

# Minutes from the Hyak Governance Board Meeting

Physics/Astronomy Tower, Rm. C610, on Wednesday, May 25 (2016) 11.30 am

**Present:** Alonso, Beck, DiMaio, Greer, Eastin, Lestrangle, Miller, Pfaendtner, Reschke, Stiber, Stuezle, Trosvig, Veessler.

**Absent:** Ackerman, Arduino, Meadows (on sabbatical).

[11.30-11.40]: **News**

- 1) Update on PNSC and PNNL (Martin Savage)
- 2) Update on WSU and Hyak (Chance Reschke)

Martin S. presented status of PNNL. After consuming most of the previous HGB meeting (see minutes from that meeting), the discussions with PNNL regarding a possible HPC alliance or center have ceased. It had been conveyed to PNNL representatives that UW-IT had agreed to provide two additional FTEs to support HPC at the UW and more generally the proposed PNSC/alliance if it were to be funded. At some point after this, discussions with PNNL stopped and the current operating assumption is that these discussions are over.

Chance R. presented a summary of the status of discussions with WSU and related points of interest. Christian Mailhiot has left WSU to assume a position at Sandia. The WSU hardware is yet to come online. Continuing discussions with WSU may lead to mutually beneficial progress in HPC.

Jim P. indicated he had had encouraging discussions with a number of faculty.

The HPC club has been preliminarily award ~\$400K from the STF in response to its proposal at the level of ~\$600K

[11.40-12.20]: **Hyak in the Exascale Era** (Chance Reschke)

- 1) Revised Master MOU

There were extensive discussions stimulated by Chance's presentation, which was renamed *Hyak, the HPC Escalater and You: A New MOU for Utility HPC*. A major takeaway point was that funds and commitments from supporting units would ideally be in place by July 1 – this is a priority. This is because Next-Gen Hyak has been approved by UW-IT, and commitments to procure hardware will begin July 1. The board considered the three possibilities that Chance presented about going forward, shutting down Hyak without deploying Next-Gen, deploying Next-Gen and then shutting down, and deploying Next-Gen with the expectation of subsequently deploying Next-Next-Gen.

After discussion, it was unanimous that the significant successes of Hyak-Classic, including the associated cost-savings for the UW accomplished by consolidating compute resources, should be capitalized on and enhanced by deploying Hyak-Next-Gen and expecting to deploy Hyak-Next-Next-Gen. It was recognized that the Hyak mission has evolved to be more inclusive of researchers at UW, as anticipated, and there was a significant need for increased human resources dedicated to Hyak-related activities and HPC. Werner and Greg made strongly supportive comments regarding the Hyak-Classic project and the Hyak-Next-Gen project. Hyak-Classic and its successor(s) remain the most effective (with all considered metrics) means to provide HPC resources to UW researchers, being complementary to cloud-computing resources but is significantly less costly. As a result there was no need identified that would suggest shutting down Hyak, but there is a need for an enhancement in the number of UW-IT FTEs supporting Hyak.

In the process of assessing the Next-Gen project, it was found that Stephen Frohlich is becoming increasingly overloaded with Hyak related tasks. The board unanimously supported making a recommendation to UW-IT to increase the number of FTEs dedicated to Hyak and more generally HPC at UW. A subcommittee will draft this recommendation and circulate to the full HGB. The timeline for this is sooner rather than later, with an approximate timeline of having the HGB vote on the recommendation by early July.

Kelli explained that she has had encouraging discussions with people in Biochemistry regarding Hyak.

Brad stated that Hyak is running optimally in the data center with regard to utilization and compute density.

It was decided that we should reach out the UW President and Provost to inform them aspects of Hyak that they might not be aware of, such as the saving to the UW by co-locating UW HPC resources, and also the entire concept of the speed of science.

After some discussions, it was agreed that when it comes to budgeting, an annual commitment from Hyak supporters, e.g. the colleges, is preferable to one-time investments every five years.

[12.20-12.30]: **Other** (Chance Reschke)

- 1) Other items in the MOU
- 2) Research Computing Governance
- 3) Expansion of Hyak beyond present boundaries
- 4) Outlook and Lifetime

We did not have time to discuss these matters on the Agenda, and that was deferred to the next meeting. A few other items were discussed.

Given the activities of the next period associated with Hyak-Next-Gen, it was decided that monthly meetings would be helpful. The HGB will meet on the last Wednesday of every month at 11.30 am (including throughout the summer). The next meeting is June 29.

Ackerman raised (in email before the meeting) the idea of identifying standing subgroups to deal with different aspects of Hyak. Such as outreach, hardware, interacting with the administration, and so forth. Discussion of this will be deferred to the next meeting.

Werner announced that at the end of the quarter, he will be stepping down as the Divisional Dean of the Natural Sciences. His replacement is Suzanne Hawley from the Department of Astronomy.