

Centers of Excellence: A Millennium Science Initiative for Vietnam

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What is the Millennium Science Initiative?

- The MSI is an international program to promote capacity in science and technology and their uses in developing countries, primarily through “MSI Institutes.”

Goals of the MSI

- To foster innovative research and applications of specific value to the host country or region.
- To educate and train future generations of scientists.
- To develop linkages with educational and research institutions, the private sector, and the global scientific community.

What is an MSI Institute?

- An MSI Institute is a group of scientists and/or engineers with common research interests, led by a Principal Investigator of world-class scientific stature and proven leadership ability, working together on a problem or set of problems or toward a specific goal.

MSI Institutes

- combine research and training.
- generally do not involve new structures; they are located within existing research institutes, universities, or other appropriate settings, and ideally include researchers from two or more institutions, thus ensuring the growth of scientific excellence beyond the host institution.
- are scientifically autonomous, giving researchers maximum flexibility to pursue their scientific goals, and they operate without bureaucratic interference.

Features of MSI Institutes

- Outstanding leadership
- International standards of excellence
- Integration of research and training
- Linkages across fields and institutions
- Linkages to the national and international scientific communities and to the private sector
- Potential to add value to existing export economy (replace blueprints by specs) and create new technology-driven companies
- Scientific and administrative autonomy

Activities Supported

- Research grants
- Stipends for graduate students and post-doctoral scholars to conduct research at the Center of Excellence
- Visiting professors and researchers from abroad
- Conferences and workshops at the center
- Travel abroad for conferences and longer stays
- Infrastructure: laboratory equipment and information technology
- Outreach to the private sector and the public
- Linkages across fields and institutions

Partnership for the MSI

- Local and international scientific communities
- Governments: Ministries of S&T, Finance, Planning, Education
- World Bank
- Science Initiative Group (SIG)
- Other governmental and non-governmental organizations, e.g. VEF

Support for the MSI

- World Bank + Governments (Country Assistance Strategy)
- Foundations

Examples of MSI Institutes

- Chile
 - Cell Biology and Biotechnology
 - Applied Quantum Mechanics and Computational Chemistry
 - Complex Engineering Systems
- Brazil
 - Coastal Studies
 - Land Use Changes in the Amazon
 - Nanoscience and Nanotechnology
- Mexico
 - Signaling, Plasticity, and Neurodegeneration in the Central Nervous System

The Millennium Science Initiative in Vietnam

- Models for consideration
- Process
- Role of VEF
- Role of the scientific community
- Opportunities for VEF Fellows

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