A visit to the Bolivian Academy of Sciences, La Paz, Feb, 24-27, 2010

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On February 24-27, 2010, I spent two days at the Academy of Sciences of Bolivia in one of the highest capitals in the world: La Paz, at 3600 m altitude in the Andes near the border of Peru. IANAS, the InterAmerican Network of Academies of Sciences, held its Executive Meeting in La Paz. IANAS is the Western-Hemisphere regional network, part of the InterAcademy Panel (IAP), which represents all science academies in the world. The InterAcademy Council (IAC) performs studies for IAP on topics of importance to global development and sustainability. Thus, IAC published reports on Inventing a Better Future (on global capacity building); Realizing the Promise and Potential of African Agriculture; Women for Science*, and most recently: Lighting the Way: Toward a Sustainable Energy Future, the last one chaired by Nobel Prize winner Steve Chu, presently US Secretary of Energy. IANAS, in turn, has established matching Working Groups (WG) on *Energy*, and on *Capacity Building*. In addition, it has formed a WG on *Water*, and one on *Science Education*. At the Bolivian meeting, IANAS formed a new Working Group "Women for Science," following last year's IANAS Workshop on this topic at the Mexican Academy, at which I gave a presentation along with Lilian Wu, Chair of CWSEM.

I had served earlier as the co-chair of the IAC Advisory Panel "*Women for Science*" – the Panel's report of that name was adopted by IAP in 2006. A central theme of the IAC report was that global capacity building requires the engagement of women at all levels, from the pinnacles of science and technology all the way down to the grassroots: the rural areas and the growing megacities. La Paz was a striking example of the latter - over 2 million people are crammed into the sharp crevasse that descends from the El Alto high plain, where the airport is located at 4100 m, down to the city. The rural population flocks to the city – unemployment is huge and I was told social services are minimal. Women in their colorful costumes line the streets, selling food, drinks and trinkets from little stalls while tending to their babies. Men drive, and announce the destinations, of ubiquitous minivans crammed full of Bolivians moving from here to yonder – a spontaneous private transportation system. There are cabs, but virtually no private cars.

I was sent to La Paz as a delegate of the U.S. National Academy of Science to propose the formation of an IANAS Working Group "Women for Science." Apparently, I did a good job on my presentation, because I was invited to chair this WG and give advice to the IANAS Executive Committee on gender issues affecting IANAS, its programs and working groups. In addition to myself, IANAS has since appointed five other members, one each from TWOWS (Third World Organization of Women in Science) and from the science academies of Mexico, Brazil, Guatemala and Bolivia.

I see my task as a chair of the WG to chart directions based on the needs of the IANAS working groups and member academies. To begin with, the Western-Hemisphere academies have been asked to each appoint a focal point (contact person) for gender issues. I plan for an open-ended questionnaire to be sent to the focal points, asking each one to propose a couple of high-priority topics for consideration by the WG. Even before the WG had been fully constituted, WG members have already been put to work helping the IANAS Secretariat arrange for a 2-day conference of its active Science Education WG, Brazil, June 12-13, 2010, followed by a teacher training day.

The Bolivian Academy of Sciences provided gracious hospitality in its beautiful 19th century home in the center of town. Adjusting to the thin air was helped by copious cups of coca tea, the national drink. The 2-day event included a visit to the Bolivian Vice President, with whom the IANAS Chair and the Academy President pleaded for more support for science. The Vice President, Álvaro García Linera, a mathematician and sociologist by training, confessed that science had not been a priority: the first year of the second term of the Evan Morales presidency will be spent on consolidating the central government in this country not known for gubernatorial stability. At the dinner with academy members, the last evening, I sat with three English-

speaking Bolivian academicians, all trained abroad, who informed me on the brain drain, the exodus of construction workers and many other problems their country is facing – almost half of the Bolivians work abroad. The 2½ days were crammed with events. I mention a dinner of dancing and music, the first evening of the meeting, and an excursion to Lake Titicaca, a huge expanse of slightly salty water at 3800 m, on the border between Bolivia and Peru. It was rainy season in the Bolivian summer, so all of nature was lush and green, with cattle grazing. No rain falls during 8 months of Bolivian fall, winter and spring.

My return trip to the US was delayed by the Chile earthquake. Latin-American air traffic was disrupted, and chaos reigned at Miami airport, where the late planes landed and passengers had to stand in line for hours to pass customs, get their missed connections rescheduled for the next day, and be put up at local hotels all over Miami - a minor disturbance, however, compared to the volcanic eruption in Iceland that was to follow in April.

References:
IAP - InterAcademy Panel: www.InterAcademies.net
IAC - InterAcademy Council: www.InterAcademycouncil.net
IANAS - InterAmerican Network of Academies of Sciences: www.IANAS.org
IAC reports can be ordered on-line free of charge

* The IAC "Women for Science" Advisory Report is the first of its kind to address the world's science academies.
Its basic premises are:

- the waste of talent in the STEM disciplines due to discouragement and marginalization of women must end; and
- the IAP goals of science capacity building in developing countries require the engagement of women from the pinnacles of STEM all the way down to the grass roots.

Its recommendations to academies are grouped in the following categories:

- Creation of an inclusive climate in scientific institutions, for the benefit of science and of both male and female members;
- Increasing the visibility of women scientists.;
- Supporting mentoring, leadership training, role models, and networking of women; and
- Working with governments, NGOs, and universities to enable access of grass roots women to information about and education in the STEM disciplines.

Plaza Major, La Paz. Rural immigrant woman, carrying her baby. Feb. 24, 2010

Bolivian Academy of Sciences, La Paz

The US National Academy delegation in front of the Bolivian flag
in the Vice-Presidential Palace, La Paz, Feb. 25, 2010. From left to right: John Boright, Executive Director, NAS Office of International Affairs; Anneke Levelt Sengers; John Millhone, Consultant; and Michael Clegg, NAS Foreign Secretary.