INFORMATION ITEM #1

Office of Research Update (T. Chris Riley-Tillman and K. Christen)

Below are the key points from WSU's Office of Research update, which will be presented during the March 2025 Board of Regents Meeting.

Recap research metrics FY 18-24

At the September 2024 meeting, we presented research metrics for FY2024 in comparison with FY2018 – FY2023 highlighting some long-term trends, both positive as they relate to leading indicators for research expenditure growth: steady growth in total annual award dollars and large awards (>3M) and negative: declining tenured and tenure track faculty headcount, declines in the annual number of proposals and number of PIs submitting proposals. We saw encouraging signs from FY23 to FY24, the number of tenured and tenure track faculty, proposals and unique PIs all saw an upward trend.

Research Metrics FY 25 to date

Looking at FY 25 to date (through Jan. 31) we have maintained a higher cumulative total of awards compared to FY2024, with markedly higher growth in the first quarter of the fiscal year and for the first half of the year we saw steady proposal rates. Considering the current climate for federal research funding, we aren't able to project this trend out with confidence. However, these first seven months have provided us with a firm foundation from which to continue growing the research enterprise relative to previous years.

As you may recall, as part of that FY 24 work we defined our research strengths by three constant indicators: significant and sustained funding, critical mass of faculty and beneficial societal impact. Since September, we have continued to assess and refine the strengths, including considering whether other areas of research at WSU may merit inclusion. We found that while there are a number of areas that stand out as worthy of note for their uniqueness or cross-disciplinary effort (e.g., STEM education research), none represent a standalone research strength or sub-strength according to our metrics.

Research Strengths and Growth

The research strengths provide a useful analytical tool for assessing the WSU research enterprise over time. Over the past several years, we see strengths have grown both in absolute terms and in as a share of WSU's overall research portfolio. However, we don't expect each individual strength and sub-strength to grow every year, some sub-strengths represent relatively established research areas at WSU and may vary year over year, while others show stronger growth in recent years, maybe due to a new investment in the area, shifting agency priorities, or because it is more of an emerging area in its respective strength.

Trends in Federal Funding

Over the last several months we analyzed our strengths in relation to federal funding agencies and their priorities. WSU's top funders include USDA, HHS, DOE, NSF and DOD which make up the majority of WSU's federal funding. The data trends show that USDA and HHS make up nearly half

of our funds annually. When looking at our peer institutions we far outpace our peers in USDA funding but fall behind in NSF funding and are just below our peers in DOE and DOD funding. Seeing this gap we have concentrated on examining where we can grow in NSF, DOE and DOD. We have analyzed each agency's priorities in relation to our strengths so that we can make tactical decisions about where to pursue more funding. We see several areas across each agency where we can optimize our funding.

Opportunities to Build

These three agencies each have very broad research portfolios; we have focused on stated priorities at the agencies where we see alignments with our strengths. We are highlighting three such areas: Nuclear Sciences, where we have unique resources and new opportunities through the recently-funded Hot Cell facility to expand our federal partnerships, particularly at DOD and NSF; Artificial Intelligence research, a developing area at WSU that will align in different ways across many agencies, with particular opportunity at NSF; and Materials research, which covers very diverse ground at WSU and has potential for growth in different areas at NSF, DOD, and DOE.