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Currents

In this Issue...

Program Update ([ReSTAR Implementation Plan](#)): NOAO has prepared an implementation plan to address the recommendations of the ReSTAR committee, which created a blueprint for developing a system of 2- to 5-meter aperture telescopes. A white paper describing the implementation plan is now available for public scrutiny and comment. The comments we receive will influence the funding proposal that we will submit to the Astronomy division of the NSF in October. We look forward to hearing from you!

Program Update II (ALTAIR Survey Continues): Over 400 members of the US ground-based community responded to the ALTAIR committee survey regarding their needs for resources such as instrumentation, observing modes, and observing time on ground-based O/IR telescopes in the 6.5- to 10-meter aperture range. Responses that were received by August 15 will be reviewed at the next ALTAIR committee meeting. You may still [respond to the on-line survey](#) if you have not already done so. Responses will be accepted until September 15. Please respond to make your views known!



NGSC Bulletins: NOAO encourages US observers to [consider applying for Classical Observing at Gemini](#). Classical observing can be accommodated for programs requiring as little as one night. As an incentive, NOAO will cover the travel expenses for up to 2 observers of all classically scheduled Gemini programs in the 2009A semester.



The NOAO Gemini Science Center now offers a [Personal Contact Option for the Gemini HelpDesk](#). While the current Web interface to the Gemini HelpDesk is a quick and easy way for US observers to submit questions about Gemini, now you can also contact a person at the NGSC directly.

CTIO Update ([Chris Smith, New CTIO Director](#)): Chris Smith has been selected as the next director of CTIO, succeeding Alistair Walker. Chris brings to the position many years of experience with NOAO and CTIO.

In Other News: NASA is soliciting proposals using the Keck Telescopes for the 2009A observing semester (Feb 2009-Jul 2009). [Proposals are now solicited](#) on a

broader range of science topics. The application deadline is 8 September 2008.

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Building the System: A Phased Plan to Address the ReSTAR Recommendations and Priorities

In a [previous issue of Currents](#), we summarized the recommendations of the ReSTAR (Renewing Small Telescopes for Astronomical Research) committee. The committee studied the needs of the US Community for current and future capabilities on small and mid-sized telescopes.

[The ReSTAR report](#) provides a compelling case for the modernization of infrastructure and capabilities on 2- to 5-meter telescopes and

increased access to these facilities. A number of capabilities are noted as already lagging the state-of-the-art, in particular, medium-resolution optical and near-IR spectroscopy. The number of observing nights needed to support high-quality research projects was found to be significantly higher than the current number of nights available through open-access channels. In addition, the evolution of other new facilities—in particular, LSST—was envisioned to further increase the demand for observing time and to drive a need for alternate modes of observing.



To address the needs articulated in the ReSTAR report, we are now assembling a coherent program that will (a) improve or modernize the infrastructure—observatories and telescopes—of the open-access system to ensure that the facilities are safe, reliable, and effective; (b) create new state-of-the-art instruments in the areas where the greatest impact can be made; and (c) increase access, if possible, by partnering with non-federal facilities that can offer desirable capabilities with an effective level of support. Over the past six months, the NOAO staff has been working to design such a program.

Based on guidance from our advisory and oversight committees and the NSF/AST staff, we have developed a proposed implementation plan that, in its initial phase, would build two new medium-dispersion optical spectrographs, one new near-IR spectrograph, and one new high-dispersion optical spectrograph. To expedite the delivery of these capabilities, two of the three proposed instrument designs are based on instruments that are already under construction or have been constructed by university groups for other facilities. In addition, we propose to add nights to the open-access system through new partnerships with non-federal facilities. We see this as the first of three 3-year phases in the implementation plan. The proposed plan, if implemented successfully, would address most of the recommendations and priorities of the ReSTAR report.

[A white paper describing the proposed implementation plan](#) is now available for public scrutiny and comment. Our intent is to develop the white paper into a proposal that will be submitted to the Astronomy division of the NSF in October. Although specific projects and partners are identified for phase 1, we would solicit community input, both ongoing guidance to the program and expressions of interest in participating, for projects that would be carried out in the two subsequent phases. Please send your comments on the white paper and the implementation plan described therein to currents@noao.edu.

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Opportunity for Classical Observing at Gemini in 2009A

Verne V. Smith, Todd Boroson, David Silva

The two Gemini telescopes provide several unique and powerful capabilities to US observers, such as full-sky coverage, excellent IR sensitivity, and the ability to support large numbers of queue-scheduled programs (including targets of opportunity or synoptic observations). Gemini can also be used in classical observing mode. Although Gemini is now capable of supporting 100% queue observing, early operations models for Gemini envisioned a smaller fraction of time (closer to 50%) devoted to queue observing. Historically, about 10-20% of the US time on Gemini has been classically scheduled.



While the heavy emphasis on queue-scheduled observing at Gemini offers convenience and scientific advantages, it also has some drawbacks. It has led to only a small number of observers who have actually traveled to the telescopes and observed with them directly. Similarly, few observers have interacted with Gemini staff astronomers. Direct usage of the telescopes and instruments, as well as close interactions between the users and the Gemini staff, is of mutual benefit to both the observing community and the Gemini staff.

In comparison, classical observing offers scientific advantages for certain programs. Classical observers can modify their programs in real time and specify the sequence of the observations. This additional flexibility may result in increased efficiency and scientific productivity. With classical observing the observer can confirm and refine the accuracy of telescope pointing, and otherwise be completely certain as to how the observations were carried out.

For the above reasons, we encourage US observers to consider applying for classical observing with Gemini, if it is appropriate for their proposed programs. We note that the only restriction on requesting classical observing is that the program request an integer number of nights with a minimum of one night. As an incentive, NOAO will cover the travel expenses for up to 2 observers of all classically scheduled programs in the 2009A semester.

Visits by classical observers to the Gemini telescopes and offices would be of benefit to both US observers and the Gemini staff, and will help all of us in planning for the long-range scientific and operational goals for Gemini.

Comments or questions about this opportunity can be addressed to us via e-mail vsmith@noao.edu or telephone (520-318-8453).

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Personal Contact Option for the Gemini HelpDesk

Verne V. Smith & Ken Hinkle

The NOAO Gemini Science Center (NGSC) now offers an additional option for US observers who have questions about Gemini. The current Gemini HelpDesk is a Web-based interface through which you can send your questions about Gemini to the NGSC. While the Web interface is a quick and easy way to submit questions, now you may also contact a person at the NGSC by e-mail or telephone.

Astronomers at US institutions are invited to e-mail their Gemini-related questions to gemini-help@noao.edu. E-mails sent to this address will be handled by Ken Hinkle (NOAO Astronomer), Sally Adams (NGSC Administrative Assistant), and Verne Smith

(NGSC Director) who will work with you to obtain the answers to your questions. Ken also can be contacted by phone at 520-318-8298. If your question cannot be answered directly, it will be forwarded either to another NGSC astronomer or to the Web-based HelpDesk. These NGSC staff can also help you enter your request into the HelpDesk system.

This new option complements the current Gemini HelpDesk and may be useful for questions requiring immediate attention or for users who prefer to deal directly with NGSC staff. We look forward to hearing from you.

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Chris Smith Named Director of Cerro Tololo Inter-American Observatory

R. Chris Smith has been selected as the next director of Cerro Tololo Inter-American Observatory (CTIO). He will take up the directorship in November. Smith succeeds Alistair Walker, who will return to the scientific staff of CTIO after five years as director. Smith brings to his new position many years of experience with NOAO and CTIO. In his previous role at NOAO, Smith was co-manager and, most recently, head of the NOAO-wide Data Products Program during a period of extensive development in virtual observatories. He has also led a major southern-sky survey of the Magellanic Clouds.



A co-recipient of the 2007 Gruber Cosmology Prize for his part in one of two teams that announced the discovery of the accelerating expansion of the Universe in 1998, Smith first joined CTIO as a postdoctoral researcher after earning a Ph.D. from Harvard University in 1991. He spent three years at CTIO, followed by three years at the University of Michigan before returning to CTIO as a staff astronomer in 1998.

Smith is the principal investigator of the Magellanic Cloud Emission Line Survey (MCELS), which was carried out through the NOAO Survey Program. MCELS mapped out the interstellar medium of the Large and Small Magellanic Clouds in the emission lines of hydrogen, oxygen, and sulfur to improve our understanding of the interactions between stars and the gas and dust that surround them.

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Contact Us

Did something interesting, inspiring, or surprising happen on a recent observing run? Please tell us about it! Is there a topic that you would like to see covered in a future *Currents*? If you are planning a regional astronomy meeting or department internal symposium, would you like someone from NOAO to give a presentation on our new program? Please contact us at currents@noao.edu. We look forward to hearing from you!

Currents is a sparkplug for communication between NOAO and our community. It provides updates—and solicits community input—on NOAO observing opportunities and NOAO programs and policies on a more rapid timescale than is possible with the quarterly NOAO Newsletter.

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