

November 1, 2016

The Honorable Terence R. McAuliffe
Governor of the Commonwealth of Virginia
Patrick Henry Building, 3rd Floor
1111 East Broad Street
Richmond, Virginia 23219

The Honorable Thomas K. Norment
Co-Chair, Senate Committee on Finance
Post Office Box 396
Richmond, Virginia 23218

The Honorable Emmett W. Hanger, Jr.
Co-Chair, Senate Committee on Finance
Post Office Box 396
Richmond, Virginia 23218

The Honorable S. Chris Jones
Chair, House Committee on Appropriations
Post Office Box 406
Richmond, Virginia 23218

Re: Virginia Biosciences Health Research Corporation

Dear Governor McAuliffe, Senator Norment, Senator Hanger, and Delegate Jones:

Chapter 780, Item 106:I of the 2016 Acts of Assembly includes funding for the Virginia Biosciences Health Research Corporation (VBHRC), a 501(c)(3) non-stock corporation, to serve as a catalyst to accelerate and focus life science research momentum at Virginia's universities.

Chapter 780, Item 106:I.6 requires that you be provided by, November 1 of each year, a written report summarizing the activities of the consortium, including, but not limited to, a summary of how any funds disbursed to the consortium during the previous fiscal year were spent, and the consortium's progress during the fiscal year in expanding upon existing research opportunities and stimulating new research opportunities in the Commonwealth.

The detail hereafter provides an update on the specific progress of this initiative to date.

Background

Efforts of VBHRC focus on stimulating collaborations and partnerships with our research universities and industry. These efforts are meant to have a positive economic impact to the Commonwealth by increasing corporate-sponsored research resulting in commercializing new technologies, starting new companies and expanding the involvement of bio and pharmaceutical companies in Virginia. The founding members are Virginia's premiere research institutions: Virginia Commonwealth University, Eastern Virginia Medical School, George Mason University, Virginia Polytechnic Institute and State University and the University of Virginia. Old Dominion University became the sixth member of the consortium effective January 2014.

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At its October 31, 2016 meeting, the Board approved William & Mary becoming the seventh member of the consortium.

The Commonwealth committed funding for Fiscal Years 2013 and 2014 to establish the core objectives of the consortium and, in addition, the President of each member university agreed to commit a cash contribution to participate. The Commonwealth's commitment over these two years totaled \$5 million, supplemented by a \$100,000 contribution from each member university distributed as \$50,000 each year.

In Fiscal Year 2015, VBHRC did not receive any funding from the Commonwealth or its member universities. For Fiscal Year 2016, VBHRC received \$2,500,000 in funding from the Commonwealth and a total of \$300,000 (\$50,000 each) from its member universities.

Pending the admission of William & Mary as a member of the consortium, VBHRC is governed by a 14-member Board of Directors. The primary duties of the Board include recruitment and selection of a Chief Executive Officer, development of the policies and goals of VBHRC, and the review and approval of research partnerships as recommended by a Project Management and Oversight Panel. The Board is comprised of the following:

- Representatives of the six (6) university members, with one (1) member appointed by the President of each member university:
 1. Eastern Virginia Medical School: William J. Wasilenko, Ph.D. (elected Board Secretary 07/25/13)
 2. George Mason University: Deborah Crawford, Ph.D.
 3. University of Virginia: Erik Hewlett, M.D.
 4. Virginia Commonwealth University: Francis L. Macrina, Ph.D.
 5. Virginia Polytechnic Institute and State University: Michael Friedlander, Ph.D.
 6. Old Dominion University: Morris Foster, Ph.D. (elected Board Treasurer 1/6/2016)
- Secretary of Commerce and Trade: Todd P. Haymore
- The President and CEO of the Virginia Economic Development Partnership or his or her designee: Dan Gundersen, Interim President & CEO, VEDP
- A representative of the United States Department of Veterans Affairs: David X. Cifu, M.D. (elected Board Chair 10/22/15).
- Two (2) representatives of statewide health care system providers in Virginia:
 1. Sentara Healthcare: Howard Kern
 2. Open position

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- Two (2) directors, one of whom is to be a representative of a venture capital firm that regularly invests in life science companies and the other, of whom, is to be a representative of a life sciences company.
 1. Tom Roberts, General Partner, Harbert Venture Partners
 2. Jason Walsh, Director, Strategic Growth, Corning Life Sciences (elected Board Vice-Chair 1/6/2016)

- A statewide representative of the biosciences industry in Virginia: Jeffrey M. Gallagher, CEO, Virginia Bio

The VBHRC Project Management and Oversight Panel is comprised of the following ten (10) members:

- Science and clinical appointments:
 1. Stanley A. Hefta, Ph.D., Professor, Director, Strategic Planning and Business Development, Virginia Bioinformatics Institute of Virginia Tech
 2. Ali Andalibi, Ph.D., Associate Dean of Research, George Mason University
 3. Jerry L. Nadler, M.D., Professor and Chair, Department of Internal Medicine, Eastern Virginia Medical School
 4. Gerard Eldering, President, Innovate Tech Ventures
 5. James P. Bennett, Jr., M.D., Ph.D., Emeritus Professor and Former Chair, Department of Neurology, School of Medicine, Virginia Commonwealth University
 6. Scott Meza, Shareholder and Attorney at Law, Greenberg Traurig

- Venture Capital firm appointments:
 7. Cody Nystrom, Managing Director, SJF Ventures (appointed 10/31/16)

- Life Science company appointments:
 8. Rony Thomas, President & CEO, LifeNet Health, Inc.
 9. James C. Powers, Chairman and CEO, Hemoshear, LLC
 10. Jeff Conroy, Founder, Embody, LLC

Non-government related positions on the Board, as well as the Project Management and Oversight Panel, are filled on a pro bono basis by qualified individuals who hold important bioscience-related expertise, value the public service nature of this position and possess a sincere interest in helping to advance Virginia's bioscience community.

The Project Management and Oversight Panel, the CEO, and the Board developed criteria in the first year to govern project solicitation from universities and companies, funding awards, project

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review and continuation, and related project management issues and decisions. VBHRC's two strategic initiatives center on the neurosciences and cardiovascular metabolics fields. From these two initiatives, VBHRC has developed three main focus areas that include bio-informatics and medical informatics, point of care diagnostics, and drug discovery and delivery.

Progress on Core Objectives

The following detail breaks down milestones and accomplishments in Fiscal Year 2016, with information on VBHRC's structure, governance, research, and project activity.

August 2015

- The VBHRC Board met on August 31, 2015, and approved Round Four of grant disbursements for five projects, totaling \$2,233,500 in funding. The Board also received an overview of strategic initiatives and priorities, including an update on the status of the Neuroscience Initiative (the "Brain State" initiative) and the Cardiac Metabolic Initiative, and approved the initiation of Round Five of funding in the amount of \$864,118. Round Five is to be focused on neuroscience projects, with one element of project scoring being the ability to demonstrate interest by "big pharma" or "big biotech."

October 2015

- October 22: VBHRC Board of Directors meeting held and all agenda items executed, including approving the election of David Cifu as Chair and the adoption of new banking resolutions.

January 2016

- January 6: VBHRC Board of Directors meeting held and all agenda items executed, including approving the election or re-election, as applicable, of David Cifu, Howard Kern, Tom Roberts, and Jeff Gallagher as directors and the election of Board officers, and approving two (2) Round 5 projects in an aggregate amount of \$687,057.

June 2016

- June 29: VBHRC Board of Directors meeting held and all agenda items executed, including approving the Independent Auditors' Report of Mitchell Wiggins & Company on the financial statements of VBHRC as of and for the year ended December 31, 2015, including the unqualified opinion of the auditors contained therein, approving the 2016 budget, and discussing anticipated collaborations with the Virginia Research Investment Committee and the Commonwealth Health Research Board.

Ongoing Activity:

Although this report is focused on FY 2016, it has been our practice to also include details of ongoing efforts into the current fiscal year. On October 31, 2016, the VBHRC Board of

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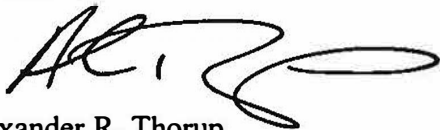
Directors meeting was held and all agenda items were executed, including approving the admission of William & Mary as a participating university, modifying VBHRC's fiscal year and cash management practices, and appointing Cody Nystrom to the Project Management and Oversight Panel. Additionally, the Board approved a resolution to recommend to the Commonwealth Health Research Board (CHRB) that VBHRC and CHRB "co-fund" seven (7) projects totaling \$3,525,000 with VBHRC contributing \$2,125,000 and CHRB to contribute \$1,400,000. This is consistent with CHRB's statutory mandate to support Virginia's core bioscience strengths, improve human health and demonstrate commercial viability and a high likelihood of creating new companies and jobs in Virginia.

Through Round 4, VBHRC has funded 16 projects involving six (6) Virginia research universities and 14 industry partners in the amount of \$6.7 million with \$19.6 million in matching funds. Subsequently, there has been \$48.8 million in follow on investment in commercializing these projects.

VBHRC is developing research tools to build infrastructure, which will accelerate funding from the federal government (NIH, NSF, DARPA), industry and philanthropy. These tools include state-wide patient registry, state-wide clinical trial network, linking our bio-repositories, and providing shared data connectivity. This effort is being led by Dr. Randall Merchant in coordination with our research universities and our health care systems including Sentara, Inova, UVA Health Systems, VCU Health Systems and Carillion.

On behalf of VBHRC and its Board of Directors, thank you for your continued support of these important and innovative efforts to transform Virginia's economy. As always, please do not hesitate to contact Mike Grisham or me if we can be of any assistance.

Sincerely,



Alexander R. Thorup
Manager, Legislation & Policy

cc: Ms. Betsey Daley, Staff Director, Senate Committee on Finance
Mr. Robert P. Vaughn, Staff Director, House Committee on Appropriations
The Honorable Todd P. Haymore, Secretary of Commerce & Trade
Mr. Mike Grisham, Chief Executive Office, Virginia Biosciences Health Research Corporation