Discussion Paper: Creating a Consistent Framework for Centers and Institutes at Virginia Commonwealth University March 31, 2006

Overview

Virginia Commonwealth University (VCU) hosts numerous organizational units referred to as centers or institutes. These terms have been used interchangeably and sometimes indiscriminately within VCU and by universities throughout the United States. These centers and institutes have been created with a broad range of missions with varying emphasis on the traditional scholarly components of teaching, research and service. Generally but not exclusively, institutes at VCU have tended to reflect a research-focused mission, whereas centers at VCU have tended to have broader missions that frequently include research, but may also prioritize academic, clinical, or service activities.

At VCU, official approval by the Board of Visitors offers one level of distinction among the dozens of named centers and institutes at the University. The process of obtaining Board of Visitors approval requires coordination among participants, a proposed structure for the desired entity, and a clearly articulated mission. The VCU Board of Visitors has to date approved 13 centers and 6 institutes (Appendix A summarizes basic structure of each). Some centers have been established exclusively under the aegis of the VCU Health System. The Molecular Imaging Center is one example. There is no clear policy on University vs. Health System designation of centers. Simultaneous designation by both the University and Health System is also a possibility and this strategy was used in the recent formation of the Center for Health Disparities. For the past three years, the VCU Bulletin, reflecting prior history, has listed 12 University Centers and 5 University Institutes. However, the VCU online directory includes 52 centers and institutes; Websites for the Schools of Medicine and Business list 22 and 15 centers and institutes, respectively, not all of which appear in the University directory. The Virginia General Assembly has, through legislative acts, created at least 2 named centers found at VCU: Virginia Center on Aging (1978), which is administratively located in the School of Allied Health Professions; and the Virginia Center for Urban Development (1992), which is administratively located in the Center for Public Policy. The State Council for Higher Education of Virginia (SCHEV) gave its approval for three centers to administer SCHEV-approved curricula: Center for Public Policy, Center for Environmental Studies, and Center for the Study of Biological Complexity. Thus, the number of centers and institutes is large and diverse, and a comprehensive catalog of their breadth, mission, objectives, reporting lines and evaluation mechanisms would be a benefit to the institution. The purpose of this discussion paper is to begin that process.

Status of Centers and Institutes Evaluation Process

Evaluation processes, reporting requirements, and means of determining institutional support varies significantly among centers and institutes at VCU. Even for some Board of Visitors-approved units, reporting lines remain vague, and the purpose for such reporting unclear. Many centers are designated as reporting to one of the two academic Vice Presidents (Provost and Vice President for Academic Affairs or the Vice President for Health Sciences), whereas all Board of Visitors-approved institutes but one report to the Vice President for Research (Philips Institute for Oral and Craniofacial Molecular Biology reports to the Dean of Dentistry). Most clinically oriented centers report to the Dean of the School of Medicine, whereas another three centers report to the Vice Provost for Life Sciences: the Center for Environmental Studies, the Center for the Study of Biological Complexity, and the Rice Center for Environmental Life Sciences. The Rice Center differs from other University Centers in that it is both a facility (similar to the Trani Center and the Siegel Center) and an academic, research, and public service program of activities. This document does not deal with VCU centers that have a predominant identity as a building or facility, such as the Trani Center or the Siegel Center.

Among Board of Visitors-approved units, the Massey Cancer Center and Institute for Women's Health undergo periodic site visits and formal review by their federal sponsors; the General Clinical Research Center receives periodic site visits by its federal sponsor (National Center for Research Resources). Additionally, some Centers, such as the Massey Cancer Center and General Clinical Research Center, have established external advisory groups that provide evaluative reviews in-between funding cycles. The VCU Reanimation and Shock (VCURES) Center is currently being assessed by the School of Medicine. Some groups produce annual reports or WEAVE documentation that proceed through defined reporting relationships. However, it has been difficult to establish universal criteria to benchmark and compare center and institute performance because of their variable and diverse academic and scholarly missions, variations in reporting structures, and ill-defined goals and expectations.

Centers and institutes, particularly those at the university level, tend to be highly interdisciplinary matrix organizations. Assessment of those umbrella matrix operations that spread over a significant sector of the University can be particularly challenging as compared with assessment of more traditional vertically-structured academic units, such as departments in schools. One reason for this difficulty is that part of the mission of these matrix structures is to use their assets and resources to support and enhance the vertically-structured units. New assessment criteria may be required to evaluate and, where possible, quantify the value-added contributions of matrix organizations to the traditional academic units.

Financial Support of Centers and Institutes

The financial structure and institutional support of these units likewise varies widely. Some centers and institutes, predominantly those with Board of Visitors' approval, receive financial support from the University; many do not. Centers with SCHEV-approved undergraduate curricula receive university funds similar to more traditional academic units that administer undergraduate curricula, as required to recruit students, hire faculty to teach the courses in that curriculum, and to advise and counsel students in that major. Budgetary commitments at defined

levels and duration (some one-time, some for specified number of years) have been made to some centers and institutes; University payment of research space rent has also been provided (ongoing). For some centers and institutes, arrangements have been made for direct return of overhead (indirect) costs. Other common sources of institutional support have included direct access to HEETF requests for equipment purchases, personnel allocation, approval by the VCU Health System Board (where appropriate), and recognition by SCHEV for administering curricula. Tracking of center and institute and funding and income generated is difficult due to the distribution of accounts across multiple administrative divisions.

Recommendations

The need to address these organizational issues is urgent. Two policy events related to VCU centers and institutes are on the horizon:

- The Office of the Provost and Vice President for Academic Affairs is defining policy for the approvals required for establishing, revising, or deleting University Centers and University Institutes.
- The VCU Strategic Plan 2020 calls for instituting "a process of systematic, periodic review of all VCU research centers and institutes to assess their state, effectiveness, and alignment with the overall goals of the University, and to recommend actions to improve centers and institutes and the institution" (Theme IV, Initiative 6).

This discussion paper lays the groundwork for implementing these two initiatives through the following recommendations:

1. Establish a standing committee chaired by the Vice President for Research with representation of the two academic vice presidents, vice provosts or deans (2), department chairs (2), and institute or center directors (4-6). A protocol for selecting and then rotating committee membership will be established to ensure representation across schools and campuses, especially those involved with centers and institutes. Resources for appropriate staff support for the standing committee should be committed.

The initial task for this committee will be the classification of all named centers and institutes based on two criteria: breadth and mission. For example, a classification of breadth might specify university centers or institutes, school or department centers or institutes, health system centers or institutes, and special-focus centers or institutes. A classification based on predominant mission might specify academic centers or institutes, research centers or institutes, or clinical centers or institutes. Other categories of breadth and mission might be warranted, such as comprehensive centers and institutes. A specification of scope and mission should inform the evaluation process such that centers or institutes have appropriate assessment criteria. Appendix B illustrates some classification schema.

The committee will gather and organize other relevant information (how formed, how approved, structure, reporting arrangements, university support, deliverables, goals,

status, and productivity). A larger task force may be needed for this one-time effort; Appendix C includes a suggested list of activities and criteria for the initial review process. The process will begin with those units having Board of Visitors' approval and be expanded to include all named entities suggesting status as a center or institute. Clearly articulated criteria for distinguishing each category must be provided along with the rights and responsibilities conferred to each level of classification. The need for formal nomenclature rules as part of this classification process could also be addressed at this time.

This committee will be tasked with recommending broad principles and standard procedures for evaluating existing centers and institutes; reviewing proposals to establish new centers and institutes as an advisory group to appropriate approval bodies; and making advisory recommendations as requested by the Provost and Vice President for Academic Affairs, the Vice President for Health Sciences and CEO of the VCU Health System, or the Vice President for Research regarding the continuation, reorganization, or dissolution of centers and institutes throughout the University and the VCU Health System. The roles of these two entities in all processes related to center and institute formation and evaluation should be carefully considered and well-defined. Formative and summative evaluation of and creation of standard operating procedures for this review process will inform the formal policy to be established by the Office of the Provost and Vice President for Academic Affairs regarding future establishment and revision of centers and institutes at VCU. Communication of this committee's efforts and policy development to all vice provosts, deans and department chairs will be essential to ensure no additional centers or institutes are internally launched without prior central notification, review, and approval. Appendix D is based on the review process used by the National Institutes of Health to review programs in their centers and institutes. It is recommended that this be adapted for the review of all biomedical research institutes at VCU. Further, because of the mandate of VCU2020, it is recommended that all the biomedical institutes be the first to be reviewed under this proposed initiative.

- 2. In general, future naming of centers and institutes should continue to reflect the primary mission of institutes being research, and the mission of centers being broader, such as may include academic, clinical, or service activities.
- 3. Create a VCU Centers and Institutes Website designed to link outside visitors with formally reviewed and approved Centers and Institutes at VCU; to inform faculty seeking to establish new centers and institutes of institutional policy and procedures regarding this process; to link and support directors of centers and institutes throughout the University; to publicize the objective criteria used to monitor institute and center progress and productivity of individual centers and institutes. This Website would be coordinated and jointly maintained by the chair of the committee defined in #1 (i.e., Vice President for Research) and the Office of the Provost and Vice President for Academic Affairs and the Vice President for Health Sciences/CEO VCU Health System.

4.	. Identify responsibilities of University officials to whom center and institute directors report (i.e., administrative, financial, resource allocation, faculty recruitment/retention, curriculum development, etc.) and how the fulfillment of these tasks is evaluated.						

Appendix A: VCU Centers and Institutes with Board of Visitors' Approval

Name/Website	Director	Participating Schools/Offices	Reporting	Review Process			
Institutes							
Grace Harris Leadership Institute http://www.vcu.edu/gehli/	Grace Harris, PhD	VCU and VCU Health System	Director of Center for Public Policy				
Institute for Drug & Alcohol Studies http://www.vcu.edu/idas	Robert Balster, PhD	Humanities & Sciences, Medicine, Pharmacy	VP Research	Annual report			
Institute for Structural Biology & Drug Discovery http://www.vcu.edu/structuralbio/	Donald Abraham, PhD	Medicine, Pharmacy, VCU Life Sciences	Dean, SOP	Annual report			
Institute for Women's Health http://www.womenshealth.vcu.edu	Susan Kornstein, MD	Humanities & Sciences, Medicine, Nursing, Pharmacy, Research, VCU Health System	Dean, SOM VP Research	Quart/ann reports Annual site visit Evaluation Director			
Philips Institute for Oral and Craniofacial Molecular Biology http://www.dentistry.vcu.edu/departments/philips/philips_home.html	Andrew Yeudall, BDS, PhD	Dentistry, Medicine, VCU Life Sciences	Dean, SOD	Annual report			
Virginia Institute for Psychiatric & Behavioral Genetics http://www.vipbg.vcu.edu/	Kenneth Kendler, MD Lindon Eaves, PhD, DSc	Humanities & Sciences, Medicine	VP Research	Annual report			
Centers							
Center for Environmental Studies http://www.vcu.edu/cesweb/	Greg Garman, PhD	VCU Life Sciences, Humanities & Sciences, Medicine	Vice Provost for Life Sci	Annual report, WEAVE			
Center for Health Disparities http://www.library.vcu.edu/whatsnew/news s result.cfm?ID=875	Sheryl Garland, MHA Wally Smith, MD	Medicine, VCU Health System, Humanities & Sciences, Pharmacy, Dentistry, Nursing, Allied Health	VP Health Sci	TBD			
Center for Public Policy http://www.vcu.edu/cppweb/	Robert Holsworth, PhD	Humanities & Sciences, Education	Dean, College Hum. & Sci.; Provost				

Name/Website	Director	Participating Schools/Offices	Reporting	Review Process
Center for the Study of Biological Complexity http://www.vcu.edu/csbc/	Gregory Buck, PhD	VCU Life Sciences, Engineering, Humanities & Sciences, Medicine, Pharmacy	Vice Provost for Life Sci	Annual report, WEAVE
Center for Teaching Excellence http://www.vcu.edu/cte/	Joseph Marolla, PhD	All Schools and the College of Humanities and Sciences	Provost	Annual report, WEAVE
Clinical Research Center for Periodontal Diseases http://www.dentistry.vcu.edu/research/c rcpd.htm	Harvey Schenkein, DDS, PhD	Dentistry, Medicine	Dean, SoD	
Pauley Heart Center http://www.vcuhealth.org/heartcenter/	George Vetrovec, MD	VCU Health System	Dean, SoM	
HIV/AIDS Center http://www.hivcenter.vcu.edu/	Daniel Nixon, DO	Medicine	Dean, SoM	
Liver Center http://www.vcuhealth.org/program-details.asp?programID=53	Robert Fisher, MD	VCU Health System	Dean, SoM	
Massey Cancer Center http://www.vcu.edu/mcc/	Gordon Ginder, MD	Allied Health, Medicine, Pharmacy, Nursing, Dentistry, College of Humanities and Sciences	VP Health Sciences	NCI site visit
(Inger and Walter) Rice Center for Environmental Life Sciences http://www.vcu.edu/rice	Leonard Smock, PhD	VCU Life Sciences, Humanities & Sciences, Medicine	Vice Provost for Life Sci	Rice Board of Trustees, Annual report, WEAVE
Virginia Microelectronics Center http://www.egr.vcu.edu/vmc/index.html	Supriyo Bandyopadhyay, PhD	Engineering	Dean, SoE	
(Harold F.) Young Neurosurgical Center http://www.vcuhealth.org/hfync/index.html	Harold Young, MD	VCU Health System	Dean, SoM	

Centers Created by the Virginia General Assembly:

Virginia Center on Aging (located in the School of Allied Health Professions): http://www.vcu.edu/vcoa/Virginia Center on Urban Planning (located within Center for Public Policy): http://www.vcu.edu/cppweb/urban/

Appendix B: Sample Classification Systems for Institutes, Centers, and Similar Units

Academic Center. The Academic Center promotes pioneering cross-disciplinary research and educational activity across multiple academic units. The Academic Center develops and maintains interdisciplinary curricula and develops and fosters interdisciplinary research and scholarly activity within and beyond VCU. Each Academic Center is a flexible organization established for a specific purpose, objective and mission. Talented faculty, both internal and external, who are leaders in their fields are members of the Academic Center.

Research Center. The Research Center promotes pioneering and strategic projects by giving priority to research resources such as budget and human resources. The Research Center influences the industrial world, academic circles, and society, and has a clear mission. Each Research Center is a flexible organization with top-down management established for a specified period of time. Talented people, both internal and external, who are leaders in their field are appointed to the Research Center.

Research Institute. The Research Institute has a bottom-up organization based on research proposals submitted by individual researchers. The aims of the Research Institute include the maintenance of continuity of operation to enable the implementation of mid- and long-term strategies and the development of technical potential. The Research Institute is also organized to clarify tasks needed to meet needs, display a sense of technical affinity, and, furthermore, facilitate the development of new fields of technology by the fusion of existing research fields.

Research Initiative. The purpose of the Research Initiative is to promote specific research projects with flexibility, for a specified period of time, especially those with a high possibility of cross-field application or with relevance to immediate administrative needs. Research Initiatives can be promoted to Research Centers or Research Institutes as appropriate based on initial performance, sustainability, and need for more formal organization and recognition.

From the University of Nevada – Las Vegas

Center: A Center provides an organizational base for research and scholarly activity in a given academic area or closely related areas. It often provides a vehicle for interdisciplinary research in a given area involving more than one department, college, school, or other administrative structures. The "Center" structure may facilitate efforts of the department, college, school or university to obtain extramural funding in specific areas. It serves as a formalized link between the academic community and the professional community in the area(s) of focus. A Center, however, is not an autonomous structure within the internal statutory organization of a department, college, school or university and the center director most commonly reports to a dean or department head. A Center is not involved in the independent offering of credit course or degree programs.

<u>Institute</u>: An Institute shares the Center's focus on research and scholarly activity, provision of opportunity for interdisciplinary activity, value in facilitating efforts to obtain extramural funding, and service as a link between the academic and professional communities. However, the Institute is a far more formalized structure and may be equivalent to an autonomous unit within

the internal structure of the university such as a division, school or college and commonly reports through the institute director directly to the Vice President for Research and Graduate Studies. An Institute is not involved in the independent offering of credit course or degree programs.

From California Polytechnic Institute

A center or an institute can enhance professional development opportunities for faculty, build links with industry and the community, provide identifiable campus entities for practitioners, foster interdisciplinary work, aid in obtaining external support, and complement the instructional program. An <u>institute</u> is a unit that has more than one interest and/or function. A <u>center</u> is a unit with one interest and/or function. An institute may encompass a number of units or centers. An academic auxiliary unit will typically develop from a trend of interest and professional activity already pursued by the proposed membership with some degree of success and will usually involve an important matter currently neglected or an area expected to grow in importance.

From University of Pennsylvania

Type 1 Center – Highly focused units, usually involving a single department

Type 2 Center – Interdepartmental unit but largely based in or identified with a single school

Type 3 Center or Institute – Interschool unit with broad multi/interdisciplinary mission including research, clinical, educational, and outreach components

Appendix C: Proposed Initial Review Process for VCU Centers and Institutes

Identification

- Survey deans for comprehensive list of centers and institutes within their schools
- Survey VCU Health System for list of centers and institutes not affiliated with a University department or school
- Centers that administer SCHEV-approved curricula
- Board of Visitors-approved centers and institutes
- Centers and Institutes with Websites at VCU

Formation

- Who initiated formation?
- Who approved formation (names & titles of all officials involved)?
- What was impetus for formation?
- What institutional support was given/available upon formation? Is this support ongoing?

Structure

- Who directs or otherwise leads the institute or center?
- Is there an internal governing body? An external oversight body?
- Is there an organizational chart?
- Is there a governing policy or procedures document?
- To whom does the director report (names and titles of all officials involved)?
- What space/resources are assigned to the institute or center?
- Funding sources for salaries, for equipment, and for operating support
- Allocation and control of space

Deliverables

- Does the center or institute confer an undergraduate degree (major) not affiliated with another academic department or school?
- Does the university offer an undergraduate or graduate degree solely through the center or institute (i.e., not affiliated with another academic department or school)?
- Does it educate other students, interns, residents, fellows, and/or faculty?
- Does it publish peer reviewed articles or books?
- Does it publish other brochures, reports, curricula, or other disseminating materials as a center or institute (i.e., not the individual publications of member faculty)?
- Does it organize workshops, seminar series or other training opportunities for students, interns, residents, fellows or faculty?
- Does it sponsor regional, national or international workshops, meetings or congresses?
- Does it represent VCU in regional, national or international organizations?
- Does it submit grant proposals for infrastructure & operation? For individual projects?
- Does it maintain a core resource or offer a core service (on a cost-recovery basis) needed by the larger University community?

- Does the center or institute generate income (patient care, licensed technology, products/services sold, consulting, conferences, etc.)?
- Does it actively seek donations and sponsor fund-raising events for central operating funds?
- Does it mediate and foster interdisciplinary interactions that are not fostered by other institutional units?
- Does it respond to regional, national or international priorities?
- Does it prepare quarterly, semiannual, annual, or biannual reports?
- Does it undergo periodic external review by a sponsor?
- Does it undergo periodic external review by any other panel of scientific experts?
- Are the contributions of members specifically and wholly to the institute or center considered by their home academic departments for the purposes of promotion and tenure?

Appendix D: Sample Evaluation Protocol for Biomedical Research Institutes at VCU

Since VCU research institutes in the biomedical field differ considerably in focus and administrative organization (e.g., specific disease focus vs. common methodology), no single evaluation method can be applied to all research institutes. Nevertheless, based on NIH criteria, some important evaluation features can be applied across all research institutes, although their importance may sometime have to be modified depending on the nature or purpose of the specific institute being evaluated (e.g., annual publication frequency may differ between disciplines). The exact method of evaluation should be considered in the formation of the research institute and approved by the Vice President for Research.

Institute director(s) will submit a brief report to the Vice President for Research each year (due on or before the annual date of institute's formation). The report will include accomplishments during the past year as well as current and anticipated administrative problems. An institute or center may have *core* investigators and/or *secondary* investigators. To clearly assess the productivity of the institute or center, only accomplishments of the *core* investigators will be included in annual reports. Core investigators are those whose participation is essential to the mission of the institute.

The quality of an institute's research program will be formally evaluated at least every 5-7 years, based on a review of the unit's annual report by the Vice President for Research. The reviews will be conducted by outside investigators with expertise in the unit's research area. The review will consist of an evaluation of the productivity of the institute or center's core investigators (as measured objectively by federal awards, publications, and citation analysis), the leadership of the directors, and the quality of mentoring of junior researchers provided by senior researchers. Material to be submitted to the external reviewers will include:

- Background and purpose of institute or center
- Organizational chart and reporting structure
- Listing of all personnel, including academic rank and department
- Current bio sketches for all core investigators
- Space assignment and usage
- University-provided operating budget
- Curricula and/or degree programs offered
- Outside grants and contracts funding, including trends since last review
- List of former students trained and current affiliation
- List of important publications since last review
- List of intellectual property filings (invention disclosures, patents and licenses) since last review

Training of new investigators (junior faculty, post-doctoral fellows and graduate students) is a vital function of all research institutes. Thus, as part of the review, the external reviewers will be asked to assess the educational environment provided by the institute or center as well as the extent that *core* investigators have worked to foster the professional development of the junior investigators. This would include individual research training as well as group training (seminars, journal clubs, etc.). The reviewers will meet individually with all graduate, medical,

and postdoctoral students for a candid discussion of quality and quantity of faculty support in research career advancement. If a student prefers, a private meeting with the reviewers can also be arranged. An anonymous questionnaire assessing the *secondary* and junior investigators' satisfaction with the quality of research training in the institute or center is available in the Office of the Vice President for Research, which may be used by unit directors if desired. The outcome of this discussion will be included in the reviewers' report, along with suggestions for improving the quality of mentoring if needed.

Specific criteria to be addressed in the external review summary report include:

- <u>Purpose</u>. Has the original purpose for establishing the research center or institute been realized? Is the institute or center continuing to serve an important function within VCU?
- <u>Significance</u>. Does the center or institute address important and timely problems? Is scientific knowledge being advanced, and is the center or institute affecting the concepts or methods that drive this field?
- <u>Approach</u>. Are significant changes needed in the operation of the institute or center? Is the infrastructure self-sustaining? Is the organizational structure flexible and able to adapt to new priorities that may arise?
- <u>Innovation</u>. Do the center or institute personnel employ novel concepts, approaches, or methods? Are their aims original and innovative? Do the projects challenge existing paradigms or develop new methodologies or technologies?
- <u>Environment</u>. Does the center or institute enhance the academic environment at VCU? Does the center or institute complement existing resources, equipment, and expertise and integrate well with other centers and institutes?
- <u>Productivity</u>. Is the center or institute productive in completing research projects, disseminating results, translating discoveries into practical applications, training a new generation of talented researchers and/or clinicians, and advancing the overall VCU strategic plan?

Enhancement or maintenance strategies, correction of deficiencies, or plans to reduce or eliminate (where appropriate) will be developed between the Institute or Center Director in concert with the relevant dean(s) and appropriate senior administration within six months of receiving the final report. The final report will be the basis for a plan of action for the Institute or Center and will be a basis for either the next periodic review or annual monitoring (if required).