Virginia Commonwealth University
Board of Visitors
Academic and Health Affairs Committee

2:45 PM
May 11, 2023
James Branch Cabell Library Room 303
Richmond, Virginia

Agenda

1. Call to Order

2. Action Items:
   - Dr. Tonya Parris-Wilkins, Chair
   - 2 minutes (2:45 - 2:47 p.m.)
   a. March 23, 2023 meeting minutes
   b. Proposal to establish a “partially-exempt” off-campus instructional site at 5285 Shawnee Road, Alexandria, VA - Department of Nurse Anesthesia, College of Health Professions
   c. Proposal to close a “partially-exempt” off-campus instructional site at 6295 Edsall Road, Alexandria, VA - Department of Nurse Anesthesia, College of Health Professions

3. Report from the Provost
   - Dr. Fotis Sotiropoulos, Provost and Senior Vice President for Academic Affairs
   - 60 minutes (2:47 - 3:47 p.m.)

4. Report from the Senior Vice President for Health Sciences
   - Dr. Marlon Levy, Interim Senior Vice President for Health Sciences and CEO VCU Health
   - 10 minutes (3:47 - 3:57 p.m.)

5. Report from the Vice President Research and Innovation
   - Dr. P. Srirama Rao, Vice President for Research and Innovation
   - 10 minutes (3:47 - 3:57 p.m.)

6. Other Business
   - Dr. Tonya Parris-Wilkins, Chair

7. Adjournment
   - Dr. Tonya Parris-Wilkins, Chair

In accordance with the Board’s operating procedures and in compliance with the Virginia Freedom of Information Act, there will be no opportunity for public comment at this meeting.

---

1 The start time for the Board of Visitors meeting is approximate only. The meeting may begin either before or after the listed approximate start time as Board members are ready to proceed.
CONFIDENTIAL SUMMARY
ACADEMIC AND HEALTH AFFAIRS COMMITTEE
OF THE BOARD OF VISITORS
May 11, 2023

OPEN SESSION

ACTION ITEMS:

- Minutes of March 23, 2023 meeting
- Proposals from the College of Health Professions to
  a. establish a “partially-exempt” off-campus instructional site at 5285 Shawnee Road, Alexandria, VA
  b. close a “partially-exempt” off-campus instructional site at 6295 Edsall Road, Alexandria, VA

FOR INFORMATION/COMMITTEE REVIEW:

- None

EXECUTIVE REPORTS:

Report from the Provost and Senior Vice President for Academic Affairs (60 min.)

- Provost Fotis Sotiropoulos will introduce a panel of faculty who have received National Science Foundation (NSF) awards. Panelists will discuss their career paths and their perspectives of VCU’s path forward. Board members will engage in this discussion. (Faculty members’ profiles will be included in the AHAC book).

Report from the Interim Senior Vice President for Health Sciences (10 min.)

- Dr. Marlon Levy will provide updates on issues pertaining to the health sciences schools and campus.

Report from the Vice President for Research and Innovation (10 min.)

- Dr. Srirama Rao will provide an annual overview on VCU’s Technology and Commercialization Program. The report will include pertinent numbers (patents, royalties, start ups etc) for the last 12 months; how we measure up with our peers in VA and nationally; provide examples of some of the most exciting and innovative technologies that are being developed by our talented faculty in the last 12 months; and plans for future growth.
Proposal
Virginia Commonwealth University (VCU) requests approval to establish a “partially-exempt” off-campus instructional site at 5285 Shawnee Road, Alexandria, VA.

Overview
The purpose of the proposed organizational change is to establish a new “partially exempt” off-campus site to replace an off-campus site slated for closure. The new off-campus site will continue to provide an academic program in an area of the state where there is a pressing and ongoing need for certified registered nurse anesthetists (CRNAs). VCU’s presence in northern Virginia dates back to 2012 with the opening of an off-campus instructional site at 6295 Edsall Road. Since its establishment, the off-campus site has offered the Doctor of Nurse Anesthesia Practice (DNAP) program; training future nurse anesthesia students to meet the ongoing demand for Certified Registered Nurse Anesthetists at hospital facilities in the geographic region. Multiple lease renewals for the space were executed until the off-campus site at Edsall Road was scheduled for demolition in 2022 by the owner of the building. Subsequent changes in building ownership and plans for the Edsall Road location, a lack of lease renewal options at the site, and the limitation of the space to support the educational and career needs of CRNAs necessitates the need to establish a new “partially-exempt” off-campus instructional site. This new site will be located Poplar Run Office Building, 5285 Shawnee Road, Alexandria, VA.

Demand
There are no other nurse anesthesia programs operating in the northern Virginia region of the state of Virginia. For the three most recent admissions cycles, the DNAP program received three to five times the number of applications for admission (36 in 2020, 43 in 2021, 53 in 2022) relative to the number of available spaces.

Target Implementation Date
August 13, 2023

Impact on Existing Programs/Policies
There is no impact to existing programs and policies. There will be no interruption to activities for nursing students in the DNAP program. Furthermore, the new space will have a positive impact on the learning environment and the reputation of the DNAP program and VCU.

Impact on Faculty
There is no impact on faculty.

Funding
No additional expenses are required to implement the change. All costs for administrative positions, faculty, and operating expenses will be funded by tuition and fees collected at the proposed off-campus site.

Next Steps
April 27, 2023 - University Committee on Academic Affairs and University Policies (UCAAUP) Meeting
May 4, 2023 - University Council Meeting
Electronic Vote - President's Cabinet Meeting
May 12, 2023 - Board of Visitors’ Meeting
May 13, 2023 – Proposal shared with SCHEV
Proposed Organizational Change Brief

Proposal
Virginia Commonwealth University (VCU) requests approval to close a “partially-exempt” off-campus instructional site at 6295 Edsall Road, Alexandria, VA.

Overview
The purpose of the proposed change is to close an off-campus instructional site that is no longer available or suitable for ongoing academic operations. VCU’s presence in northern Virginia dates back to 2012 with the opening of an off-campus instructional site at 6295 Edsall Road. Since its establishment, the off-campus site has offered the Doctor of Nurse Anesthesia Practice (DNAP) program. Multiple lease renewals for the space were executed until the off-campus site at Edsall Road was scheduled for demolition in 2022 by the owner of the building. Subsequent changes in building ownership and plans for the Edsall Road location, a lack of lease renewal options at the site, and the limitation of the space to support the educational and career needs of CRNAs necessitates the need to close the Edsall Road “partially-exempt” off-campus instructional site.

Target Implementation Date
August 13, 2023

Impact on Existing Programs/Policies
There is no impact to existing programs and policies. There will be no interruption to activities for nursing students in the DNAP program and students will be transitioned to a new location.

Impact on Faculty
There is no impact on faculty.

Funding
The proposed organizational change to close the Edsall Road off-campus instructional site is executable within the budget of the VCU College of Health Professions’ currently authorized funds. No additional expenses are required to implement the change.

Next Steps
April 27, 2023 - University Committee on Academic Affairs and University Policies (UCAAUP) Meeting
May 4, 2023 - University Council Meeting
Electronic Vote - President's Cabinet Meeting
May 12, 2023 - Board of Visitors’ Meeting
May 13, 2023 – Proposal shared with SCHEV
Overview
During the 2022-23 academic year, the Academic and Health Affairs Committee has discussed a number of aspects of the university’s academic enterprise: Transformative Learning Experiences for undergraduate students (Sept.); Opportunities for increasing national rankings by focusing on faculty resources, student support and success, peer perception, and clean data (Dec.); and our strategy for increasing international student enrollment and its impact on academic research (March). The reports at this meeting will center around Faculty Excellence at VCU.

Panel Discussion
Provost Fotis Sotiropoulos will introduce a panel of faculty who have received National Science Foundation (NSF) awards. Panelists will discuss their career paths and their perspectives of VCU’s path forward. Board members will engage in this discussion.

Faculty panelists to date:

- Priscilla Hwang, Ph.D., assistant professor, Dept. of Biomedical Engineering, College of Engineering
- Carlos Castano Londono, Ph.D., assistant professor, Dept. of Mechanical and Nuclear Engineering, College of Engineering
- Jennifer Puetzer, Ph.D., assistant professor, Dept. of Biomedical Engineering, College of Engineering
- Joshua Sieber, Ph.D., assistant professor, Dept. of Chemistry, College of Humanities and Sciences
- Fantasy Lozada, Ph.D., assistant professor, Dept. of Psychology, College of Humanities and Sciences
- John Fife, Ph.D., assistant professor, Department of Foundations of Education, School of Education
Health Affairs Update
VCU Board of Visitors
Academic and Health Affairs Committee (AHAC)
May 11, 2023
College of Health Professions

- Enrollment up 28% over 2022; leads the University in enrollment growth
- New BS program: 160 majors
- Research funding up 96% over FY2018
- Dept of Gerontology received American Society in Aging award for anti-agesim work
- Nursing - Anesthesia #1 graduate program from U.S. News rankings
- 100% employment in the field for December 2022 Doctor of Nurse Anesthesia Practice
- Created digital badges for CRNAs - digital verification of skills/training
School of Dentistry

- Advance inclusive excellence in the School - Increasing faculty diversity enrollment and training
- DDS student recruitment strong - cannot accommodate demand in current building
- Residency enrollment up in Orthodontics, Periodontics, Endodontics, and Oral Maxillofacial Surgery - successful match
- Outstanding performance on the integrated National Dental Board Examination
- Continue addressing access to care especially for underserved populations/regions
- Recruited Chairperson of Pediatric Dentistry: Dr Jeffrey Johnson DDS, MS, MPH
- Expanding innovative research, some in partnership with Massey
School of Medicine

• New Dean: Dr. Art Saavedra

• Dr. Vanessa Sheppard honored as American Cancer Society’s researcher of the year

• Medical Scientist Training Program grant from the NIH awarded to M.D.-Ph.D. program - Triple crown of institutional NIH awards

• Blue Ridge Rankings - Total NIH funding up more than 10%, topping $71M, thanks to a net increase of 10 awards

• Preparing for accreditation site visit February 2024

• Teaching & Research Faculty activity points project: Annual Activity Score and new compensation structure will assist with department realignment
School of Nursing

• To address workforce shortages - Increased students admitted to prelicensure programs
  – 15% increase in admissions to the traditional prelicensure program- 30 in January 2023
  – VCU Health, the Richmond VA Medical Center, others have committed to ensuring clinical placements additional students

• FY23 is a record year in external funding
  – Raised $15.1M in FY23, representing 745% over the goal, thanks in large part to a $13M student scholarship gift from Mr. and Mrs. Conway

• Continued growth in sponsored research with $6.28M projected for FY23; $7.0M actual in FY22 - represents 235% increase over the previous 5-years
School of Pharmacy

- School of Pharmacy continued accreditation through 2031 - maximal period
- Resubmitted Bachelor of Science in Pharmaceutical Sciences to SCHEV
- Re-initiation of international practice-based experiences for P4 students
- Next Generation Pharmacist: Curricular redesign to meet student expectations and evolving healthcare landscape
Update on Technology Commercialization and Economic Impact

May 11, 2023

P. Srirama Rao, Ph.D., Vice President for Research and Innovation
10 years of impact through innovation at VCU

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patents filed</td>
<td>1,500+</td>
</tr>
<tr>
<td>Patents issued</td>
<td>194</td>
</tr>
<tr>
<td>Licenses/options</td>
<td>189</td>
</tr>
<tr>
<td>Start-up jobs added</td>
<td>103</td>
</tr>
<tr>
<td>New products to market</td>
<td>49</td>
</tr>
<tr>
<td>New products from VCU start-ups</td>
<td>8</td>
</tr>
<tr>
<td>Start-up companies</td>
<td>60+</td>
</tr>
<tr>
<td>Start-up financing</td>
<td>$80M+</td>
</tr>
<tr>
<td>Licensing revenue</td>
<td>&gt;$30M</td>
</tr>
</tbody>
</table>
VCU startups over the past 10 years

~60+ startups | ~$80M in funding | 8 products
VCU TechTransfer and Ventures

**FY2022 Impact At-a-glance**

- **122** invention disclosures
- **18** patents issued
- **10** startups
- **144** patents filed
- **$3.1M** licensing revenue
- In FY2023: evaluating 30 startup opportunities in different phases of development
FY2021 Technology Commercialization National Peer Ranking

<table>
<thead>
<tr>
<th>FY2021 Peer Institutions Based on research expenditures</th>
</tr>
</thead>
<tbody>
<tr>
<td>University of Rochester</td>
</tr>
<tr>
<td>University of South Florida</td>
</tr>
<tr>
<td>Iowa State University</td>
</tr>
<tr>
<td>Princeton University</td>
</tr>
<tr>
<td>Oklahoma State University</td>
</tr>
<tr>
<td>University of Miami</td>
</tr>
<tr>
<td><strong>Virginia Commonwealth University</strong></td>
</tr>
<tr>
<td>Louisiana State University System</td>
</tr>
<tr>
<td>Carnegie Mellon University</td>
</tr>
<tr>
<td>University of New Mexico/Sci. &amp; Tech. Corp.</td>
</tr>
<tr>
<td>Florida State University</td>
</tr>
<tr>
<td>Case Western Reserve University</td>
</tr>
<tr>
<td>Medical College of Wisconsin Research Foundation</td>
</tr>
<tr>
<td>University of Connecticut</td>
</tr>
</tbody>
</table>

**VCU Ranking Relative to national peers**

- #4: in startups
- #5: in invention disclosures
- #6: in licensing income
- #6: in patent applications

*Analysis based on FY2021 AUTM data*
VCU faculty are at the forefront of innovation and entrepreneurship.

Blood clotting agent
Robert Diegelmann, Ph.D.,
School of Medicine

‘coursFACTS’
Jean Giddens, Ph.D.,
School of Nursing

Fighting cancer reoccurrence
Worth Longest, Ph.D.,
College of Engineering

Olfactory implant
Richard Costanzo, Ph.D. (front left),
Daniel Coelho, M.D., (front right)
School of Medicine

Anti-cancer stem cell agents
Umesh Desai, Ph.D.,
School of Pharmacy

‘Nerve Tape’
Jonathan Isaacs, M.D.
School of Medicine
VR training tomorrow’s surgeons
Milos Manic, Ph.D., (right) in his lab with students Victor Cobilean (left) and Harindra Sandun Mavikumbure.
School of Engineering

How VR could help at-risk youth
Nicholas D. Thomson, Ph.D.
School of Medicine

VR training to improve “blind” surgery
Lauren Siff, M.D.
School of Medicine

VCU faculty are at the forefront of innovation and entrepreneurship
Impact of VCU Proof of Concept Funding

- 64 Projects funded
- $2M awarded by Commercialization Fund
- $20M Projects funded
- 10 Total awarded
- 15 licenses
- 8 licenses in progress
- 6-year analysis
VCU Services for Inventors

- IP protection
- IP assessment and validation
- Technology maturation / de-risking
- Marketing and licensing
- Industry engagement
- Startup facilitation
- Education
Tech Commercialization & Economic Impact
Achieved in collaboration with various state entities

Chamber of Commerce

CIT

VEDP and GRP

Greater Richmond Partnership

Virginia Economic Development Partnership

Virginia Biosciences Health Research Corporation

Virginia Innovation Partnership Corporation

Center for Innovative Technology

VBHRC

Virginia Catalyst

Activation Capital

oneVCU

VCU
VCU Commercialization Advisory Board

Comprised of industry experts, early-stage investors and entrepreneurs, the board provides guidance for critical commercialization and investment decisions.

David R Beauregard
Managing Director and Founder, Monument Square Advisors, LLC

Geoffrey D. Beecher
Mid-Atlantic sales manager, Focal Therapeutics

Reinhold Brand
President (ret), Evonic USA

Chris Little
Founder, SingleStone

Kevin Corby
Research and development director (ret), DuPont

Chanda Briggsman
President / CEO, Activation Capital

David Daughtry
Group managing partner (retired), PwC

Alex Euler
Investment director, CIT Gap Fund

Vida Williams
Advanced analytics solution lead, SingleStone

Gerard Eldering
President, InnovateTech Ventures

Bruce Ferris
Managing partner, SPARK Product Development LLC

Anthony Fung
CEO, GovInight

Tracey Greene
Founding executive director, Charlottesville Angel Network

Mark Lambert
Founder, VArtisans

Saan Mallon
VP, Commercialization, Virginia Innovation Partnership Corporation

William McPheat
Principal scientist (ret), AstraZeneca

Hina Mehta
Director, University Programs, Virginia Innovation Partnership Corporation

William Weber
VP and general manager (retired), DuPont

John Newby
CEO, Virginia Bio

Kaitlyn L. O’Connor, Esq.
Partner, Nixon Gwilt Law

Dan O’Korn
Partner, Hutchinson PLLC

Erin Powell
Executive director, Lighthouse Labs

Richard Pellegrino
Sr. Director global innovation, Stryker

Brandon J. Price
Advisor to Entrepreneurial Ventures, Prof. of Entrepreneurship, Panamanian University Colleges of Business & Engineering

Kirsten Rieth
Director, Strategy and Innovation, RTI Innovation Advisors

Dennis Schafte
Director, Life Science Management

Matthew Miessau
Associate, Epidarex Capital
Our 6-year vision for growth

<table>
<thead>
<tr>
<th>2022: Present State</th>
<th>2028: Future State</th>
</tr>
</thead>
<tbody>
<tr>
<td>$3.1M licensing revenues / year</td>
<td>$8-10M licensing revenues / year</td>
</tr>
<tr>
<td>Inconsistent growth issued patents</td>
<td>40+ issued patents / year</td>
</tr>
<tr>
<td>10-20% yearly growth cash revenues</td>
<td>1-2 VC rounds or exits / year</td>
</tr>
<tr>
<td>6-7 startups / year slow growing, faculty-run</td>
<td>10-15 startups / year</td>
</tr>
</tbody>
</table>
| Fast growing startups fast funded, CEO-run | }
Thank you for your time.

Questions, comments?