Comments and Controversies

Latin American Brain Mapping Network (LABMAN)

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1. Lack of critical mass of trained specialists within any single country.
2. Insufficient public perception of the magnitude and public health importance of brain disorders.

3. Historical bias in the regions towards molecular and cellular neuroscience with insufficient development of systems neuroscience research geared to serve as a bridge to clinical applications.
4. Unequal and sometimes sparse presence of equipment and specialists with adequate training.
5. Limitations in coverage of health systems and public awareness.

The Latin American Brain Mapping Network (LABMAN) was launched at a workshop convened for this purpose in Havana, Cuba on March 7–8, 2008. The initial core of this network was formed by scientists from Argentina, Brazil, Colombia, Cuba and Mexico. Experts from Germany and Canada acted at the meeting as external advisors.

The creation of LABMAN had been originally suggested at the November 2006 “Latin American-UK Workshop on Neuroimaging” chaired by Karl Friston and Pedro Valdés-Sosa. Encouragement and financial support for the creation of LABMAN was provided by the Pan-American Health Organization (PAHO/WHO) as part of this organization’s strategy for the introduction of novel technologies in the region in a way designed to have an impact on primary health care under conditions of scarce resources.

The primary goal of LABMAN is to promote the application of brain mapping in Latin America. The LABMAN initiative will be based on the coordinated exchange of software, data, personnel, training and joint projects. The participants of the workshop recognized that the introduction of neuroimaging in Latin America has lagged behind the level achieved in other countries due to several factors including:

3. Historical bias in the regions towards molecular and cellular neuroscience with insufficient development of systems neuroscience research geared to serve as a bridge to clinical applications.
4. Unequal and sometimes sparse presence of equipment and specialists with adequate training.
5. Limitations in coverage of health systems and public awareness.

This situation has already begun to change favorably as is reported in the full description of the workshop available at http://ijbem.k.hosei.ac.jp/2006/-volume10/issue4/100407.pdf. The paper includes a description of the status of brain mapping in Latin American countries. The formalization of LABMAN will accelerate this process by acting as a catalyst for national programs.

The first LABMAN meeting was initiated by a lecture by Dr. Alan Evans, from the Montreal Neurological Institute's Brain Imaging Centre (BIC) on the international human brain mapping (HBM) project with emphasis on the creation of multimodal atlases for MRI and the quantification of brain development. Each participating Latin American country then presented a status report on neuroimaging efforts. The meeting concluded with a general discussion on how to implement a regional network. There was a strong consensus on the urgent need to develop Brain Mapping in Latin America. Notwithstanding the above difficulties the attendees felt that, given the scientific maturation of the brain mapping field and the technical infrastructure now available, the...
time was right to launch a coordinated multi-national effort that would
support and promote their individual national efforts. The immediate
LABMAN goals are therefore to:

• Train specialists in all major imaging techniques.
• Expedite the transfer of new scientific and technical knowledge
  from abroad.
• Increase the scientific productivity of the region.
• Drastically increase the awareness of local governments, interna-
  tional organizations and of the general public of brain mapping
  results on potential.
• Organize multinational projects in areas of special relevance to the
  region, e.g. nutrition, pediatric development, neurodegeneration.

To coordinate these efforts, a provisional council was established
with representatives from every participating country. It was also
decided to stimulate the creation of consortium-like groups for brain
mapping by every Latin American country. Dr. Pedro Valdés-Sosa,
vice-director of the Cuban Neuroscience Center, was elected as the
LABMAN Chairman.

The LABMAN initiative has already had a significant effect in the
region, acting synergistically with new national programs. Venezuela
will create in 2009 the national Center for Neurosciences with
assistance from Cuba. The LABMAN Project has already been discussed
with the highest levels of government of Brazil and Argentina and
steps are being taken to implement concrete programs. Joint projects
have been initiated between groups of countries (see full LABMAN
description). Nevertheless continuing effort must be expanded to fully
realize the ambitious goals.

An important decision made at the inaugural workshop was to
organize an annual LABMAN meeting. Moreover it was felt that
LABMAN should vigorously promote the hosting of an International
HBM meeting in the region sometime in the near future. A full report
of the LABMAN initiative was enthusiastically received at the Town
Hall meeting of the OHBM in 2008. While the LABMAN community is
now engaged in establishing internal collaborative projects, there is a
considerable interest in formalizing infrastructural links with estab-
ished brain mapping communities in Europe, North America and the
Pacific Rim.