RoR Doctoral Research

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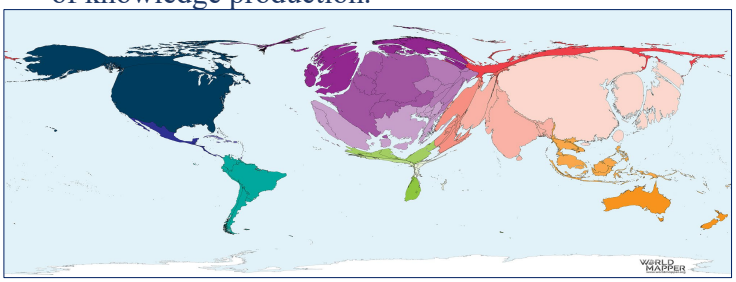
English for Research Publishing Purposes (ERPP): A Comparative Study of ERPP Practices for EAL and NES Scholars in Social Sciences (SS) and STEM Disciplines

Anoud Abusalim

Department of Educational Research, Lancaster University

Introduction

- Research writing and publishing is challenging for many scholars, across the world, including English as Additional Language (EAL) scholars who report several problems when it comes to their use of English for Research Publishing Purposes (ERPP).
- This study contributes a comparative understanding of how EAL and NES scholars write across the disciplines while also exploring some of the geopolitical and epistemological challenges faced by EAL and NES scholars based outside the Anglophone center.
- Over 18 months, qualitative interviews with 12 EAL and 12 NES scholars, in social sciences and STEM disciplines, were conducted to understand their ERPP practices for writing the literature review section in research articles.
- The data were analyzed using a tripartite conceptual framework drawing on research genre and disciplinary writing.
- After finishing the interview analysis, textual analysis of 541 literature review sections written by the 24 informants in their published journal articles was performed using 14 syntax complexity measures.
- The study offers comparative answers about the situated and textual aspects of ERPP practices for EAL and NES scholars **emphasizing the complexity of knowledge production behind the linguistic binary.**
- The study identified some of the epistemological challenges faced by researchers based outside the Anglophone center highlighting the **geopolitical nature** of knowledge production.



Study's Aims

I. Developing an understanding of EAL and NES ERPP practices that transcends the binary of native and non-native writer by exploring the varying roles of disciplinary writing conventions in preparing and writing the literature review section in a journal article.

II. Examining the ERPP challenges faced by scholars based outside the Anglophone center, specifically the publishing, epistemological and geopolitical and challenge.

Conclusions

Situated Aspects of Writing the Literature Review Section

1) Reading related literature for preparing the literature review section

- The study highlighted how the link between epistemology and academic discourse impact knowledge construction and production.
- The varying reading practices between STEM and SS scholars emphasized how the hierarchical knowledge (common in natural and hard sciences), horizontal knowledge, and/or warring triangles structures (common in social sciences) affect literature review reading practices (Becher 1989; Bernstein, 1999; Wignell, 2007).

2) Genre awareness of the literature review section in a journal article

- The study's qualitative interviews with 24 EAL and NES scholars about their conceptualization of literature review writing conventions in STEM and SS disciplines suggest how genre awareness influence writing practices.

3) Writing the literature review section in a journal article .

- The study's findings emphasized how disciplinary conventions impact knowledge production more than language for both its EAL and NES participants,
- The initial corpus analysis suggests how the same level of syntax complexity is evident in STEM writing for EAL and NES scholars. SS writing, on the other hand, has varying levels of syntax complexity with NES scholars using less idiomatic terms (Shin et al., 2020).

Challenges Faced By EAL and NES Scholars outside the Anglophone Center

1) Publishing challenges

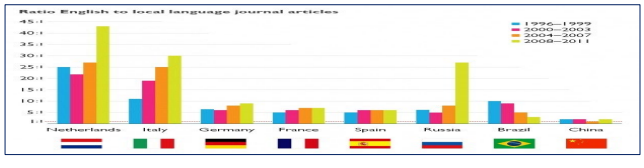
- For both EAL and NES scholars in STEM, publishable work was evaluated according to its scientific merit whereas for EAL and NES scholars in SS, publishable work was evaluated according to various rhetorical features, more specifically audience awareness.

2) Epistemological racism

- Highlighting how hierarchical and horizontal knowledge structure impact knowledge production, the study's finding identified specific epistemological challenges faced by SS scholars in their attempts of researching local topics.
- The study drew on Geertz (1983) and Spivak (1998) work on local knowledge when sharing its findings about the geopolitical nature of knowledge production.

3) Geopolitical challenges

- The accounts of the 12 NES participants suggest the increasing power of the anglophone center as knowledge powerhouse because of its location and not because of English language.



European Universities: Building the future of higher education in the European Union through transnational "knowledge alliances"

Antonin Charret – Department of Education – University of Oxford
antonin.charret@education.ox.ac.uk
Supervisors: Maia Chankseliani and Alis Oancea

Context: 2019 – Ursula von der Leyen nominates Mariya Gabriel as first Commissioner with a portfolio that associates both **education** and **research**
Missions includes:

- "Making the **European Education Area** a reality by 2025"
- Building a "true **European Research Area**"
- "Full implementation of the **European Universities Initiative**"

European Education Area (EEA)

- The EEA is to be the latest outcome in decades of education cooperation at EU level, it aims to **create a common space for leaning without borders by 2025**
- Developing a **strong and efficient governance framework** that respects the **independence of Member states** in the organization of national education systems AND involve stakeholders at the local, national and regional levels
- Building an **inclusive and cohesive society** in the European Union while strengthening the **competitiveness** of European citizens on the labor market
- Six main dimensions: **Quality, Inclusion and gender equality, Green and digital transition, Teachers and trainers, Higher education** and **Geopolitical dimension**

Synergies between the EEA and ERA

"The EEA will work in synergy the ERA to harness knowledge, making it the foundation of Europe's recovery and prosperity."
The EEA and ERA will jointly strengthen the:

- **Public science system**
- **Research and Innovation dimension of universities**
- Focus on **participation of women in Science, Technology, Engineering and Mathematics** (STEM) fields
- "**Education and training contribution to Europe's innovation capacity**"
- **Entrepreneurship outcomes**

European Research Area (ERA)

- The ERA was initially launched in 2000 as part of the Lisbon Strategy. The Von der Leyen Commission has called for a "**new ERA for research and innovation**"
- Stronger cooperation and **collective governance structure** between the Commission and Member States in order to achieve the **green and digital transition** and **recovery** through "setting of new priorities to better orienting funding, launching ambitious joint initiatives and developing common approaches between policies".
- Four priorities: **Prioritising investments and reforms**, **Improving access to excellence**, **Translating R&I results into the economy**, **Deepening the ERA** (the already existing single market, mobility, open science)

This research will study in what ways:

- These collaborative partnerships are set up, particularly looking at the **multi-characteristics of their governance structures** (multi-level, multi-actor, multi-issue, multi-spatial)
- How the different stakeholders participating the construction of these "knowledge alliances" see their role in **creating a common "knowledge" space in the EU** displaying **synergies** between **research** and **education**
- How these "knowledge alliances" are formed and what are the implications for the higher education institutions

Knowledge Alliances - European Universities Initiative (EUI)

"Higher education institutions in Europe are at the heart of both the EEA and the ERA and particularly well placed to connect them together"

- The EUI aims to establish **20 European Universities by 2024**
- **European Universities** are **transnational alliances/collaborative partnerships** made up of 3 to 10 HEIs from the North, South, East and West of the European Union (and participating Erasmus+ countries)
- Two pilot phases launched in 2019 and 2020 to experiment what these universities will look like. **41 alliances have been selected involving 280 HEIs**
- Budget: **€287 million** from Horizon 2020 **(Research)** and Erasmus**+ (Education)**
- **Objectives:** International competitiveness and visibility of EU HEIs, fostering European culture and identity and **creating a "synergy" between the EEA and ERA**

EUROPEAN UNIVERSITIES

Erasmus+

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European Commission (2020c) On achieving the European Education Area by 2025.
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THE IMPACTS OF THE ACADEMIC EXCELLENCE INITIATIVE ON RUSSIAN HIGHER EDUCATION: PERSPECTIVES ON THE FUTURE DEVELOPMENT OF DOCTORAL EDUCATION

Elena Tsvetkova, Doctoral Student
University of Oxford, Department of Education
Supervisors: Professor Alis Oancea, Professor Simon Marginson
Email: elena.tsvetkova@education.ox.ac.uk

Background: In the era of the knowledge society, the ability to produce and apply knowledge has become crucial for driving up and sustaining socio-economic growth. Numerous countries have implemented Excellence Initiatives designed to establish world-class universities, boost their research productivity, raise their international visibility and attractiveness, and thereby enhance the global competitiveness of their national higher education systems and institutions. Many governments (e.g. Germany, South Korea, China, Japan and Russia) have also striven to reform their doctoral education systems as part of this agenda. To date, little research has been done on how Excellence Initiatives (re-)construct value, redefine the purposes of research education, and intensify stratification in doctoral training within a state-dominated environment.

Study aims: This study sets out to explore from a 'glonacal' perspective the relationship between the Russian Excellence Initiative and the revamping of doctoral education, which is driven by the strategies devised to build up academic staff capacity and foster the global competitiveness of higher education and science in Russia. It seeks to analyse the changes of models and practices in response to the Excellence Initiative and determine the prospects for future development of research education in Russia through critically examining tensions, barriers, and challenges in the strengthening of doctoral training.

Design: This multiple-case study of four selected national research universities uses qualitative research techniques. In particular, it applies Critical Discourse Analysis to documentary research and semi-structured interviews with a range of stakeholders in pursuit of a more insightful and nuanced grasp of current processes driving changes in Russian higher education through the lens of neoliberalism.

Research Questions

Umbrella question: How does the Excellence Initiative shape the ongoing and future development of doctoral education in Russia?

RQ1
- To what extent does the Russian Excellence Policy redefine the purposes of doctoral education in Russia, and in particular its contribution to building up academic staff capacity and enhancing global competitiveness of Russian higher education and science?

RQ2
- What changes to doctoral education are the selected national research universities introducing in response to the Excellence Initiative? And with what effect?

RQ3
- What do key stakeholders see as the implications of the Excellence Initiative for the future development of doctoral education in Russia?

Problem Statement: In light of the ongoing discussions of various tensions and barriers to revamping research degrees and training, it is crucial to investigate further the current discourse of crisis in Russian doctoral education not only in terms of producing highly skilled professionals for knowledge-based society, but also through the prism of enhancing academic staff capacity in higher education and science. Furthermore, it is worthwhile to expand the boundaries and explore further how to integrate Russian doctoral training into global education and research systems, thereby making higher education more sustainable and globally competitive.

Potential contribution: This project seeks to make an empirical and theoretical/conceptual contribution to inform the national policy and practice in doctoral education and policy debates around the Russian Excellence Initiative, as well as provide potentially new perspectives and avenues for strengthening Russian research education.

For further information on the project, please contact by email:

elena.tsvetkova@education.ox.ac.uk

Emerging professions in higher education administration in East Asia: a comparative study of research and international offices

Julie Lin
Dphil, Oxford University
Chia-yi.lin@education.ox.ac.uk

Supervisors:
Alis Oancea
Simon Marginson
Xin Xu

Higher Education Administration

Whitchurch (2015) proposed the concept of "third space" to address the transforming professionals who "extend classic accounts of professionalism by developing new knowledge" (p. 97). With the missions of higher education broadens, administrators' job coverages are also diversifying in the modern times. Not many had studied the process of professionalisation and even in the group of researchers, there is no consensus on terminology used to describe higher education administrators. From Deem's (1998) "nonacademic managers," Gornall's (1999) "new professionals," Rhoades and Sporn's "support professionals" (2002), to Teichler's Higher education professionals (HEPROs) (2003). The changing terminology, though gradually moved away from the academic versus non-academic dichotomy, shows space in this field still awaits more research and discussion.

Higher Education Administration in East Asia:

In East Asia, while the academics are highly valued in traditional Confucianism, "[a]dministrative works are perceived as bureaucratic and unspecialized" (Takagi, 2015, 581). Scholarly discussions on higher education administration, is scarce but in the few papers that discuss the topic, commonalities across the region can be spotted. Yun (2006) pointed out that "Confucianism has prevailed in the administrative culture of East Asia" (p.497). Scholars also often noted the influences from hierarchical structure, strong leadership (Yun, 2006; Takagi, 2015; Welch, 2020), and state government engagement (Welch, 2020). With the special regional culture and its influences, higher education administration in East Asia shows distinctiveness in system and structure.

How are emerging professional administration roles being framed, regulated, managed and experienced in higher education in Japan, Singapore, and Taiwan?

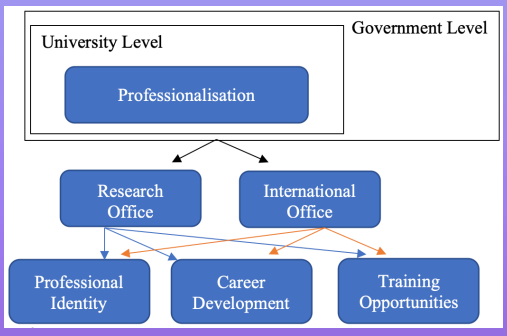
Motivation:

Research management and internationalization are two newly emerged fields in the modern higher education in East Asia. While many papers researching administration noted the mix of boundary for research managers (Whitchurch, 2008), few discovered another newly established administration field – international office. International offices in East Asia were established in the 2000s along with the trend of internationalisation. With the language, netogiation, and strategical planning skills demanded from these new administrators, changes toward professionalisation might start to emerge in Asia.

1. How do governmental policies and regulation frame the professionalisation of higher education administration in the three countries?

2. How do higher education organisations in the three countries define and manage (emerging) professional roles in research and international?

3. How do individuals working in research and international offices describe their professional identity, career development, and training opportunities?



Similarities and differences:

1. Individuals v.s. organisational/regulatory frames
2. Research office v.s. international office
3. Japan v.s. Singapore v.s. Taiwan

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Research culture(s) in Indian higher education: exploring the disciplinary, institution and system dimensions

Minto Felix | minto.felix@wolfson.ox.ac.uk
Department of Education, University of Oxford
Supervisors: Professor Alis Oancea, University of Oxford and Professor Simon Marginson, University of Oxford

1. Key challenges facing India's research system

- India's public spend on R&D has remained between 0.6-0.7% - well below other major nations such as China and the US.
- No Indian HEI featured in Top 200 global rankings, patent production remains low.
- At the same time, research output has grown significantly. Overall volume of research output higher than UK, Germany and Japan (National Science Board, 2020).
- The need for research in India to "rise beyond the step of instrumentality." (Patel, 2016, p.251)
- Research culture described as weak and disjointed (Ravi, Gupta and Nagaraj, 2019).

There is a need to explore research culture in India

2. The many faces of culture

- Culture is variously defined, including as the persistent patterns of shared values, beliefs and assumptions (Lee, 2007).
- Culture is dynamic, ever evolving, spawning subcultures and nested within other systems and forces (Ruscio, 1987).
- Culture as a list of functions and activities
- Culture as a lever of change.
- Culture as enabling and disabling.
- Culture as interactions between human and the non-human.

These definitions have implications for research

4. Proposed programme of inquiry

RESEARCH QUESTIONS

1. With a focus on the Tamil Nadu, and Maharashtra regions, what are the key features in research culture at the level of disciplines, institutions, and systems (regional / national)?
2. What are the interactions and tensions between the scales of disciplinary research cultures, HEI research cultures, and the culture of the wider research system at regional and national levels?

PHILOSOPHICAL ASSUMPTIONS AND THEORIES

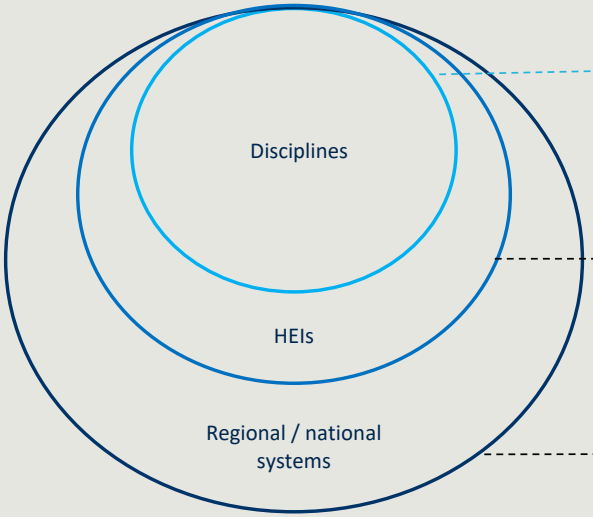
The study is underpinned by a social constructivist epistemology and will draw on Williams' (1961) work on cultural materialism.

METHODS OF DATA COLLECTION

Disciplines will serve as the core unit of analysis.

Interviews and field observations with researchers, research leaders and policy officials.

3. A conceptual framework to investigate research culture



Disciplinary research culture explores the norms of researchers within shared epistemological communities. Members of a discipline share certain commitments (McLean, Abbas and Ashwin, 2013).

HEI research culture emphasises values, attitudes, and behaviours towards research itself and is positioned as a lever through which to drive changes in research performance. (Tierney, 1998)

System-level research culture is expected to fulfil a broad range of ideals, including contributing to national economic and social development. Discourse is closely linked with researcher ethics, regulation, and values. (Wellcome Trust, 2020)

Epistemic Injustices in Internationalising Humanities and Social Sciences: A Case Study of Higher Education and Science Institutes in Kazakhstan

By Olga Mun, Doctoral student, Department of Education, University of Oxford

This case study will examine how policies for internationalisation of research (IoR) outputs shape epistemically just and unjust practices in Humanities and Social Sciences (HSS) in different types of higher education and science institutes (HESIs) in Kazakhstan. It will provide in-depth analysis of the personal interpretations of the impact of the IoR policies on academics, administrators, policymakers, and academic journal editors, hence, covering the macro national, meso institutional and micro personal levels. Data collection methods will include diaries and semi-structured interviews which will be supplemented by historical and document analysis. Overall, the academic and department representatives interviewed will be based at five types of HESIs, covering all main types of HESIs with HSS programs.

Anticipated Intellectual Contribution to Philosophy of Education

Conceptually, this work engages with the ideas of testimonial and hermeneutical epistemic injustices introduced by Miranda Fricker (Fricker, 2009) in order to unpack the hierarchies and identify unjust practices during the internationalisation of research outputs process.

Three main intellectual contributions of this work are anticipated.

1. The study will contribute new knowledge to the literature on the topic of internationalisation of research drawing on the concepts of epistemic justice and injustice.
2. The second contribution will be methodological, since this work uses diaries, semi-structured interviews and archival research in analysing IoR in Kazakhstan, which has not been done before.
3. The third contribution will be empirical, as not many studies exist that empirically engage with the concepts of testimonial and hermeneutical injustice in the field of IoR research.

References: Fricker, M. (2007). *Epistemic injustice: Power and the ethics of knowing*. Oxford University Press.

With special thanks to Egor Shapovalov for a full permission to use this piece of art

Universities amid the imaginary of the triple helix in the Great Bay Area (GBA) of China

Wanlin Cai, University of Oxford
Contact: wanlin.cai@education.ox.ac.uk

Supervised by Dr. Xin Xu, Prof. Simon Marginson and Prof. Alis Oancea

- In the GBA, how do Universities and Research Institutes work with governmental and industry actors in fostering regional innovation?
- What are the particular roles of research in building the regional innovation system and World-Class Universities in the GBA?

Research Design

- Nested case study of Universities and Research Institutes (N=10) physically located in Guangzhou, Shenzhen, Hong Kong and Macau and are varying stages of pursuing a world-class status
- Interviews with government and industry actors pertinent to the research engagement of the case institutions
- Documentary analysis of policy and institutional documents and the informants' academic publications.

TRANSNATIONAL KNOWLEDGE NETWORKS:
A CASE STUDY OF SINO-SWISS SCIENTIFIC RESEARCH COLLABORATION

Xiaona Wang | *xiaona.wang@education.ox.ac.uk*

BACKGROUNDS

· Within globalization, international scientific collaboration is thought to be an essential factor in nurturing scientists and promoting the development of institutions and countries (Maginson, 2018).

· With the emergence of geopolitical tensions, competition centres around talent, science and technology (Wu, 2019). The environment around STEM advances is particularly competitive.

❖ **Why China And Switzerland?**

· Due to the diplomatic tensions between the Sino-US, China proactively seeks scientific collaborations with other developed counterparts with strong scientific capacities and neutral political stances (Freeman& Huang, 2015).

· The lack of research on international collaboration between a ”small” and “big” country while can reflect unique geopolitical and knowledge production patterns in scientific collaboration (Schøtt, 1987).

A Step Into The STEM Laboratory

The laboratory is where scientists have most of their daily communications and where relationships are most likely to form (Conti & Liu, 2015), and it is also a small scientific community that undertakes technological innovation and the responsibility of knowledge production and talent training (Nakhleh, Polles, & Malina, 2002), while the process of knowledge production inside the laboratory is usually described as a black box (Latour & Woolgar, 2013).

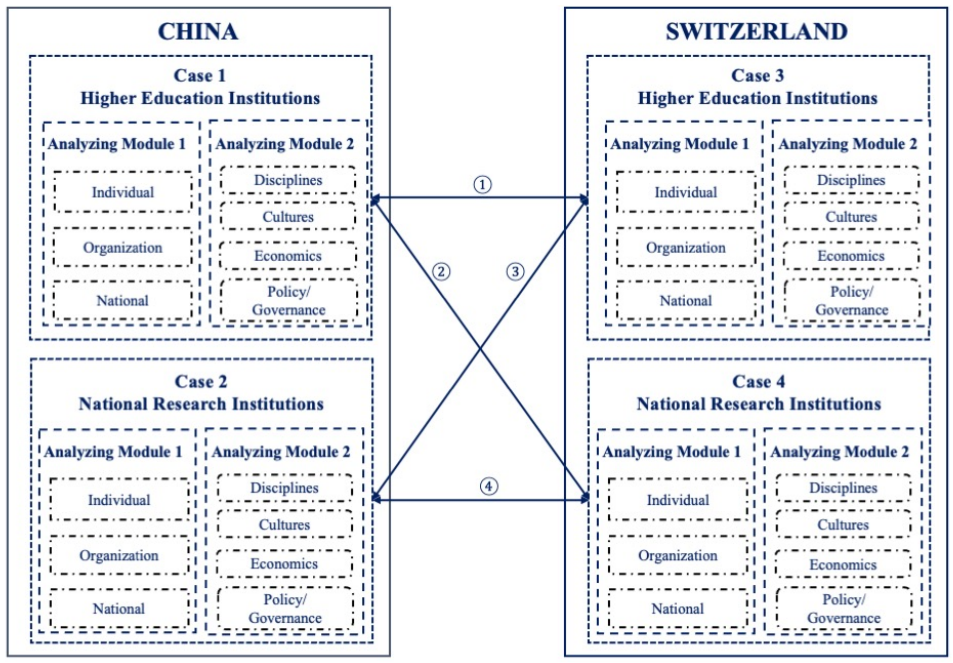


Figure 1. Multiple Cases Embedded Research Design

RESEARCH QUESTIONS

What are the key features of knowledge production in transnational knowledge networks formed by Sino-Swiss scientific collaboration in the field of STEM?

Sub-RQ1: What are the dynamics that stimulate collaborative knowledge production?

Sub-RQ2: What are the patterns of partnerships in knowledge production?

Sub-RQ3: How does the differentiated cultural, economic, and policy/governance environment in China and Switzerland affect collaborative knowledge production as external conditions?

KEY CONCEPT ： Transnational Knowledge Networks

The activities by agencies with the freedom to exchange and produce knowledge across the border on a reciprocal basis.

The human experience is the basis of understanding time and space (Castells, 2010; Kerdeman, 2015). Time and space shaped our society and have the characteristics of the network (Castells, 2010).

METHODOLOGY

❖ **Sampling process**

- A four-step process, followed by bottom-up and top-down strategies
- Step 1, identify the most collaborative relationships in the bilateral collaboration through bibliometric data analysis (Scopus data between 2011-2020, in STEM, 14,002 in total; ①②③④ in figure 1 are four pairs of relationships)
- Step 2, select the most collaborated institutions and disciplines through the pairs of relationships.
- Step 3, find the target laboratories among the institutions through the official laboratory website.
- Step 4, contact the individual participants from the laboratories and government through email.

❖ **Data collection**

- In-depth interviews
- Analyzing units: individual scientists; administrative staffs

IMPLICATIONS FOR HIGHER EDUCATION

· **Knowledge level:** scrutinise knowledge production in laboratories in the field of STEM situated in a globalised context; patterns of scientific research collaboration between China and European countries, particularly from the perspectives of knowledge production.

· **External environment of knowledge production:** extend our understanding of how external environments in the laboratory may influence scientific knowledge production and provide a policy basis for future Sino-Swiss science and technology collaboration.

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