

Mapping the Return of Argentine Researchers

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Since 2003 the Argentine government runs the RAÍCES Programme (Network of Argentine Researchers and Scientists Abroad). This programme has been designed to mitigate the negative effects of the loss of skilled human resources. This study will address one of the main programme results of the RAÍCES Programme: the return of an important group of Argentine researchers who reinserted themselves into the main national agency dedicated to the promotion of scientific research in Argentina, that is, the National Council for Scientific and Technical Research (CONICET, for its Spanish acronym). We will attempt to draw a map of their repatriation, giving some insights into its structural dynamics and highlighting the characteristics of the returnees using a statistical approach. At the same time, we will link different variables in order to understand different itineraries of returnees in the Argentine university scientific field that help us explain this geography.

Introduction

IN ORDER TO STRENGTHEN Argentina's scientific and technological capabilities, in 2003 the Argentine government formally launched the Network of Argentine Researchers and Scientists Abroad (RAÍCES Programme). The creation of the Ministry of Science, Technology and Productive Innovation (MINCyT) in 2007 and enacting of Law 26421 on 22 October 2008 that declared RAÍCES a State policy helped consolidate the programme. Under the mandate of the MINCyT's National Directorate of International Relations, RAÍCES seeks to foster knowledge transfer and circulation or *to exploit qualified nationals living abroad [sic]*. To this end, it works on two fronts. On the one hand, it promotes the return of Argentine scientists and technologists working abroad home. On the other hand, it promotes and encourages the links between qualified Argentine expatriates living

Acknowledgements: The author acknowledges the reading and comments of Fernanda Beigel and statistical assistance of Andrea Blazsek.

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Science, Technology & Society 20:3 (2015): 435–449

SAGE Publications Los Angeles/London/New Delhi/Singapore/Washington DC

DOI: 10.1177/0971721815597165

outside the country and their colleagues working in the country's premier science, technology and higher educational institutions¹ (Spivak L'Hoste & Hubert, 2014).

This report will explore and analyse the impact of RAÍCES on the return migration of Argentine researchers who joined the main national science agency dedicated to the promotion of scientific research in Argentina—the National Council for Scientific and Technical Research. This report will attempt to draw a map of their repatriation, giving some insights into its structural dynamics and highlighting the characteristics of the returnees using a statistical approach. At the same time, effort will be made to link different variables in order to understand different itineraries of returnees in the Argentine university scientific field that help us explain this geography.

Before analysing the Argentine government's policy on human resources and return migration, a synoptic view of Argentina's scientific system, its universities and their development is presented in the next section.

Argentina's Scientific System

As noted by Fernanda Beigel, Argentina's scientific system may be viewed as a largely state-controlled and directed system. It can be, however, seen as a dynamic, professionalised and heterogeneous system. The national administration, with its public funding, encompasses and promotes a high share of all undertakings associated with science and technology (over 70 per cent), with a small share under the purview of private universities and companies, as opposed to what is typically the case in other Latin American countries (Beigel, 2015).

In Argentina there are 53 national universities (NUs) and seven state-managed university institutes across the country. Out of 53 NUs, as many as 18 are located in the Buenos Aires Province, in addition to Universidad de Buenos Aires (UBA) and a Universidad Tecnológica Nacional (UTN) site, both located in Buenos Aires City, the nation's capital. Adriana Chiroleu et al. (2012) point to three expansion pathways or milestones under the state-managed direction over the recent decades. The first one unfolded in the early 1970s to prevent student concentration in the country's largest urban hubs. The second wave, around the 1990s, was intended to lower the predominance of UBA. The third took place in this century's first decade, when 11 new public universities were created, 5 of them in the Greater Buenos Aires area (Chiroleu et al., 2012).

In the 1990s, as the second expansion thrust swept Argentina's university field, a number of changes were introduced in this sector marked by contradictory shifts with consequences that are still noticeable. Amidst the neoliberal policies pursued by the government at that time, university reforms drove a system update that included graduate programme expansion and broadened research efforts, among other things, while leaning towards 'assessment bureaucratization and greater system fragmentation' (Suasnábar, 2014, p. 32).

Argentina's university landscape is not completed without private institutions. There are 49 universities and 14 university institutes across the nation. The overall

list of universities also includes four province-managed universities, one foreign university (Universidad de Bologna) and one international university (FLACSO). As far as enrolment distribution is concerned, the latest statistical yearbook published by Argentina's University Policy Secretariat (UPS) for 2012 recorded that national public institutions hold the largest share of university students, with a total of 1.5 million students—that is 79 per cent of the overall enrolled population.

Over the past decade, Argentina's university budget and its scientific and technological research capabilities have grown impressively. The national government has increased public spending on higher education by 489 per cent during 2006–2012. In other words, in 2006, 0.61 per cent of the country's GDP went to NUs, while, by 2012, that percentage rose to 1 per cent (DNPeIU-SPU, 2012). The share of Argentina's GDP devoted to Research and Development (R&D) climbed from 0.37 per cent in 2004 to 0.58 per cent in 2012, with strong public sector engagement. As regards the type of scientific undertakings that received funding, 44 per cent of R&D spending goes to applied research, 34 per cent to basic research and 22 per cent to experimental development. Similarly, the overall headcount for Argentina's R&D efforts also reflects this expansion. In 2008, 79,391 people held a research position of some sort,² while, by 2012, this number had risen to 102,022 (National Ministry of Science and Technology, 2014).

A key feature that underpins the heterogeneous nature of Argentina's scientific system is the fact that research is primarily concentrated at the National Council for Scientific and Technical Research (CONICET), to the detriment of university research, despite institutional efforts to mitigate the division between both realms (Beigel, 2014). Fabiana Bekerman's study shows how, over the last military regime in Argentina (1976–1983), the country pursued a scientific policy intended to expand and deepen the gap between CONICET and NUs. This policy, which has proven somewhat resilient to recent change efforts, was successfully executed via two mechanisms: a transfer of financial resources to CONICET and the creation of research institutes outside universities (Bekerman, 2013).

Currently, in spite of efforts to strengthen the ties between research and university teaching, every institutional group reports to a different ministry. In 2007, Argentina's government created the Ministry of Science, Technology and Productive Innovation (MINCyT), encompassing all initiatives and projects designed to bolster the nation's scientific and technological capabilities. Both CONICET and the National Agency for Scientific and Technological Promotion (ANPCyT) fall under this Ministry's purview, while universities, both public and private, are governed and follow the guidelines given by the Argentina's Ministry of Education.

CONICET is Argentina's leading agency for scientific research in the country, and its role is carried out at its regional Scientific Technological Centers (CCTs) and institutes located in public universities. These CCTs have collaboration agreements with various universities and institutions such as the National Atomic Energy Commission (CNEA), among others. CONICET has experienced remarkable

expansion over the last fifteen years, both in terms of budget as well as human resources. In 2003, it housed 3,694 researchers and by early 2015, this number had risen to 8,508 indicating an increase in excess of 100 per cent. This growth does not only translate into a larger research staff but also into an increase in other areas, as CONICET's administrative personnel included 471 employees in 2003 as compared to today's headcount of 1,371.³ Concerning research scholarships, including doctoral and post-doctoral programmes, CONICET's broadening and expansion have also proven highly significant. Doctoral scholarships, including both three-year Type 1 and two-year Type 2 Scholarships, cover a total training period of five years. In 2003, 1,840 such scholarships were awarded, while, by 2014 this number had grown to 7,464. In turn, post-doctoral scholarships cover a two-year period, with 511 scholarships awarded in 2003 as compared to 2,043 in 2014. Consistently with the university landscape, CONICET researchers are largely concentrated (60 per cent of all researchers) in Buenos Aires City and the Greater Buenos Aires area. Researchers' geographic distribution data confirm the cross-regional imbalance in favour of Buenos Aires' metropolitan area (Beigel, 2015).

Background to Brain Return Programmes

Repatriation programmes stemmed from what was known as 'brain drain' during the early second half of the twentieth century. It is a complex phenomenon that has prompted extensive research in Latin America (Brandi, 2006; Didou & Gérard, 2009; Pellegrino, 2003; Pellegrino & Pizarro, 2001; Reza, 1972; Oteiza, 1969, 1970) and numerous political efforts to revert it. This phenomenon that emerged in developed countries also manifested itself in the developing world. In Latin America, the term *fuga de cerebros* was coined to refer to the emigration of academics and professionals from developing countries to developed countries. During the 1960s and 1970s, diverse political and academic scenarios triggered this mobility. Lack of postgraduate programmes, mainly in social science areas (Graciarena, 1974), economic factors, lack of infrastructure in S&T, interruption to independent scientific development (military coups) and policies to attract qualified knowledge workers implemented by major knowledge production centres in the world.

There is an ongoing debate at the theoretical level over the appropriateness of the term 'brain drain' (Gaillard & Gaillard, 1997). On the one hand, scholars uphold that in view of the free circulation of products, capital and work, migration of highly qualified academics should be defined as 'brain mobility'. In contrast to this vision, other scholars argue that this term validly expresses the negative consequences of this type of mobility on developing countries. In addition to disagreement over the term, Silvie Didou Aupetit, responsible for UNESCO's Observatory on Academic and Scientific Mobility (IESALC-UNESCO, for its Spanish acronym), pinpoints another obstacle to studying the real dimension of this phenomenon. That is the lack of qualitative studies regarding international student mobility, host countries and links that migrants maintain with their countries of origin (Didou, 2009).

Until the 1990s, governmental policies to fight brain drain usually involved designing repatriation programmes that, in actual practice, were unsuccessful. Conditions in developing countries were not favourable enough (in terms of salary, infrastructure to develop specific lines of research, etc.) to attract back expatriate scientists living in developed countries.

In South America, political factors must be added to economic, academic and infrastructure factors as determinants driving brain drain processes. In the second half of the twentieth century, several countries in the region underwent military coups and long-lasting military dictatorships that generated academic exile, among other serious consequences. In some cases, negative effects of brain drain were compensated by regional circulation of academics who settled down in other Latin American countries, reinforcing recipient academic fields and contributing to create and disseminate knowledge at the periphery. This was the case of Brazilian expatriates in Chile after the 1964 coup in Brazil, when ‘high intellectual and political profile sociologists and economists arrived, such as Celso Furtado, Fernando Henrique Cardoso, Theothonio Dos Santos, Vania Bambirra, Ruy Mauro Marini, Maria Da Conceicao Tavares, Francisco Weffort, Vilma Faria, Ayrton Fausto, Emir Sader, among others’ (Beigel, 2010a, p. 77). The arrival of this group of intellectuals in Chile combined with local elements in academic institutions and universities in political, economic and international fields to enable Chile to consolidate itself as a *peripheral centre* of social knowledge creation until 1973, when the military coup shook the nation (Beigel, 2010b). From then on, the bulk of South American exiled intellectuals would seek refuge in Mexico.

In addition to the coup in Chile, there was Banzer’s military dictatorship in Bolivia (1971–1978), coups in Uruguay (1973) and Argentina (1976), civil wars in El Salvador (1980) and periods of institutional instability in Paraguay and Guatemala (Ansadi & Giordano, 2012). In most countries in the region, political violence was exerted both by the military and civil society under the auspices of the United States, on its crusade to retain its hegemony. In this context, serious damage was done to autonomous development of universities and research centres, many of which were in the process of institutionalisation and a large number of political activist academics were persecuted, put in jail, forced into exile and/or they disappeared.

In light of this situation, several initiatives were implemented in the region with a view to avoiding a massive brain drain, to achieve reinsertion or attraction of knowledge workers into other Latin American countries faced with inevitable exile. These efforts were supported by several governments and foundations in Central American countries and some local sources. In this regard, the Latin American Council of Social Sciences (CLACSO) launched its Social Scientists Relocation Programme (PRCS) that aided over 1,000 social scientists, mainly Chileans affected by the military coup in their home country (Bayle, 2008, 2010a). This programme executed several relocation strategies in several countries that included job placement services or scholarships for further studies. Although the Council initially sought to prevent social scientists from abandoning Latin America, many actually

left their home countries with the help of the relocation programme. Funding sources⁴ and the political situation in other countries in the region drove a large number of South American academia to leave the region, several of them going to Europe or the United States.

Closely linked to CLASCO programme, the Scholarship Programme for Chilean Refugees managed by the international ONG World University Service and funded by the British government (WUS UK), supported 900 exiled Chileans between 1974 and 1986 to pursue undergraduate and postgraduate studies and further education in several institutions in the UK (Bayle, 2010b, 2010c). Moreover, WUS UK executed a return programme to Chile⁵ and other Latin American countries based on the principle of development assistance (Bayle, 2013). In the 1970s, WUS expanded its actions to Latin America and rolled out several assistance, human rights and educational programmes, among others. It implemented return programmes to the region for Latin American exiles, combining academic, political and humanitarian criteria for beneficiary selection (Bayle & Navarro, 2014). In Argentina, WUS, known for its acronym in Spanish SUM, also funded a small-scale academia repatriation programme after the reinstallation of democracy in 1983.

Towards the end of the 1990s and at the beginning of the twenty-first century, Argentina underwent a deep economic crisis as a result of the implementation of neoliberal policies that led to unemployment, a sharp decline in GNP, regressive income redistribution and other serious effects. In this context, governmental support for national scientific and technological development was quite marginal or persisted at a very low level of support.

Into the twenty-first century, the Argentine government addressed the issue of the loss of its qualified human resources in a different political scenario, both at the national and international levels. This meant increasing internationalisation process of scientific research and higher education (Luchilo, 2011). This initiative was directed to academic researchers living abroad who emigrated not for reasons associated with political repression in its home country. Rather, it largely included internationally mobile academics graduated from publicly funded Argentine universities. As we will see later these professionals also included who after a postdoctoral or doctoral stay, were willing to reinsert themselves into the Argentine scientific university system. In the last decade the country has significantly expanded its research capacities, thus becoming an attraction pole for scientists and technologists. Having briefly explored the background, let us now explore the main programme concerned with brain drain.

RAÍCES Programme (Network of Argentine Researchers and Scientists Abroad)

Since the return of democracy in 1983 some actions were taken to strengthen links with Argentine researchers abroad and facilitate their return. However, after a time lapse, it was only in 2003 that the Argentine government adopted a systematic approach to this policy, providing financial resources. According to data supplied by MINCyT, at the beginning of the twenty-first century, there

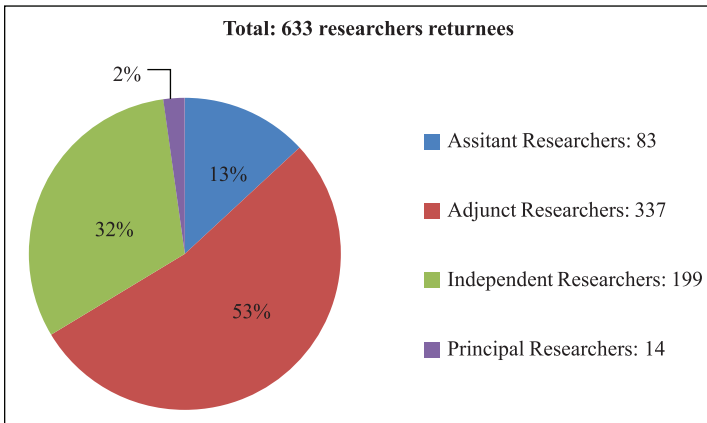
were approximately 6,000 Argentine scientists and technologists living abroad. Among the countries receiving highly qualified Argentine migrants, as revealed by statistics, the United States still ranks first with 30 per cent, followed by Brazil with 21 per cent (MINCyT, 2011).

This programme operates on several fronts and with various funding sources to promote repatriation: (a) ANPCyT's Research and Development Projects for the Relocation of Researchers (PIDRI); (b) special call to apply to the Scientific Research career at CONICET for Argentine researchers abroad; (c) CONICET's postdoctoral insertion scholarships; and (d) RAÍCES' return subsidy for those who do not benefit from the previous options. As a result of these initiatives and according to official records, between 2003 and early 2015, some 1,100 scientists and technologists have returned to Argentina. CONICET plays a crucial role in this phenomenon, since over 75 per cent of returnees up to 2011 have joined this institution and presently carry scientific activities at its units across the country and also in some universities. Therefore, we have focused on a group of returnees who hold research positions at CONICET. We have worked with information provided by the RAÍCES Programme, cross-checking with other sources. Repatriated researchers' curriculum vitae and systematised data in CONICET's Integral System for Management and Evaluation (SIGEVA)⁶ updated for 2015 we taken into account our study.

CONICET and the Return of Argentine Researchers

CONICET has a permanent call for application for the Scientific and Technological Researcher career for candidates abroad (CIC EXT) and its first requirement is to prove having performed research work abroad for a period of more than two years. Internal postdoctoral scholarships for reinsertion of researchers are closely linked to application to the researcher career, since researchers will only have access to this kind of scholarship if they submit an application for admission to CIC as an abroad candidate (CIC EXT). Thus, a large number of applicants who have joined CIC have held a postdoctoral scholarship pending determination of their application to the researcher position. According to official records as noted earlier 1100 scientists have returned to the country. However, listings available at MINCyT only include data of the 821 returnees up to the year 2011. Of these 821 scientists and technologists, 633 are currently members of the Scientific and Technological Researcher career, holding different academic ranks, and 3 are members of the Professional and Technician in Support of Research career scheme. These 633 researchers make up the population analysed in this study, including 260 women and 373 men, thus featuring a 60 per cent male predominance. This percentage is not consistent with the overall male to female ratio at CONICET, given that, since 2007, there has been a significant increase in female population surpassing males. At present women represent 52 per cent of the total number of researchers at the organisation. The researcher career at CONICET is hierarchically organised into five positions: assistant, adjunct, independent, principal and

FIGURE 1
 Researcher's Distribution across Categories of CONICET



Source: Figure by author from SIGEVA's database.

superior researchers. Out of the 633 returnees that are CONICET researchers, 83 of them are assistant researchers (13 per cent), 337 are adjunct researchers (53 per cent), 199 are independent researchers (32 per cent) and 14 are principal researchers (2 per cent) (Figure 1).

Of the 633 researchers, 32 had previously received a subsidy for Research and Development Projects for the Relocation of Researchers (PIDRI) and then joined CICyT. Whereas 31 researchers returned to the country with a return subsidy awarded by the RAÍCES Programme and then joined CICyT. This data illustrates how all programme initiatives contribute to an overall policy that fosters return from abroad. Thus, researchers willing to return use programme strategies to achieve effective reinsertion.

As regards disciplines into which returnees incorporated themselves, we took into account the broad knowledge areas established by CONICET and we arrived at the following results. 38 per cent of researchers (239) entered into Biological and Health Sciences; 27.5 per cent (174) took up posts in Exact and Natural Sciences; 21.5 per cent (136) of returnees went into the broad area of Agricultural Sciences, Engineering and Materials Sciences; and 13 per cent (84) joined Social Sciences and Humanities. Although the RAÍCES Programme does not collect data on distribution across disciplines, there is a remarkable difference to the detriment of Social Sciences. This is possibly in keeping with emigrant researchers' disciplinary profiles rather than programme characteristics or reinsertion area. However, predominance of Biological and Health Sciences, as well as Exact and Natural Sciences, is consistent with their larger presence in CONICET's general structure (Table 1).

As regards institutional spaces where returned migrants are currently conducting research, the highest percentage of returnees (approximately 61 per cent)

TABLE 1
Distribution of Repatriated Researchers across Broad Knowledge Areas
and Sub-areas at CONICET

<i>Repatriated Researchers across Broad Knowledge Areas at CONICET</i>	<i>Distribution across Knowledge Sub-areas</i>
Biological and Health Sciences 38% 239 researchers	Medical Sciences: 89 Biology: 66 Biochemistry and Molecular biology: 76 Veterinary: 8.
Exact and Natural Sciences 27.5% 174 researchers	Earth, Water and Atmospheric Sciences: 15 Mathematics: 19 Physics: 87 Astronomy: 11 Chemistry: 42
Agricultural Sciences, Engineering and Materials Sciences 21.5% 136 researchers	Agricultural Sciences, Civil, Mechanical, Electrical and related Engineering: 59 Habitat, Environmental and Sustainability Sciences: 5 Informatics and Communications: 20 Industrial Process Engineering and Biotechnology: 33 Social and Technological Development of Complex Projects: 19
Social Sciences and Humanities 13% 84 researchers	Law, Political Sciences and International Relations: 5 Archaeology and Biological Anthropology: 4 Psychology and Educational Sciences: 3 Economics, Management and Public Administration Sciences: 6 Sociology, Social Communication and Demographics: 23 History, Geography, Social and Cultural Anthropology: 21 Literature, Linguistics and Semiotics: 10 Philosophy: 12
Total repatriated researchers relocated at CONICET: 633	

Source: Table by author from SIGEVA's database.

holding positions at CONICET are working in its Scientific and Technological Centers (CCT) across the country or its Administrative Coordinating Offices⁷ (OCA) located in the autonomous city of Buenos Aires. These institutions bear no direct link with national universities and they are research-only organisations not dedicated to teaching. The remaining returnees are mainly distributed in public universities (UUNN), accounting for 26 per cent of cases, as compared with a low presence in private universities (3.5 per cent). Finally, 6 per cent of returned researchers have joined the National Atomic Energy Commission (CNEA) and 3.5 per cent are currently conducting research in other institutional spaces. In geographical terms, there is some concentration of returned researchers in the capital

TABLE 2
Cities Concentrating the Largest Number or Repatriated Researchers at CONICET

<i>Cities with Highest Relocation Rate</i>	<i>Relocation Institution</i>
Autonomous city of Buenos Aires CABA: 176 researchers	University of Buenos Aires: 48 researchers (8%) Administrative Coordinating Office: 111 researchers (17%) Private universities, hospitals and other institutions in CABA: 17 cases (2.5%)
La Plata city: 73 researchers	National University of La Plata: 17 researchers (3%) CCT La Plata: 56 researchers (9%)
Córdoba city: 62 researchers	National University of Córdoba: 12 researchers (2%) CCT Córdoba: 50 researchers (8%)
Rosario city: 38 researchers	National University of Rosario: 13 researchers (2%) CCT Rosario: 25 researchers (4%)

Source: Table by author from SIGEVA's database.

city or in other important cities relative to population and university licenses. The city of Buenos Aires concentrates a significant number of repatriates, followed by La Plata, Córdoba and Rosario, as we can see in the Table 2. Although repatriated researchers have settled in almost all Argentine provinces, the observed distribution confirms the structural heterogeneity of Argentina's scientific field since these human resources largely concentrate in major cities (Beigel, 2015).

The table shows the four cities with concentration of the largest number or repatriated researchers. The rest is distributed among some 40 national universities and CCTs Bahía Blanca, Mar del Plata, Mendoza, Northeastern, Patagonia, Southern Patagonia, Río Cuarto, Salta, San Juan, San Luis, Santa Fe, Tandil, Tucumán and other research institutions belonging to CONICET. Researchers at the National Atomic Energy Commission have not been included, nor have researchers working at the National Institute for Agricultural Technology (INTA), representing 6 per cent and 2 per cent respectively, because there is no data on their geographic distribution.

With respect to chosen destination countries, it can be concluded that the largest percentage (38.8 per cent) of researchers had settled in the United States (USA); followed by Spain (13 per cent), France (9.5 per cent), Germany (7 per cent), the United Kingdom (5.6 per cent) and Brazil (5 per cent). The rest is distributed among 20 other countries. Thus, we can affirm that the United States is one of the main attraction poles for highly qualified migrants coming both from developing countries and from developed countries (Luchilo, 2011). Now, by cross-checking data from the sources already mentioned, we can proceed to obtain yet further insights into this phenomenon. Taking into consideration that we are dealing with a group with high academic qualifications, we will determine whether this group pursued its postgraduate studies in Argentina or at a foreign university. In the latter case, we will identify country of study and scientific discipline.

Of the 633 researchers that make up the study population, 96 per cent pursued an undergraduate career in a publicly funded Argentine university. Foreign universities have a minor presence in this variable, appearing in very few cases of

researchers with dual nationality. The proportion becomes greater when it comes to postgraduate studies, although Argentine public universities still predominate in this variable. Currently, 38.5 per cent of repatriated researchers at CONICET (238) earned a postgraduate degree from a foreign university, as compared to 61.5 per cent who studied for a postgraduate qualification in Argentina. Hence, it can be concluded that the latter group left the country with a postdoctoral destination. As regards the countries awarding postgraduate qualifications, in the case of migrants who had undertaken postgraduate studies abroad (238), 63 researchers obtained their postgraduate degree in the United States, accounting for 26 per cent of researchers who graduated from foreign universities, followed by 45 researchers in Spain, 26 in France, 21 in Brazil and 20 in Germany.

This analysis becomes better if we add the variable associated to researchers' specialisation areas. This cross-checking enables us to link structural elements of the Argentine university system with individual decisions of internationally mobile students and the development of certain disciplinary traditions in recipient countries and their retention policies towards foreign graduates. At this point, we will focus on several 'paradigmatic' cases. One of them involves returned researchers in the Informatics and Communications sub-area, belonging to the broad area of Agricultural Sciences, Engineering and Materials Sciences. Only 10 per cent of researchers in this group obtained a postgraduate degree in Argentina, as compared to 48 per cent in the United States (16 per cent), France (16 per cent) and Italy (16 per cent) and other European countries. Although small relative to the overall returnee population, this group's high rate of postgraduate study abroad can be preliminary explained by the technological and knowledge advances in the field in the United States and other Organization for Economic Cooperation and Development (OECD) member countries. These countries usually attract postgraduate students, while they implement an active retention policy of qualified students for their research and/or companies. In this respect, Lucas Luchilo notes that 'the dizzying expansion of the information technology and communication sectors in the 1990s was accompanied by systematic policies implemented by American companies and the American government targeted at facilitating access to specialists in the field from all over the world' (Luchilo, 2011, p. 26).

Another case diametrically opposed to the preceding one involves researchers in the broad area of Biological and Health Sciences. Most returnees in this group had obtained their postgraduate degree in UUNN, thus their experience abroad was associated to the postdoctoral phase. If we limit our exploration to biochemistry and molecular biology researchers with a postgraduate degree from an Argentine university, we come up with a 94 per cent rate. The development of these disciplines, their established tradition and even their reputation in the Argentine university system may very possibly account for this high rate. Moreover, disciplines linked to this area have a strong presence in CONICET's structure. In fact, they boast the highest percentage of members (35 per cent of total researchers), a figure that reveals its strong institutionalisation in the national academic field.

As for researchers having pursued postgraduate studies abroad, we would like to focus on a last example that comprises researchers with a postgraduate degree

in Sociology from Brazilian universities. Out of the total Argentine repatriated researchers in this field through the RAÍCES Programme who have joined CICyT, 31 per cent had earned their postgraduate degree from a Brazilian university, as compared to 13 per cent from a publicly funded national university. This can be explained by the earlier development of Social Sciences postgraduate programmes in Brazil as compared with Argentina and for the extensive range of postgraduate programmes in the field offered in Brazil, thus triggering intra-regional competition with its neighbouring country. In this regard, as pointed out by Gabriela Sala (2011, p. 208),

Brazil has historically offered compensation and professional incentives for highly qualified migrants in the region. Since the 1970s, the expansion of the economy and of higher education institutions encouraged the incorporation of high qualified resources trained in other countries, within a regional context that presented increasing hurdles to their incorporation.

Lastly, we will examine the relationship between teaching and research. Analysis of the different sources reveals that 70 per cent of returned researchers who are CICyT members at CONICET are also faculty members at the undergraduate level (439), mainly at UUNN. The University of Buenos Aires (UBA) features the highest percentage of teaching researchers, 20 per cent, accounting for 90 faculty members; followed by the National University of Córdoba with 12 per cent and 53 faculty members, and the University of La Plata, with 11.6 per cent and 51 faculty members, in yet another demonstration of resource concentration. Once again, the presence of private universities in this variable is almost minimal. It should be noted that the number of repatriated researchers teaching at Argentine universities is surely larger than suggested, since we are only considering the group of repatriates that relocated at CONICET, that is, 633 researchers. Out of the total 439 teaching researchers, 47 are full professors, 220 are assistant professors, 24 are associate professors, 36 are teaching assistants and 112 are heads of Practical Assignments mainly at Argentine universities, as aforementioned. An interesting data on reinsertion that emerged as a result of the crossing of variables is that 70 per cent of repatriated researchers who are university faculty members are teaching at the same academic institution from which they earned their graduate and/or postgraduate degree. This data reveals the reduced intra-university mobility of this group, despite being agents with high levels of international mobility. Future research may unveil whether this is a characteristic of returnees or if it can be extrapolated to the national university community.

Concluding Remarks

This report has sought to draw a map of the reinsertion of Argentine researchers who, through the RAÍCES Programme, are currently conducting research at CONICET. We have identified their areas of research, the institutes or centres in CONICET's institutional network where they are undertaking their research

and their category. Furthermore, we have explored the link between teaching and research noting that most researchers have joined CONICET's institutes, but that 70 per cent of them also hold faculty positions, mainly at national universities.

Analysis of curriculum vitae of repatriated researchers has disclosed that Argentine public universities played a predominant role in researchers' postgraduate training. In spite of the increasing internationalisation of higher education and academic research, UUNNs were key at the postgraduate stage to the group of researchers analysed in this study. This leads us to conclude that international academic mobility is largely experienced at the postdoctoral stage rather than at the doctoral phase. Still, the distinctive features of this mobility still need to be addressed, for example, the number of years that these researchers lived abroad. Although this information is not provided in detail in most bio data sheets, it may be inferred from the end date of postgraduate studies and the date of entry into CONICET's CICYT that approximately 70 per cent of researchers that pursued their postgraduate studies in Argentina lived less than six years abroad before their repatriation. This information is uncertain but it can spark new questions about the profiles of these postdoctoral scholars, the existing pressure on scientific disciplines around internationalisation and the need for postdoctoral scholarships that foster short stays in different countries, among others.

Finally, we believe that CONICET provides this group of mobile researchers with multiple linguistic capabilities and prior experiences abroad with favourable conditions to carry out their academic careers without affecting their willingness towards internationalisation. Over the last decade, CONICET underwent an unprecedented growth in terms of financial resources and creation of new jobs. While in 2003 the number of researchers at CONICET totalled 3,694, by early 2015 it increased to 8,508. This means that CICYT experienced an increase of over 100 per cent. Future research based on ethnographic approaches may shed light on these aspects that reveal the complexity of the phenomenon of qualified international mobility.

NOTES

1. The programme uses three main instruments to pursue this last objective: (a) the César Milstein sub-programme that funds short stays in the country for Argentine scientists and technologists working abroad; (b) REDES' calls for the creation of networks, that encourage the formation of research groups of Argentine expatriate and local talent in priority knowledge areas (Exact and Natural Sciences, Social Sciences, Biological and Health Sciences and different types of Engineering) in an effort to 'relink the diaspora' (Meyer, 2011); and (c) Scientific and Technological Research Projects (PICT, for its Spanish acronym) funded through the National Agency for the Promotion of Science and Technology (ANPCyT, for its Spanish acronym) that supports research teams that include an Argentine scientist working abroad.
2. This number includes full- and part-time researchers, full- and part-time interns, R&D technical personnel and R&D support staff.
3. As regards CONICET's human resources, the only area showing no increase has been the research support personnel, which has remained with a headcount of around 2,400 employees throughout the 2003–2014 period.
4. CLASCO's PRCS received funds and support from Latin American governments, including Mexico and Venezuela, as well as from Human Rights advocacy institutions, academic institutions, private

- foundations such as the Ford Foundation, and financial governmental support from Canada, Sweden and the United Kingdom through their respective development agencies or ministries, among others.
5. This programme relocated 253 former WUS UK award holders. Most of them wanted to return to Chile, and 198 managed to do so, while 44 moved to other Latin American countries and 11 settled in other countries outside Latin America (WUS UK, 1986).
 6. The research team under Dr Fernanda Beigel, head of the Research Program on Academic Dependence in Latin America (PIDAAL, for its Spanish acronym), within which this paper is framed, obtained official authorisation from CONICET to access CVs in SIGEVA's database. This base, that contains key information on all CONICET researchers, enabled us to analyse different variables. Moreover, this research received support from the Scientific and Technological Research Project, PICT 2013–1442, financed by the Scientific and Technological Research Fund (FONCyT, for its Spanish acronym) and from project 06/f327 of the Secretariat of Science, Technology and Postgraduate studies of the National University of Cuyo (SECTyP-UNCuyo, for its Spanish acronym).
 7. Administrative Coordinating Offices were created to prevent resource overlapping in the metropolitan area.

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