
Dr. Wally Smith

OTHERS PRESENT
Ms. Chelsea Gray, Executive Director of Board and Executive Operations
Ms. Stephanie Hamlett, Esq., Virginia Commonwealth University Counsel
Ms. Mary Tacconi, Board Administrator & Assistant Secretary to the VCU Health System Authority Board of Directors
Ms. Anne Scher, Interim General Counsel, VCUHSA
Virginia Commonwealth University and Virginia Commonwealth University Health System Authority Staff and Guests

CALL TO ORDER & OPENING REMARKS
Rector Dendy and President Rao called the meeting to order at 5:44 p.m. and welcomed all Board of Visitors and Board of Directors members to the meeting. The public was able to view the open session of the meeting via livestream at https://mssvideo.vcu.edu/BOV.

Rector Dendy began by highlighting that the topics for the meeting, VCU research and Massey Cancer Center, represent the true intersection of the university and the health system – where the power of academic discovery and invention fuels innovation in the treatment and cures of disease and betterment of the overall human condition. VCU’s research enterprise has reached historical achievements this year, becoming a top 50 National Science Foundation ranked university as well as exceeding previous sponsored research funding awards. And VCU is hoping to make an announcement this summer that Massey Cancer Center has received National Cancer Institute comprehensive designation. This means Massey meets all of the NCI’s standards for cancer prevention, clinical services and research. This is what great research universities with academic centers do to improve the quality of life in its communities and beyond.

President Rao then followed by stating that among the many things that make VCU distinctive, VCU’s research – and specifically medical research – really stands out. There are many health systems around the country, but they are not research-focused academic health systems. VCU is the largest safety net health system in Virginia and provides care to the most vulnerable people. VCU does the research that gives hope to the lives of people who are most in trouble – including cancer research. That distinguishes VCU across all health systems. VCU is preparing the next generation of physicians, nurses, and other health care providers and researchers. He
acknowledged and thanked VCU Massey Cancer Center Director Dr. Rob Winn and Vice President for Research and Innovation Dr. Srirama Rao for their work that is at the center of VCU’s distinctive mission – research, including cancer research and clinical trials leading to new treatments – and research is saving lives.

**ONE VCU: RESEARCH**

Dr. Srirama Rao, Vice President for Research and Innovation, began by sharing that VCU’s research is strong and is thriving and is impactful because of the support and investment from VCU and VCU Health System. The growth in research has taken place in the last four or five years. – 50%. In 2022 VCU reached over $400 million in research funding. A lot of this research was done across the enterprise by faculty in multiple schools and colleges. The funding was including federal money (including NIH), state, foundations, and industry. One of the ways that VCU has accomplished this growth is because VCU has been strategic in the investments made. The four key initiatives are enriching the human experience, supporting sustainable energies and environment, achieving a just and equitable society, and optimizing health. He recognized specific centers and institutes and the work that they are doing. There are only twenty-three other universities in the nation with academic health centers that have a CTSA and a comprehensive research center. The impact of that is going to be huge on what VCU is going to be doing in the future years. He talked about the impact VCU research has had on patents, startup jobs, startup companies, new products, and licenses.

A copy of Dr. Rao’s presentation is attached hereto as *Attachment A* and is made a part hereof.

**ONE VCU: MASSEY CANCER CENTER**

VCU Massey Cancer Center director Dr. Rob Winn began his report with sharing what makes VCU different - science that impacts people. He mentioned that we will be getting the notification of comprehensive status and showed the timeline to get there. VCU has tripled its high-impact publications and tripled the amount of NIH dollars we had. The standard of care in the 21st century is the availability of clinical trials effect. He talked about the impact Massey Cancer has on its communities and VCU’s vision to be a premier community-focused cancer center leading the nation in cancer health equity research and ensuring optimal health outcomes for all.

A copy of Dr. Winn’s presentation is attached hereto as *Attachment B* and is made a part hereof.

**ADJOURNMENT**

There being no further business, Rector Dendy and President Rao adjourned the meeting at 6:28 p.m.
One VCU Research: 
Improving the Human Condition

P. Srirama Rao, Ph.D., 
Vice President for Research and Innovation

May 11, 2023
VCU celebrates new milestones in research funding and reputation

Top 50 ranked of U.S. public research universities

~50% increase ($134M) in annual funding
Advancing QUEST 2028

**VCU goals:**
- Diversity driven excellence
- Student success
- Research and innovation
- Thriving communities

**VCUHealth System goals:**
- Workforce wellness
- Patient-centered care
- Innovative research and education
- Advancement of health equity
“Improving the human condition”
One VCU Research Strategic Initiatives

Achieving a just and equitable society

Optimizing health

Enriching the human experience

Supporting sustainable energy and environments

Technology commercialization and entrepreneurship

Monroe Park Campus
STEM, Arts, Business, Humanities, Social Sciences

MCV Campus
VCU Health Sciences, VCU Health, Bio+Tech Park

VCUarts Qatar Campus
Arts and Creative Sciences
VCU’s Research Institutes and Centers:
Enhancing the academic health center mission and national prominence

Wright Center for Clinical and Translational Research
F. Gerard Moeller, M.D.

Massey Cancer Center
Robert A. Winn, M.D.

Stravitz-Sanyal Institute for Liver Disease & Metabolic Health
Arun Sanyal, M.D.

Pauley Heart Center
Greg Hundley, M.D.

Institute for Women’s Health
Susan G. Kornstein, M.D.

VCU Medicines for All Institute
B. Frank Gupton, Ph.D.
Optimizing health:
Innovative research for addressing disparities and inequities

Goal 1:
Reduce the burden of disease and improve wellness
through
basic, translational, applied and population research

Goal 2:
Generate new treatments and interventions (medications, biologics, devices and vaccines)
by
actualizing discoveries made at VCU

Goal 3:
Improve health outcomes by
leveraging emerging technologies, data science, machine learning & clinical research / trials

VCU
Clinical research responsive to patient and community needs

FY2023 YTD

10,000+ VCU Health visits (in 2022)

5,344 individual participants

1,019 clinical research studies, and of these studies, there are:

- 650 clinical trials
- 347 VCU designed studies
- 32 VCU new drug/devices studies

# of patients enrolled in VCU Clinical Research

<table>
<thead>
<tr>
<th></th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY2019</td>
<td>410</td>
<td>329</td>
<td>397</td>
<td>519</td>
<td>521</td>
<td>393</td>
<td>459</td>
<td>519</td>
<td>450</td>
<td>624</td>
<td>982</td>
<td>1205</td>
</tr>
<tr>
<td>FY2020</td>
<td>519</td>
<td>521</td>
<td>393</td>
<td>459</td>
<td>519</td>
<td>450</td>
<td>624</td>
<td>1205</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY2021</td>
<td>1205</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY2022</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY2023</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

COVID-19 spikes
110 drugs and 20 biologics are currently in various stages of development.
- 8 in early phase clinical trials
- 13 in IND-enabling advanced studies
10 years of impact through innovation and entrepreneurship at VCU

- 1,500+ patents filed
- 60+ startup companies
- 194 patents issued
- $80M+ in startup financing
- 103 startup jobs added
- 49 new products to market
- 189 licenses / options
- >$30M in licensing revenue
- 8 new products from VCU start-ups
Enhancing the academic health sciences mission and public impact through:

- Workforce Development
- Operations
- Infrastructure
- Impactful Research

Groundbreaking One VCU Research
Robert A. Winn, MD  
Director and Lipman Chair in Oncology,  
VCU Massey Cancer Center  
Senior Associate Dean for Cancer Innovation,  
VCU School of Medicine,  
Professor of Pulmonary Disease and Critical Care Medicine,  
VCU Department of Internal Medicine  
Richmond, VA  
ATTACHMENT B
CCSG Renewal Timeline

- CCSG Submission (May 25, 2022)
- NCI Site Visit (Oct 12)
- NCI Draft Summary Statement (Nov 3)
- Summary Statement to Parent Committee; Scored (Dec 1)
- Reviewed by National Cancer Advisory Board (Feb 9)
- Notice of Award; Comprehensive Status is Public (May 2023)

A National Cancer Institute-designated Cancer Center
Summary Statement: CCSG Merit Ratings

Massey improved every component across the board from 2016 to 2022.
- 14 of 23 merit-rated components (61%) included the “exceptional” rating (full or partial)
- Only 3 components included “exceptional” in 2016

<table>
<thead>
<tr>
<th>Component</th>
<th>2016</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Six Essential Characteristics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cancer Director</td>
<td>Outstanding to Exceptional</td>
<td>Exceptional</td>
</tr>
<tr>
<td>Institutional Commitment</td>
<td>Exceptional</td>
<td>Exceptional</td>
</tr>
<tr>
<td>Physical Space</td>
<td>Outstanding</td>
<td>Exceptional to Outstanding</td>
</tr>
<tr>
<td>Cancer Focus</td>
<td>Excellent</td>
<td>Outstanding</td>
</tr>
<tr>
<td>Transdisciplinary Collaboration &amp; Coordination</td>
<td>Excellent</td>
<td>Excellent to Outstanding</td>
</tr>
<tr>
<td>Organizational Capabilities</td>
<td>Excellent</td>
<td>Outstanding to Exceptional</td>
</tr>
<tr>
<td>Community Outreach &amp; Engagement</td>
<td>N/A</td>
<td>Exceptional</td>
</tr>
<tr>
<td>Plan to Enhance Diversity</td>
<td>N/A</td>
<td>Exceptional to Outstanding</td>
</tr>
<tr>
<td>Cancer Research Training &amp; Education Coordination</td>
<td>N/A</td>
<td>Excellent to Outstanding</td>
</tr>
<tr>
<td>Research Programs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cancer Cell Signaling Program</td>
<td>Excellent</td>
<td></td>
</tr>
<tr>
<td>Cancer Molecular Genetics Program</td>
<td>Very Good</td>
<td></td>
</tr>
<tr>
<td>Cancer Prevention and Control Program</td>
<td>Outstanding</td>
<td>Exceptional to Exceptional</td>
</tr>
<tr>
<td>Developmental Therapeutics Program</td>
<td>Excellent</td>
<td>Excellent to Outstanding</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component</th>
<th>2016</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shared Resources</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shared Resource Management</td>
<td>N/A</td>
<td>Exceptional to Outstanding</td>
</tr>
<tr>
<td>Biostatistics Shared Resource</td>
<td>Very Good to Excellent</td>
<td>Outstanding</td>
</tr>
<tr>
<td>Flow Cytometry Shared Resource</td>
<td>Outstanding</td>
<td>Outstanding</td>
</tr>
<tr>
<td>Lipidomics Shared Resource</td>
<td>Exceptional</td>
<td>Exceptional to Outstanding</td>
</tr>
<tr>
<td>Microscopy Shared Resource</td>
<td>Outstanding</td>
<td>Exceptional to Outstanding</td>
</tr>
<tr>
<td>Tissue and Data Acquisition and Analysis Core</td>
<td>Outstanding</td>
<td>Outstanding</td>
</tr>
<tr>
<td>Transgenic/Knockout Mouse Shared Resource</td>
<td>Outstanding</td>
<td>Exceptional</td>
</tr>
<tr>
<td>Clinical Research</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinical Protocol &amp; Data Management</td>
<td>Excellent</td>
<td>Outstanding to Excellent</td>
</tr>
<tr>
<td>Data and Safety Monitoring</td>
<td>Acceptable</td>
<td>Acceptable</td>
</tr>
<tr>
<td>Protocol Review and Monitoring System</td>
<td>Approval</td>
<td>Approval</td>
</tr>
<tr>
<td>Administrative Core</td>
<td>Excellent</td>
<td>Exceptional</td>
</tr>
<tr>
<td>Leadership, Planning &amp; Evaluation</td>
<td>Excellent</td>
<td>Outstanding to Exceptional</td>
</tr>
<tr>
<td>Developmental Funds</td>
<td>Outstanding</td>
<td>Exceptional</td>
</tr>
<tr>
<td>Overall</td>
<td>Excellent to Outstanding (31)</td>
<td>Outstanding to Excellent</td>
</tr>
</tbody>
</table>
“Overall, this Center has significant strengths in the full spectrum of cancer research, as it relates to basic, clinical, translational, and population research. There is active collaboration between the Center’s research programs and clinical translational research has expanded, with an increased number of patients enrolled on therapeutic and non-therapeutic clinical trials, along with an increased number of investigator-initiated, institutional clinical trials. The level of transdisciplinary research and collaborative interactions has substantially expanded, as evidenced by a high level of intra- and inter-programmatic collaborative publications and a growing number of multi-investigator, team-based grants. It has a well-defined catchment area, clear bidirectional communication with its community and strong cancer research training activities. Overall, the Center fulfills the requirements of comprehensive designation.”
Overall Cancer Peer-Reviewed Funding

NOTABLE CENTER ACCOMPLISHMENTS

<table>
<thead>
<tr>
<th>Year</th>
<th>CCSG Submission</th>
<th>NCI Funding</th>
<th>Total PR</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>CCSG Submission</td>
<td>$7.6M</td>
<td>$17.6M</td>
</tr>
<tr>
<td>2022</td>
<td>CCSG Submission</td>
<td>$10.0M</td>
<td>$25.5M</td>
</tr>
<tr>
<td>2022</td>
<td>CCSG Site Visit</td>
<td>$11.0M</td>
<td>$26.9M</td>
</tr>
</tbody>
</table>

Excludes CCSG; includes training grants
Growth in Interventional Trial Accruals

NOTABLE CENTER ACCOMPLISHMENTS – CY2022 ACCRUAL GOAL ACHIEVED

<table>
<thead>
<tr>
<th>Year</th>
<th>Treatment</th>
<th>Non-Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>156</td>
<td>330</td>
</tr>
<tr>
<td>2017</td>
<td>187</td>
<td>468</td>
</tr>
<tr>
<td>2018</td>
<td>149</td>
<td>261</td>
</tr>
<tr>
<td>2019</td>
<td>265</td>
<td>403</td>
</tr>
<tr>
<td>2020</td>
<td>162</td>
<td>436</td>
</tr>
<tr>
<td>2021</td>
<td>208</td>
<td>473</td>
</tr>
<tr>
<td>2022</td>
<td>240</td>
<td>600</td>
</tr>
</tbody>
</table>

A National Cancer Institute-designated Cancer Center
### Scientific Publications

#### NOTABLE CENTER ACCOMPLISHMENTS

<table>
<thead>
<tr>
<th>Metrics*</th>
<th>2016 Renewal</th>
<th>2022 Renewal</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td># of High-Impact Publications</td>
<td>67 (6%)</td>
<td>115 (12%)</td>
<td>100%</td>
</tr>
<tr>
<td>Inter-programmatic Publications</td>
<td>145 (12%)</td>
<td>159 (14%)</td>
<td>17%</td>
</tr>
<tr>
<td>Intra-programmatic Publications</td>
<td>318 (27%)</td>
<td>363 (37%)</td>
<td>37%</td>
</tr>
</tbody>
</table>

*Note: Percent increases for publication metrics is based on increases in percentages vs increases in the number of publications.*

---

Eligibility Criteria Perpetuate Disparities in Enrollment and Participation of Black Patients in Pancreatic Cancer Clinical Trials
Mukhopadhyay N, Gal T, Trevino J (JCO, 2022)

Distinct Hepatic Immunological Patterns are Associated with the Progression or Inhibition of HCC
Leading Collaborations to Reduce Cancer Disparities

NOTABLE CENTER ACCOMPLISHMENTS

Planning SPORE in Lung Cancer Disparities
(Massey, City of Hope, USC)

Southeastern Consortium for Health Equity
(Massey, UNC, MUSC)

Alliance for Equity in Cancer Care
an initiative funded by Merck Foundation
Cancer Service Line
NOTABLE CENTER ACCOMPLISHMENTS

QUALITY

OPERATIONAL EFFICIENCY

FINANCIAL VIABILITY

MARKET LEADER

Cancer Service Line Success

LEADERSHIP

Paula M. Fracasso, MD, PhD, FACP
SVP, Cancer Service Line, VCU Health
Deputy Director, Massey

A National Cancer Institute-designated Cancer Center
A Unique Cancer Center Model
NOTABLE CENTER ACCOMPLISHMENTS

Bench-to-Bedside Framework  ➔  Community-to-Bench Framework

VISION
To be a premier community-focused cancer center leading the nation in cancer health equity research and ensuring optimal health outcomes for all
Discussion