

President's Column – Debra Meloy Elmegreen –Sept-Oct 2010

Congratulations to all of us in the astronomical community on the completion of the Decadal Survey! Two years after the National Research Council organized the Astro2010 Committee to begin its arduous process, the report “New Worlds, New Horizons in Astronomy and Astrophysics” is complete. In fact, on the day this article goes to press, August 13, the public roll-out is underway at the Keck Center of the National Academies in Washington, DC. This was truly a community effort, and we should all be proud of it and feel ownership of it. The federal funding agencies and Congress widely view the astronomy decadal process as a model for other disciplines to emulate, and it is extremely important for us to embrace it.

We are embarking on a period of unprecedented opportunities for astronomical research, thanks to great advances in technology, theory, and observations, and the report presents an exciting and balanced set of science-driven priorities within the framework of realistic budget scenarios. The Astro2010 committee comprised 23 astronomers, selected by the National Academies based on community solicitation of suggested names, who were assisted by panels on different science disciplines, space- and ground-based activities, and study groups on the astronomical infrastructure; these subcommittees had a membership of nearly 200 astronomers from the US astronomical community. The Survey report and the panel reports are the culmination of a careful and deliberate consideration of science goals, projects and missions and on the whole astronomical enterprise, based in part on the distillation of over 450 community-submitted white papers, over 100 proposals for research activities, briefings from federal agencies, and 17 Town Halls, along with other federal and international reports. To give a sense of the process, there were over 100 telecons, 6 in-person full committee meetings, 27 panel meetings, endless drafts, and extensive email discussions that led to the final recommendations for astronomical endeavors over the next decade. Having had the privilege of serving on the committee, I think it's accurate to say that none of us had a clear initial idea of the colossal efforts that would be required to bring the Survey to fruition.

The community presented an order of magnitude more suggestions for initiatives than what could be supported by the highly constrained federal budget guidelines for astronomy, so obviously not every worthy goal could be included in the prioritizations. The committee weighed scientific merit, technical readiness, balance, and cost and risk assessment in considering various proposals and developing new ideas to meet science goals. The report includes small, medium, and large initiatives spanning the electromagnetic spectrum, from ground to space, from time variability to deep exposures, ranging from the Sun, to exoplanets, to the ISM, stars, and galaxies, to dark energy, to the early universe, and including instruments, telescopes, labs, missions, observations, computations, theory, people. The recommendations maximize the science return while also highlighting the most urgently needed activities. Necessarily not everyone will agree on all of the details or the rankings. Nevertheless, it is imperative for the astronomical community to stand united in fully accepting the report as it stands, for it is that cohesiveness that will serve us best in furthering our common goals. The report is now in

the hands of NASA, NSF, DOE, Congress, OSTP, and OMB; the agencies need clear prioritization to help them procure the funds we need to do our work. So let us agree, as we have with past decadal reports, to embrace the results and work together to achieve great science and improve our astronomical enterprise in the coming decade.

We owe a debt of gratitude to Roger Blandford, our indomitable chair of the committee, who covered the globe interacting with astronomers nationwide and internationally to get a better perspective on various endeavors (I hope he accumulated lots of frequent flyer miles for some much needed and deserved R&R!). Lynne Hillenbrand as Executive Officer was tireless in her efforts to coordinate the various subcommittees and panels. Vice-chairs Martha Haynes, Marcia Rieke, and John Huchra guided us wisely throughout the process, and Michael Moloney as the National Research Council Astro2010 study director was masterful in his handling of all the issues. Thanks to all of them, to the rest of the committee, to the NRC staff, and to all the panels, study groups, and contributors. I suspect most of us were no more than a step or two removed from some part of the Decadal process.

By the time you're reading this newsletter, we'll already be in the midst of new Town Halls that will help spell out the details of the report and describe the rationale for the difficult and careful decisions. In addition to the regional meetings, there will be a Town Hall on the Decadal report at the AAS Seattle meeting in January, hosted by John and me in our AAS hats and presented by Roger.

Part of my motivation for serving on the Decadal committee was that, if I were elected AAS president, I wanted to be well-informed about our astronomical endeavors. Besides science-driven missions and observatory projects recommended in the Decadal report, there are many other important infrastructure issues that are highlighted, including demographics, training and employment, facilities, data handling, public policy, and partnerships. Two that particularly stand out in terms of AAS priorities are well known. The percentage of minority astronomers remains extremely low, less than 4% of the astronomical community, despite many efforts. The number of women astronomers has been steadily increasing since the last Decadal report, but we still have a long way to go before equity is achieved there too. As I mentioned in the last newsletter, the AAS will be initiating activities to help improve the balance of under-represented groups in astronomy, and we can all take small steps in this direction. The Committee on the Status of Women has noted in several recent CSWA newsletters and in this AAS newsletter that there are still conferences and workshops where the list of invited speakers lacks a balance of under-represented groups. The National Science Foundation and the International Astronomical Union require a diverse list of speakers when providing funding for conferences and workshops; the astronomical community is urged to follow these guidelines, and Scientific Organizing Committees should work diligently to present a balanced speaker list. Remember that there are several AAS committees who can aid in identifying suitable speakers if SOCs ask for help. A Demographics committee, initiated under John's term, is also getting started, with representatives from CSWA, CSMA, and the Employment Committee, so that we can keep and track our own records on membership demographic statistics. An Ad Hoc Sustainability Committee is in the

works. Down the pike, we are also considering some mentoring and outreach efforts, and may even join ranks with the Astronomical Society of the Pacific in some initiatives; details will follow as plans develop. You can help by persuading non-member colleagues and students to join the AAS and come to Seattle! Meanwhile, enjoy autumn and stay engaged in the Society; be sure to check the AAS website periodically for updates.