

Research Policy Committee Minutes

Tuesday, February 26, 2019

2:30-4pm

Topic: IT Support of Research at UMichigan

Fleming 4006

Chaired by Francine Dolins

**Members present:** Irene St. Charles, Marisa Conte, Francine Dolins, Kate Eaton, Jainam Menon

**Absent:** Niccolo Biltramo, Jake Carlson, Yi-Su Chen, William Close, Mimi Dalaly, Austin Glass, Nick Harris, Tim Guetterman, Albert Liang, Jinghyun (Jessie), Lee Nocona Sanders, Adam Van Deusen, William Schwartz, Francois Beaufay, Ashley Kalinski, Sami Malek

**Guest Speakers:**

Dr. Andrew Rosenberg, Chief Information Officer, Michigan Medicine, Vice President, Information Technology, UMichigan.

Dr. Ravi Pendse Vice President, Information Technology and Chief Information Officer, UMichigan

**I. Dr. Rosenberg**

What does it mean for IT to support research?

Computers? Internet? Storage? IT Tools that require immense amount of storage. How do you pay for it?

Should grants include \$ for storage?

What do we mean for more storage availability?

Enterprise IT works on one side and another part of IT works on sources and a third on hardware of IT (e.g., research devices). Defining research models vs computational models.

Network

Desktop

etc.

All parts of these conversations and equations.

Storage is incredibly expensive; UM is paying more and more for terabytes. Real problem and a universal problem.

80/19/1 problem.

80% need just a few terabytes per person. 19% need high amountt of terabytes. And 1% need enormous amount storage.

Kate Eaton: Who pays for the storage? IT requests amount of \$ for estimated amt. But costs over estimation. Some researchers need more.

MCloud: need to move forward. Governance via pcards. Value for research but not useful for clinical side.

Continued work on ArcTS – high performance computing.

Asking office of research – create an IT core of a kind: at least some kind of storage core (indirect to pay for?).

Endowment for the basic sciences group – came up with some basic needs.

Administrative rights to load software. At UM: packaging software in UM's App Store – don't have to load oneself.

Special devices that are used in research - IT will apply special monitoring than the core computer/laptop.

## **II. Dr. Pendse**

What are we here for? About creating new knowledge and sharing that knowledge and archiving that knowledge. Intersecting the field of information technology. Some on the commodity side (computers, software, internet, etc.).

Working to solve problems and how do we pay for it? Going beyond short codes...

High speed storage and storage needs; storage needs are growing and costly and are not sustainable.

Vision to have an IT research dream team as problem solvers. System level people to provide high performance computing and a hybrid computing environment. Some workloads able to run on campus and some on Amazon.

Support varies between disciplines and needs. Data scientists will pair with faculty and depts to guide them on research h computing.  
--Storage and accessible.

What is needed for experiments need to run all night? Or for weeks, without computers not turning off?

### III. Q&A:

Kate Eaton: How do we find someone who can help with computing and storage issues?

AR: should be someone in each dept who is the liaison with IT to assist.

JM: Suggestion that Andrew come to the Basic Sciences meeting to present these ideas.

AR and RP: ask chairs of depts to invite them to meetings and help support faculty, grad, postdoc research.

AR: Michigan Medicine can support Macs better if have MyWorkSpace image from Campus Computing for a small fee per year (e.g., \$50/yr). Only about 1200 Macs compared to multiple thousands on Windows-based.

AR: Security issues are real. Attacks are in the millions and per second; e.g., hospital IT security.

RP: Try to be transparent about security issue. Two factor duo as an example.

AR: Security issues the most controversial.

RP: Where is the data? Trying to map where the data are located and how its networked, what happens to the data, where is it stored, etc?

RP: Should be able to write a query in a google like box, to type in info to find out where data are located. Right now, data stored all over the place. System of record, system of engagement, and in middle programmer interface. Anytime change a system will work together. Right now units are creating their own multiple shadow systems.

AR: We are trying to get ahead of the curve but probably never will. API systems – to access data. U of M data lake would never work here.

e.g., travel expenses for all deans is universal; make it shareable.

Master data management: heterogenous issue.

Michigan Medicine can't afford breaches of security.

True innovation – speed up tools – distributed antenna system to work with 5G – data flowing and metadata. What are the analytic tools? = machine learning tools. Quantum.

### IV. Meeting Adjourned at 3:55pm.

