

In a project on the scale of SISOB, it is not possible to study all the communities and social networks that contribute to the social appropriation of research knowledge. SISOB will therefore focus on three “case studies”, each of which illustrates one of the ways society appropriates (or fails to appropriate) research knowledge.

- **Researcher mobility:** Thanks in part to European policies, recent years have seen a rapid increase in researcher mobility, allowing individuals and institutions to appropriate skills and techniques which would not have been available to them otherwise. As a result, there has been created a network of laboratories and institutions, which have access to each other's culture, know-how and techniques. In this setting, SISOB will develop SNA-based tools and indicators to analyze and represent this network. The tools will take account both of short-term movements of researchers (lab visits, courses, lab exchanges) and longer-term mobility (mobility between jobs). SISOB will use these tools to analyze existing patterns of mobility as represented in a large database of researchers' curricula. On the basis of this knowledge, the study groups will suggest possible ways of improving mobility and related social appropriation of knowledge. This case study is [covered by WP7](#).

- **Knowledge sharing:** Social appropriation of knowledge depends on researchers' willingness to share the knowledge they produce with other researchers, with scientists working outside their domain of research and with general public. This process involves not just classical scientific publications and conference presentations, but also other channels of communication (blogs for scientific and general audiences, articles for popular science magazines and for newspapers, interviews with newspapers, radio and television, etc.), many of which allow direct interaction between authors and readers. The existence of these informal channels of communication creates networks linking researchers to other researchers and to members of general public. These networks can be identified and characterized by automated analysis of discussion threads in blogs and other interactive media. SISOB will develop SNA-based tools and indicators to perform this task and to represent the results. It will then use these tools to analyze patterns of interaction in a corpus of webbased media covering research-related topics, and to suggest measures to improve knowledge sharing. This case study is [covered by WP8](#).

- **Peer reviewing:** peer reviewing mechanisms for papers, conference presentations and funding proposals are designed to guarantee high quality of scientific research. However, the same mechanisms have been frequently criticized for encouraging conformism and for failing to identify work with a potentially high impact. This risk is particularly high when a discipline is dominated by a limited number of prestigious reviewers who often review each other's work, and who tend to reject challenges to their own ideas. From the SISOB point of view, the review of the work of a scientist by another scientist is equivalent to a link in a reviewer-author network, which can be studied using SNA tools and indicators. The basic hypothesis is that networks that are "open" and "well connected" provide a better environment for social appropriation of knowledge than networks that are separated into isolated subnetworks. SISOB will investigate this hypothesis using data collected by a major scientific publisher (FrontiersIn) that is participating in the project. This case study is [covered by WP9.](#)