



# Open Research Online

---

The Open University's repository of research publications and other research outputs

## Academic "Centres", Epistemic Differences and Brain Circulation

### Journal Item

How to cite:

Ortiga, Yasmin Y.; Chou, Meng-Hsuan; Sondhi, Gunjan and Wang, Jue (2018). Academic "Centres", Epistemic Differences and Brain Circulation. *International Migration*, 56(5) pp. 90–105.

For guidance on citations see [FAQs](#).

© 2017 Yasmin Y. Ortiga; 2017 Meng-Hsuan Chou; 2017 Gunjan Sondhi; 2017 Jue Wang; 2017 International Migration; 2017 IOM

Version: Accepted Manuscript

Link(s) to article on publisher's website:  
<http://dx.doi.org/doi:10.1111/imig.12354>

---

Copyright and Moral Rights for the articles on this site are retained by the individual authors and/or other copyright owners. For more information on Open Research Online's data [policy](#) on reuse of materials please consult the policies page.

---

[oro.open.ac.uk](http://oro.open.ac.uk)



## Academic “Centres,” Epistemic Differences and Brain Circulation

|                  |   |
|------------------|---|
| Journal:         | <i>International Migration</i>  |
| Manuscript ID    | Draft   |
| Manuscript Type: | Original Article  |
| Keywords:        | brain circulation, academic mobility, development, diaspora, epistemic culture  |
| Abstract:        | <p>This paper investigates the incentives and challenges that shape how migrant academics engage with universities and local counterparts within their countries of origin. We focus specifically on the mobility of Asian-born faculty between Singapore, a fast-developing education hub in Southeast Asia, and their “home” countries within the region. Based on qualitative interviews with 45 migrant academics, this paper argues that while education hubs like Singapore increase the possibility of brain circulation within Asia, epistemic differences between migrant academics and home country counterparts make it difficult to establish long-term collaboration for research. Singapore institutions also look towards the West in determining how research work is assessed for tenure and promotion, encouraging Singapore-based academics to focus on networking with colleagues and peers based in the US and Europe rather than those based in origin countries. Such conditions undermine the positive impact of academic mobility between Singapore and surrounding countries within the region.</p> |

1  
2  
3 Amidst increasing cross-border movement among highly skilled professionals, researchers  
4  
5 and policymakers have raised the question of how migrant academics can contribute to their  
6  
7 countries of origin when return is not a viable or immediate option. Moving away from the  
8  
9 brain drain debates of the 1970s, recent studies have argued that overseas scholars can still  
10  
11 contribute to their home communities through diaspora networks, sharing knowledge and  
12  
13 resources through international collaboration, short visits, and internet communication  
14  
15 (Meyer, 2001; Meyer and Wattiau, 2006; Davenport, 2004; Laudel, 2005). Such phenomenon  
16  
17 is often encapsulated in the term, *brain circulation*, where studies cite the breaking down of  
18  
19 boundaries among nations and the potential benefits brought by the short-term mobility of  
20  
21 highly educated workers to and from their countries of origin (Singh and Krishna, 2015:  
22  
23 302).

24  
25  
26  
27 Yet, scholars have also cautioned against depicting the mobility of highly skilled  
28  
29 workers as continuously fluid, free of structural barriers that impede people's movement  
30  
31 (Chou 2014; Cohen, Duberley and Ravishankar 2015; Mosneaga and Winther 2013; Yeoh  
32  
33 and Huang 2011). In addition to policy and administrative barrier (Chou 2014), they argue  
34  
35 that highly skilled mobility, such as brain circulation, can also be "temporally and spatially  
36  
37 stickier" as migrants can become "locked into" particular places or develop attachments  
38  
39 which restrain movement (Williams, Balaz and Wallace 2004: 42). Existing studies have also  
40  
41 largely focused on the circulation of highly skilled professionals such as scientists, engineers,  
42  
43 and IT workers. Fewer have looked specifically at migrant academics and the role that higher  
44  
45 education institutions play in their engagement and disengagement with counterparts within  
46  
47 their countries of origin. While a number of studies have investigated the role of universities  
48  
49 in promoting *return* migration among overseas scholars (see Lee and Kim 2010; Wang, Li  
50  
51 and Li 2015), we know little about how academic environments, institutional cultures, and  
52  
53  
54  
55  
56  
57  
58  
59  
60

1  
2  
3 practices of knowledge production shape the temporary circulation of overseas academics  
4  
5 within their home countries and their subsequent impact on local knowledge production.  
6

7         This paper seeks to contribute to the extant literature on brain circulation in two ways.  
8  
9         First, we respond to Ackers' (2005) call for a more nuanced understanding of the "stickiness"  
10 or "frictions" that impact how members of an academic diaspora choose to interact with  
11 counterparts within their countries of origin. While we acknowledge that there are many  
12 ways migrant academics can engage with home country institutions, we focus specifically on  
13 brain circulation in the form of academic research collaboration. In particular, this paper  
14 investigates how such engagements are shaped by epistemic cultures or the norms, structures,  
15 and values that define how knowledge is created and, more importantly, recognized within  
16 migrant academics' home and host country institutions (Knorr Cetina 1999). We also analyze  
17 the institutional policies that shape such epistemic cultures, emphasizing how opportunities  
18 for collaboration are affected by the specific standards that drive research expectations, the  
19 manner by which institutions assess academic work, and the politics of tenure and promotion.  
20 We argue that such factors are important aspects of academic work across all fields, yet  
21 remain an understudied aspect of how we understand brain circulation today.  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37

38         Second, we focus on the mobility of migrant faculty between Singapore, a rapidly  
39 developing education hub, and their "home" countries in the surrounding Asian region.  
40 Empirical research on brain circulation has tended to focus on academics' movement  
41 between developing nations and traditional "centers" of knowledge production in the West.  
42 Yet, the last few decades has seen the rapid development of Asian universities, where  
43 governments have invested heavily in higher education. Singapore universities, in particular,  
44 have emerged as major players within international knowledge networks, cementing the  
45 country's status as an emerging education hub. This paper investigates whether countries like  
46 Singapore raise the possibility of establishing new centres of knowledge production away  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

1  
2  
3 from the West, thereby encouraging the productive circulation of migrant academics within  
4  
5 Asia. This paper looks specifically at the opportunities and challenges for academic  
6  
7 collaboration between Singapore-based academics and counterparts within their home  
8  
9 countries, and how Singapore universities shape brain circulation between Singapore and  
10  
11 surrounding countries within the region.  
12

### 13 14 15 BRAIN CIRCULATION AND DEVELOPMENT 16

17  
18 Early definitions of brain circulation refuted the notion that highly skilled workers would  
19  
20 remain overseas permanently, arguing that such migrants would eventually circulate back to  
21  
22 their home communities (Gaillard and Gaillard, 1997). Yet, recent studies have shown that in  
23  
24 reality, most highly educated professionals never return “home,” choosing instead to settle  
25  
26 outside their countries of origin (Blachford and Zhang, 2014). As a result, researchers have  
27  
28 sought to understand whether highly skilled migrants can contribute to their home  
29  
30 communities from a distance, moving beyond the assumption that such “brains” are lost  
31  
32 when they leave national territories (Fahey and Kenway, 2010; Mahroum, Eldridge, and  
33  
34 Daar, 2006; Meyer, 2001; Saxenian, 2005). Such discourse has also permeated policy  
35  
36 discussions, not only among developing countries but wealthy nations competing in a so-  
37  
38 called knowledge-based economy (Cerna, 2016; Robertson, 2006). In particular,  
39  
40 policymakers emphasize the need for international collaboration between migrants and their  
41  
42 local counterparts, whether it be in the form of academic research, business ventures, or the  
43  
44 commercial development of innovative products (Edler, Fier and Grimpe, 2011; Xiang,  
45  
46 2011). Scholars have argued that successful brain circulation benefits migrants’ host and  
47  
48 origin countries, promoting investment in local businesses and possibly providing  
49  
50 employment to local communities in both locations (Harvey 2008; Saxenian 2005).  
51  
52  
53  
54

55  
56 In the case of migrant academics, governments have launched a wide range of  
57  
58 programs, providing research funding, institutional support, and opportunities for short-term  
59  
60

1  
2  
3 visits (Blachford and Zhang, 2014; Xiang, 2011). Researchers argue that migrant academics  
4  
5 often express a desire to help improve teaching and research in universities within their home  
6  
7 countries, and suggested that well-planned programs should provide them with the  
8  
9 opportunity to do so effectively (Cohen, Duberley and Ravishankar, 2015). For example,  
10  
11 Blachford and Zhang's (2014) research shows how Chinese Canadian academics work to  
12  
13 support knowledge production within China by doing research related to Chinese issues,  
14  
15 instituting joint research projects between Canadian universities and counterparts in China,  
16  
17 and recruiting Chinese students into their graduate programs. Studies have also shown how  
18  
19 collaboration and networks with co-ethnic counterparts living overseas enhance academics'  
20  
21 research productivity, thereby benefiting local knowledge production (Scellato, Franzoni and  
22  
23 Stephan, 2015).  
24  
25  
26

27  
28 Yet, scholars have also cautioned against an overly optimistic interpretation of how  
29  
30 academics overseas can contribute to their countries of origin. Similar to the issues besetting  
31  
32 return migration, migrant faculty who wish to engage in collaborative projects or short-term  
33  
34 visits within their countries of origin can also face a lack of support from local state officials,  
35  
36 fears of persecution, or frustrating bureaucracies within local institutions (Teferra, 2005;  
37  
38 Yeoh and Eng 2008). Non-migrant academics can also become resentful of the benefits that  
39  
40 their overseas counterparts receive from the state, thus fuelling possible conflict between  
41  
42 local and international collaborators (Altbach, 2014; Author, 2011).  
43  
44

45  
46 At the same time, researchers have questioned how states demarcate who "belongs" to  
47  
48 the diaspora, and how migrant academics define their relationship to their countries of origin.  
49  
50 Harvey's (2008) study of British and Indian scientists show that while individuals may  
51  
52 maintain contact with industry counterparts in the UK and India, such connections do not  
53  
54 necessarily translate into significant investments in their origin countries. In a study of  
55  
56 Australian academics overseas, Fahey and Kenway (2010: 572) discuss how their participants  
57  
58  
59  
60

1  
2  
3 actually “shade in and out” of feeling any sense of responsibility to Australia, indicating that  
4  
5 any desire to contribute to the home country largely depends on a particular time or context  
6  
7 in a person’s life course.  
8

#### 9 10 BRAIN CIRCULATION WITHIN THE GLOBAL SPACE OF ACADEMIA

11  
12 Scholars have argued that compared other highly skilled migrants, academics and researchers  
13  
14 are more likely to express an attachment to a professional network of colleagues, rather than  
15  
16 a national or ethnic identity (Colic-Peisker, 2010; Fahey and Kenway, 2010). Mahroum  
17  
18 (2000) argues that these networks form *global spaces*, often organized at the level of a  
19  
20 particular profession, discipline, or technology. While global spaces are not grounded in a  
21  
22 particular place, they contain “poles of gravity” or “centres” where there is a concentration of  
23  
24 institutions accorded a high level of prestige. Philip Altbach (2006: 124) echoes the same  
25  
26 framework, defining academic “centres” as institutions with the funding, facilities, and  
27  
28 qualified staff to pursue high quality research and teaching. In contrast, higher education  
29  
30 institutions at the “periphery” are often found in nations whose research and teaching  
31  
32 programs would benefit greatly from the “expertise” of citizens who have studied or worked  
33  
34 in these centers for knowledge production.  
35  
36  
37

38  
39 Existing studies on brain circulation (as well as brain drain in general) have largely  
40  
41 portrayed the mobility of migrant academics as a movement towards these “centres,” often  
42  
43 located in places like Western Europe and the US. Here, they seek better training, credentials,  
44  
45 and recognition among their peers (Kim, 2010; Qiang, 2016; Robertson, 2006). In contrast,  
46  
47 fewer studies have investigated the role of “aspiring centers” like Singapore (Altbach, 2006),  
48  
49 where local universities are rapidly closing the gaps in global university rankings where  
50  
51 institutions at the centre lead. Institutions of higher learning in Singapore also possess better  
52  
53 resources and engage in more quality research in comparison to many of those at the  
54  
55 periphery. This gap in the literature is concerning given the growing number of emerging  
56  
57  
58  
59  
60

1  
2  
3 education hubs, which are neither migrants' origin countries nor the country where they  
4  
5 obtained their graduate education.  
6

#### 7 Why Singapore? Brain circulation from the aspiring centre

8  
9 An island nation with no natural resources, Singapore has invested heavily in its higher  
10  
11 education system, developing its local universities into key sites for knowledge production  
12  
13 and innovation. Part of this development has been the aggressive recruitment of highly  
14  
15 qualified faculty, making Singapore a major player in the competition for academic talent  
16  
17 (Ng, 2013). Singapore institutions have been particularly successful in attracting doctoral  
18  
19 graduates from some of the most prestigious universities in the world, offering generous  
20  
21 compensation packages and research funding that rival those offered by Western countries.  
22  
23 To date, foreign-born scholars account for more than 60 percent of tenure-track and tenured  
24  
25 faculty within the country (Paul and Long, 2016; Gopinathan and Lee, 2011).  
26  
27  
28

29 Migrant academics in Singapore not only bring their knowledge assets but also  
30  
31 personal networks, raising the possibility of new opportunities for brain circulation within the  
32  
33 Asian region. In many ways, the presence of such active collaboration networks would  
34  
35 indicate a positive move towards Singapore becoming its own "centre" of knowledge  
36  
37 production, no longer reliant on ties to prestigious institutions in the US and Europe. At their  
38  
39 current state, Singapore universities are well-positioned to establish such collaboration  
40  
41 networks with its neighbors. It is important to note that a significant number of Singapore-  
42  
43 based academics come from nearby countries such as China, India, and other Southeast Asian  
44  
45 nations like Malaysia and Thailand (Paul and Long, 2016). Many of these scholars travel  
46  
47 back to their home communities as often as several times a year – a luxury made possible by  
48  
49 Singapore's geographic location and its status as a regional transportation hub. This paper  
50  
51 provides a preliminary investigation as to whether such conditions promote brain circulation  
52  
53 and what factors impede or undermine such opportunities.  
54  
55  
56  
57  
58  
59  
60



## METHOD

1  
2  
3  
4  
5 This paper is based on qualitative interviews with 45 migrant academics (17 tenured and 28  
6  
7 tenure-track) who were born and grew up in countries geographically close to Singapore, but  
8  
9 spent considerable time in Europe or North America either working in academic positions or  
10  
11 pursuing a doctorate and/or postdoc (see Table 1).<sup>1</sup> This sampling decision reflects the shift  
12  
13 in the demographics of migrant scholars. While earlier studies have tended to portray migrant  
14  
15 faculty as a group of Western expatriates (see Cohen 1977; Hindman 2009), recent years  
16  
17 have shown a growing proportion of migrant faculty and researchers who were born outside  
18  
19 the West and pursued postgraduate study in North America or Western Europe (see Colic-  
20  
21 Peisker 2010; Lawrence et al 2014). We define “migrant academics” as faculty members who  
22  
23 were not born in Singapore but moved to the country to take on tenure track positions within  
24  
25 its universities.  
26  
27  
28  
29  
30  
31

32 We interviewed a total of 17 women and 28 men, all employed at three of Singapore’s  
33  
34 major universities (the National University of Singapore, Nanyang Technological University,  
35  
36 and Singapore Management University). The research team recruited interviewees by sending  
37  
38 invitation emails to faculty members from two major fields: Science, Technology,  
39  
40 Engineering and Math (STEM); and the Social and Behavioral Sciences. We then asked  
41  
42 interviewees to connect us to other colleagues who might be interested in participating in the  
43  
44 project (“snowball” sampling). To supplement this recruitment method, team members also  
45  
46 promoted the project at university workshops and events, distributing fliers with project  
47  
48 details to interested faculty members. Tables 1 and 2 show the breakdown of the sample by  
49  
50 country of origin and by discipline (STEM, Social Science, Humanities, and Professional  
51  
52 Schools).  
53  
54

55  
56 [Insert Tables 1 and 2 here]  
57  
58  
59  
60

1  
2  
3 While scholars have used “brain circulation” to describe a range of activities, this project  
4 looks specifically at research collaborations, joint projects, and the sharing of knowledge and  
5 resources between migrant academics in Singapore and local counterparts within their  
6 countries of origin. Interview questions centered on participants’ decision to come to  
7 Singapore, their work experience within Singapore universities, their research activities both  
8 within and outside Singapore, and their academic collaborations. Interviewees also reflected  
9 on their decision to settle in Singapore instead of returning to their home countries, often  
10 ruminating on whether there was a possibility of permanent return in the future.

11  
12 While the time spent overseas varied widely, participants loosely referred to their  
13 countries of origin as “home,” mainly defined as a place where they grew up, and, more  
14 importantly, where parents and siblings remain. As such, we refer to the “home country” in  
15 this way as well, while recognizing that scholars have problematized how this term is  
16 defined.<sup>2</sup> We also recognize that individual connections to “home” differ among our  
17 interviewees. Our study is limited in that we do not fully explore migrant academics’  
18 individual identities and how this might shape how they view their role in the development of  
19 their countries of origin. Rather, we focus on how they choose to engage with professional  
20 counterparts in their home countries, regardless of whether they still feel connected to their  
21 home countries or not. All interviews were transcribed and analyzed using NVivo, a  
22 qualitative software.

#### 23 CIRCULATING CLOSER TO HOME: POTENTIALS FOR COLLABORATION

24 The majority of migrant faculty in this study saw Singapore as a place that allowed them to  
25 be closer to aging parents and siblings, while still pursuing their careers in highly ranked and  
26 well-resourced institutions. Although many of our interviewees had considered returning to  
27 their home communities, they felt that doing so would compromise the research work they  
28 had begun as graduate students. Singapore then served as an ideal “middle ground” where  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

1  
2  
3 migrant academics could be “close enough” to their families, while working in a university  
4  
5 that allowed them to pursue their academic careers (Authors, forthcoming).  
6

7  
8 Yet, their decision to remain overseas did not mean that interviewees had no interest  
9  
10 in engaging with local counterparts in their countries of origin. Most of the migrant faculty in  
11  
12 this study had friends and former classmates who continued to work in higher education  
13  
14 institutions within their home communities. In some of these places, state agencies have also  
15  
16 increased support for research, thus improving local facilities and funding opportunities far  
17  
18 beyond what migrant faculty had before they left to pursue their doctorates overseas. Many of  
19  
20 our interviewees from the social sciences and humanities also researched topics that involved  
21  
22 their home countries. As such, working with colleagues rooted in local contexts was an ideal  
23  
24 way to keep up with issues within their areas of interest. As noted by one Assistant Professor  
25  
26 from Japan,  
27

28  
29 I wanted to move closer to Japan. I started doing more policy-oriented work and my  
30  
31 research is about Japan so I wanted to start working with, you know, people in Japan,  
32  
33 academics and NGOs. I thought about Australia but it was a bit too far away from  
34  
35 Japan, and you know, Singapore, it’s close enough to Japan.  
36  
37

38  
39 Other academics felt that collaboration with colleagues in their home countries would allow  
40  
41 them to broaden their research areas and provide better opportunities to gather data. One  
42  
43 Assistant Professor from China explained that this was especially advantageous for her work,  
44  
45 which required large samples of survey respondents,  
46

47  
48 If I have more collaboration with China, my productivity will actually be higher.

49  
50 Getting participants is so hard in Singapore but in China, it’s so easy (laughs). They  
51  
52 can just collect all the data, few thousands in one day or one week...their population  
53  
54 is very huge and I think that [the consent requirements] in China is not as strict as  
55  
56 Singapore.  
57  
58  
59  
60

1  
2  
3 Other interviewees echoed this sentiment, arguing that it would be difficult if all academics in  
4  
5 Singapore limited their data-gathering within the nation's boundaries. Aside from  
6  
7 Singapore's small population, its unique history also made it an exceptional case – one that is  
8  
9 sometimes difficult to market to academic journals seeking more general theoretical  
10  
11 contributions building from larger data samples. Working with home country institutions then  
12  
13 offered an opportunity for comparative work, or at least access to a larger population of  
14  
15 research participants.  
16

17  
18 Yet, despite recognizing the advantages of working with academics and institutions in  
19  
20 their home countries, the majority of our interviewees admitted that they rarely engaged in  
21  
22 such forms of collaboration. While they travelled to home regularly, few of these visits  
23  
24 translated to meaningful exchanges in terms of joint research projects, co-authored papers, or  
25  
26 even teaching opportunities. Some of the migrant faculty in our study served as invited  
27  
28 speakers for local events and organized conference panels with friends working in home  
29  
30 country institutions. Yet, they admitted that they tended to avoid becoming involved in more  
31  
32 long-term collaboration. Some of the reasons for their limited academic engagement reflected  
33  
34 issues discussed in previous studies: repressive government policies, local university politics,  
35  
36 and a lack of long-term support for “cutting edge” research. For migrant faculty from poorer  
37  
38 nations such as Indonesia and the Philippines, available facilities and funding was an  
39  
40 especially difficult problem, with most of their home country universities unable to access  
41  
42 international journals. In this paper, we highlight how differences in the cultures of  
43  
44 knowledge production also shape migrant faculty's engagement with colleagues and  
45  
46 institutions within their home countries. Such disjunctures involve epistemic differences in  
47  
48 defining the purpose and outcomes of research, and the standards that drive tenure and  
49  
50 promotion within universities.  
51  
52  
53  
54

55  
56 EPISTEMIC DIFFERENCES: REDEFINING THE PURPOSE OF RESEARCH  
57  
58  
59  
60

1  
2  
3 In seeking home country collaboration, one challenge migrant faculty often encountered was  
4 finding local colleagues who shared similar “priorities” in defining the objectives of their  
5 research work. Interviewees shared that, while there was no shortage of local scholars willing  
6 to collaborate with them, they often had different ideas of what the outcomes of their research  
7 should be. One Assistant Professor from India recalled a previous collaboration with a  
8 colleague in India, whose research approach was more driven towards solving problems for  
9 practitioners on the ground,  
10  
11

12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

Actually it’s easy to build the collaboration but the thing is, it’s hard to translate into a tangible project with *Singapore values* [emphasis added]... You know, the kind of journals in which [university administrators] expects us to publish is pretty high in terms of the standard. But [colleagues in India], they don’t care. This colleague of mine, she is the dean of the Business School there. She is very much into how relevant is my research to managers. Given so many companies, she would pick some of their problems, convert that into a research statement, and then work on it. That is the kind of approach she had. Many of these times, that is not publishable. We learn a lot but it doesn’t eventually turn into a paper.

Interviewees interpreted such differences as a reflection of the expectations that their local counterparts faced from both the university and government agencies within their home countries. On the one hand, limited state funding meant that academic research should have a clear and immediate benefit to society, beyond academic publications. The Assistant Professor who shared the previous quote was quick to clarify that she valued the more “applied” research that her colleague did because it allowed her to reach out to practitioners and made more of an impact on the industrial settings she studied. However, she also felt that continuing on such collaborations required her to “play a different game” from the more theoretical work she was trained to do in her PhD. As such, she chose not to develop the

1  
2  
3 collaboration further, saying that she did not want to force her local colleagues to adapt her  
4  
5 standards for research and “do things they don’t want to do.”  
6

7 A number of interviewees also noted that few of their home country institutions  
8  
9 required academics to establish themselves internationally – a situation made more apparent  
10  
11 by a general lack of access to international journals. As a result, many academics based in  
12  
13 countries neighboring Singapore tended to focus mainly on domestic issues, without  
14  
15 consulting the latest publications in their research areas. One professor from Malaysia shared  
16  
17 that, while research produced by Malaysia-based scholars remained relevant to local  
18  
19 problems, such studies were too “insular” and out of date with current scientific trends. An  
20  
21 Associate Professor from Vietnam echoed this observation, noting that due to a lack of access  
22  
23 to scientific journals, Vietnam-based academics often getting “stuck” in projects that other  
24  
25 scientists had already done. He explained,  
26  
27  
28

29 They make compounds that nobody needs. They aren’t aware that all these things  
30  
31 have been done. I mean [one group] was doing this anti-tumor compound that  
32  
33 thousands of scientists have already investigated. What you can do there? You are  
34  
35 basically competing with all these big groups who have so much experience there. As  
36  
37 a newcomer, you don’t join them. So that’s why they need my assistance --- I suggest  
38  
39 them something to do, share some of the ideas to them.  
40  
41  
42

43 In many cases, such limitations did not adversely affect local academics’ careers within their  
44  
45 institutions. As noted by one Assistant Professor from Korea, most of his former professors  
46  
47 in Korea published mostly in Korean journals and often did not understand the long process  
48  
49 of getting work published in a highly ranked journal. He attributed such differences to a  
50  
51 “strong local culture” in Korean academia that made it harder for him to engage with local  
52  
53 colleagues. In this sense, he found it easier to collaborate with his professors and former  
54  
55  
56  
57  
58  
59  
60

1  
2  
3 graduate school friends in the US. He noted, “Singapore to Korea, geographically it’s a  
4 nearby, but still probably for me it’s a [bigger step].”  
5  
6

7 As such, the migrant academics who did engage in collaboration within their home  
8 countries often relied on “like-minded” local colleagues – fellow scholars who also obtained  
9 their degrees in universities in the US or UK and were eager to continue their academic  
10 practices as they have been trained. One Assistant Professor from the Philippines admitted  
11 that he only collaborates with one faculty member in his alma mater, a fellow Fulbright  
12 scholar who also obtained her degree from an American university. “There are very few  
13 people who do media research in the Philippines,” he explained. “The culture itself is not  
14 very conducive for research. So even when I was looking for a job, we were already making  
15 plans to do research together and I was very excited about that.” Another Assistant Professor  
16 from India has maintained an active collaboration with a former graduate school classmate  
17 who returned to India after obtaining his degree. “It really depends on the person, right. I  
18 have known Dr. K for ten years now so I can work with him. We talk on phone and via email  
19 almost every day. We have the same work ethic and we complement each other.”  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35

36 In many ways, migrant academics’ search for like-minded colleagues meant looking  
37 for local scholars who shared the same research goals and priorities, despite the existing  
38 differences in the way scholars in their home countries defined and went about research  
39 work. In lamenting the academic “culture” of their home country institutions, migrant faculty  
40 highlighted the difference between the type of work they did as PhD graduates trained in the  
41 West and the more locally-oriented scholarship within their home countries. Migrant  
42 academics in this study were driven towards publications in highly ranked journals and  
43 pursued topics that they felt were theoretically relevant in their general academic fields. In  
44 contrast, many of their local counterparts focused on problem-based research within local  
45 contexts and not all were willing to go through the long process of publishing in top  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

1  
2  
3 international journals. These epistemic differences thus discouraged brain circulation from  
4  
5 Singapore to migrant academics' home countries, with few migrant academics willing to  
6  
7 "translate" their research objectives in line with the values and priorities of local knowledge  
8  
9 production.  
10

11  
12 However, not all interviewees in this study saw epistemic disjunctures as a major  
13  
14 impediment to collaborations with home country institutions. In some places, increasing  
15  
16 pressures to develop local universities had actually strengthened the research culture among  
17  
18 local academics, increasing the number of local scholars also driven towards international  
19  
20 publications. Such situations heightened the opportunity for joint research projects and  
21  
22 opportunities to share both knowledge and resources. Yet, the migrant academics in our study  
23  
24 remained hesitant to engage in such activities. The following section discusses how such  
25  
26 reticence is partly due to current policies for promotion and tenure within Singapore  
27  
28 universities, which inadvertently discourage academic collaboration between Singapore and  
29  
30 surrounding countries.  
31  
32

### 33 34 35 PRESSURES OF PROMOTION: RECOGNIZING ACADEMIC WORK

36  
37 While Singapore's geographic location allowed Asian-born academics to move closer to their  
38  
39 home countries, Singapore universities, like other "aspiring centers" in the global knowledge  
40  
41 economy, adapted the academic norms and standards of prestigious institutions in the West  
42  
43 (Kim 2010: 588). Eager to emulate established centres in the global space of academia,  
44  
45 Singapore institutions looked towards highly ranked institutions in the West in assessing the  
46  
47 work of their faculty, requiring publications in Western journals and university presses, and  
48  
49 promoting links to well-known universities based in the US and UK. University  
50  
51 administrators also implemented a tenure and promotion system based on their interpretation  
52  
53 of the requirements of American higher education institutions, where junior faculty were  
54  
55 expected to demonstrate substantial capability in research and teaching within a time period  
56  
57  
58  
59  
60



1  
2  
3 of six to seven years. Like many other universities, international publications carried a heavy  
4  
5 weight, and individuals unable to publish enough before going up for tenure did not have  
6  
7 their contracts renewed or extended.  
8

9  
10 This academic environment and structure undermined brain circulation in two ways.  
11  
12 First, untenured migrant academics were less inclined to do research in “new” areas or  
13  
14 projects that would not immediately lead to journal publications. Such “risky” endeavors  
15  
16 included exploring research collaboration with their home country institutions, where  
17  
18 working with local scholars might require more time and effort. For one Associate Professor  
19  
20 from China, this extra work was the reason why he held off from collaborating with Chinese  
21  
22 colleagues until he obtained tenure in 2014. He explained,  
23

24  
25 I have quite a lot of friends in China... They always remind me to be there, to attend  
26  
27 seminars or collaborate with them. But before I get my tenure, I actually am not very  
28  
29 active in this one because I don't see how it adds any value to my CV or to my case.  
30  
31 I don't want to spread too thin because it will actually damage your development  
32  
33 here. You have to spend a lot of time to go to China, you have to supervise students,  
34  
35 you have to do a lot of things... Collaboration can help you get more resources, you  
36  
37 can get more publications and do more interesting things. But before this year, I was  
38  
39 not very active on that.  
40  
41  
42

43 As noted by this interviewee, home country collaborations could provide many benefits such  
44  
45 as additional resources and opportunities to learn new things. Yet, given the limited time to  
46  
47 build their CVs for tenure, many interviewees felt it was more strategic to either focus on  
48  
49 projects rooted in Singapore or continue publishing with their PhD and postdoc advisers.  
50  
51 Untenured faculty members were also well aware that by the time they came up for  
52  
53 promotion, university administrators were likely to send their dossiers to anonymous  
54  
55 reviewers based in Western institutions. As such, there was more incentive to network or  
56  
57  
58  
59  
60

1  
2  
3 collaborate with colleagues in American or British institutions or what some interviewees had  
4  
5 dubbed as “mainstream” academia. As explained by an Associate Professor from India,

6  
7       You have to keep in touch with as many people as you can, because eventually they  
8  
9       require six people to write letters for you. These are people outside. It’s not going to  
10  
11       be people here. They’re looking for people outside, so you really have to be keeping  
12  
13       in touch with people in the US, people in Europe.  
14  
15

16 As such, attaining tenure provided migrant academics with more space to explore projects  
17  
18 with home country institutions. Tenure took away the pressure to publish and provided  
19  
20 academics with more time to finally begin more “exploratory” projects. One Associate  
21  
22 Professor from Vietnam shared that he often gets emails from Vietnamese scholars seeking  
23  
24 advice or possible opportunities for collaboration. None of these invitations provide much  
25  
26 benefit for his academic career, yet his tenured status gives him the space to “help” local  
27  
28 counterparts develop scientific projects. He shared,  
29  
30

31  
32       There was this woman from [Vietnamese university] who applied for [a post-doc  
33  
34 position]. It was clear to me that she will never become my post-doc, because of the  
35  
36 lack of qualification. But then I applied for some sort of collaboration funds for  
37  
38 maybe just 5,000 dollars. I said, I invite you to come to my lab to do something. You  
39  
40 bring your compounds and then we see what we can do. And so in the end she spent  
41  
42 two months here...It’s for them, actually. It’s not for me. Maybe the only thing I get  
43  
44 out of it is a few travels to Vietnam.  
45  
46

47 Yet, for some migrant academics, tenure does not necessarily ensure freedom from other  
48  
49 university expectations. Similar to other universities, faculty in Singapore were also  
50  
51 encouraged to bring in research money for their respective departments – a requirement that  
52  
53 is often not possible with overseas funding. As such, migrant academics were less likely to  
54  
55  
56  
57  
58  
59  
60

1  
2  
3 collaborate with counterparts in their home countries even if the project was likely to  
4  
5 translate to good publications. One Associate Professor from China explained,

6  
7 The university has to recognize the funding. Does the money trail go into the  
8  
9 university? Normally, research money cannot cross borders. That's the rules  
10  
11 normally, lah. So even if I get the money from China, I have to spend in China. I have  
12  
13 to recruit students in China using that money. The student can do something for me --  
14  
15 - I mean, I can write a paper using my [Singapore] affiliation. It's good for my career  
16  
17 but for overall career, it isn't good. For the university, I don't think they will see it as  
18  
19 a benefit.  
20  
21

22  
23 The expectations outlined in this section indicate that while there may be migrant academics  
24  
25 eager to explore collaborative work with scholars and institutions within their home  
26  
27 countries, policies and expectations within their host universities make such work a risky  
28  
29 endeavor. As such, interviewees without tenure were more likely to limit such activities until  
30  
31 they had more job security. Meanwhile, those with tenure often weighed the benefits of such  
32  
33 collaboration against the other expectations of senior faculty such as the need to bring in  
34  
35 grants and take on more administrative tasks. Whether intentional or not, these policies then  
36  
37 encourage migrant academics to maintain ties to their colleagues in the *West*, where  
38  
39 collaborative links are seen as more likely to lead to higher visibility in "mainstream"  
40  
41 academia.  
42  
43  
44

#### 45 CONCLUSION

46  
47 This paper investigates the stickiness or frictions (Ackers, 2005) that can impede brain  
48  
49 circulation among migrant academics. Focusing on the mobility of Asian-born faculty based  
50  
51 in Singapore, our findings indicate that migrant academics frequently move to and from their  
52  
53 countries of origin, maintaining contact with counterparts within local universities. Yet, few  
54  
55 of our interviewees actively engaged in research collaboration with these scholars. This paper  
56  
57  
58  
59  
60

1  
2  
3 investigates two significant reason for such disengagement: epistemic differences in terms of  
4  
5 academic priorities within the home country and unfavorable policies within host institutions  
6  
7 that discourage migrant academics from collaborating with home country counterparts. As  
8  
9 such, migrant academics were more likely to devote their time and energy towards  
10  
11 developing links to established centers of knowledge in the West, even if competent  
12  
13 collaborators exist within home country institutions as well.  
14  
15

16  
17 It is important to note that while tenure and promotion within Singapore universities  
18  
19 are largely patterned against the standards of prestigious institutions in the US, such policies  
20  
21 do not indicate a deliberate attempt to discourage brain circulation within the region. In fact,  
22  
23 state funding agencies have increasingly encouraged Singapore-based academics to conduct  
24  
25 research with a focus on Asia, providing funding opportunities that would otherwise be more  
26  
27 difficult to attain in the West. Migrant faculty in this study also recognized the benefits that  
28  
29 collaborative projects with home country counterparts would bring, citing the importance of  
30  
31 sharing resources, networking with scholars on the ground, and doing more comparative  
32  
33 research. We also do not intend to depict academics within migrants' home countries as  
34  
35 unable to produce important knowledge and research. Interviewees in this study often  
36  
37 emphasized the value of their local colleagues' research, the outcomes of which often have  
38  
39 more immediate implications for pressing social issues.  
40  
41  
42

43  
44 Rather, this paper emphasizes how geographic location and frequent mobility are not  
45  
46 enough to ensure the more productive circulation of migrant academics within the region. In  
47  
48 a global hierarchy of higher education institutions, epistemic differences and conflicting  
49  
50 assessments of academic work create a gap between migrant academics and their home  
51  
52 country counterparts that many find difficult to overcome. Migrant academics trained in  
53  
54 Western institutions adapt epistemic practices and values that may not coincide with  
55  
56 counterparts within home country institutions; meanwhile, global standards for university  
57  
58  
59  
60

1  
2  
3 rankings and prestige continue to favor networks and publications in venues based in  
4  
5 established centres in the US and Europe. In many ways, these limitations demonstrate how  
6  
7 the powerful status of highly ranked Western institutions is reinforced, despite the  
8  
9 development of aspiring centres of higher education such as Singapore. Promoting brain  
10  
11 circulation and active collaboration networks between Singapore and its neighboring  
12  
13 countries means allowing academics to adopt different epistemic values for research and  
14  
15 recognizing research work beyond the usual standards that have defined academic standards  
16  
17 for tenure in well-known and established US institutions. Such issues remain understudied in  
18  
19 the current discussions surrounding the mobility of academics and knowledge workers, as  
20  
21 well as their implications for their countries of origin.  
22  
23  
24  
25

#### 26 REFERENCES

- 27  
28 Ackers, L.  
29 2005 "Moving people and knowledge: Scientific mobility in the European Union",  
30 *International Migration* 43(5):99-132.  
31  
32  
33 Ahmed, S.  
34 1999 "Home and away: narratives of migration and estrangement", *International Journal*  
35 *of Cultural Studies* 2(3), 329-347.  
36  
37  
38 Altbach, P.  
39 2014 "The Elite of the Elite at Peking University", *Inside Higher Ed*,  
40 <https://www.insidehighered.com/blogs/world-view/elite-elite-peking-university>  
41  
42 2006 "Globalization and the university: Realities in an unequal world", Pp. 121-39 in  
43 *International Handbook of Higher Education*, edited by James Forest and Philip  
44 Altbach. The Netherlands: Springer.  
45  
46  
47 Blachford, D. R. and B. Zhang  
48 2014 "Rethinking international migration of human capital and brain circulation: The case  
49 of Chinese-Canadian Academics", *Journal of Studies in International Education*  
50 18(3): 202-22.  
51  
52  
53 Cerna, L.  
54 2016 *Immigration Policies and the Global Competition for Talent*. Palgrave Macmillan:  
55 Basingstoke.  
56  
57 Chou, M-H.  
58  
59  
60

- 1  
2  
3 2014 “The ‘republic of research administrators’ in Europe: How to get the researchers  
4 moving”, *PS: Political Science & Politics* 47(3): 612-615.  
5 Cohen, E.  
6 1977 “Expatriate communities”, *Current Sociology*, 24(3), 5–90.  
7  
8  
9 Cohen, L., J. Duberley, and M N Ravishankar  
10 2015 "Examining the interplay of career, migration and national cultural identity: The case  
11 of indian scientists." *International Migration* 53(5):104-22.  
12  
13 Colic-Peisker, V.  
14 2010 “Free floating in the cosmopolis? Exploring the identity-belonging of transnational  
15 knowledge workers.”, *Global Networks* 10(4):467-89.  
16  
17 Davenport, S.  
18 2004 “Panic and panacea, brain drain and science and technology human capital policy”,  
19 *Research Policy*, 33 (4), 617–630.□  
20  
21 Edler, J., H. Fier, and C. Grimpe.  
22 2011 "International scientist mobility and the locus of knowledge and technology transfer",  
23 *Research Policy* 40:791-805.  
24  
25  
26 Espiritu, Y. L.  
27 2003 *Home Bound: Filipino American Lives Across Cultures, Communities, and*  
28 *Countries*. University of California Press: Berkeley, CA.  
29  
30  
31 Fahey, J. and J. Kenway  
32 2010 "International academic mobility: Problematic and possible paradigms", *Discourse:*  
33 *Studies in Cultural Politics of Education* 31(5):563-75.  
34  
35  
36 Gaillard, J. and A. M. Gaillard.  
37 1997 "Introduction: The international mobility of brains: Exodus or circulation", *Science*  
38 *Technology and Society* 2(2):195-228.  
39  
40  
41 Gill, B.  
42 2005 “Homeward bound? The experience of return mobility for Italian scientists”,  
43 *Innovation*, 18 (3), 319–341.□  
44  
45 Gopinathan, S. and M. H. Lee  
46 2011 “Challenging and co-opting globalisation: Singapore's strategies in higher education”,  
47 *Journal of Higher Education Policy and Management*, 33(3), 287-299.  
48  
49  
50 Harvey, W. S.  
51 2008 “Brain circulation?” *Asian Population Studies*, 4(3), 293-309.  
52  
53 Hindman, H.  
54 2009 “Cosmopolitan codifications: elites, expatriates, and difference in Kathmandu,  
55 Nepal”, *Identities: Global Studies in Culture and Power*, 16 (3), 249–270.  
56  
57 Kim, T.  
58  
59  
60

- 1  
2  
3 2010. "Transnational academic mobility, knowledge, and identity capital", *Discourse:*  
4 *Studies in Cultural Politics of Education* 31(5):577-91.  
5  
6  
7 Knorr Cetina, K.  
8 1999 *Epistemic Cultures: How the Sciences Make Knowledge*. Harvard University Press:  
9 Cambridge, MA.
- 10  
11 Laudel, G.  
12 2005 "Migration currents among the scientific elite", *Minerva* 43(4): 377–395.  
13
- 14 Lawrence, J. H., S. Celis, H. S. Kim, S. K. Lipson and X. Tong  
15 2014 "To stay or not to stay: Retention of Asian international faculty in STEM Fields",  
16 *Higher Education* 67: 511-531. □  
17
- 18  
19 Lee, J. J. and D. Kim  
20 2010 "Brain Gain or brain circulation? US doctoral recipients returning to South Korea",  
21 *Higher Education* 59:627-643  
22
- 23 Mahroum, S.  
24 2000 "Scientists and global spaces", *Technology in Society* 22: 513-523.  
25
- 26 Mahroum, S., C. Eldridge and A. S. Daar  
27 2006 "Transnational diaspora options: how developing countries could benefit from their  
28 emigrant populations", *International Journal on Multicultural Societies* 8(1): 25-42  
29
- 30  
31 Meyer, J.-B.  
32 2001 "Network approach versus brain drain: Lessons from the diaspora", *International*  
33 *Migration* 39(5): 91-111.  
34
- 35 Meyer, J.-B. and J. P. Wattiau  
36 2006 "Diaspora knowledge networks: Vanishing doubts and increasing evidence",  
37 *International Journal on Multicultural Societies* 8(1): 4-24.  
38  
39
- 40 Mosneaga, A. and L. Winther  
41 2013 "Emerging talents? International students before and after their career start in  
42 Denmark", *Population, Space and Place* 19:181-95.  
43
- 44 Ng, P. T.  
45 2013 "The global war for talent: Responses and challenges in the Singapore higher  
46 education system", *Journal of Higher Education Policy and Management*, 35(3): 280-  
47 292.  
48
- 49  
50 Ortiga, Y. Y.  
51 2011 "Looking beyond the obvious: Power, epistemic culture and student migration in the  
52 knowledge-based economy", *Power & Education* 3(3): 263-273.  
53
- 54 Paul, A. M. and V. Long  
55 2016 "Human-capital strategies to build world-class research universities in Asia: Impact  
56 on global flows" In M-H. Chou, I. Kamola and T. Pietsch (Eds.) *The transnational*  
57  
58  
59  
60



- 1  
2  
3 *politics of higher education: Contesting the global / transforming the local* (pp.130-  
4 155), Abingdon: Routledge.  
5  
6  
7 Qiang, Z.  
8 2016 "What factors influence the direction of global brain circulation: The case of Chinese  
9 Canada research chairholders", *Compare: A Journal of Comparative and*  
10 *International Education* 46(2):214-34.  
11  
12 Ralph, D.  
13 2009 "Home is where the heart is? Understandings of "home" among Irish-born return  
14 migrants from the United States", *Irish Studies Review* 17 (2):183-200.  
15  
16 Robertson, S. L.  
17 2006 "Brain drain, brain gain and brain circulation", *Globalisation, Societies and Education*  
18 4(1): 1-5.  
19  
20  
21 Saxenian, A.  
22 2005 "From brain drain to brain circulation: transnational communities and regional  
23 upgrading in India and China", *Studies in Comparative International Development*  
24 40(2):35-61.  
25  
26 Scellato, G., C. Franzoni, and P. Stephan  
27 2015 "Migrant scientists and international networks." *Research Policy* 44:108-20.  
28  
29 Singh, J. and V. V. Krishna, V. V.  
30 2015 "Trends in brain drain, gain and circulation: Indian experience of knowledge  
31 workers", *Science Technology and Society*, 20(3): 300-321.  
32  
33  
34 Teferra, D.  
35 2005 "Brain circulation: unparalleled opportunities, underlying challenges, and outmoded  
36 presumptions", *Journal of Studies in International Education* 9(3): 229-50.  
37  
38  
39 Wang, Q., T. Li, and H. Li  
40 2015 "Return migration of the highly skilled in higher education institutions: A Chinese  
41 university case", *Population, Space and Place* 21:771-87.  
42  
43 Williams, A. M., V. Balaz, and C. Wallace  
44 2004 "International labour mobility and uneven regional development in Europe: Human  
45 capital, knowledge, and entrepreneurship", *European Urban and Regional Studies*  
46 11(1): 27-46.  
47  
48  
49 Xiang, B.  
50 2011 "A ritual economy of 'talent': China and overseas Chinese professionals", *Journal of*  
51 *Ethnic and Migration Studies* 37(5):821-38.  
52  
53  
54 Yeoh, B. S. A., and L. A. Eng  
55 2008 "Guest editors' introduction", *Asian Population Studies*, 4(3): 235-245.  
56  
57  
58  
59  
60



1  
2  
3 2011 "Introduction: Fluidity and friction in talent migration", *Journal of Ethnic and*  
4 *Migration Studies* 37(5): 681-90.  
5  
6  
7  
8  
9  
10

---

11  
12 <sup>1</sup> This paper is part of an ongoing project on the migration decisions and experiences of  
13 migrant scientists and academics in Singapore. The research team interviewed a total of 80  
14 foreign academics currently working in Singapore. Aside from the interviews included in this  
15 study, research participants originate from countries such as the US, UK, France, Germany,  
16 and Spain.

17 <sup>2</sup> Migration scholars have studied issues of integration, belonging, and identity, using a more  
18 critical analysis of what the "home country" means to different immigrant groups (see  
19 Ahmed 1999; Espiritu 2003; Ralph 2009)  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

Table 1. Interview Participants' Countries of Origin

| <u>Country of Origin</u> |    |
|--------------------------|----|
| China                    | 13 |
| India                    | 11 |
| Malaysia                 | 4  |
| Taiwan                   | 4  |
| Philippines              | 3  |
| Thailand                 | 3  |
| Japan                    | 3  |
| Indonesia                | 2  |
| Korea                    | 1  |
| Vietnam                  | 1  |
| Total:                   | 45 |

For Peer Review

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

Table 2. Interview Participants' Academic Disciplines

| <b>Discipline</b> |    |
|-------------------|----|
| STEM              | 22 |
| Social Science    | 23 |
| Total:            | 45 |

For Peer Review