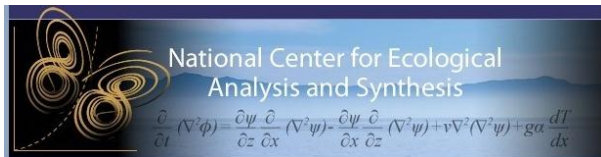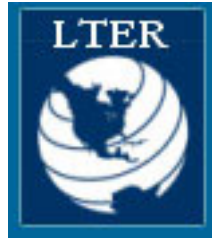# Centers and Center-like Activities Awardee Meeting on Cyberinfrastructure

Held 27 June 2012 at the Socio-Environmental
Synthesis Center (SESYNC) in Annapolis, Maryland

Debrief to BIO Advisory Council
5 September 2012

12 Center and Center-like Activities

Meeting emphasis: Cyberinfrastructure

Areas of strength, overlap, gaps in cyberinfrastructure

- **Advanced Computational Infrastructure (ACI)**: Compute cycles and gateways not effectively used by BIO researchers. Improve access and usability and encourage use by BIO awardees
- **Data:** Increased need for short- and long-term storage, and archiving, metadata, standards, ontologies, data quality, trust, and data publishing
- **Software:** Support for tools that biologists use
- **Collaboration**: Research has become increasingly collaborative, interdisciplinary, and international
- **Coordination**: What can both the Centers and NSF do to improve usability, management, evaluation

As strategic investments, are Centers able to do the things we should expect of them?

- Create/leverage **economies of scale** to better utilize cyberinfrastructure
- Address **grand challenges** not possible at individual or small-scale
- Foster **collaboration and shared opportunities**.

Are large-scale activities competing with individual researchers for program funding?

What NSF can do

Enhance opportunities at all levels through existing programs, DCLs, supplements.
- Grow out the top level investments at large-scale integrative level
  - Facility scale investments that support software, tools
  - Facility scale investments for data acquisition and
- Provide mechanisms to improve CI access; partnerships with Centers for individual/small researchers.
  - Strategic supplements
  - plus-ups
  - co-funding (e.g., CI-REUSE)
- Push better integration between OCI and BIO investments in CI (SI2, Software Institutes, Xsede, DIBBs [Datanet])

Coordination, Accountability, Post-award Management

- Coordination
  - Community-based infrastructure needs: Conceptualization first, implementation to follow, as communities demonstrate readiness
  - Facility scale investments that support software, tools
  - Facility scale investments for data acquisition and
- Accountability
  - award conditions documenting collaboration for awards partnering with Centers and in programs participating in CILS portfolio
- Post award management
  - Improve data reporting to include common data templates (e.g., for demographic data).
  - Continue coordination of CI development, use, re-use across the Directorate and in the communities

OCI DCL – Supplements for large-scale coordination

Table 1. BIO Centers response to the call entitled "Cyberinfrastrcture Coordinationfor Multi-User Research Facilities (NSF 12-101)" issued as a Dear Colleague letter on June 27, 2012.							
Supplement ID	**PI**	**Title**	**Institution**	**Amount Requ**	**BIO funding**	**OCI funding**	**Cognizant PD**
DBI - 1253049	Palmer, Margaret A.	National Socio-Environmental Synthesis Center	University of Maryland College Park	$ 199,751	$ 66,421	$ 133,330	Saran Twombly
DBI - 1252914	Gross, Louis J.	National Institute for Mathematical and Biological Synthesis (...	University of Tennessee Knoxville	$ 199,986	$ 199,986		Sam Scheiner
DBI - 1252973	Nel, Andre	CEIN: Predictive Toxicology Assessment and Safe Implementati...	University of California-Los Angeles	$ 199,074	$ 65,744	$ 133,330	Alan Tessier
DBI - 1252889	Wiesner, Mark R.	Center for Environmental Implications of Nanotechnology	Duke University	$ 200,435	FY13?		Alan Tessier
DBI - 1252974	Goodman, Erik D.	BEACON: An NSF Center for the Study of Evolution in Action	Michigan State University	$ 199,996	$ 66,666	$ 133,330	George Gilchrist