

University Senate Research Committee Meeting

(online)

21 April 2023

1:00 PM

In attendance: M Scott, K Wood, R Rutenbar, P Morel, E Facher, B Yates, F Luyster, M Holland, Z Xia, R Kear, J Lalo, M Levine, M Kenney, A Sethi, S Weinberg, D Reed

Approval of Minutes: The March 18 2023 meeting minutes were approved without changes.

The passing of Martica Hall (SRC member) in March was announced by M Scott.

Research update

Rob A. Rutenbar, SVC for Research

Follow-up proposed research security guidelines. Foreign travel guidelines are drawing a lot of comments/responses. The CHIPS Act is imprecise regarding research security. APLU leadership meeting requested Pitt's input on proposed guidelines. Some precision is needed on what will be required of research institutions like Pitt or whether Pitt is expected to inform on what/how it will conduct research security. It's anticipated that external institutions and societies will provide feedback on the proposed guidelines. FASEB should be pressed to respond, which M. Scott agreed to bring up at their next meeting.

Question: Is there a pathway/process for faculty to request new computer software? (Salcido) Rutenbar answered that it is easiest to just ask him for any new software needed/desired. In development is a new website for computer resources for the research part of campus. The goal is integration of Pitt IT, Rutenbar's computer stuff and the Pitt super-computer center. If one person needs currently unavailable software, then likely others do as well. It is cheaper to acquire licenses in bulk than for single use and Pitt is used to negotiating enterprise-scale engagements.

Update from the Pitt Innovation Institute

Evan Facher PhD, MBA. Vice Chancellor for Innovation and Entrepreneurship & Associate Dean for Commercial Translation in the University of Pittsburgh School of Medicine. Slide presentation included.

The Office of Innovation and Entrepreneurship (OIE) is composed of 4 units: the Innovation Institute, the Office of Industry and Economic Partnerships, the Big Idea Center and the Institute for Entrepreneurial Excellence.

Innovation Institute. The Institute works with faculty on campus, students and businesses to grow Pittsburgh, SW Pennsylvania and the overall Commonwealth opportunities on and off campus. The Institute focuses on transfer of ideas and technology, as well as protection of technology rights (patents, copyrights), to existing or new companies off campus. It manages Pitt's

relationship with UPMC Enterprises, provides commercialization gap funding to move technology/ideas over the finish-line, and oversees the NSF I-Corps (teaching idea-to-impact) site. Metrics show growth over the last year in moving ideas from campus to third parties: invention disclosures, patents, start-up companies. By these metrics, Pitt is in the top 15 or top 20 in comparison to other institutions.

The Pitt-UPMC relationship. UPMC Enterprises' goal, similar to a venture capital fund, is to grow opportunities for financial return. Most Pitt work with UPMC is on a third-party relationship level and template agreements are in place for doing business. Points of engagement include traditional RFPs, inquiries from UPMC about Pitt technologies, sponsored research agreements, pilot awards through CTSI or Dr. Billiar's office, gifts to labs, start-up packages for new faculty, and consulting money for Pitt faculty.

Key items to be aware of: Pitt and UPMC are separate legal entities. There is no such thing as a blanket confidentiality agreement between the 2 parties. This is important to remember when disclosing ideas. All projects that get funding are governed by standard agreements that can be accessed through Jennifer Woodward's office (Office of Sponsored Programs). Generally, technologies being developed through start-up packages from UPMC have strings attached. The most confusion over the UPMC-Pitt relationship occurs with dual-appointed individuals and ownership of the intellectual property or research product arising during the relationship. Most research by dual-appointed individuals is under Pitt's umbrella in terms of intellectual property rights.

UPMC has sponsored a lot of research that hasn't yet led to much translational activity. Sponsored research agreements with UPMC have not included the traditional coverage for indirect costs. Gap funding from UPMC is usually around \$250K, only enough to covers studies at the preclinical level. UPMC is probably Pitt's single largest industry-sponsored partner, requiring Pitt to have one full-time partner for working with UPMC. Colleen Cassidy (Project and Technology Commercialization Manager) has the role of working in that interface area. A lot of management is needed to work through the system given the enormity of the UPMC Enterprise versus Pitt's team.

Big Idea Center. The Center is for students, focused on immersing them in entrepreneurial and innovation activity (non-credit bearing) outside the classroom curriculum. Provides accelerator ideas, coworker space, student-focused venture funds (investment in return for equity), roll-up your sleeve mentorship and everything in between. \$125K in business competition prizes are available to students. IP is mostly owned by the students unless arising from federally sponsored programs. The Center has grown to 1500 students per year; 40% are masters or PhD students wanting to create a company based on their dissertation. Most of the students with entrepreneurial interests are coming from the schools of business, computing and medicine.

A physical space on the corner of Forbes and Meyran Ave was opened this year, providing 5000 square feet of meeting space, classroom space, and boardroom space. It is free and open to the public during business hours. It is an experiment with integrating inside-the-classroom and

outside-the-classroom activities in a more public space. There are a lot of partnerships to allow students to on-ramp to an immersive experience that they won't get in a classroom over one semester. A lot of collaboration goes on between OIE and the various schools, including work with ADRs and faculty, as well as how-to classes on networking.

Office of Industry and Economic Partnerships. Its focus is enhancing industry sponsorship of research scholars. It currently ranks number 50 among similar organizations. The group was specifically created with a focus on developing business activity with industry and professionalizing alliance management activities with industry so that the experience of working with Pitt is good and comfortable. For instance, OIE monthly sends out a list of opportunities to over a hundred different companies. This has enhanced industry-sponsored research coming through the door. A dedicated group is focused on business development - searching and evaluating for opportunities. The focus is also to help investigators know where they can turn for help/services with their entrepreneurial interests from the perspective of achieving societal benefit. Building the group has been from the ground up over the last 3.5 years.

Institute for Entrepreneurial Excellence. The Institute works not just at the campus level but also for the region. Early-stage entrepreneurs and businesses from across all of SW Pennsylvania can get consulting services, education on how to grow a business, how to do a profit and loss statement, and help with networking. There are physical locations in 6 counties, including metro areas and under-represented areas. Roughly 1500 businesses were worked with last year and 350 new jobs were created. Services are largely provided free; there is a membership-based organization also available, offering discounts on educational opportunities. The money to support all of this is mostly (97%) soft-funded through foundations, state/federal small business administration, and purchase of memberships at different levels. The student work is almost entirely funded through philanthropy and some regional support.

Life X. Pittsburgh hasn't had the supportive off-campus habitat that early-stage life science companies need. To keep those companies from going elsewhere, Pitt is trying to create a regional tech-based economic development organization to work specifically with health care companies in our neck of the woods. The goal is to provide the support for a local ecosystem that includes help developing milestones to get funding from venture capitalist groups. There is also direct investment into companies (\$16 million available). The organization is technically a separate legal entity, completely funded external to Pitt, but reports into OIE to make sure it is properly stewarded. The concept is that a lot of ideas/discoveries with the promise of societal benefit need this type of nurturing regional ecosystem to survive, especially when they can't afford to go elsewhere. The ideas per capita that come out of Pitt are more numerous than anywhere in the US, but the local ecosystem isn't comparable. Annually, OIE gets 325-260 new inventions, 105 new US patents, 11 new start-up companies, 164 new transactions with third parties rights to technologies developed on campus. The success of the work/accomplishments of Life X are being recognized by third parties outside Pitt.

Consideration of use of generative AI in research and for scholarly work

Seth Weinberg PhD, Associate Professor, Department of Oral and Craniofacial Sciences; Co-Director Center for Craniofacial and Dental Genetics (CCDG)

Introduction. People are using AI tools to generate research products: pubs, graduate theses, non-peer reviewed scholarly works, presentations at Pitt. Most publishers have guidelines in place for that: AI cannot be an author and AI use for manuscript writing must be disclosed. CCDG has recently enacted similar guidelines for use of generative AI in scholarly work.

Discussion/Comments on SRC involvement in guidelines for generative AI use.

M Scott: Might fit under Responsible Conduct of Research. Generative AI is heavily used by those for whom English is not their first language. National standards and regulatory requirements are not yet there for generative AI, so that's a problem. Should Pitt not wait on a federal initiative?

R Rutenbar: The overlap between academic work products (credit-bearing) and research work products (there is some guidance from large publishers) complicates the development of guidelines. Surveying schools and departments on what they are thinking on the matter is a way to begin. Pitt can find out what people and peer institutions are doing right now on this - benchmarking. Current existing guidelines are mostly on using generative AI in education. R Kear: It is an appropriate topic for consideration by SRC. There may be some foundational knowledge that Pitt students should have about these tools, such as legitimate uses and ethics; the library can help with this. There is no knowledge of the NIH currently working on anything about this and we can't wait for government to come up with guidelines. Joseph Yun (recent [Senate Plenary](#) presenter and part of Pitt IT) has been looking at generative AI and innovation for the University.

New items of discussion:

Interim Research Data Governance Policy Committee being formed. Pitt doesn't have a data governance policy, which leaves it exposed; needs an interim policy in place while the formal policy is being developed. Per a draft memorandum from Chancellor Gallagher, the interim policy is needed " ...to address a gap in policies that govern data gathered through research at the University as well as a lack of compliance with current federal funding agency policies and regulations on data management and governance. "The policy will cover basic things like ownership of data generated and maintaining copies of data that survive the departing investigator. A full committee will be formed later to flesh out a more formalized policy structure that will eventually come back through the SRC.

The meeting was adjourned at 2:50pm.

The next Research Committee meeting: May 19 (unless issues arise in the meantime)

Minutes submitted by: K Wood and M Scott