

**VIRGINIA RESEARCH INVESTMENT COMMITTEE  
MEETING  
DECEMBER 5, 2016**

**DRAFT MINUTES**

Mr. Blake (chair) called the meeting to order at 10:00 a.m. in the SCHEV Boardroom, 9<sup>th</sup> Floor, James Monroe Building, Richmond, Virginia.

Committee members present: Peter Blake, Ric Brown, Betsey Daley, Jim Dyke, Heywood Fralin, Karen Jackson, Robert Vaughn, John O “Dubby” Wynne

Committee member absent: Wick Moorman

**WELCOME AND INTRODUCTIONS**

Mr. Blake welcomed VRIC members and attendees. He introduced Al Wilson, Senior Assistant Attorney General, as counsel to the Committee.

**APPROVAL OF MINUTES**

No action was taken on the draft minutes of the October 12 meeting because some members had not yet been sworn in.

**DISCUSSION OF DRAFT BYLAWS**

Mr. Blake introduced the first reading of a set of draft bylaws, with the understanding that the bylaws could be moved for approval upon the second reading at the next meeting.

At the request of Mr. Blake, Dr. Edwards highlighted the salient points in each section of the draft bylaws.

Asked for clarification on the provisions regarding election of a Vice Chair, Dr. Edwards explained the terms and procedures, which include nomination and, at least two weeks in advance of the election, public notice of the nominee as well as the date, time, and place of the Committee meeting during which the vote is scheduled to occur.

Dr. Edwards concluded that if the desire of the Committee was to approve bylaws and elect a Vice Chair at the same meeting, then both a nomination and public notice would have to occur at least two weeks prior to that meeting; and at said meeting, the election of a Vice Chair could be held only subsequent to an action to approve the bylaws.

**DISCUSSION OF PROPOSED ORGANIZING PRINCIPLES, CONCEPTUAL FRAMEWORKS, AND TIMELINE**

Mr. Blake introduced staff's proposals regarding organizing principles, conceptual frameworks, and a timeline for developing and initiating a grant program and award process for the Virginia Research Investment Fund (VRIF). Mr. Wynne spoke in favor of a broader-scale approach to the Committee's work.

Mr. Wynne said that he would like to see a situational analysis on research opportunities and strengths. He said he would like VRIC to provide more coordination and more focus to research at public universities. Toward those ends, he would prefer to begin by gaining a better understanding of the “tectonic plates” involved, and then to focus on the mechanics of a research grant program.

Mr. Blake asked those Committee members with knowledge of the legislative intent of the VRIC and the VRIF to provide some insight on the scope and limits of the enacting statutes.

Sec. Brown stated that, from the perspective of the McAuliffe administration, commercialization is the overriding goal; collaboration and diversification of the Virginia economy are also priorities.

Ms. Daley stated that, in the wake of the recent JLARC report on the Virginia Economic Development Partnership (VEDP), she is concerned that the Commonwealth possesses no single focal point for the research efforts of its public universities. While many agencies and entities are involved in research, she said she believes that VRIC should be that focal point.

Mr. Vaughn expressed agreement with Mr. Wynne regarding a broad scale for the Committee’s work. He said he wishes to see better collaboration between and among universities and believes that the VRIF should not be a vehicle to recruit faculty unless they are very high-profile researchers.

Mr. Fralin stated that the VRIC goal should be to create good jobs for Virginia. He said he seeks to understand the best methods and the most likely research topics for getting innovations from the lab to the marketplace.

Sec. Jackson mentioned the Georgia Research Alliance (GRA) as one model that has been highly successful, particularly in terms of recruiting eminent scholars. She stated that the GRA has broadened the industries in which it invests, because its initial two were too few/restrictive. She highlighted the head-to-head nature of the competition for GRA funding.

Mr. Dyke agreed that VRIC could learn from other states and lead the research agenda more broadly.

Mr. Dyke asked whether the next Committee meeting should include presentations about programs/initiatives in other states. Sec. Brown suggested the agenda also include best practices from the literature. Committee members also said that they would like to have a better understanding about what the research universities would recommend.

Ms. Seuffert suggested that an additional method of determining what the universities would prefer would be to solicit proposals broadly and then look closely at the types and foci of requests received. She added that the process would not have to require that any proposals be funded.

Mr. Dyke described his attendance at the SCHEV General Professional Advisory Committee meeting of public institution chief executives and reported that community college presidents are interested in VRIF and the work of VRIC because, as the regional research ecosystem develops, opportunities will manifest for community colleges to contribute to the supply chain or pipeline of talent.

Sec. Jackson noted some projects' long timespan between the lab and commercialization. She emphasized the need for VRIC to recognize that timeframe. She asked where VRIF best fits and who then is responsible for funding a project through the remainder of the often-lengthy commercialization timeline to the ultimate launch of the product.

Mr. Wynne noted the high rate of failure for start-up companies and offered that investigators need the skill sets of entrepreneurs.

At the request of Mr. Blake, Ms. Seuffert then discussed staff's two graphics illustrating the research and innovation continuum in academic research and state grant funding thereof.

### **PRESENTATION ON CIT'S RESEARCH AND TECHNOLOGY STRATEGIC ROADMAP**

Mr. Blake introduced the next topic and welcomed Ed Albrigo, President and Chief Executive Officer of the Center for Innovative Technology (CIT).

Mr. Albrigo offered that his presentation would describe the Roadmap, including what it is and where it is going in terms of CIT's work to update it.

In describing the input sources for updates to the Roadmap, Mr. Albrigo noted the existence of over 100 venture capital firms known to CIT through the GAP Funds program, and that CIT receives input from these firms regarding where they are investing their dollars.

Mr. Albrigo also highlighted the tri-annual frequency of CIT's updates to the Roadmap and postulated that three years may be too infrequent, given the fast-changing innovation cycle in some fields, e.g., cybersecurity.

Mr. Vaughn asked for information about cybersecurity. Mr. Albrigo said that organizations traditionally have focused their strategy on end-point security solutions, but now university research demonstrates that hackers are already past end-point security and are inside the systems and networks of organizations.

Mr. Albrigo pointed out that one way CIT learns about these transitions in technology is by companies coming forward with proposals requesting funding to develop solutions. He also invited comments from Nancy Vorona, CIT Vice President for Research Investment, who stated that proposals from universities for the Commonwealth Research Commercialization Fund and other CIT grant programs span the gamut.

In response to Mr. Vaughan's question about the role that universities can and do have in the data security marketplace, Mr. Albrigo replied that many of the products sold by data security companies originated with university research. Sec. Jackson noted universities' growing roles in developing cybersecurity embedded in medical devices, which can be vulnerable to hacking.

Asked by Ms. Daley for his insights into the next wave of research opportunities, Mr. Albrigo answered that CIT receives qualitative input on the subject. For the Roadmap, CIT staff are discussing how to project into the future rather than only reflecting where Virginia is now. He added that CIT uses seven focus areas for grants and that, as was found by the Georgia Research Alliance, perhaps one or two focus areas is too few.

Reflecting on the Committee's earlier discussion of its approaches and starting points, Mr. Albrigo closed by conjecturing as to whether the Roadmap should lead or follow the foci of the VRIF and whether it should originate from CIT or elsewhere.

**PRESENTATION ON INOVA'S GENOMICS INSTITUTE AND UNIVERSITY PARTNERSHIPS  
(BUDGET ITEM 478.20)**

Mr. Blake welcomed the Inova representatives and their university partners: J. Knox Singleton, CEO of Inova; Todd Stottlemeyer, CEO of the Inova Center for Personalized Health; Richard P. Shannon, Executive Vice President for Health Affairs at the University of Virginia; and Deborah Crawford, Vice President for Research at George Mason University.

In introductory comments, Mr. Singleton described Inova's Global Genomics and Bioinformatics Research Institute as a seminal step into a new realm with long-term potential. He called the partnerships between Inova and the research universities "a long-term play," with both short and intermediate impacts. Mr. Singleton highlighted three principles: (i) collaboration rather than competition ("the strength of a wolf is in the pack"); (ii) alignment of business, government and the research community; and (iii) a Commonwealth network, through which the assemblage of a statewide team brings together the differential strengths and competencies of the partners.

Kicking off Inova's formal presentation, Mr. Stottlemeyer emphasized that the institute is a private-public partnership that leverages partners' strengths and improves their collective ability to compete nationally for research dollars. He described the effort as the constructing of a new research ecosystem.

Dr. Shannon stated that UVa would move some 3<sup>rd</sup>- and 4<sup>th</sup>-year medical students to the Inova campus, along with the Darden i.Lab, an initiative that creates a nexus for entrepreneurship and innovation education. Dr. Shannon said that the problems in this space are so large that no single entity can solve them alone. He described what is being created as a "research rectangle" and noted that UVa is looking forward to other Virginia universities bringing their areas of expertise, including proteomics from GMU. He believes that the institute is the right mechanism for universities to come together.

Mr. Stottlemeyer introduced Inova's partnership with George Mason University on the Joint Center for Proteomics, for which the policy and ethics issues are still under development. Dr. Crawford from GMU then highlighted the multiplier effect in the creation of this new ecosystem.

Mr. Stottlemeyer then introduced Inova's pending partnership with Virginia Tech on bringing a foundational data piece to the ecosystem. Dr. Theresa Mayer, Vice President for Research and Innovation at Virginia Tech, discussed her enthusiasm for leveraging 20 years of investment and taking it in a new direction: the merger of social analytics and health care analytics.

Dr. Shannon suggested that population genomics might be an example of a potential gap at the institute, with UVa's strength being functional genomics. He also suggested that VCU could collaborate on pharmacogenomics.

Referencing Budget Item 478.20, Mr. Blake asked when the university partners would be ready to present the information needed to access the \$8 million in general funds and \$20 million in debt authorization. Mr. Stottlemeyer said he anticipates being able to present a detailed request in early 2017.

Mr. Vaughn raised the subject of the issuance of bonds to support the institute and expressed a desire to align the square footage to be used by each university with the allocation of bond funds to each partnership. He asked for information about space utilization by each institution. Mr. Stottlemeyer responded that the plan for space utilization is still under development.

Sec. Brown stated that a representative of the Treasury Department was in the room and was taking notes about the timing of the bond issuances. Treasury borrows for cash needs periodically, rather than by individual project. He expressed belief that the bonds involved would be taxable bonds. Sec. Brown said that the mechanics are in place, the only issue is final approval from VRIC.

### **DISCUSSION OF NEXT STEPS**

Mr. Blake asked VRIC members to comment on the process each would like to follow to obtain the input they need to make the best decisions. He offered examples of options such as meeting in smaller groups, scheduling more meetings and/or holding one-on-one consultations with experts.

Mr. Vaughn asked Sec. Jackson whether her early 2016 visit to the Georgia Research Alliance had been worthwhile. She answered that a Virginia contingent had made a field trip to the labs funded by the GRA, in addition to meeting with GRA board members who explained their role and how they designed the program; she found the visit and the information valuable. Mr. Wynne expressed belief that the GRA is funded by private dollars and reiterated his interest in examining other examples.

Sec. Jackson stated that, if members believe that the Committee is more than what is specified in the Code of Virginia, then they need to decide what it is. She suggested that good tools and good staff can lay out a broader scope for the Committee, pointing out that much exists that they, individually and collectively, do not know.

Sec. Brown stated his interest in hearing from individual institutions, particularly about their patents. He too wants to get a handle on what VRIC is doing and what Virginia's strengths are. He believes that VRIC should incent collaboration.

Mr. Wynne suggested formation of a subcommittee that would work with universities and other state agencies, as well as subject matter experts and full-time staff. He said the subcommittee could drive the work, with content and results presented at VRIC meetings.

Ms. Daley agreed with Mr. Wynne on the need to meet, but preferred that all VRIC members participate in discussing the scope of VRIF.

Mr. Blake observed that while the next meeting had been scheduled tentatively for March 14 to coincide with the next meeting of the Growth and Opportunity for Virginia Board, it was clear to him that an earlier meeting was needed. Calendar availability for VRIC members in early January was discussed, but no date was chosen.

### **ADJOURNMENT**

Mr. Blake adjourned the meeting at 12:15 p.m.

---

Peter Blake  
Chair, Virginia Research Investment Committee

---

Lynn Seuffert  
Associate for Research Investment

DRAFT