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Dr. Margaret Leinen Assistant Director for Geosciences National Science Foundation 4201 Wilson Boulevard Arlington, VA 22230 Dr. James Collins Assistant Director for Biological Sciences National Science Foundation 4201 Wilson Boulevard Arlington, VA 22230

Dr. Daniel Atkins Director Office of Cyberinfrastructure National Science Foundation 4201 Wilson Boulevard Arlington, VA 22230

Dear Drs. Leinen, Collins, and Atkins:

As you would expect, the academic research and education community is excited about the American Competitiveness Initiative (ACI) which, among other things, calls for substantial increases in the NSF budget. Our organizations have strongly supported this proposal from the outset and it appears that Congress is also supportive given the recommendations they have made thus far in the FY 2007 Congressional budget process. We appreciate that this process is far from over, and we intend to continue to do our part to educate Members of Congress about the importance of investing in research and education through the National Science Foundation.

As you and your colleagues at NSF turn your attention to the development of the FY 2008 budget proposal, we would like to strongly urge you to consider enhancing support for the infrastructure needs of marine laboratories and biological field stations through the specific programs within the BIO and GEO directorates as well as through the continued development of the new Office of Cyberinfrastructure.

The Improvements in Facilities, Communications, and Equipment at Biological Field Stations and Marine Laboratories (FSML) program – jointly funded and managed by the Biological Sciences and Geosciences Directorates – is an important source of competitive, merit-based support that enables our respective members to address critical infrastructure needs in support of the entire academic community. Our facilities include over 120 marine labs and about 200 field stations, many of which are open to scientists, students and educators from across our community and from many different fields beyond the marine and biological sciences. They are vital components of our research enterprise for which the quality and availability of instrumentation and related infrastructure has a significant impact on the rate and quality of progress in our fields.

We believe that with the onset of the Ocean Observatories Initiative and the National Ecological Observatory Network, projects we strongly support, the role that field stations and marine laboratories will play in the collection, analysis, and dissemination of the data generated by these and other observing systems will become more pronounced. These facilities are an integral part of the network of observing systems and they provide additional value in connecting the results of observing system science to the needs and interests of wider communities and to the public at large. To take advantage of these opportunities, we believe it will require the enhanced revitalization of both the cyber and physical infrastructure at these facilities.

The FSML program has been fairly level at \$2.5 million per year for a number of years and the demand for these funds has continued to grow. From our collective experience as both panel reviewers and principal investigators, we believe the success rate for this program has been significantly below the Foundation-wide average, even though the quality of the proposals received is quite high, and many excellent proposals continue to go unfunded.

A recent analysis within the community of marine labs has also indicated that the kind of infrastructure required is also becoming more sophisticated and expensive to supply. As the observing systems appear on the horizon, we also see a pressing need to install modern cyberinfrastructure that will maximize the linkages between the marine labs and field stations and the revolutionary science being done at the observing systems. Therefore, we respectfully call on the NSF to increase this modest program to \$5 million per year in the FY 2008 budget request and then gradually increase it to \$10 million per year as the observing systems come on line. This would energize the relevant community of labs and field stations and greatly assist them in meeting their infrastructure challenges.

Infrastructure needs have been addressed in several prominent NSF-related reports, such as the National Science Board's Science and Engineering Infrastructure Report for the 21st Century -The Role of the National Science Foundation, February 2003; the Report of the Blue-Ribbon Advisory Panel on Cyberinfrastructure, December 2004; and the Draft National Science Foundation Strategic Plan FY 2006-2011, June 2006. With the excitement created by the proposal for a multi-year enhancement of the NSF via the ACI and the positive Congressional reaction thus far to this proposal, it seems to us that this may represent an opportunity for the NSF to help address the specific cyber and physical infrastructure needs of marine laboratories and field stations in the larger context of the NSF's mission, vision, goals and objectives.

Thank you for the opportunity to present these views. If we can provide additional information or help in anyway, please do not hesitate to let us know. Dr. Michaels can be reached at <u>tony@usc.edu</u> or at (213) 740-6780. Dr. Hodder can be reached at <u>jhodder@uoregon.edu</u> or at (541) 888-2581 ext: 215.

Sincerely,

Dr. Anthony F. Michaels President National Association of Marine Laboratories

Jan Hodder

Dr. Jan Hodder President Organization of Biological Field Stations