

## Academic Senate Research Committee Minutes

January 20, 2022

### Via Zoom

**Time: 3 pm – 4:11 pm**

**Members present:** Noreen Rossi (chair), Alan Dombkowski, Andrew Fribley, Krishnarao Maddipati, Joseph Roche, Shirley Papuga, Robert Harr, Tamara Bray, Karen MacDonell, Wanda Gibson Scipio, Carol Miller, Robert Reynolds, Ramzi Mohammad, Le Yi Wang, Edward Cackett (liaison), Lance Heilbrun, Shane Perrine, Arun Iyer, Jennifer Lewis, Hossein Yarandi

**Members absent with notice:** Christian Bozeman (liaison); Timothy Stemmler (liaison)

**Guests:** Stephen Lanier; Linda Beale

The meeting was opened at 3 pm on Jan. 20, 2022. Corrections in the minutes were provided, and the minutes from the previous meeting were approved as corrected. The chair reported that the composite post-pandemic education document was submitted to Policy. No report or feedback as yet from Policy.

There was a questions re: assignment of experts to the review board for evaluating Research Misconduct. The question was tabled as Dr. Lanier joined the committee earlier than anticipated.

Dr. Lanier joined the meeting. Committee members introduced themselves. Dr. Lanier mentioned he intended to address four broad questions that he received prior to the meeting: 1) the impact of changes in calculation of research dollars in 2016, 2) details regarding inclusion of HFH investigators at iBio in WSU portfolio, and 3) status of large grants and programs at the University (PRB, CURES, Physics, etc.), 4) potential for decentralization of some intramural seed money grant.

Dr. Lanier opened with notice that the University has posted updated guidance on masking on campus. KN95 masks are available at Science Stores since there is concern standard surgical masks may not be sufficient for Omicron.

He noted that there is an effort embarked on a new 5-year strategic plan; he will be glad to make it available to this committee.

In 2021, major programmatic grants came into play: a major contract from CDC (\$15.9M) in COVID surveillance (PI: Jeffrey Kline, MD from Emergency Medicine who joined WSU from Indiana U.); Michigan Marijuana Regulatory Agency (\$7M; PI: Leslie Lundahl) team-based initiative – a percentage of the funds are set aside by LARA for research; successful renewal of NCI designation of Comprehensive Cancer Center (\$3.2M/yr x 5 yr; PI: Gerold Bepler, M.D.); Engineering/Chemistry joint initiative from US Army Corp of Engineers: REUSE of Rare Eaterh from US Extractions (\$10M; PI Matt Allen, Ph.D., chemistry and Timothy Dittrich, Ph.D. (Civil and Environmental Engineering).

Additional extramural highlights included launch of WSU-HFHS joint effort in cardiovascular health and metabolic diseases with transfer of current HFHS grants from their teams to WSU and new grants by that group to be submitted through WSU. This group is integrated into Physiology, a department now interviewing candidates for chair after J.P. Jin stepped down to return to Chicago. This will be an important recruitment also due to the T32 NIH training grant housed in Physiology.

A cardiovascular center grant (NIH P50; \$3.6M/yr x 5 yr; PI: Philip Levy, M.D.). In addition, WSU received the only grant awarded by the American Heart Association on “Health Equity Research Network in Preventing Hypertension” which is a collaborative initiative with WSU, Beth Israel Deaconess, John Hopkins, NYU, and UAB (\$20M overall with \$2.6M to WSU; Project Leaders: Philip Levy, M.D. and Robert Brook, M.D.) Dr. Lanier envisions these initiatives as highly promising platforms for cardiovascular research.

Dr. Lanier provided a 5-yr overview of extramural research funding, 2017-2021. NIH has increased. Other federal funding (e.g., CDC) and corporate funding showed increases although NSF decreased 2020 vs 2021 but was similar to prior years. He was very happy that we broke the \$100M benchmark and anticipates that this will bring additional funding and the next phase of growth. He noted that the program grants tend to build on each other.

He showed that in going back to 2013, NIH went from \$77M to \$100M in 2021; NSF doubled in the 7 years. In 2016 the Cancer Center trials were included as awards for the first time. Prior to 2016, the clinical trial data was not included so WSU portfolio looked considerably lower than HFHS or other comparable institutions. Now we are comparing “apples to apples.” Cancer Center has the most clinical trial activity but we need to foster additional areas.

Overall,

FY21 vs FY20: 13% increase in total federal funding

9% increase in NIH funding

2.5% decline in NSF funding

44% increase in other federal funding

170% increase in state funding

FY21 vs FY13: 53% increase in total federal funding

29% increase in NIH funding

94% decline in NSF funding

156% increase in other federal funding

321% increase in state funding

Dr. Lanier then showed a table of extramural research funding broken down by schools and colleges. School of Medicine still brings in 70% of extramural research funding. CLAS has continued to increase. Engineering has declined slightly. Social work garnered a number of grants/contracts from State of Michigan. Nursing has also increased substantially since 2017, and Pharmacy/Health Sciences has kept steady as has College Education. VP for Research has increased from ~\$9.7M to \$15.2M in the last 5 years.

Dr. Lanier pointed out that if you have the award “it is important to spend the money” that generates F&A money which goes into general fund. So if you track research expenditures and report to the National Science Foundation (and results in ranking). The expenditures declined to nadir in 2015 and have since continued to climb. The ranking is based on the expenditures: WSU dropped from 55<sup>th</sup> in 2012 to 70<sup>th</sup> in 2015 (nadir) and has climbed back up to 67<sup>th</sup> in 2019. WSU reported \$243M in 2020, so held flat due to less expenditures during the pandemic. The amount of F&A generated in 2020 was \$35.4M.

He provided some comparisons of peer institutions since 2015: WSU increased 14%. U. Cincinnati increased 21%, whereas U. Illinois increased 8%. Among others, some did better and some worse than us.

Progress made in the Strategic Plan of 2016. He promised to share that document with us as well.

Two key leaders have come on during the pandemic with whom he has been working closely despite the challenges: Mark Schweitzer, M.D. and Amanda Bryant-Friedrich, Ph.D. In addition, a new Provost, Mark Kornbluh, Ph.D. came on board. New deans are being recruited (e.g., Engineering) as well as new chairs in physiology and pharmacology.

Reynolds: Inquired on the increase in patents; how are they distributed across the university? He provided a "best guess" that many are in Health Sciences, and several are in engineering and chemistry. Dr. Lanier promised to provide more detailed information. Dr. Reynolds commented that patents provide an opportunity to work with industry, community, and government.

Beale: Asked about the data regarding the dollar amount that WSY-HFH grants due to their participation with iBio. What can Engineering specifically do to increase its share of research? Was our rank prior to 2011 closer to 47-49 on expenditures; can we make it back up there and how long to do so? Comparison of peer groups what are the factors determining the peer group.

Lanier: HFHS group generates about \$3M/yr (R01, K award, training grants). To operationalize the HFHS program was not easy but it was important to strengthen the obesity, cardiovascular, and metabolism areas. The HFHS agreement is for 5 yrs.

Rossi asked if the issue with MSU joining HFHS will impact the HFHS group being part of WSU.

Lanier: If we can build physiology and something that people want to be a part of, group physiology, and develop a programmatic initiative in cardiometabolic diseases so that researchers are empowered and not encumbered, it will succeed. If we recruit a strong chair of physiology, those researchers will stay, and we can recruit and build the program even better.

What will it take for engineering? We need to recruit strong leaders and chairs. With a new dean that should be possible. Partnerships with Imaging Center and Cancer Center and grow programs in targeted areas will be important. An important area is biomedical engineering that needs to be tapped into as well nurture the relationship with physics.

Beale: Should engineering reach out to Dept. of Defense?

Lanier: Why did our ranking fall? Other institutions grew during the doubling of funding and due to the changes in leadership, relations with the City, etc. during that period resulted in not taking advantage of the doubling. Some of the big jumps by other institutions occurred by large programmatic grants which we did not do and strategic partnerships.

Peer group institutions were chosen as urban universities that were comprehensive research universities. He will check to be sure the ones provided were also R1 institutions.

Rossi: Inquired the status of PRB, CURES, physics and engineering grants.

Lanier: PRB is coming up in its 10<sup>th</sup> year overall which ends in ~ Feb. 2023. It is in the 5<sup>th</sup> year of its second renewal. WSU received \$15.4M in November which is a 10% reduction due to budgetary pressure across the board on the government. This is the last year of the contract. Due to the contract ending in early 2023 the funding will be prorated for the limited time to ~\$4M. Key is a strong chair of OB-GYN, 5000 deliveries (a certain number is needed), etc., NIH is now considering a more distributed model rather than putting all the funds in one place. Yale is interested in competing, WSU will compete. We may go into next year with a request to fund for one more year as the program retools.

CURES is on the bubble for renewal. Council meets in February, 2022. If needed they will go back in if needed. For 6 years we have been working on a superfund proposal Carol Miller and Melissa Runge-Morris have gone in for that 2.6M/yr (marriage of Environmental Health Science and Engineering) also awaiting funding decision. Council to meet in February, 2022.

In Feb., 2021, we submitted a grant had a good score but not funded. WSU resubmitted in September, 2021 NIH program on transformational recruitment to hire faculty up to 10 per year from underrepresented populations. This will also be reviewed in late February, 2022.

In the last few years we have tried to invest in infrastructure and keeping research cores nimble. Submitted grants for instrumentation some of which have been funded.

After Dr. Lanier left the meeting, the chair asked re: other questions on the agenda.

Rossi returned the discussion to the Research Misconduct document.

Maddipati raised the question of whether there was an issue of potential conflict in the process for appointing the expert reviewers.

Rossi pointed out that was the issue that prompted sending the document to the Research Committee. The appointment of the panel of experts seems to depend on Dr. Lanier. Clarification on that from Dr. Stemmler that the appointment of experts is actually done by Dr. Cunningham. That is the issue at the heart of how the members of the panel are to be appointed yet maintain confidentiality and expertise.

The Chair asked for ideas on how to modify the process if at all and, if so, how to do so. The next meeting will be a discussion of the Research Misconduct Document and particularly that issue.

Rossi also pointed out the decline in graduate enrollment and asked if the group wanted to have Dr. Bryant-Friedrich come speak with us. It is not clear if the decline is in international students but that granularity of data has not been provided even to Policy.