REPORT OF GEMINI'S SCIENCE & TECHNOLOGY ADVISORY COMMITTEE (STAC) MAY 2014

The STAC held its sixth meeting on 8-9 May 2014 in Tucson.

STAC Membership

Lydia Cidale (by polycom) Tim Davidge (by polycom) Debra Fischer (in person) Don Gavel (unable to attend) Karl Glazebrook - Deputy Chair (in person) Paulina Lira (in person) Kevin Luhman (unable to attend)

Paul Martini (in person) Thomas Matheson (in person) Henry Roe - Chair (in person) Nathan Smith (in person) Alan Stockton (in person; as substitute for Fabio Bresolin) Thaisa Storchi-Bergmann (in person) Kim Venn (in person)

GHOS

6.1 The STAC is pleased to see the progress with GHOS, including the recent kickoff design meeting in May 2014.

6.2 The STAC endorses the plan for the GHOS Combined Science Team, including that the core science team be open to all scientists within the Gemini Partnership to develop a proposal for a GHOS science campaign.

6.3 The STAC recognizes that a decision on which hemisphere to install GHOS at initially is needed by the end of 2014 in order to allow site preparation and planning to proceed efficiently. The STAC requests that the GHOS Combined Science Team provide a report on the scientific pros & cons of the two possible sites by the end of August 2014. The STAC will take that input, along with the context and implications of the hemisphere decision, to arrive at a recommendation by the the time of its October 2014 meeting. Examples of context include: remaining within the 4+AO model per site, predicted instrument demand at each telescope, the ability to move instruments between hemispheres in the future, etc..

GPI

6.4 The STAC is extremely pleased with the initial on-sky successes achieved with GPI and congratulates both the instrument team and observatory.

GMOS Hamamatsu upgrades

6.5 The STAC welcomes the arrival of the Hamamatsu CCD upgrades at GMOS-South. The STAC reiterates support for proceeding with the planned Hamamatsu upgrade to GMOS-N expeditiously, including proceeding with the CCD procurement as soon as feasible.

Fourth Generation Instrument #3 (Gen4#3; next instrument after GHOS)

6.6 The STAC endorses the procurement plan laid out for Gen4#3 and applauds the flexibility shown in the plan, especially the ways in which instrument builders are invited to propose to build the instrument they most want to build for the science case they are most keen to see pursued.

GRACES

6.7 The STAC congratulates the GRACES team for a successful initial on-sky engineering test and recognizes the efforts that have gone into this novel approach. The STAC requests analyzed results of the current on-sky tests be reported back to the STAC as soon as possible, not waiting until the 2014B meeting.

Report of the Procurement Working Group

6.8 The STAC endorses the Report of the Procurement Working Group, particularly the recommendation to be flexible about the paths by which a facility instrument can be brought into operations. The STAC continues to endorse the concept of using observing time as a currency to help pay for desired capabilities.

Large & Long Programs (LLP)

6.9 The STAC is pleased to see the strong proposal demand in response to the first call for proposals for Large & Long Programs.

Fast Turnaround Program (FTA)

6.10 The STAC endorses moving forward with a small-scale trial of the Fast Turnaround Program as proposed by the Observatory using 10% of time on Gemini North for six months. The STAC thanks all the staff & outside reviewers who have been involved with developing this program. The STAC will monitor and review the results of the trial.

Gemini Science Meeting 2015

6.11 The STAC discussed initial plans for the next Gemini Science Meeting, to be held in summer 2015, likely in Toronto, and started the formation of a Scientific Organizing Committee (SOC).

Scientific Priorities

6.12 The STAC endorses the observatory's near-term implementation plan for priorities as laid out in earlier reports with the following comments:

- GPI remains the top development priority
- As noted above, the STAC continues to place a high priority on completing the GMOS-N Hamamatsu upgrades as these represent a large improvement in capability on a frequently used instrument.
- The STAC emphasizes the need for Gen4#3 to be treated as a high enough priority that additional significant delays to the procurement process are avoided.
- The STAC places a high priority on fixing the spectroscopic performance degradation on F2. The STAC asks to be kept informed on the investigation of the issue and what scale of project the fix involves.
- The STAC supports placing several lower priority projects "on hold" to allow other higher priority projects to move forward. These "on hold" projects include upgrades to Altair, NIRI, A&G, laser guide stars, and infrared detector controllers. Each of these projects remains important to the future reliability and capability of the observatory.

Science time 2015A

6.13 The STAC endorses the observatory proposed science time goals and minimums for 2015A.

Points-of-Contact & Roles

Chair (incoming) - Paul Martini Vice-Chair - TBD GHOS - Kim Venn GRACES - Kim Venn GMOS - Tom Matheson F2 - Kevin Luhman GeMS - Tim Davidge GPI - TBD ALTAIR & Gemini North AO - Don Gavel Gen4#3 - Nathan Smith Fast Turn-Around - Thaisa Storchi-Bergmann Default for other issues arising: Chair

Future STAC Meetings

The 2014B meeting of the STAC will be in Hilo, HI at the Gemini base facility on 29-30 October 2014.