by Markus Kissler-Patig and Fred Chaffee

Changing of the Guard: *Directors' Messages*

As this issue goes to press, the directorship of Gemini is in transition. Interim Director Fred Chaffee has recently returned to his retirement in Italy (as planned, in May) and Gemini's Nancy Levenson is filling in until the much-anticipated August arrival of Markus Kissler-Patig. Both Fred and Markus have contributed their reflections and visions here.

A Message from Markus:

Greetings!

Starting August 1st, I will take over as Director of the Gemini Observatory and feel very privileged to be allowed to do so.

After announcing my decision in March, I was flooded with congratulations from all parts of the Gemini community. Thank you all for your warm words and the support that made me feel most welcome. It strengthened me in the belief that I had made a great decision to take up this opportunity.

Since then, I have visited the Hilo Base Facility a couple of times and encountered a highly motivated and incredibly dedicated staff. The environment I found at the observatory is a very dynamic one and made me understand why Gemini has been constantly improving over the last years. Clearly, Gemini has worked hard to become a world-class facility, and the fruits of this labor are now being harvested by its community.

While fantastic, it's almost unfair to arrive right at the time when the efforts of the previous directors (from Doug Simons, through Fred Chaffee and lately Nancy Levenson) have started to pay off, at a time when Gemini, with the advent of the Gemini Multi-Conjugate Adaptive Optics System (GeMS) and the Gemini Planet Imager (GPI), will offer unique facilities to its users.

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— Markus Kissler-Patig
Gemini incoming Director

Challenges remain, of course. With the United Kingdom leaving the partnership at the end of 2012 (and the associated reduction in the overall budget) the structure of the observatory and the services that it can deliver will have to be modified. But times of change are times of opportunities!

I was most pleased to see the new Gemini Science and Technology Advisory Committee (STAC) take off in November with such enthusiasm. It will provide most valuable input into the future program of the observatory. I am confident that the new Users' Committee, to be assembled over the summer, will play a similar important role in energizing the observatory's long-range plan.

What will this future look like? In the short term, the observatory will continue its efforts to improve the reliability of its workhorse instruments, and to bring smoothly into operations the instruments currently in commissioning (FLAMINGOS-2 and GeMS/Gemini South Adaptive Optics Imager) and arriving (GPI). With the fiber-optics feed from GRACES, we should be able to offer soon a high spectral-resolution opportunity to the Gemini community. With the Gemini High-resolution Optical Spectrograph, to be kicked off this year, we will consolidate the exploitation of this part of the parameter space. There is also a window to soon launch the next instrument project, complementing a suite of 4 instruments + 1 AO system on each telescope, taking us into the next decade.

That decade will be one of transition for the 8-meter-class telescopes. Facilities such as the Atacama Large Millimeter/sub-millimeter Array and the upcoming wide-field surveys (with the Large Synoptic Survey Telescope taking the lead) will challenge their monopoly in forefront ground-based astronomy. The 8-m-class telescopes will have to exploit these new opportunities and develop synergies between the facilities that will then play a most important role.

Creativity and new ideas will be required to realize and fully profit from another bright decade for astronomy. The Gemini STAC already pointed to the importance of offering to the Gemini community more flexibility in proposing for observing time. Astronomers will need large and/or long programs to allow for a maximal impact in many research fields. Rapid responses to discoveries will be a key. I would like to quickly pick up both ideas. In the near future, I wish to develop a scheme in which Gemini users can apply across the partnership, and across semesters, for ambitious, internationally competitive projects.

We could gain flexibility by developing a scheme allowing for visitor instruments to play a more prominent role; or by moving to a more dynamic time allocation scheme.

As the observatory budget gets reduced, we might also look at helping users to more efficiently support each other with their expertise in data reduction and analysis. Here also, we need ideas (and if you have some, join our Users' Committee!).

I want to encourage the community to profit a lot more from the opportunity to come and

visit us at the observatory – either as classical observers, or visitors during their queue observations. This is often a "once-in-a-lifetime" chance to bring along students, train them in observing (a disappearing skill!), and even more importantly, grant them with an enormous boost of enthusiasm for their projects. Our plans to bring the operations down to the base facilities should make this easier as well — and prepare us in the long run for true remote operations.

Finally, don't forget that some of the observing time is reserved to the discretion of the enthusiastic director. Ambitious "high risk/high return" projects, that might fail at the Time Allocation Committee Level, are welcome proposals.

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I hope to see many of you at the Gemini Science meeting in July in San Francisco and welcome even more of you (especially students) as visitors at our telescopes in the next few years.

Markus Kissler-Patig is Gemini's incoming Director. He can be reached at: mkissler@gemini.edu

…and a Few Words from Fred:

How quickly this year is flying by! My final day as Gemini interim Director May 11th approached at an alarming speed; its blue-shift was palpable. Reflecting on my year back in Hawai'i, I realize many things will remain with me for a very long time. First and foremost, I will remember the wonderful people I've met and worked with here at Gemini. This is a talented and dedicated group, fully capable of transforming Gemini into the world-class competitive observatory of the future. I feel honored to have played any role in encouraging that transformation.

Maybe the best thing is to list some highlights, in roughly chronological order:

- Brian Schmidt's public lecture at the University of Hawai'i at Hilo only two weeks after being named as one of the 2011 Nobel Prize laureates in physics: The size and enthusiasm of the huge crowd spoke volumes about the excitement our field can generate in the lay public.
- The November 2011 commissioning of new red-sensitive CCDs in the Gemini Multi-Object Spectrograph (GMOS) at Gemini North: Though not the "ultimate" CCD improvement for GMOS, this "interim" solution has provided a capability our users have long anticipated.
- The December 2011 recommissioning of FLAMINGOS-2 after over two years of improvements by our team in the La Serena instrument lab: Our users and governing boards enthusiastically hailed its first-light image of spiral galaxy NGC 2442 (which became my screensaver), as well as its first multi-object spectrum. A key capability for Gemini was poised to do great science. The spontaneous fracture of the collimator lens on the eve of FLAMINGOS-2's second commissioning run in February 2012 came as a great disappointment, of course, but we are well on our way to recovery. I predict that FLAMINGOS-2 will become extremely popular and productive.

- The December 2011 roll-out of the upgraded Phase II Observing Tool in time for use by astronomers in semester 2012A: Our users had been clambering for years for this improvement, and the OT team delivered. The cries of pain from our users should now have been silenced.

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— Fred Chaffee
Gemini outgoing Interim Director

- The December recommissioning of the Gemini Multi-Conjugate Adaptive Optics System (GeMS) after a decade of effort and a long five months of upgrades: Given the complexity of this system, its success within hours of its being reinstalled on the telescope was absolutely stunning. The "second light" image of NGC 288, a nearly 90-arcsecond field covered with thousands of tiny pinprick (80 milliarcscond) stars, captured the imagination of the world. It was the largest area of night sky ever secured in a single adaptive optics observation. Congratulations to the GeMS team poured in from all over.

With these successes, Christmas seemed to arrive early, and the entire staff was justly proud of this unprecedented burst of accomplishment.

- Gemini at the January 2012 meeting of the American Astronomical Society in Austin, Texas: 18 members of the Gemini staff attended the meeting and got to share the excitement of their recent scientific and technical successes with the community. Gemini's Town Hall meeting was called by many "the most exciting in years," and the double-wide Gemini booth became a focal point for users who wanted to chat with staff and participate in data reduction and observing planning tutorials — a memorable week for all.

- The March 2012 GeMS commissioning run at Gemini South: This activity brought new excitement when, at the last minute, GMOS-S had to replace the ailing Gemini South Adaptive Optics Imager as the Multi-Conjugate Adaptive Optics detector. The dazzling images that GeMS with GMOS-S captured of the planetary nebula NGC 6369 and the galaxy Centaurus A once again had the astronomy world agog.

Some highlights were daily, weekly, or scattered throughout the year:

- Daily visits with the Mauna Kea summit crew: I was privileged to spend 5-10 minutes each work-day morning visiting with the Mauna Kea crew before they departed for the summit. Every day I gained even more respect for the difficulty of their jobs and of their dedication to Gemini. I'll greatly miss my morning visits with "da guys."

- Frequent videoconfrence "visits" with the observers, both north and south: The success of the night-time summit shift is what we all work for; it is why we're here. So it has been gratifying to spend a few minutes chatting with our scientific and technical staff as they obtain the data on which Gemini's success ultimately depends.

- Meetings with various governing boards: Gemini's governance structure contains an alphabet soup of boards, committees, and councils: AOCG, AoBD, GBoD, GFC, NGO, STAC, and the soon-to-be GUC. Even though preparation for these meetings and attending them required a huge time commitment, the outpouring of support we received from them during my year here was truly gratifying. They all believe in this place and wish the very best for us.

Last but by no means least was the appointment of Gemini's next Director, Markus Kissler-Patig. The March announcement culminated nearly a year-long, world-wide search, and the efforts of multiple committees, to find the very best leader for Gemini in the challenging times ahead. Markus will arrive in August 2012, bringing new energy, enthusiasm, and ideas to Gemini, some of which he shares with us earlier in this article. Both he and Gemini are fortunate to have each other. The future is bright, indeed.

As for me, Diana and I have returned to our beloved Menaggio, Italy, where our days will be spent sipping coffee, visiting friends, strolling the lakefront, enjoying good food and wine, and in general living *la dolce vita*.

But I can't walk away from Gemini "cold turkey." For the rest of this year I plan to be available by phone, Skype, or e-mail, to help however I can.

I wish you all the very best and bid you a fond "aloha."