Collaborative scientific research networks

The internationalization of science is a vital issue for scientific and technological development in different regions of the world. Cooperation and exchange between researchers from different countries are necessary for the progress of science and its translation into policies. Traditional North-South cooperation still dominates the world scenario, often perpetuating inequalities. South-South cooperation has increased more recently and is a priority for Brazil.

Scientific collaboration can occur between countries, academic institutions, and research peers. Such exchange is often encouraged by research funding policies that feature international cooperation, as well as the supply of grants to researchers for internships abroad. Recent initiatives by Brazil feature the Science without Borders program, aimed to provide 101,000 scholarships by 2015 to support overseas internships for undergraduate and graduate students, and to attract foreign researchers to Brazil and retain young talents.

How should the durability of established cooperative programs be evaluated? How should the development of research networks be monitored, beyond the use of traditional indicators? The Lattes Platform link for researchers' resumés (http://lattes.cnpq.br) features an application that allows viewing the collaboration network based on the coauthors in each researcher's science output. Lang et al. (p. 369-78) present instigating proposals based on research networks for evaluating web-based research cooperation and internationalization, focusing on institutional websites.

In addition to evaluating international research networks, the article presents a proposal for monitoring such cooperation by identifying existing collaborative projects and mapping relationships between institutions using social network analysis. Although various fields had already used these techniques, interest has grown in their application to the study of complex health phenomena like the adoption of behaviors and lifestyles in the determination of diseases. The article presents some limitations, such as failing to include universities in the analysis, potentially altering the overall profile and networks. However, the study's merit lies in contributing new approaches to the evaluation of science output that are appropriate for contemporary communications media.

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