

SHARED Resources project: the sharingpoint

Scientists for Health And REsearch for Development

www.sharingpoint.net

A.Soaes¹, M.Diwersy², M.Smidt², J.W.Gastelu³

AIRNET
A Thematic Network on
Air Pollution and Health

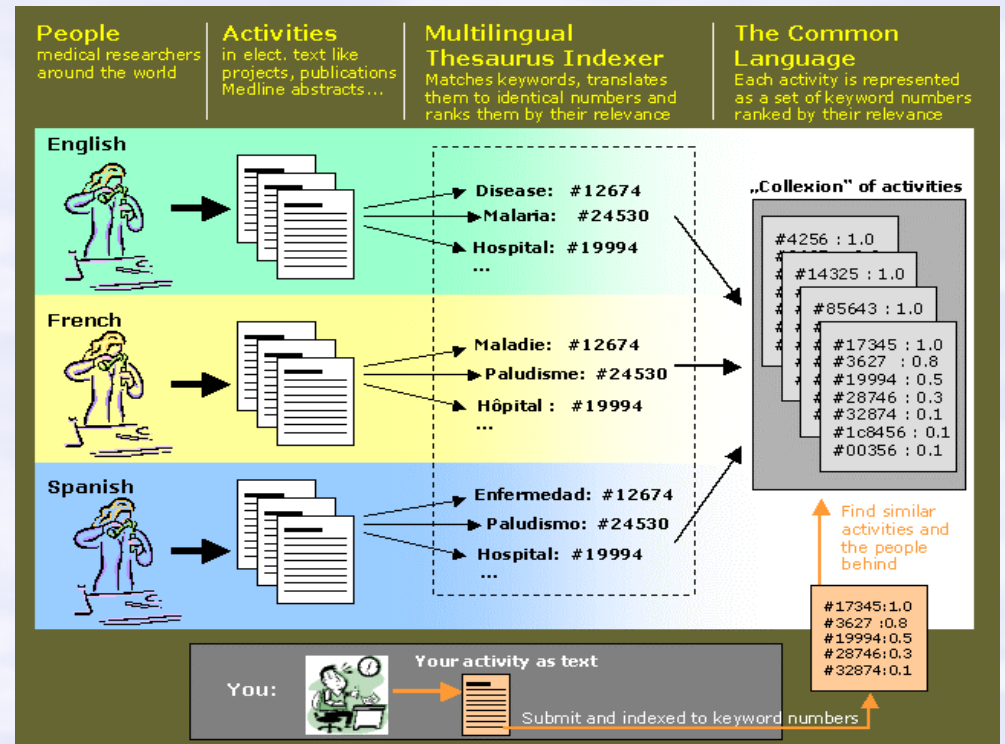


Network for Environmental Risk
Assessment and Management

SHARED

"Scientists for Health and Research for Development" is a digital network based on validated information about ongoing medical and health related research, researchers and institutions. Amongst others, it's main objectives are (a) to make health related information available on the Web in order to promote cooperation and exchange of information and technology among health related organisations and (b) to support cooperation and avoidance of duplication of efforts to solve common health problems and (c) to work towards a balanced relationship on research production and results dissemination in the North and the South.

The technology is a product of two EC Concerted Actions where partners in Europe and in Developing Countries designed a decentralized model for the exchange of information on research projects, scientists and organizations. An indexing technology was developed later by the Erasmus University of Rotterdam, in conjunction with The Netherlands Organization for Scientific Research - NWO in the Netherlands. This technology is now applied at the www.sharingpoint.net



Cross language networking is based on a thesaurus. For Medicine and Health, it is MeSH (NLM) which is available in English, and is translated to many different languages.

SHARED Knowledge is Double Knowledge

The advantage of participating in the SHARED knowledge pool is that the information is made immediately available, what helps the establishment of collaboration networks with no needs to build up central databases of scientists and their activities or results. It is only necessary to automatically index the content using the CFP technology. The *Collexions*[®] of FingerPrints is stored and regularly updated in a virtual space and can be accessed according to the user needs. Policy makers might have more interest in news, mail lists or policy-papers whilst will look for scientists activity profiles only to find referees for project proposals or experts for a consultancy work for example.

To enable the automatic indexation of environmental health documents using the CFPs, it is necessary to test the quality of the existing thesaurus when generating the profiles. It is proposed that a group of experts concentrate their work in this field to build up an environmental health knowledge pool. This *sharingpoint* would facilitate the information flow between the knowledge generation networks and could improve the communication with policy-makers, health workers and interested group of patients or NGOs, among others.

THE SHARED TECHNOLOGY

SHARED uses advanced Web technology that allows search through decentralized databases using an automatic indexing process, the Conceptual Fingerprint (CFP)⁴. The software enables for the rapid abstraction of concepts based on validated knowledge, creating a profile from any form of electronic text. Since a CFP represents all relevant content of such document, it can be used for search comparing millions of CFP's or knowledge profiles. Accumulated CFP's from multiple publications or projects form dynamic *interest*, *activity* or *publication* profiles of scientists and experts. Hundreds of millions of CFP's can be stored on one server and can be compared with each other in a matter of milliseconds.

This matching process is language and jargon independent and can be used in conjunction with any existing local platform or database. There is no need to change existing Web based information systems, document management systems, or local databases. This system allows unprecedented search and networking properties across decentralized, distributed and non-standardized data sets.

Notes:

SHARED Resources project is funded by DGIS and NWO – Contact shared@nwo.nl

(1)Netherlands Organization for Scientific Research - NWO (2) Ssynx[®] (3)Latin America and Caribbean Center for Health Sciences Information – BIREME (4) *Collexis*[®] technology

