Report of the Research Committee of the Academic Senate, Wayne State University

Academic Year 2021-2022 Submitted by Noreen Rossi, MD, Chair

I. Outline

A. Activities Undertaken by the Committee

The Committee was given the following charges during this academic year:

- 1. Post pandemic Higher Education Report impact on research
- 2. Research Misconduct Policy recommendations for revision re: due process
- 3. Budgetary support for research
 - a. Medical school
 - b. SPA programs
 - c. Research centers and institutes
 - d. Tech transfer
 - e. Function of Office of Business Innovation
- B. The Committee members raised issues that required information and sought input from the following administrative and academic offices:
- 1. Office of Graduate Studies
- 2. Facilities
- 3. C&IT
- 4. IRB (Institutional Review Board)

II. Individual Charges

C. Post-pandemic Higher Education Report – impact on research

The Committee was divided into three subcommittees: student education, faculty impact, and R1 research status. Each subcommittee provided a report that was then consolidated into a single 15-page document and submitted to the Policy Committee of the Academic Senate. The Committee investigated, discussed, and researched current and *anticipated* trends in student education (undergraduate and graduate), faculty, and R1 research status, STEM, and laboratory instruction. It should be noted that the three areas/items are intricately intertwined. The major findings and recommendations of this endeavor are summarized below.

<u>Student education in research fields</u>: STEM knowledge is increasingly important in a highly technical society (see Table 1).

Graduate student recruitment has been negatively impacted and recruiting strategies should be revisited. Remote interviews are adequate for initial screening but in-person interviews should be resumed as soon as safely possible.

WSU should look into additional affiliations with local community colleges and utilize graduate students in teaching roles more effectively.

Table 1. Ottaent Education in Nescardi Ficias						
	Challenges to correct	Innovations				
High School	Strengthen existing research opportunities for high school students (e.g., SURF)	Develop new outreach to local high schools interested in STEM research				
WSU students	Make the "A Grade" program at WSU more visible to transition outstanding undergrads into graduate programs. Involve more undergraduate students in research across disciplines.	Establish more online degree programs that reflect Wayne State research and teaching strengths.				
Other colleges	Clarify the process of transferring credits to ease transition to WSU Continue active support of BUILD program	Accelerated programs to earn baccalaureate and master's degrees.				

Table 1: Student Education in Research Fields

Industry	1.	Re-establish relationships with corporations to improve the	1.	Provide Credit for work experience: internships,
		pipeline for graduate level students		cooperative classes, competition teams, and outreach
				activities.
			2.	Consider initial online coursework for graduate students
				from abroad followed by laboratory/field work at WSU
				for degree

<u>Faculty impact</u>: WSU should anticipate that some of the changes to work will be adopted by the research community at large and will continue after the pandemic phase, thereby, extending to changes in faculty workflow and responsibilities.

Laboratory research was severely impacted as was field work during the pandemic. Recovery after shutdown will not be immediate due to loss of staff. The disruption of work on grants was significant. Education of graduate students was made more challenging and consideration of extension of time to doctorate as well as tenure should be considered.

To provide more flexibility in future, WSU needs to embrace hybrid environment for teaching and research but will require significant upgrades in network capability, classroom and laboratory interfaces.

The ability to host highly respected researchers remotely during and after the pandemic will be advantageous and cost effective.

R1 research status. This area was extensively discussed in the document. The Committee evaluated the Carnegie Classification that is used to classify R1, R2, R3 institutions. WSU currently maintains its R1 status but the metrics depend heavily on doctorates conferred and research expenditures (Fig. 1). Thus, graduate recruitment and retention are important in this area as well. There was concern regarding a "vicious cycle" of disruptions in facilities and infrastructure support that could reduce future funding. An addition concern was the shift in hiring away from research intensive faculty (e.g., clinicians), decreased administrative staff to support all levels of research mission (e.g., IRB, budgeting, SPA, facilities, computing technology, etc.).

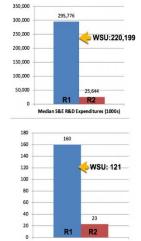


Figure 1. WSU research expenditures (S&E) and number of STEM doctorates in comparison to the median of R1 and R2 universities

Two major recommendations were (1) to identify and mitigate factors that contribute to faculty departures and (12) to address issues regarding tuition waivers/support for predoctoral students.

A. Research Misconduct Policy – recommendations for revision re: due process

The Committee reviewed the "WSU Policy and Procedure Regarding Research Misconduct" (Policy 2010-01). Dr. Cunningham, the Assoc. VP for Research, was invited to present the salient features as well as how the policy has been implemented at WSU over the last 12 years (Nov. 18, 2021). Discussion ensued over the next two meetings. The Committee acknowledged that some, but not all, of the procedures for inquiry and investigation are delineated by regulatory agencies outside the university, such as the Office for Research Integrity (ORI). Further, not all reports of disputes regarding research are subsumed under the umbrella of "misconduct" (e.g., authorship disputes).

The Research Integrity Officer (RIO) and the Deciding Officer (DO) are key positions in the process. The RIO "performs the initial assessment…oversees inquires and investigation, …and other responsibilities." The DO is the VP for Research of designee and "makes determination about institutional administrative actions concerning allegations."

Basically, there are two phases once an allegation of research misconduct occurs: the inquiry phase and the investigation phase. If the inquiry finds that there is sufficient information for a full investigation, it moves to the investigation phase. In both phases, there are individuals empaneled with specific expertise in the field of research in question and who are not affiliated with the complainant's or respondent's department or unit. The Policy does have provisions re: undue influence by employees or students over the RIO or DO (section 4.2.2), however, the Committee observed that there are insufficient provisions for

oversight of the process and actions by the RIO or DO. It should be noted that the "expert panel" investigating the misconduct in either the Inquiry phase or the Investigative phase are chosen by the RIO or DO. However, the choice of experts may be subject to bias as well as the subsequent actions of the University.

The Committee provided five recommendations. Basically, the process, key information, and decision of the Inquiry Phase should be submitted to a Hearing Panel (n=3) chosen by lottery (from the Hearing Panel roster). Likewise, if the process goes to Investigation, then a second Hearing Panel (n=7) chosen by lottery would be charged to review the *process*. The Hearing Panels would not need to be experts but would need to evaluate whether due process was followed, that bias was not exerted in either the choice of experts or in any other phase of the inquiry or investigation, and that the RIO and/or DO proceed with appropriate actions as deemed by the data and recommendations.

It was also considered that the appeal process for the respondent was inappropriately to be made to the RIO or DO who made the original decision. The Committee recommended changes to the language so that "The respondent may appeal the final decision...file written Notice of Appeal with the Provost. The Vice President for Research as the DO and/or the Associate VP for Research as the RIO will be notified of the appeal by the Provost."

Finally, the Committee recommended that the Policy be more explicit regarding the process to be followed if the RIO and/or DO act in opposition to the determination of the Inquiry Committee or the Investigative Committee and that under such circumstances, the issue be referred to the Provost after review by the Hearing Panel.

The recommendations were submitted to the Policy Committee in March, 2022.

B. Budgetary support for research

The Committee also hosted the following:

- 1. Gail Ryan, Assist. VP for Research in charge of SPA to provide clarification on any new processes, barriers, and issues regarding grant submissions and activities post-award.
- 2. Amanda Bryant-Friedrich, PhD., Dean for Graduate School to clarify GRA, GTA, graduate awards, and to discuss issues of tuition on grants. Committee members had a lively dialogue regarding these issues. Dr. Bryant-Friedrich provided important clarification on the classifications of graduate stipends, assistantships, awards, etc. She also noted that their funding of the as well as tuition on grants and other funding mechanisms for graduate students are under review by her office and the CFO. She welcomed the members to provide input.
- 3. James Wurm, Senior Director of C&IT, was also hosted by the Committee due to issues and difficulties have arisen with purchases of new computers that interface with research instruments and are involved in data acquisition and analysis. The delay in purchasing of computers or computers that are not on WSU "special purchase list" (e.g., Dell) but are needed for specific tasks also arose. Mr. Wurm extended a strong willingness to work directly with the researchers when such issues arise.

C. Other

The Committee intended to have a discussion regarding the new IRB process, particularly, that for expedited reviews with members of the IRB; however, scheduling conflicts prevented a meeting. The matters were taken up by members of the Committee that are intimately involved in IRB and clinical research. They are working together with the IRB on proposed changes to the process to streamline the applications and will report next academic year.