MEMORANDUM

TO: The Special Committee on Research:

Edward D. Miller, M.D., Chair
Frank M. Conner III
Barbara J. Fried
William H. Goodwin Jr.
Stephen P. Long, M.D.
Margaret N. Gould
George Keith Martin, Ex-officio
Mark J. Yeager, M.D., Faculty Consulting Member

and

The Remaining Members and Senior Advisor to the Board:

Frank B. Atkinson
L.D. Britt, M.D.
Allison Cryor Dinardo
Helen E. Dragas
Kevin J. Fay
Frank E. Genovese
John A. Griffin
Victoria D. Harker
Bobbie G. Kilberg
John G. Macfarlane III
John L. Nau III
Leonard W. Sandridge Jr.

FROM: Susan G. Harris

RE: Minutes of the Special Committee on Research on November 13, 2014

The Special Committee on Research of the Board of Visitors of the University of Virginia met, in Open Session, at 1:18 p.m., on Thursday, November 13, 2014, in the Byrd Room of the Harrison Institute; Edward D. Miller, M.D., Chair, presided.

Committee members present were George Keith Martin, Frank M. Conner III, Barbara J. Fried, William H. Goodwin Jr., Stephen P. Long, M.D., Margaret N. Gould, and Mark J. Yeager, M.D.

Present as well were J. Milton Adams, Ian B. Baucom, Jeffrey D. Blank, Catherine P. Bradshaw, Nancy E. Dunlap, M.D., Alison P. Landry, Pamela M. Norris, Nancy A. Rivers, Richard P. Shannon, M.D., Margaret A. Shupnik, John D. Simon, and Thomas C. Skalak.
Opening Remarks by the Committee Chair

Dr. Miller said the focus of the meeting will be on the status of research at the University, national research trends, and how the Board of Visitors can support research.

Report by the Vice President for Research and the Executive Vice President for Health Affairs

Thomas C. Skalak, Vice President for Research, introduced Dean of the College of Arts & Sciences Ian B. Baucom; Dean of the School of Medicine Nancy E. Dunlap, M.D.; Margaret A. Shupnik, Senior Associate Dean for Research in the School of Medicine (SOM); Pamela M. Norris, Associate Dean for Research and Graduate Programs in the School of Engineering and Applied Science (SEAS); Catherine P. Bradshaw, Associate Dean of Research and Faculty Development in the Curry School of Education; and Jeffery D. Blank, Assistant Vice President for Research.

Mr. Skalak explained that the University as a research intensive institution attracts top students and faculty, is an important lever for academic excellence, and supports the Cornerstone Plan. All of the University’s schools engage in research, but due to the nature of their research not all schools receive federal funding. Award distributions between the schools are in line with those at other institutions. Research funding comes from the federal government, industry, foundations, other colleges, and state/local government.

A review of University research funding for the 2010-2014 period shows that after three years of declining funding, in FY 2014 funding increased by 5%. SOM accounted for a majority of the funding. SEAS and SOM had the highest funding levels per tenure-track faculty, with SEAS being slightly over $350,000 and SOM being slightly over $300,000. SEAS and SOM also had the highest funding levels per square foot with both being slightly over $300. This is at the upper end of the $150 to $350 range that indicates a high level of laboratory activity.

For 2014, research funding levels for the science departments in the College and Graduate School of Arts & Sciences ranged from $3 million to $7 million, with Physics having the highest funding level. Funding for the social sciences, arts, and humanities was significantly lower. The funding per tenure-track faculty for the science departments ranged from $100,000 to $250,000. This funding in the social sciences, arts, and humanities was less than $50,000; historically these fields have received limited funding from federal agencies. For the science departments, funding on a per square foot basis was approximately $150.

For 2014, funding in the SEAS departments ranged from $2 million to $12 million. The average departmental funding per tenure-track faculty was $350,000; the average funding per square foot was $350.
A comparison of National Institutes of Health (NIH) funding for the 2004-2014 period shows that while substantially below the levels attained by Duke, Johns Hopkins, and the University of Michigan, the University’s funding levels remain constant. When asked about the University’s aspirations, Mr. Skalak noted that the University aspires to be in the top 40 in terms of federal research dollars.

Dr. Shannon reported on research funding for the School of Medicine. A review of NIH funding over a 30 year period shows that the SOM has historically ranked 32nd among 125 schools and has consistently garnered about 0.6% of the funding. During the last five years, however, the ranking dropped from 32nd to 41st. In the rankings by U.S. News and World Report, the school is listed at 26th; five years ago it was in the top 20. Rankings are influenced by a school’s research portfolio, which at the University has decreased by more than $20 million since FY 2008. SOM’s FY 2014 research level is $161.4 million with clinical departments accounting for two thirds.

SOM has four major research centers: cancer, immunology, cardiovascular, and population health genomics. These centers combine basic and clinical investigators in translational research where basic discovery is moved to clinical applications. The centers are interdepartmental. Most major academic medical centers during the last five to six years have risen on the success of their cancer centers. Between FY 2008 to FY 2014, the school’s research funding declined by $20 million. While the basic sciences and clinical departments maintained their funding levels, the centers lost ground with almost the entire decline due to the cancer center, which lost a number of investigators and their research funding which was in excess of $25 million.

The remaining faculty are productive; more grant proposals were submitted in 2014 than in 2008, but with more of the applications for non-NIH funds. SOM has a successful bridge funding program that keeps research programs going when they are between funding cycles. To improve the number of grant awards and help junior investigators start their careers the school has a K-to-R Award Transitions program to help with the preparation of grant proposals.

Between FY 2008 and FY 2014, research funding per square foot fell from $411 to $368, which is above the $300 threshold but is below the performance of the elite programs. SOM has found that senior researchers tend to be the most successful. Unproductive researchers are subject to salary reductions and unproductive departments are subject to space reductions.

To improve its standing, SOM recently completed a strategic plan. It intends to focus on being really good in a few areas. It will need to recruit 10 to 15 new basic science investigators just to replace recent losses. There is sufficient funding for a $100,000,000 investment in new hires over the next three years. These will not all be in basic sciences; a major focus will be in cancer. New hires will be institutional hires, not departmental hires.
Dr. Dunlap also noted that cross-Grounds collaboration is a strong point. Dean Ian Baucom added that the College is also focusing on research and has tentatively identified four major research areas: computational sciences; environmental and climate science; astrophysics; and neurosciences.

In response to comments about the mentoring for junior investigators, Dr. Dunlap said that the SOM has an internal review process for grant proposals for both junior and senior faculty and that gap funding is available if an investigator fails to receive a grant. There is also a yearly case symposium for young investigators to present the results of previous work and their grant proposals. Dr. Yeager reported that in his department each faculty member is assigned a mentor and that a team of mentors participates in the development of junior investigators.

Mr. Skalak concluded the presentation with a review of industry support, which accounts for 30% of research awards. Last year, 513 industrial awards generated $33.1 million. The majority were in the life sciences, clinical trials, and engineering. Education and computing are emerging disciplines. The $250 million per year in research funding equates to the income of a $5 billion endowment. During the first quarter of this year, the research program grew with funding up 4%, proposals up 13%, and new proposals up 23%.

On motion, the Special Committee on Research meeting was adjourned at 2:31 p.m.

SGH:wtl

These minutes have been posted to the University of Virginia’s Board of Visitors website:  http://www.virginia.edu/bov/educationalminutes.html