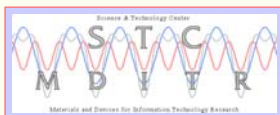


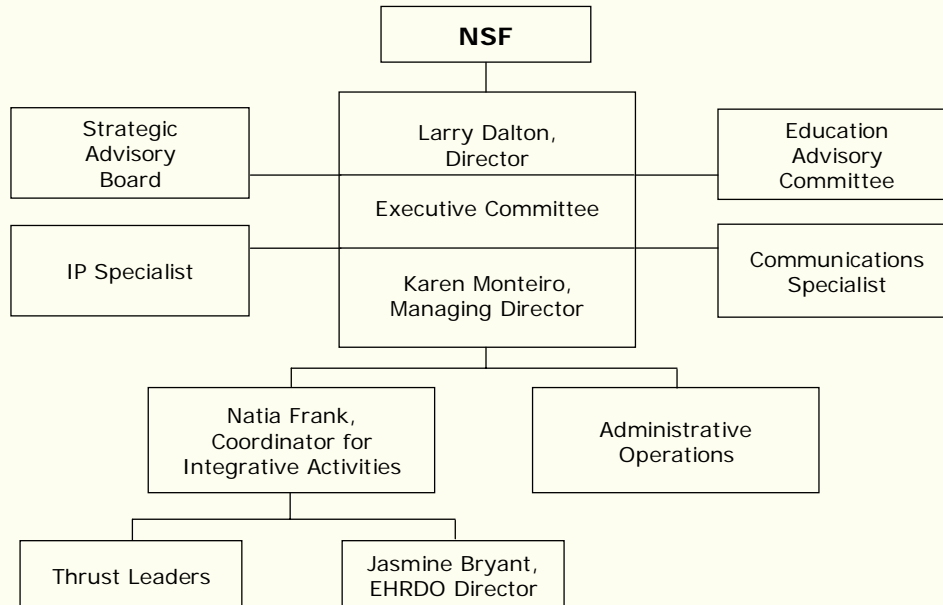
VII. MANAGEMENT

Organizational Matters

There have been no major changes in the Center's organizational strategy although there have been some refinements to the original organization chart submitted with the proposal. These refinements are, in part, a response to the NSF requirement for specific administrative positions such as a full-time managing director and a full-time education and outreach director, and in part from practical considerations that have emerged as the Center has been launched. Below is the current organizational chart.



Administrative Organizational Chart



UW 121002

The Management Team meets on a weekly basis by videoconference (unless the agenda does not justify the time of the entire group in which case only the local UW group meets). The Executive Committee consists of the following personnel:

EXECUTIVE COMMITTEE

Administrators

Larry R. Dalton, Director

Alvin L. Kwiram, Executive Director (Chair)
Karen M. Monteiro, Managing Director

Associate Directors

Bruce H. Robinson
Seth Marder
Aaron W. Harper
Neal Armstrong
Natia Frank
Alex Jen

Thrust Leaders

Joseph Perry
Bernard Kippelen
Bruce H. Robinson
Alex Jen

ANLO

Tatiana (Tanya) Timofeeva

SAB

Edel Wasserman (Ex Officio)

The Strategic Advisory Board and the Education Advisory Committee provide advice to the Management Team. In addition, the Knowledge Transfer functions and a Communications function also are linked to the Management Team.

We are pleased that we can now fill in some additional names on our organizational chart. In particular, Karen Monteiro has been appointed as full-time Managing Director of the Center. Karen comes to us from the School of Medicine where she was Administrative Director of the General Clinical Research Center at the University of Washington. She was our first choice out of some forty candidates identified through a national search. She will begin her duties on May 6, at 60% time, and then ramp up to full-time within a month or so as she makes the transition from her present position. From the time that NSF notified us of the award until the time of the offer to Karen took six months.

Likewise, we are pleased to announce the appointment of a full-time Director for the EHRDO program, Jasmine Bryant. Jasmine was our top (full-time) candidate for the position out of some forty candidates that responded to our nationally advertised opening. She began her official duties as of April 18 although she had already worked on a temporary basis since mid-March. Jasmine has a PhD in chemistry from the University of Washington and a Masters in Teaching from Seattle University. She has worked at the Pacific Science Center and taught for two years in middle school and high school.

A few individuals have also decided not to continue in the roles originally envisioned. In our original proposal, Gretchen Kalonji was designated as the Executive Director for EHRDO, and she was involved in the refinement of our education and outreach program for the site visit. However, the subsequent requirement by NSF that there be a full-time Director for EHRDO created complications. Professor Kalonji obviously was not able to become a full-time director, and with a full-time director it was less obvious what the role of the Executive Director would be and how the authority and responsibilities would be divided. After considerable discussion and reflection, Professor Kalonji decided that her expertise could be more effectively used in other

programs and she decided to resign from her proposed role in the Center. It remains to be seen whether we will revisit that position or whether we have the necessary human resources in place to mount a strong program in this area.

Likewise, Carl Dirk, former Director of the ANLO program, stepped down from that position and has been replaced by Tatiana Timofeeva. She has participated actively in the Management Team deliberations.

A half-time fiscal specialist, Cyril Margate, has been hired to manage the financial affairs of the Center. A full-time webmaster, Joe Marquez, has been hired to develop the Center website and to manage our telecommunications infrastructure. In addition, a half-time intellectual property officer will soon be appointed who will serve both the Center's programs at the University of Washington as well as the broader photonics programs on campus and will also serve as the Center's liaison on intellectual property matters with the other participating institutions.

Finally, Natia Frank, Assistant Professor of Chemistry, has been appointed as Associate Director for Integrative Activities. Her responsibilities will be, in part, to ensure that there is meaningful coordination between the research activities of the Center and the Education and Outreach activities. She serves as an active member of the Executive Committee and, together with Co-Director, Bruce Robinson, has led our EHRDO efforts during this start-up phase.

Performance and Management Indicators

The original expectation was that the leadership of the Center in consultation with the SAB would develop a set of performance indicators for the Center. Since then, NSF has retained Abt Associates who have developed a comprehensive array of performance measures essentially superseding the role that might have been anticipated for the SAB. We are in the process of developing the databases mandated by NSF via Abt Associates, and a wide array of information is included in this report. We will evaluate this information at the time of the SAB meeting in June to determine whether there are some keystone measures that we should focus on to help us evaluate whether we are making the desired progress with respect to the goals stipulated by NSF. Obviously, the broad objectives are reasonably clear:

- we seek to advance the scientific frontiers in significant and easily recognizable stages as outlined in our Strategic Plan;
- we seek to have a significant impact on the K-12 community, on undergraduate programs both instructional and research, on graduate education, and on the broader continuing education community who wish to learn about the field represented by the Center;
- we seek to expand the opportunities in science of the underrepresented minority community and women by an aggressive outreach program including mentoring activities to ensure greater diversity of the workforce in this field;
- we seek to bring the knowledge developed through the work of the participants in the Center to the public both in terms of published research results, but also in terms of commercial applications where possible and practical;
- we seek to enlist the interest of industry to ensure that the needs of the marketplace are understood by the Center participants and that the private sector understands the implications of the research carried out in the Center; and finally
- we seek to give visibility to the accomplishments of the Center so that the public can understand both the return on their investment and the exciting opportunities these scientific advances create for them and for society at large.

We will continue to refine the management structure to achieve these macroscopic goals, and will continuously examine the variety of measures to develop a sense of the collective activities that contribute to our goals. While we must pay due attention to metrics, our policies and procedures must ensure that we do not lose sight of the critical role of the Center: to provide an environment that nurtures creativity; to support those who are willing to take intellectual risk; and to devote the time to be mentors for our colleagues.

Finally, we are providing substantial support to the Office of Educational Assessment at the UW. The OEA staff will work with the Center not only to refine the various performance measures, particularly in the education and outreach arena, but in addition will actually gather the data from the communities with whom we will be engaged to determine the impact and efficacy of our efforts. These efforts are just getting underway and we are not yet in a position to provide specific outcomes for their work.

Problems Encountered

We have encountered no major problems in our start-up phase that would not be expected for an organization just getting launched. There are obvious growing pains and adjustments that have to be made as we proceed to create the Center. We believe we have made excellent progress on all fronts including the recruiting of personnel as described above, as well as the acquisition, distribution, installation and implementation of telecommunications equipment for videoconferencing. Minor issues would include the difficulty in enlisting the attention of some of our participants to the myriad of administrative overhead that is associated with a Center grant.

A more substantive challenge that we will face in the next reporting period is the anticipated move of four of the key faculty from the University of Arizona to the Georgia Institute of Technology. We are not able to report on this matter at this time (although we expect to have much more information at the time of the Site Visit) because the negotiations of those individuals are still ongoing with their respective institutions. However, we are in touch with the two institutions to ensure that the interests of the Center are being considered in the discussions, that matching requirements are recognized and met, and that the intellectual property agreement is agreed to and signed by Georgia Tech if and when an agreement is consummated.

One of the novel goals of the Center was to enlist the help of the Center for Technology Entrepreneurship in the School of Business (CTE) together with the Office of Intellectual Property and Technology Management (OIPTT) to create a more dynamic program in technology transfer than might be the case traditionally. This effort has not yet taken hold in part because there has been a leadership change in the CTE and in part because we have not had someone who could dedicate sufficient time to the intellectual property issues of the Center. We anticipate that both of these problems will be resolved in the coming months (as indicated above, an offer has been made for the intellectual property management position), and this part of the Center program will have much more to report next time.

Another minor problem was encountered in connection with our industry consortium plans. After considerable discussion both within the Center and with the SAB we arrived at a draft agreement for an industry consortium. However, after further exploration of the implications, especially in connection with intellectual property matters, it was decided to go in the direction of an Industry Affiliates program instead of a formal consortium. The major difference in the Affiliates model is that the membership fee is tendered essentially as a gift that obviates the

need for the agreement with the complex intellectual property terms. After further consultation with our industry contacts this seemed like the best alternative. Upon implementation, however, we discovered that a number of companies find it difficult to negotiate the internal corporate approval process for a gift. This has necessitated further discussions and negotiations within the institution and with prospective sponsors. We are making progress and have already received some funds for the Affiliates program. We hope to expand that in the coming months although the current difficult business climate has dramatically dampened the enthusiasm of companies for such sponsorships.

Integration

Integration is clearly a high priority for the NSF Centers and is an essential element to justify the existence of a Center rather than funding individual projects. As indicated above, we have explicitly addressed this problem not only by constantly emphasizing this goal in our Management Team meetings, but also by appointing an Associate Director, Natia Frank, as described in 1a above, with the specific task of seeking greater integration of the research and education efforts. We believe there is a strong philosophical commitment to this goal on the part of the major participants and the progress toward this goal in the few months we have had has been excellent.

However, it is not an easy matter to engage all the participants at a comparable level. In other words, when a faculty member is receiving much less support from the Center than she receives from her own single investigator grants she tends to be less than enthusiastic about the extensive reporting requirements of the Center. As a consequence, it is at times difficult to get responses to requests for the wide range of statistical information that some do not believe is always justified or productive. To address this problem we will simplify as much as possible the reporting requirements, will ask the faculty to designate a graduate student or staff person who would be the point person for such information requests, and will work with NSF to ensure that all the information being requested is truly essential.

A second means for improving integration is to have frequent communications with the participants, to continuously emphasize the key goals of the Center, and to test how well we are addressing them. The weekly Management Team meetings help to facilitate this communication. In the last month, we have begun regular videoconferencing sessions. In time, videoconferencing among subsets of the participants in the Center will probably become routine. We feel this improves the exchange of information. For example, in our recruiting efforts for the administrative directors, representatives from the University of Arizona were members of the respective Search Committees. The final interviews were held by videoconference so that the UA member of the Committee could participate and see the responses and body language of the candidates. This was very effective, and we believe it led to better outcomes.

STRATEGIC ADVISORY BOARD

	Name	Affiliation
1	Ray Baughman	University of Texas at Dallas
2	Neal Dempsey	Bay Partners
3	Christos Dimitrakopoulos	IBM
4	James Dye	Michigan State University
5	Susan Ermer	Lockheed Martin Advanced Technology Center
6	Stephen Forrest	Princeton Mat. Inst., Optoelect. Components
7	Petra Franklin	Vault Capital

8	Peter Gunther	ETH, Zurich
9	Waguih Ishak	Agilent Labs
10	Rick Lytel	Sun Microsystems, Inc.
11	Admiral William Owens	Teledesic, LLC
12	Rick Rashid	Microsoft
13	Elsa Reichmanis	Bell Laboratories, Lucent Technologies
14	James Rottsoik	Cray Inc.
15	Martin Smith	Preston Gates
16	Jonathan St. Clair	Boeing
17	Edel Wasserman	DuPont