

The University of Tennessee
Research Council
Minutes of the Meeting
November 14, 2018

Attendance:

Elected Members present:

Graciela Cabana, Jay Chen, Yuri Efremenko, David Icove, Julia Jaekel, Michael Kilbey, Rebecca Koszalinski, Andreas Nebenfuehr, Greg Reynolds, Casey Sams and Soren Sorensen (Chair)

Ex-Officio Members present:

Chris Boake, Bill Dunne, Robert Muenchen, Holly Mercer, Charlie Noble, Bill Nugent, and David White

ORE Members:

Jon Phipps

Call to order:

Soren Sorensen called the meeting to order. A regular meeting of the Research Council was held at Blount Hall room A004 on November 14, 2018. The meeting called to order at 3:35 pm.

Chair queries Council regarding member availability and the need for a December 12 meeting. Council concurred they would be available and attend the December meeting.

Approval of Minutes:

Minutes have not been approved (November 30, 2018)

New Business

Equipment and Core Facilities Presentation & Discussion – Jon Phipps & Andreas Nebenfuehr

Jon Phipps – UT Core Facilities: The Core of the Research Enterprise

Core Facilities are shared resources available to UT faculty, staff, and students recovering cost through user fees and non-federal subsidies. These centers are non-profit re-charge centers with limitations of the types of charges allowed based on federal regulations. These state-of-the-art centers provide access to state-of-the-art resources for expert scientists fostering collaborative opportunities for faculty, student's experiential learning, and external partners. They expand the university's reputation as a regional, national and international leader in the research equipment. The current UT cores include life sciences, physical and material sciences, communications, and analytical/computational resources.

The Core Facilities program fast tracks research by reducing start-up time by providing cutting-edge resources and expert consultation. By distributing operational costs the university provides enhanced capability and capacity of faculty by removing barriers to research, leading more effective studies and opening new avenues for funding. UT Core Facilities identifies critical needs, connect partners, increases awareness, and provides administrative and financial support resulting in total contributions for FY18 more than \$2M.

The Core Facilities director wants to improve access and affordability of the equipment, improve individual facility organization including account procedures, and strategic financial support. Moving forward in the last half of FY18, the director wants to understand UT's research equipment capabilities, cataloging current resources, and strategically group by guiding future investments, support cluster hires, and guide start-up fund investment.

Andreas Nebenfuehr – Perspectives from Core Users and Managers

The types of Core Facilities users are occasional, heavy, and new researchers who use these facilities for preliminary data for proposals, research results for publications and student training. Financially, the facilities are supported by institutional support, user fees and equipment grants (Internal and external). The funds are used to provide maintenance and repair, equipment service contracts, technical support and equipment upgrades.

- Q: Why is the SARIF Equipment and Infrastructure not combined and funds only go to core facilities? A: ORE keeps the funds separate since the funding buckets have two separate focuses: support current equipment, upgrades and repairs. The Core Facilities program provides gap funding for core facilities since they are non-profit by design.
- Q: How did additional commitments occur? A: The purchase of major equipment or for funding requests above that which can be supported through the core facilities program. In many cases, these types of requests have been escalated to the level of VCR. Recently we have been fortunate that they have been put in front of the core facilities advisory committee for review and recommendation. However, there have been issues in the past when commitments were made toward purchases without consideration given to ongoing support if user fees were insufficient to cover costs. In the future, major purchases, including those from instrument awards (such as the NSF-MRI award) should be considered from the perspective of a long-term investment strategy. This means if a large piece of equipment is purchased for a core, the budget of the program will need to be assessed to ensure appropriate levels of support can be maintained.
- Q: Why are the commitments not anticipated or predicted each year? There seems to always be an urgency at the end of the year. A: There are some facilities requiring funds for budget shortfalls due to decrease in the user fees. Facilities do use historical data to predict future income and set rates based on predicted usage. This works in many cases, but some facilities have limited historical data or may have unexpected drops in users. Data collected by the Core Facilities Program is available to help guide rate setting decisions.
- Q: How do our peer institutions compare in providing financial support core facilities? A: Based on national surveys of cores from universities within the US, the average amount of operational support provided to cores by their home institute is about 35%, with the remainder of costs coming from user fees. Over the past 4 years, cores at UT have recovered ~75% of costs from user fees with 25% coming from ORE and the Office of Budget and Finance.
- Q: What is the cost structure? A: Core facilities must charge actual rates which are established yearly. They can charge the market price but may not be competitive resulting in cost deficits. It depends on what the economy can bear and doubling the rate will make the centers uncompetitive.
- Q: If external users are charged at a higher rate, where does this money go? A: Funds from external users, above the cost for services are retained by the core. These funds carry forward, and may be used for any purpose that advances the facility. For example, they may be used to reduce costs to users, to repair equipment, or to purchase new equipment.
- Q: Could VCR discuss with Mr. Cimino about how investments are made in core facilities and use the 6 years of data for rates instead of a 2 year snapshot? A: Yes, the university could re-evaluate the policies governing recharge centers to allow a longer period to break even.

- Q: Are some core facilities consider 'owned by the PI' and not UT? A: No, departments are the smallest unit that can be responsible for recharge centers and cores. Thus, ownership resides at the departmental level. The Core Facilities Program supports those that are working with multiple departments, but does not 'own' equipment.
- Q: What is the most critical point financial goal for the centers? A: Sustainability is the most important financial goal for the centers, and that this does not imply self-sufficiency as there are very few cases, if any, from peer or other universities that indicate facilities can operate solely on user fees and sufficiently serve their research communities. Another consideration is to depreciate equipment and currently ORE provides approximately \$100K per year supporting deficits.
- Q: How can the program avoid surprises at the end of the year since 25% does not appear to be adequate institutional support compared to peers? A: UT faculty are hesitant to use Core Facilities or include in proposals because of the charge. The program budget is fixed, while the number of facilities and services provided have grown. This year, ORE increased the budget of the core facilities program by almost six-fold, which is a wonderful start. However, with the addition of more high-end equipment, this investment should be re-evaluated to ensure the proper levels of funding can be provided to the cores.

SARIF Equipment and Infrastructure Committee – Yuri Efremenko, Chair

Twenty-two proposals were awarded and seven were denied resulting in \$300K invested in new and improvement of equipment; regardless if in a core facility or not.

The SARIF E&I fund needs more public relations for faculty to understand the funds purpose. A clear definition of 'infrastructure' needs to be established. It is recommended that ORE create a wish list across departments for UT research equipment. This is also a good opportunity to partner with UTIA.

Adjournment: The Chair adjourned the meeting at 5:15 pm.

Minutes submitted by: Paula Brown

Next Meeting: December 12, 2018 @3:30 pm in Blount Hall A004.

Zoom Attendance:

Please notify Paula Brown if attending by Zoom.