# **CALL FOR PAPERS**



# Skilled migrants and scientific diasporas in the digital technology age

Subject of the call: The deployment of digital technologies has resulted in significant changes in the practices of highly skilled migrants and scientific diasporas, and in the way that they are studied.

# SUBJECT MATTER

International migration has become increasingly complex. In today's globalised world, the migration of highly skilled people has become ever more important. Seen traditionally in terms of brain drain (Meyer & Charum, 1995), the migration of researchers, engineers, technicians and students is now regarded as something that offers considerable potential for host countries which benefit from the contributions of these skilled individuals, as well as for the countries of origin, especially developing countries (Meyer, 2001; Barré et al, 2003; Vinck, 2013). This migration brings new dimensions to scientific cooperation and innovation, which have been strengthened in recent years by the connectivity of diasporas through digital networks and other forms of engagement that facilitate the circulation of knowledge.

The deployment of new technologies has created possibilities for new practices and forms of mobility as well as ways that allow highly skilled migrants to cooperate from a distance, either accompanied by their families or not, and there are also greater possibilities for engagement at the heart of the diasporas. These technologies have contributed to the transformation of the methods for producing, circulating and using knowledge. As collectives of producers and bearers of knowledge, either individually or as members of scientific diasporas (Meyer, 2001; Foray, 2004; Tejada, 2012), these migrants use technology to produce and reproduce knowledge in a decentralised manner, providing opportunities for collective action involving their colleagues back in their countries of origin and elsewhere in the world thanks to multiple and far-reaching connections (Meyer, 2001). These transnational practices contribute to the sharing of information and the creation of innovative ways of putting knowledge into circulation and making it available locally. These technologies have also allowed highly skilled migrants and their diasporas to participate more intensely in transnational scientific and academic spaces, and to influence their country of origin from a distance. In terms of the knowledge and skills deployed far from the countries of origin, their transnational practices are partially placed at the service of their home countries and they also send social remittances (Levitt, 1999; Levitt et Lamba-Nieves, 2011). This has resulted in a new current of research based on theoretical and empirical studies that examine the contextual and personal dynamics influencing the level and type of diaspora engagement (Barré et al., 2003; Tejada, 2012; Nowicka et Serbedzija, 2016), whilst offering an alternative to the physical return of the migrants. This provides opportunities for the countries of origin, which benefit from the networking of migrants and new ways of circulating knowledge, skills and other resources that the migrants contribute to.

The diasporas themselves have also evolved. The challenge now is to understand the changes associated with the digital resources of these migrants. This means practicing mobility and cooperating from a distance or returning to the country of origin, but it also means using the digital information and footprint that these migrants produce and leave behind. This involves looking at how these technologies can be used to track the circulation and relations of the highly skilled migrants and analysing the engagement of the scientific diasporas that they form. Studying these dynamics with the help of tools and digital data should reveal the paths, collaborations and productions of researchers and students in the knowledge economy, particularly those from the global South (this general category includes emerging countries, developing countries and those in transition).

# POSSIBLE THEMATIC AREAS

Papers should discuss the practical implications and impacts of the migration of highly skilled persons and the diasporas that they form in relation to the use of digital technologies and data. Articles should also look at how the use of these data and technologies can help to shed light on the phenomenon under study. Contributions should focus on one of the following areas:

- The mobility and migration of highly skilled individuals in the digital era, paying special attention to their paths, conditions and professional mobility experiences in the host countries and their output in terms of knowledge:
  - o What are the processes that shape the international mobility of highly skilled individuals, and how do digital technologies influence this mobility, migration and scientific transnationalism? How do they influence personal relationships, especially two-way and professional relations that contribute to this mobility?
  - O How do these technologies intervene in the dynamics and difficulties that migrants experience when trying to engage in the host countries, where the market is often saturated, and where some scientific and technical migrants end up occupying positions that are below their skills level? How do they mobilise within the engagement dynamics at the heart of scientific diasporas and cooperate with the countries of origin?
- The dynamics of diasporas, their activities and how they mobilise digital technologies: emergence, development and transformation:
  - What are the transformations faced by scientific diasporas? How do they differ from other transnational scientific communities? How do the digital resources of migrants and diasporas contribute to their development? How do we define and classify these diasporas, their transformations and their paths, as well as their transnational practices for knowledge circulation vis-à-vis the country of origin, and their integration into the structures of the countries of origin and those of destination?
- The use of digital technologies in the study of these dynamics:
  - How can digital tools and footprints shed light on migratory dynamics, the work of diasporas and their transformation? How can the social sciences use these tools to study the phenomena that are of interest to them (for example, methodologies designed for data mining and deep learning that integrate different descriptors) and

- revisit paths and diasporas? What are the steps that need to be taken to make it possible to interpret these new tools?
- O How can we define and operationalise the concept of transnational scientific path in order to choose and/or design tools and methods that allow us to study the phenomenon? What factors and processes should they consider (particularly the family and institutional situations of the countries of origin and the host countries)? How can we make sure that the use of digital technology does not result in the creation of a science of victors (those who make their data public, mainly because of their integration in the academic world)? How can we include "undocumented" highly qualified individuals or persons who might not have finished their studies, their spouses and partners, and qualified individuals who barely leave a footprint at all because they are not pursuing an academic career? What are the implications of all this for the study of mobilities and scientific diasporas?
- O How can digital tools and data contribute to the study of the dynamics of scientific diasporas and what they are producing, and how can they help to circulate knowledge, skills and innovations? How can these tools be used to take the policies, institutions and practices of the origin and destination countries into account?

These questions will be appraised from the perspective of the point where several disciplinary fields of the human and social sciences and information sciences and technologies converge. Contributions should propose detailed case studies that document the phenomena being studied, while contributing to their conceptualisation and fostering the design of methods and tools, and taking advantage of digital footprints to study these questions.

# PUBLISHING PROCESS

Ideally, articles should not exceed 45,000 characters. They may be submitted in the language of the author and they will be assessed on this basis (in this case, authors will be asked to provide an extended 2-page abstract in French).

The articles should set out the problem, the type of approach, the methodology and empirical materials used. Authors are asked to refer to the <u>instructions</u> concerning the anonymity of manuscripts, text presentation and bibliographical references, and they should use the stylesheet provided on the instructions page. Articles should be submitted online via the <u>platform</u> of the *Revue d'Anthropologie des Connaissances* **by January 2018**.

Articles will be assessed by independent external evaluators who will help the *Revue* and the guest editors to reach their decisions. Following this assessment and review, the final version of accepted articles should be submitted **in French by June 2018** (for publication in September 2018).

#### **Guest editors:**

Gabriela Tejada, Cooperation and Development Center, Ecole Polytechnique Fédérale de Lausanne (EPFL), gabriela.tejada@epfl.ch

Daniel Gatica-Perez, IDIAP EPFL, gatica@idiap.ch

Dominique Vinck, STSLab, University of Lausanne, Dominique.Vinck@unil.ch

# REFERENCES

Barré R., Hernandez V., Meyer J.B., Vinck D. (2003). *Diasporas scientifiques. Comment les pays en développement peuvent-ils tirer parti de leurs chercheurs et de leurs ingénieurs expatriés?*, Paris, IRD. Foray, Dominique (2004) *Economics of knowledge;* MIT Press; Cambridge.

Levitt, P. (1999) 'Social remittances: a local-level, migration-driven form of cultural diffusion' *International Migration Review*, 132(32), 26-49.

Levitt, P., Lamba-Nieves, D. (2011) 'Social remittances revisited', *Journal of Ethnic and Migration Studies*, 31(1), 1-22.

Meyer J.B., Charum, J. (1995). La fuite des cerveaux est-elle épuisée? Paradigme perdu et nouvelles perspectives, *Cahier des sciences humaines*, 31 (4), 1003-1017.

Meyer J.-B. (2001). Network Approach versus Brain Drain: Lessons from the Diaspora, *International Migration*, 39 (5), 91-110.

Tejada G. (2012). Mobility, knowledge and cooperation: Scientific diasporas as agents of development. In: *Migration and Development*, vol. 10, no. 18, pp. 59-92, 2012.

Vinck D. (2013). Formation des chercheurs et mobilité internationale: utilité pour le pays d'origine. In : Glassey O. Leresche J.P., Moeschler O. (éd.), *Penser la valeur d'usage des sciences*. Paris : Editions des Archives Contemporaines, pp. 77-91.