

## Report of the Research and Collaborations Committee

How are you approaching your work?

- What is its current status and schedule?

The Research and Collaboration Committee (RCC) firstly clarified the high level goals of the committee to be around two objectives. The first focuses on research branding, which will develop and prioritize about two to three candidate "brands" or "thrusts" that the new school would excel and be recognized for worldwide.

The second objective pertains to collaboration, to identify existing & potential collaboration relationships within the University of Pittsburgh and Pittsburgh region, and to classify the nature, level and scale of existing and potential collaboration relationships. The committee will also develop evidence to support the candidate brands, make a recommendation on the brands and on potential opportunities for collaborations within the brand areas.

To achieve the identified goals, the RCC has developed a multi-stage process, which includes 1) surveying both SIS and CS faculty for existing and potential collaborators; 2) engaging RCC chairs, members and other faculty in meetings with potential collaborators for identifying synergies and soliciting/eliciting research trends around combining computing and informatics with other areas, such as medical, education, critical infrastructure, science and engineering, and social and humanities; 3) reviewing the collaboration meeting reports as well as relevant discipline reports to distill research branding areas; and 4) drafting committee report.

We have finished the first stage, and have conducted two meetings with collaborators in medical and educational disciplines. Our timeline is as follows: stages 1 and 2 will be carried out September to October; stage 3 in November; the report will be written and reviewed in December and January.

What opportunities are evident?

- What 2 or 3 have the greatest potential?

Through our initial conversations with other campus units, it is becoming clear that a new era of computing and informatics (C&I) is emerging which requires C&I to be contextually-situated. In other words, both C&I and a specific domain need to work directly with one another. Domain scientists and educators require deep understanding of C&I, i.e., what can be done with the data, and C&I scientists and educators require a deep understanding of the domain, i.e., what is required by the domain in processing the data.

While it's still too early to clearly identify the themes and research brandings, we are envisioning "contextually-situated computing" as a possible overarching direction for research and education. This would allow CS/IS and relevant disciplines to leverage expertise in computing and domain, accelerating both to achieve more impact than can be done alone. It will require new programs and ways to enable effective and direct interaction between CS/IS and domains, i.e., research and education programs will need to be cross cutting between units (e.g., CIS & Public Health) with creative incentives and mechanisms to enable deep collaborations (e.g., faculty-in-residences in CIS and/or other units).

Our meetings with medical and educational collaborators demonstrate the potential of these two areas as possible foci within the contextually-situated computing theme. Importantly, we feel strong and positive receptivity among the collaborators toward the new and stronger school. All collaborators we have talked to expressed their desires to work even closer with the new school on many issues in their disciplines regarding computational and informatics.

What issues are problematic?

- Which 2 or 3 pose the greatest uncertainty or risk?

Building the new school to be the university's center of gravity for computational and informatics capabilities is an exciting goal. At the same time, the biggest issues are: (a) determining the scope of the effort, (b) having enough time to engage all constituencies and potential collaborators, (c) determining the boundary for the new school. Moreover, the RCC needs to engage more with the steering and executive committees, the BOV, and other committees to gradually clarify these issues.

What conclusions seem to be emerging?

- What would you recommend to the Provost today?

It is really too early to make any meaningful conclusion. This is really unique and exciting opportunity, so it deserves stronger engagement and support of faculty from SIS and CS, as well as the university.

How can the Board of Visitors help?

- What message would you have us bring to the Provost?

Both SIS and CS have been actively collaborating with many other schools/department/institutions on research, and there is a large number of collaborators yet to engage in discussions. One great help that BOV can do is to work with RCC to prioritize the collaborators to talk to, as well as identifying the right contact persons for discussions. Recommendations about the scope to be pursued will also be helpful.