Meeting Minutes  
Research Board  

Date: 25 September 2014  
Time: 1500 - 1630  
Location: MAE Conference Room  

Present:  
Jeffrey Paduan, Dean of Research  
Kevin Wood, Associate Dean of Research  
Perry McDowell, MOVES  
Robert Harney, SE  
Claudia Luhrs, MAE  
Mike Malley, NSA  
Timour Radko, OC  
Cameron Mackenzie, DRMI  
Uday Apte, GSBPP  
James Newman, SSAG  
Daphne Kapolka, PH  
Wendell Nuss, MR  

Not Present:  
Frank Barrett, GPPAG  
Thomas Herbers, OC/UW  
Mark Nissen, IS  
Mark Aparicio, Meyer Institute  
David Tucker, DA  
Duane Davis, CAG  
Johannes Roysset, OR  
George Dinolt, Cebrowski Institute  
Geoffrey Xie, CS  
Pante Stanica, MA  
Ric Romero, ECE  

Guests: Jeff Haferman  

COMMUNICATIONS  

End Strength Update/Research Status  

Dr. Paduan opened the board meeting with the subject of End Strength. End Strength is code for the drawdown and personnel review that has been taking place at NPS. The campus has been under pressure from the Secretary of the Navy regarding the number of personnel employed. The school is currently authorized to have 884 personnel. Another group has recommended that NPS be allotted 1100 FTE. The maximum number of FTEs executed at the NPS was in FY12 when the school was close to 1200. President Route is
proposing a number closer to 1200. The N1 group backs the 1100 number, which would still be a better outcome than the original 884 number.

Dr. Susan Rabern, Assistant Secretary of the Navy for Financial Management and Comptroller (ASN FM&C) will be visiting NPS on 1-2 October. Dr. Rabern has the authority to increase the number of personnel allocated to NPS. She will receive the standard Command Brief, lab tours and interaction with the students. Dr. Paduan asked the board to think about suggestions for lab tours. It would be helpful if she had some student interaction with students in the labs. Claudia Luhrs and Jim Newman were proposed suggestions for tours in their respective labs.

Recently, Dr. Paduan presented to Mr. Scott Lutterloh, NAVY SES with N1 (N1B), regarding the status of research at NPS. N1 are our resource sponsors, or managers, from the Navy side. Mr. Lutterloh came to help us interpret the questions NPS has been getting from Secretary Rabern. The most common question is, “Why do you need to do so much research?” Dr. Paduan thinks progress was made with Mr. Lutterloh by going through the data.

The largest misperception is that research has grown very large at NPS. The fact is that the dollar amounts have grown more than the FTE. We haven’t grown in execution of effort or in positions being taken on. Research expands when we expand our students and our disciplines. Different parts of the campus have varied research group sizes, but overall the number of NTT faculty and research associates who work those programs are comparable, or below, other universities. How do we keep things on track going forward?

The presentation differentiated between research and reimbursable activity. The distinction is a very important one to make. The graph on slide 2 showed that reimbursable has gone up, but research activity peaked in 2012 and has since declined. Dave Olwell collected data that shows other recognizable research universities and their number of NTT research faculty compared to their TT faculty. The NPS should not necessarily be calling everyone faculty. It would help to differentiate between the technical staff, GS and TT. There is about 1/3 Research Faculty individual to each Tenure Track faculty. The presentation can be found on the Research Board website.

There have also been a number of questions related to the institutes i.e. MOVES, CIRPAS, CRUSER and Cebrowski. MOVES is the largest in terms of FTE. It is important to note that large projects, such as CRUSER and CENETIX, are part of faculty research within the departments. The notion of what constitutes a center is not well understood and may need to be re-examined. They do not have autonomy nor do they have many staff. NTT faculty are the most vulnerable at this point. Letting go of GS staff would mean having a RIF. Chairs do not foresee a way to let go of TT faculty. However, if we lose 100 hundred research faculty, it would cut the Research Program in half.

Dr. Paduan introduced an idea for managing research portfolios. Dr. Paduan referenced slide 9 to compare the model of the Navy Warfare Center vs the Naval Postgraduate School. At the NWC, money comes into their portfolio managers and is then disbursed
down to the project leaders. At NPS, the faculty are required to generate funding for themselves and their teams. This helps keep our faculty competitive in their fields.

It would be possible to add a strategic layer to the way proposal review is approached. A method for aligning the top down desire for control while allowing the faculty to have autonomy would be to describe the strategic lanes we work in. These lanes are the areas of expertise that are needed to cover the disciplines and curricula. By having a standard set of ten or fifteen lanes, the Chair could then identify which area a proposal falls into. If the proposal doesn’t fall into one of the established lanes, there should be another review in order to establish another lane. A board member proposed using the categories that are listed on proposal forms. Kuali COEUS will be able to catalog that information and make it accessible for future data calls.

**OSD Data Availability**

Kevin Wood notified the board that the office of the Secretary of Defense has asked NPS (and all federal agencies) to make their publications available through DTIC, if they are not restricted. The memo mandating this can be found on the DTIC website entitled “Public Access Memo 2014.” The library staff is well versed in the process and willing to work with the faculty. Data can be sent to them and it will go on Calhoun and then be sent to DTIC. Library staff have previously given tutorials on this issue. It would be helpful if the Research Board sponsored an additional seminar. Sponsoring it sends a message to the faculty that it is useful and important. It could be an open forum event during a lunch hour.

A board member pointed out that the data can come in a format that is not readily readable. This would mean the faculty member would have to devote more time to organizing and translating the data. Another member noted that the size of the data could also cause issues. It could be beneficial to simply utilize key words and the POC for the data. Information could be “available upon request”.

**HPC BIG Data Availability Requirements**

Jeff Haferman spoke on some HPC highlights over the past fiscal year. The budget for HPC continues to decline, but usage continues to increase. Over FY14, there were approximately 400 unique users of the Hamming Supercomputer. Many of those users were students. At any time there are around 150 active users on the system. GSEAS and GSOIS users are more dominant than any other school. Departments that used it the most in the past fiscal year were MA, PH, OR, MAE and CS. Cumulative usage was 2000 CPU years. FY15 will see additions of more CPU cores, more storage and increased bandwidth. The budget is $300,000 which is a decline from previous year budgets at $700,000.

BIG data is related to social media avenues such as Facebook, Instagram or Twitter. BIG data is of great interest to IS and CS because of possibilities of data mining. Hamming architecture isn’t good for big data problems. It’s better for CPU intensive things that
may involve running models. BIG data can read through terabytes of data for a particular phrase. For example, network graphs can be constructed from Twitter or Facebook data. There are a number of people on campus using social media for DoD purposes. It would be beneficial to have a BIG data center on campus.

Jeff Haferman partnered with Buddy Barreto (IS), Ron Fricker (OR), Mathias Kolsch (CS) and Sam Buttrey (OR) and submitted a $1 million proposal that would provide specialized hardware for BIG data applications. Wired magazine reported that every day, around the world, 52 trillion words are produced on social media. That is equivalent to 520 billion books daily. The commercial sector has found ways to profit from this, but the DoD and Navy are behind.

Energy consumption is a big trend and DON CIO will soon be asking for consolidation of data centers. There is a current directive to save all data and it seems likely a future directive to count data centers, energy draw and cooling will be seen soon.

In related news, the campus Intel Officer will need to be involved in the purchase of data from social media. Data that could potentially involve US citizens is an area of concern. It would be beneficial to address those concerns on the front end and also go through proper IRB channels.

A board member mentioned recent IRB issues with local IRB approval then being denied on an international level. DONHRPP is reviewing some subset of proposals. Dr. Paduan was recently briefed on the situation and notes frustration from our local IRB office on that point. At this juncture, warning colleagues of this potential issue is the only solution. A new DoN instruction is due out soon that will simplify international human subjects related research processes.

Updates on the Research Portal and FAR were deferred until the next meeting.

Meeting adjourned at 4:14