

**Science for Health and Well Being**  
**Science and Technology in the Care of Patients**  
**and Persons with Disabilities**  
**(Dissemination of 'Best Practice', Continued Professional Development**  
**and Recycling of Viable Technology,**  
**with special focus on Developing Countries)**

**INTRODUCTION**

This proposal represents an innovative and creative additional activity within ICSU, providing direct benefit for members of the public suffering from illness or infirmity, especially in Developing Countries. Its successful prosecution would stimulate and require close collaboration among Scientific Unions and National members. Public understanding of science and technology would be enhanced by its demonstrable benefits. IUPESM, through its Constituent Organisations, has considerable experience on which to build and would be prepared to take a leading role in this component of "Science for Health and Well Being".

**THE PROPOSAL**

Advances in the direct care of patients and people with disabilities are often generated by interdisciplinary collaboration between scientists, bioengineers and clinical specialists. However, dissemination of 'Best Practice' may be retarded by the lack of opportunities for further advanced training or limited accessibility to information, including learned journals, especially in some Developing Countries.

It is proposed that a Group (or Sub-Group) of relevant Unions and National Scientific Members within ICSU be established as part of a program of 'Health and Well Being'. Its purpose will be to alleviate these deficiencies by providing Continued Professional Development (CPD) for practitioners and improved access to information for the ultimate benefit of patients and those with disabilities in Developing Countries. The aim will be to establish a collaborative interdisciplinary, international approach promulgating training, education, CPD and, possibly recycling of viable technology from Industrialised to Developing Countries.

**Dissemination of 'Best Practice'**

There is shared interest among several and different Unions within ICSU on a variety of clinically related subject areas. A few examples are:

Imaging

Clinical Instrumentation

Assistive devices, e.g. in cardiology, neurology etc.

Artificial organs, limbs and tissues

Telemedicine

Cancer therapies

Aids for everyday living, including devices for war-stricken people

Genetics

Quality Assurance, including radiation protection

*Involvement of ICSU members*

It is proposed that interdisciplinary Regional Training Workshops and Regional International Seminars be established jointly by relevant ICSU Scientific Unions. National Scientific Members would provide advice and make propositions on appropriate

subjects and regional venues, as well as formal recognition of the Continued Professional Development as an additional incentive for attendees.

#### *Financial support*

Potential sources of financial support might include UNESCO, WHO, the European Union, major US charitable bodies. National Scientific Members could advise, on a case by case basis, on potential sponsorship from Governments and Regional Organisations (such as PAHO) and local industry in the Region where Workshops or Seminars would be proposed.

### **Global Biomedical Information Networking for Developing Countries**

#### *Involvement of ICSU members*

It is suggested that inter-Union collaboration be established to compile teaching and training materials accessible via the Internet and possibly the ICSU web site. The co-ordinated provisions of 'chapters' and 'lectures' would build into globally accessible 'textbooks' and 'manuals'. It should also be possible to provide, at least, updated Contents Pages (and possibly Abstracts) from relevant scientific and medical journals.

#### *Financial support*

Only modest financial support would probably be required and might be available from industry (as advertisers) or publishers.

### **Recycling of Viable Technology**

Commonly in Industrialised Countries, major medical and other equipment that is operating perfectly becomes redundant through replacement by the most recent 'state of the art' technology. The surplus equipment will often have, at least, several years of useful life capable of being exploited in less demanding situations. IUPESM (through its Constituent Organisations) has previously arranged for the international transfer of such equipment to Developing Countries on a modest scale.

#### *Involvement of ICSU members*

Such a program could be greatly and beneficially expanded under the auspices of ICSU with National Scientific Members and Scientific Unions working in close collaboration. The former would identify the needs in Developing Countries and those in Industrialised Countries would compile a list of available equipment, based on information either available centrally (such as at Ministry level) or from national organisations which may be members of a Scientific Union. The National Members could probably facilitate the transfer of such equipment and a relevant Scientific Union could provide the expertise for re-installation of equipment in its 'new home'.

### **SUMMARY**

This proposal would create an opportunity for ICSU to provide direct benefit for the sick and infirm particularly in Developing Countries. It would also represent an opportunity to demonstrate the unique strength of ICSU through practical and productive collaboration among the family of Scientific Unions and National Members.

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