

IANAS STRATEGIC PLAN  
Draft May 4, 2008

**Preamble:** IANAS is the Inter-American Network of Academies of Sciences. IANAS is dedicated to strengthening and empowering science communities in the hemisphere by enhancing the capacities of academies and science associations. Science academies are self-renewing honorific organizations, independent of government, in which members are elected on the basis of scientific merit. Typically academies include the leadership of science within nations. Many academies serve their societies by functioning as formal or informal sources of advice and expertise to all levels of government and civil society. Academies can be particularly important in advising governments on policies designed to enhance national science and technology (S&T) capacities, including the development of effective science education programs and policies for the support of national research agendas (policy for science). Academies also provide access to essential expertise and can thereby assist in formulating solutions to national and regional problems with S&T dimensions (science for policy).

**Vision:** To make academies more effective instruments in providing science advice to governments and society and in so doing to empower science communities in the hemisphere.

IANAS will achieve this vision by (1) enhancing human resource development in science, technology and health by improving the quality of science education in the hemisphere; (2) developing programs that employ science to provide solutions to major societal challenges such as water resource needs, energy development, disease surveillance, disaster mitigation, biodiversity loss, environmental pollution, climate change and other problems; and (3) linking with IAP / IAC and allied organizations to organize periodic regional workshops aimed at bringing the recommendations of major IAC studies to policy makers.

**Rationale:** IANAS is an organization of science academies. By virtue of their credibility and independence from government, academies have certain inherent advantages in addressing societal issues related to science, technology, health and education. Academies, when composed of the scientific leadership of nations, are credible voices on issues in science, technology, health and education at the national level. Academies also are

committed to advancing high quality science education. Owing to their status, academy leaders often have access to high-level policy makers and can influence national agendas. The major issues of the 21<sup>st</sup> century transcend national borders and IANAS seeks to play a coordinating role in bringing effective solutions to governments and societies within the hemisphere.

**Accomplishments:** IANAS was established as a consequence of a meeting of academies of the hemisphere in Santiago, Chile in May 2004. In the short time since its inception IANAS has initiated active programs in science education, water resources, and academy capacity building. Each of these programs has developed a series of successful activities. In the area of capacity building, IANAS has undertaken a study, funded by the Ford Foundation, and in a partnership with the Brazilian Institute for Studies in Labor and Society, to examine the contribution of research in higher education institutions as contributors to social well being. The study examines cases in Latin-American countries - Argentina, Brazil, Chile and Mexico. The main hypothesis behind the study is that, in spite of the overall institutional rigidity and resource limitations, many higher education institutions in the region have scientific and technological research groups, programs and institutions that have been able to create the innovative arrangements that are necessary for their work, and these should be studied as models and examples to be followed. The foci of this study are: the role of institutional autonomy and flexibility to engage in partnerships with government and private sector; the flow of knowledge and issues of intellectual property; the main differences between the natural sciences and technology and the social sciences; and the reward systems for academics. IANAS has also developed significant linkages with the Organization of American States (OAS) and UNESCO. These accomplishments set the stage for more ambitious efforts in the second triennium of IANAS.

### **Goals for the 2007 – 2010 triennium:**

- 1. Work with IAP / IAC to develop regional workshops** aimed at disseminating recommendations from major IAC reports to national decision makers. This focus serves the dual purpose of disseminating major reports and also providing academies with national action agendas.
  - a. The first workshop will focus on the IAC energy report and the lead organizers will be the Academies of Argentina, Brazil and the US.

- b. A second workshop on the IAC report on women for science will be organized by IANAS in collaboration with the regional offices of TWAS and ICSU, as a satellite event to the TWAS meeting in Mexico City in November 2008.

**2. Capacity building for academies:**

- a. Assist member academies to promote science in their countries by:
  - i. Organizing a workshop on the science funding landscape to be led by the Guatemalan Academy.
  - ii. Improving access to online education resources.
  - iii. Working with the IAP program on access to scientific information to enhance access to and tools for the utilization of knowledge resources.
- b. Assist academies in their work with governments and society by contributing to:
  - i. STI (science, technology and innovation) strategies essential for economic development, poverty reduction and quality of life.
  - ii. Developing best practices for the provision of evidence based advice to national audiences.
- c. Creating new academies in countries lacking national academies.
  - i. Work with scientific associations/societies to establish academies, where merited, in nations lacking such institutions.
- d. Work with the IAP program on “Promoting Access to and Use of Digital Knowledge Resources” to facilitate access to electronic knowledge sources such as digital libraries and open access publications and to help create digital networks and infrastructure for research and education

- 3. Web page:** The webpage of IANAS will include a questionnaire to ascertain the highest priority activities for strengthening science in each country. The questionnaire should also identify the specific needs of member Academies. This will provide IANAS with relevant information for priority setting and program initiation in pursuing the goal of strengthening scientific activity in the hemisphere.

**4. Scientific mobility:** The development of human resources for science is an essential priority to build a scientific community. Two main avenues will be pursued with a focus on countries with limited scientific capabilities:

- a. Send outstanding students to host countries in the region to carry out doctoral studies. Fellowships for this program will be coordinated with Academies of potential host countries (e.g. Brazil, Mexico, Canada, USA and others). The Academies pursuing such fellowships should determine potential areas of interest and should also be responsible for the selection of suitable candidates.
- b. To establish a program of “short stays” (e.g. 3 – 9 months) for young investigators (including doctoral students), that would allow them to obtain specialized training in “frontier laboratories” or to use specialized equipment not available in their home institutions. It will be necessary to establish the potential funding sources for this initiative.

**5. IANAS programs**

- a. Continue the IANAS science education program.
  - i. Move beyond an emphasis on primary education.
  - ii. Adapt and exploit on line resources for use in Latin America.
- b. Pursue a strategic plan for the IANAS water program
  - i. Work towards wide spread dissemination and enhancement of the web based safe drinking water educational tool produced by the US National Academy of Science.
  - ii. Plan to develop other policy and outreach tools.
- c. Foster regional alliances to address major regional problems such as scientific challenges in managing the Amazon River basin or managing coastal and ocean resources.

**6. Continue to foster partnerships with the OAS, IADB, TWAS and ICSU.**

- i. Implement a brain storming session with OAS to develop closer linkages.
- ii. Involve the OAS in partnering with IANAS on workshops aimed at gender issues in science and technology based on the IAC women in science report.

- iii. Work with IADB and OAS to develop national STI strategies.
- iv. Develop effective linkages to TWAS and ICSU regional offices.

**7. Development of additional resources:** IANAS needs to attract donors to its programs and initiatives. While much has been accomplished with very limited resources, more ambitious programs will require a broader base of support. IANAS will develop a fund raising strategy, involving both governmental and non-governmental sources, to enable the implementation of a more ambitious program.