

Event report

Brussels

18.04.2023

TALENT IN DEMAND

THE POTENTIAL OF DOCTORATE HOLDERS



DEPARTMENT OF
ECONOMY
SCIENCE &
INNOVATION



ecoom



FÉDÉRATION
WALLONIE-BRUXELLES



UNIVERSITEIT
GENT



TABLE OF CONTENTS

| | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| ORGANIZING COMMITTEE | 3 |
| INTRODUCTION | 4 |
| PROGRAMME | 5 |
| WELCOME SPEECHES | 6 |
| VÉRONIQUE HALLOIN, SECRETARY GENERAL, F.R.S-FNRS | 6 |
| KARL LAUWERS, ADVISOR SCIENCE & INNOVATION, CABINET OF JO BROUNS | 8 |
| VALÉRIE GLATIGNY, MINISTER OF HIGHER EDUCATION AND SCIENTIFIC RESEARCH, WALLONIA-BRUSSELS FEDERATION | 9 |
| KEYNOTE PRESENTATION : TALENT IN DEMAND – THE POTENTIAL OF DOCTORATE HOLDERS | |
| ECOOM & OBSERVATORY OF RESEARCH AND SCIENTIFIC CAREERS-F.R.S.-FNRS | 11 |
| THE PHD CAFÉ : DOCTORATE HOLDERS IN THE NON-ACADEMIC LABOUR MARKET | 15 |
| DISCUSSIONS | |
| ARE DOCTORATE HOLDERS SUFFICIENTLY PREPARED TO START WORKING IN THE NON-ACADEMIC LABOUR MARKET ? | 17 |
| HOW CAN EMPLOYERS OUTSIDE ACADEMIA ATTRACT AND RETAIN DOCTORATE HOLDERS ? | 18 |
| HOW CAN UNIVERSITIES AND EMPLOYERS ENABLE AND ENHANCE KNOWLEDGE TRANSFER AND COLLABORATION BETWEEN DOCTORAL CANDIDATES, POSTDOCTORAL RESEARCHERS AND EMPLOYERS ? | 19 |
| HOW CAN ACADEMIC AND NON-ACADEMIC ORGANIZATIONS ENSURE THAT THE EXPERIENCE GAINED IN ACADEMIA IS RECOGNIZED AS VALUABLE EXPERIENCE FOR NON-ACADEMIC JOB OPPORTUNITIES, AND VICE VERSA? | 20 |
| PHD CAFÉ SYNTHESIS | |
| CREATE CONNECTIONS AND COLLABORATIONS | 21 |
| ENHANCE INFORMATION, TRAINING AND RESEARCH VALORISATION | 22 |
| CHANGE OF MINDSET | 23 |
| PANEL DISCUSSION : DOCTORATE HOLDERS IN THE NON-ACADEMIC LABOUR MARKET | 24 |
| CLOSING SPEECHES | |
| CARTHAGE SMITH, SENIOR POLICY ANALYST & HEAD OF THE GLOBAL SCIENCE FORUM, OECD | 25 |
| IGNACE LEMAHIEU, DIRECTOR OF RESEARCH AND PROMOTOR OF ECOOM, GHENT UNIVERSITY | 27 |
| CONCLUSION | |
| ECOOM & OBSERVATORY OF RESEARCH AND SCIENTIFIC CAREERS-F.R.S.-FNRS | 28 |

ORGANIZING COMMITTEE



ECOOM Ghent focuses on the human potential in research in **Flanders**. On the one hand they focus on the academic trajectory, namely on the doctoral trajectory and the postdoctoral career path (e.g., success rates and wellbeing). On the other hand, they map the non-academic careers of doctorate holders, using the perspectives of doctorate holders and non-academic employers. To monitor these academic and non-academic careers ECOOM Ghent uses administrative databases (Human Resources in Research Flanders database), surveys (Survey of Junior Researchers, PhD Career Survey and Survey of Employers) and in-depth interviews. By doing so, it is possible to develop policy-supporting indicators, to formulate recommendations for the Flemish government and the Flemish universities, and to contribute to scientific knowledge about researcher careers that can support researchers in decision making regarding their careers. ECOOM Ghent publishes their results and findings on <https://www.ecoom.be/en/>

Thanks to funding from the **Wallonia-Brussels Federation** (WBF), the **Observatory of Research and Scientific Careers** was created in September 2018. Integrated in the F.R.S.-FNRS, this structure aims, among other things, to track and analyse the careers of researchers in the WBF through surveys and data cross-referencing. In collaboration with the WBF universities, the Observatory is responsible for developing knowledge on the doctoral and postdoctoral process. It makes recommendations to facilitate the professional transition of doctorate holders and optimise the doctoral process to meet the expectations of researchers and society. Particular attention is paid to the various obstacles to a scientific career: stereotypes and discrimination related to gender, constraints related to the requirement of international mobility, impact of the pressure to publish early in one's career, etc. The results of surveys and analyses are systematically published on the site: <http://www.observatoire.frs-fnrs.be/>

Lien Wille, senior researcher and project manager at ECOOM Ghent

Anneleen Mortier, senior researcher and project manager at ECOOM Ghent

Eva Steenberghs, data manager at ECOOM Ghent

Katia Levecque, Promotor and Director of ECOOM Ghent

Neda Bebiroglu, scientific advisor and coordinator at Observatory of Research and Scientific Careers-F.R.S.-FNRS

Baptiste Dethier, scientific advisor at Observatory of Research and Scientific Careers-F.R.S.-FNRS

Christel Ameryckx, administrative assistant at Observatory of Research and Scientific careers-F.R.S.-FNRS



October 2023

© Expertise centre for R&D monitoring (ECOOM)

© Observatory of Research and Scientific Careers-F.R.S.-FNRS

To cite this report:

Expertise centre for R&D monitoring (ECOOM) & Observatory of Research and Scientific Careers-F.R.S.-FNRS (2023, October). Event Report. *Talent in Demand: The potential of doctorate holders*. <https://observatoire.frs-fnrs.be/media/talentindemand.pdf>

Photographs: Aude Vanlathem – www.audevan.com

Sketch notes and portraits: Emilie Gobbo

INTRODUCTION

The event “[Talent in Demand: The Potential of Doctorate Holders](#)” was held on 18 April 2023 in Brussels, Belgium. Nearly 80 people from Flanders, Brussels and Wallonia joined this event to discuss the potential of doctorate holders in the non-academic labour market. The objective of this event was to bring together all relevant stakeholders in Belgium to engage in a fruitful dialogue about the careers of doctorate holders. The audience was a diverse mix of policymakers, researchers (including both doctoral candidates and doctorate holders), university representatives and non-academic employers.

The day was opened with speeches by **Véronique Halloin** (Secretary General F.R.S-FNRS), **Karl Lauwers** (Advisor for the Flemish Minister of Economy, Innovation, Work, Social Economy and Agriculture) and **Valérie Glatigny** (Minister of Higher Education and Scientific Research, Wallonia-Brussels Federation). After this, **ECOOM-UGent** and **Observatoire F.R.S-FNRS** set the stage with a keynote presentation on the current state of doctorate holders in the Belgian labour market and how Belgian non-academic employers perceive doctorate holders. Next, participants were invited to the “PhD Café” to discuss crucial questions on doctorate holders’ careers and how doctoral training can contribute to these careers. These discussions were then presented to a wider audience, followed by a panel discussion. The panel was moderated by **Clàudia Sarrico** (Professor of Management at School of Economics and Management, University of Minho). The event concluded with presentations by **Carthage Smith** (Senior Policy Analyst, Head of the Global Science Forum at OECD) and **Ignace Lemahieu** (Research Director of Ghent University).

This report is a comprehensive document that looks back on the event and compiles the main ideas and insights that unfolded throughout. It includes the opening speeches, the main messages from the keynote presentation, a synthesis of the ideas that emerged during the PhD Café and the closing speeches. As such, this report aims to document and synthesize the thought-provoking discussions from the event, providing a tangible resource not only for those who attended the event but also for anyone seeking creative ideas and insights concerning the careers of doctorate holders.



*Observatory of Research and
Scientific Careers-F.R.S.-FNRS*



*Expertise centre for R&D
monitoring (ECOOM)*

PROGRAMME

| | |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 8.30 – 9.00 | REGISTRATION & COFFEE |
| 9.00 – 9.30 | WELCOME Veronique Halloin <i>Secretary General, F.R.S-FNRS</i> Karl Lauwers <i>Advisor & Innovation, Cabinet of Jo Brouns, Flemish Minister of Economy, Innovation, Work, Social Economy and Agriculture</i> Valérie Glatigny <i>Minister of Higher Education and Scientific Research, Wallonia-Brussels Federation</i> |
| 9.30 – 10.00 | KEYNOTE PRESENTATION: TALENT IN DEMAND – THE POTENTIAL OF DOCTORATE HOLDERS <i>Expertise centre for R&D monitoring (ECOOM) & Observatory of Research and Scientific Careers - F.R.S.-FNRS</i> |
| 10.00 – 11.00 | PHD CAFÉ: DOCTORATE HOLDERS IN THE NON-ACADEMIC LABOUR MARKET |
| 11.00 – 11.15 | COFFEE BREAK |
| 11.15 – 12.15 | PANEL DISCUSSION: DOCTORATE HOLDERS IN THE NON-ACADEMIC LABOUR MARKET Moderator Clàudia S. Sarrico <i>Professor of Management at School of Economics and Management, University of Minho / Visiting Researcher, Sciences Po</i> Panelists Aina Fitó Parera , PhD Candidate, University of Antwerp Nicole Wedell von Leupoldt , Liaison External Labour Market, KU Leuven Career Center Sophie Leclère , Administrative Coordination and Valorisation of the Doctorate, UCLouvain Véronique De Herde , Postdoctoral Researcher, Rotterdam School of Management, Netherlands Institutions for Collective Action / Postdoctoral Research Fellow F.R.S.-FNRS, ULiège Vinciane Gaillard , Deputy Director for Research and Innovation, European University Association Wim Audenaert , CEO and Co-Founder, AM-TEAM Wout Van Impe , Partner & Team Director Belgium, Mercuri Urval |
| 12.15-12.30 | CLOSING Carthage Smith <i>Senior Policy Analyst, Head of the Global Science Forum (GSF), OECD</i> Ignace Lemahieu <i>Director of Research and Promotor ECOOM, Ghent University</i> |
| 12.30 – 14.00 | LUNCH |

WELCOME SPEECHES

VERONIQUE HALLOIN



VÉRONIQUE HALLOIN
SECRETARY GENERAL F.R.S.-FNRS

Good morning, everyone. It's an honour to welcome you all to this event dedicated to doctorate holders. I would like to express my gratitude to Karl Lauwers and minister Valérie Glatigny for their participation and congratulate the Observatory FNRS and ECOOM for bringing together representatives from universities, employers, policy makers, and researchers to discuss the role of doctorate holders in today's labour market.

With two questions that seem important to me: on the one hand, are doctoral graduates sufficiently prepared to start working in the non-academic job market? And on the other hand, how can employers attract, recruit, and retain PhDs?


You know it very well, FNRS is the research funding agency in the Wallonia-Brussels Federation, and the employer of around 1,800 researchers from all scientific fields based in the French-speaking universities.

We often talk about the precariousness of the researcher's career. It's true that, even if we must absolutely thank the unwavering support of our policy makers who have provided us with funding, the level of public funding for FNRS is often considered to be insufficient, given the high number of applications we receive, both at doctoral and post-doctoral levels. This results in the unfortunate rejection of outstanding researchers. It's one aspect of that precariousness. It's true all over the world I would say. And I am fully aware of the problems this poses, even to the point of threatening academic freedom itself.

But my point is a little different: I hope that it will be well understood and may give rise to positive reflections during this day. The precarity doctorate holders are experiencing is forcing them outside the academic world. This is an enormous potential for the entrepreneurial world. Why couldn't PhD holders, who may feel underestimated in this context, find other career possibilities, opportunities to bring their values, their rigor, their method, their vision of the world to the business world (market and non-market, private and public)? Why couldn't all business sectors fully profit from their potential?

This way of posing the problem, raising the issue is perhaps a little unusual, but I tell myself that there is something more mobilizing and exciting... Even if, I repeat, this question linked to the uncertainty of scientific careers is a daily concern and I believe that we are doing, with the support of the Wallonia-Brussels Federation, the Federal Government, and Wallonia, the best we can with the means available. And we try harder and harder every year...

I would not like to end this introductory speech without underlining the contribution of the Observatory FNRS to our understanding of the research workforce in the Wallonia-Brussels Federation. With data of over 3,500 doctorate holders and 600 employers, their work has provided valuable insights into the working conditions of doctorate holders, both within academia and beyond. Their research has shed light on skill requirements, mobility patterns, and career trajectories of doctorate holders, enhancing



our understanding of this critical workforce. The team has disseminated their findings through various channels such as reports, notes, publications, and presentations. I'm pleased to share that their work has garnered recognition not only from universities and researchers but also from employers and international institutions.

I hope this event will provide a platform to further our reflections on improving the career prospects of doctorate holders. Thank you for your presence.

"We attach great importance to the career development of the doctorate holders that we fund. For several years now, we have systematically monitored the employment status of our former doctoral and postdoctoral researchers to understand their job transition."



It is my pleasure to welcome you all to this event.

As policymakers we have the ambition to expand Flanders' position as an innovative region in Europe. ECOOM, our Flemish Expertise Centre for Research and Development Monitoring, provides a robust system of parameters to map the innovation efforts, results, and impact.

Also, the latest ECOOM Brief investigated whether junior researchers find their PhD an added value for future employers outside the university. Since, for many doctoral candidates, their career path is not limited to the academic labor market. However still, many skills obtained during a PhD are very useful for later career opportunities.

The ability to plan, execute, follow up, and communicate a complex problem, is for instance something that is also useful in the private sector, and even in politics.

In Flanders, we already have some policy instruments to train our young students in these future career skills. The "Baekeland mandate" also provides the ability of PhD research in strong collaboration with a private company.

The discussions today will give us information and food for thought to optimize our policies. It helps me to give an inside in the needs of our young researchers.

"For many doctoral candidates, their career path is not limited to the academic labour market. However still, many skills obtained during a PhD are very useful for later career opportunities."



Dear colleagues, dear researchers, ladies, and gentlemen,

Thank you for your invitation to this national day of reflection on the recruitment of research talents in our country. I would like to thank ECOOM and the Observatory of Research and Scientific Careers for their work and I am delighted with the presentation of the data they have collected and the recommendations they will make.

I fully support the initiatives taken to facilitate the inclusion of all researchers, in particular young researchers, in positions in which they can develop their full potential, their talents.


We are not talking here only about the Top 10 researchers, the future Nobelists, but about any committed and invested research professionals, as defined by the OECD. Furthermore, our focus extends beyond those aiming for an academic career, which some still think is "the career" for PhD holders.

It is about supporting the development of research careers that are balanced, equally accessible to all, and that contribute to the economic and social development of our country as well as to peace and prosperity in the world.

I fully support European initiatives to open up the labour market in Europe, and in particular in the world of research. It is a question of training, welcoming, sending and including everyone in interesting and fairly paid jobs, without discrimination on the basis of gender, origin or discipline. These jobs can be in the public or private sector, in research centres, universities, colleges (hautes écoles), art schools, large and small companies, NGOs, etc.

As Minister of Higher Education and Scientific Research in the Wallonia-Brussels Federation, I would like to draw your attention to the following points:

- The success rate of training for research, must be clearly improved, and the duration of the doctorate must be controlled to correspond to the best international standards.
- Research must be free and in accordance with ethical practices, within a favourable environment, whether it is developed in universities, colleges (hautes écoles), art schools or directly in companies.
- Research results and data must be published in open access and accessible to all.
- The mobility of researchers must be facilitated, both financially and administratively, whether it is developed in the European Union, or in the world.
- Good balance between family life and professional life as well as equality in diversity must be at the heart of reflections and actions.
- The sustainability of researchers' employment must be supported, through professional training of course, but also by ensuring a permanent dialogue between ministries, employers, funders, researchers, and social partners.

- 
- Researchers' access to existing national, international, or private funding must be facilitated by professionalized services.

This is why I believe that the work entrusted to the Observatory FNRS must be carried out, in collaboration with all the actors and operators, according to priorities established in consultation for the benefit of all.

Thank you for your attention.

"It is about supporting the development of research careers that are balanced, equally accessible to all, and that contribute to the economic and social development of our country as well as to peace and prosperity in the world."

KEYNOTE PRESENTATION

TALENT IN DEMAND: THE POTENTIAL OF DOCTORATE HOLDERS

ECOOM & OBSERVATOIRE-F.R.S.-FNRS

A record high of 210,000 jobs were vacant in 2022 in Belgium. The most recent numbers coming from Eurostat indicate that the job vacancy rate of Belgium is the second highest in Europe. High job vacancy rates have consequences for both employers and employees. Employees have a larger pool of available jobs, which means that they have a choice. Before choosing a job, they consider many factors like work-life balance, the possibility to work from home, having a meaningful job, the career development potential of the job, etc. On the other hand, employers have a smaller applicant pool and hence a reduced supply of critical skills. Indeed, employers in Belgium are encountering difficulties in finding suitable candidates to fill their vacancies. Therefore, currently in the Belgian labour market, attracting talent is a top priority for employers.

THE IMPORTANT ROLE OF DOCTORATE HOLDERS WITHIN THE LABOUR MARKET OUTSIDE UNIVERSITY



They are a **primary source of knowledge**, bringing information about recent scientific research, and offering insights to solve complex problems.



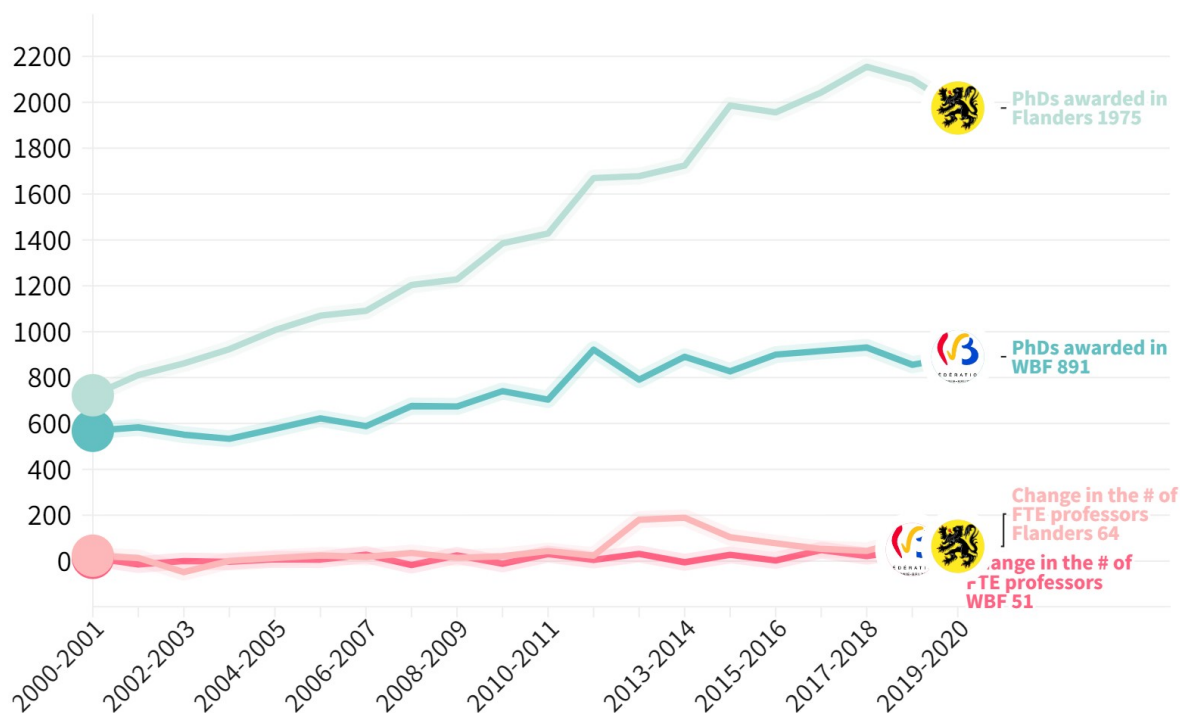
They possess a remarkable ability to **swiftly access and assimilate external knowledge**, using it to create value and enhance organizational performance.



Doctorate holders can act as **indispensable connectors**, bridging academia and non-academic sectors, thereby facilitating the transfer of knowledge and technology.

SIGNIFICANT INCREASE IN THE NUMBER OF DOCTORAL DEGREES IN BELGIUM BETWEEN 2000 AND 2020

Looking at figures coming from Belgium between 2000 and 2020 (Figure 1), we see a **steep increase** in the share of doctorate holders both in Flanders and Wallonia-Brussels Federation, particularly from 2013 onwards. However, for the same period, the change in number of full-time professors is not at the same speed. This suggests that **many doctorate holders sooner or later enter the non-academic labour market** and transition to a job outside academia.



Source: CRef, VLIR, DHO

Figure 1. Number of doctorates awarded in Flanders and Wallonia-Brussels Federation and change in the number of professors (full-time equivalent) between 2000-2020.

TRANSITION OF DOCTORATE HOLDERS TO THE NON-ACADEMIC LABOUR MARKET

However, the transition of doctorate holders to the non-academic labour market is not as seamless as one would expect. Looking at this transition from the perspective of doctorate holders, our findings highlight that in both regions, only about **one third of doctorate holders are employed in jobs that require a doctoral degree** (Figure 2). This implies that the majority of doctorate holders who work outside of academia find themselves “**overeducated**” for their positions, given their higher level of education compared to job requirements.

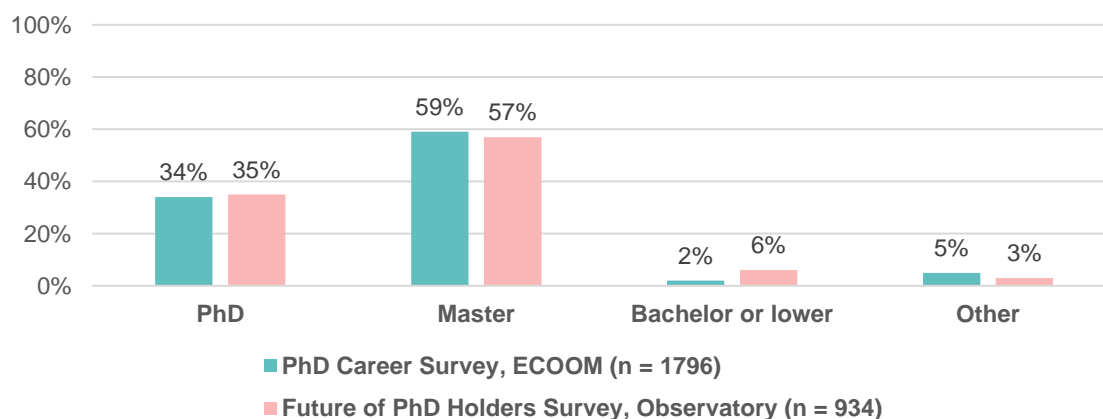


Figure 2. Educational level required for current job outside of academia – reported by doctorate holders.

Moreover, 41% of doctorate holders who work outside of academia do not perceive that their doctorate enables them to secure a better salary (Figure 3).

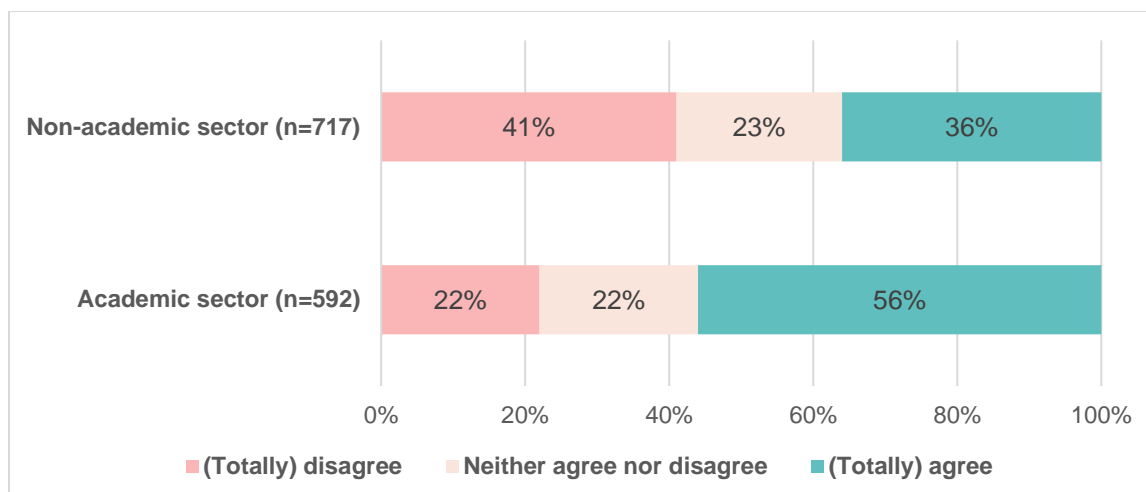


Figure 3. Doctorate enabled to secure a more attractive salary – reported by doctorate holders. (source: Future of PhD holders Survey, Observatory of Research and Scientific Careers-F.R.S.-FNRS).

Nevertheless, for most of them, **their doctorate is perceived as an added value in their job** (Figure 4). When these three points are considered together, it gives the impression that their worth is not being fully recognized.

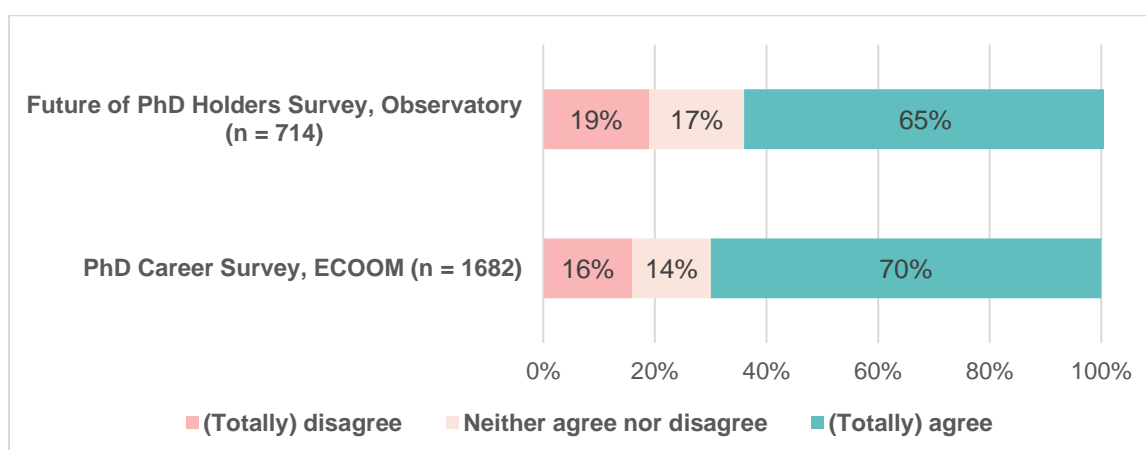


Figure 4. Doctorate perceived as an added value in current job outside of academia – reported by doctorate holders.

HOW DO EMPLOYERS PERCEIVE DOCTORATE HOLDERS?

When looking at employers' perceptions of the added value of doctorate holders (Figure 5), we observe that 55% of employers recognize their added value for the company. At the same time, four out of ten hold uncertainty regarding whether a doctorate holder brings an added value.

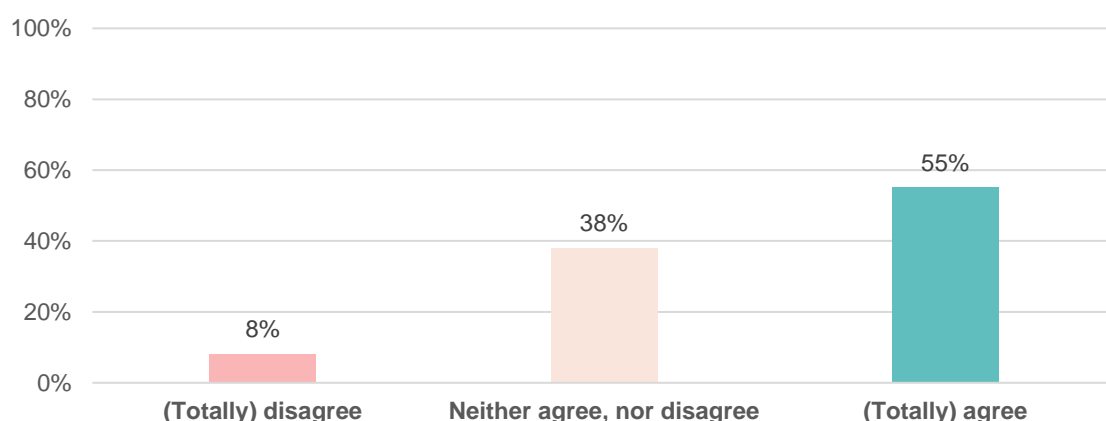


Figure 5. Added value of a doctorate holder – reported by non-academic employers (source: Survey of Employers, ECOOM; n = 251).

EMPLOYERS PERCEPTIONS OF DOCTORATE HOLDERS' SKILLS

| Weaknesses | Strengths |
|-------------------------------------------------------------------------------------------------------|---------------------------------------|
| Lack of business skills and insights | Strongly developed learning ability |
| Difficulties to adapt to the pace of business and strike the right balance between speed and accuracy | Expertise they bring into the company |
| Difficulties with working on topics outside their speciality | Ability to work autonomously |
| Lack of leadership skills | Innovative mindset |

CONCLUSION

Taken together, on one hand, there is an **influx of doctorate holders into the non-academic job market**, where they find themselves in roles that do not match their educational qualifications, and do not necessarily perceive their salaries as more appealing. Nonetheless, many still believe that their doctorate is perceived as an asset in their current roles. On the other hand, **employers are grappling with talent shortages** and hold **mixed sentiments** about doctorate holders, who represent a potential source of untapped talent. These observations give rise to several pertinent questions that were later discussed during the PhD café and the panel session.



PHD CAFÉ: DOCTORATE HOLDERS IN THE NON-ACADEMIC LABOUR MARKET

The goal of the PhD Café was to foster collaborative dialogues, knowledge sharing, engaging discussions, and exchanges among participants. Participants were encouraged to share their opinions and insights constructively and with a focus on solutions.

The PhD Café was organized as follows: Groups of 4-5 people were gathered around tables. They were instructed to avoid people they personally knew so that the discussion could be richer. Every table had one of the following questions:

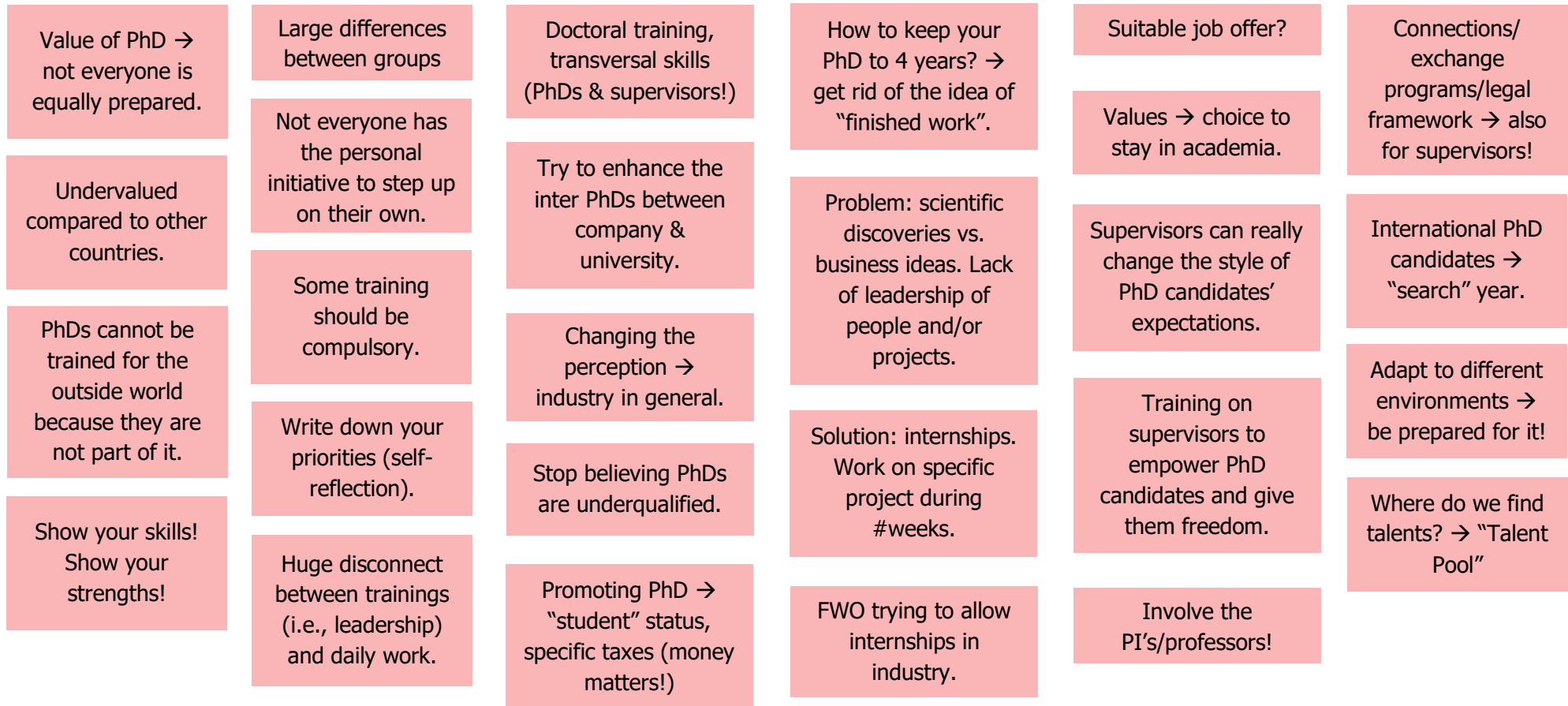
- Are doctorate holders sufficiently prepared to start working in the non-academic labour market? If this is not the case, how can doctoral or postdoctoral training be further developed to facilitate the transition to the non-academic labour market?
- How can employers outside academia attract and retain doctorate holders? What role can universities, policy makers, funding agencies and researchers play in facilitating this process?
- How can universities and employers enable and enhance knowledge transfer and collaboration between doctoral candidates, postdoctoral researchers, and employers?
- How can academic and non-academic organizations ensure that the experience gained outside academia is recognized as valuable professional experience for academic job opportunities, and vice versa? What can be put in place to incentivize and recognize these experiences?

During a discussion of 15 minutes, the designated note-taker in each group took notes of the key ideas, issues, and proposed solutions. Every group had then five minutes to wrap up. After that, participants switched tables, questions, and groups while the note-taker remained at the same table. After forming new groups, the note-taker provided a summary of the first-round discussions. The newly formed group then added to the suggestions of the first group and discussed for another 15 minutes the same question. Then, the group had five minutes to wrap-up, summarize and write down all the ideas discussed. During the PhD café, multiple ideas, strategies, and solutions were proposed by the participants.

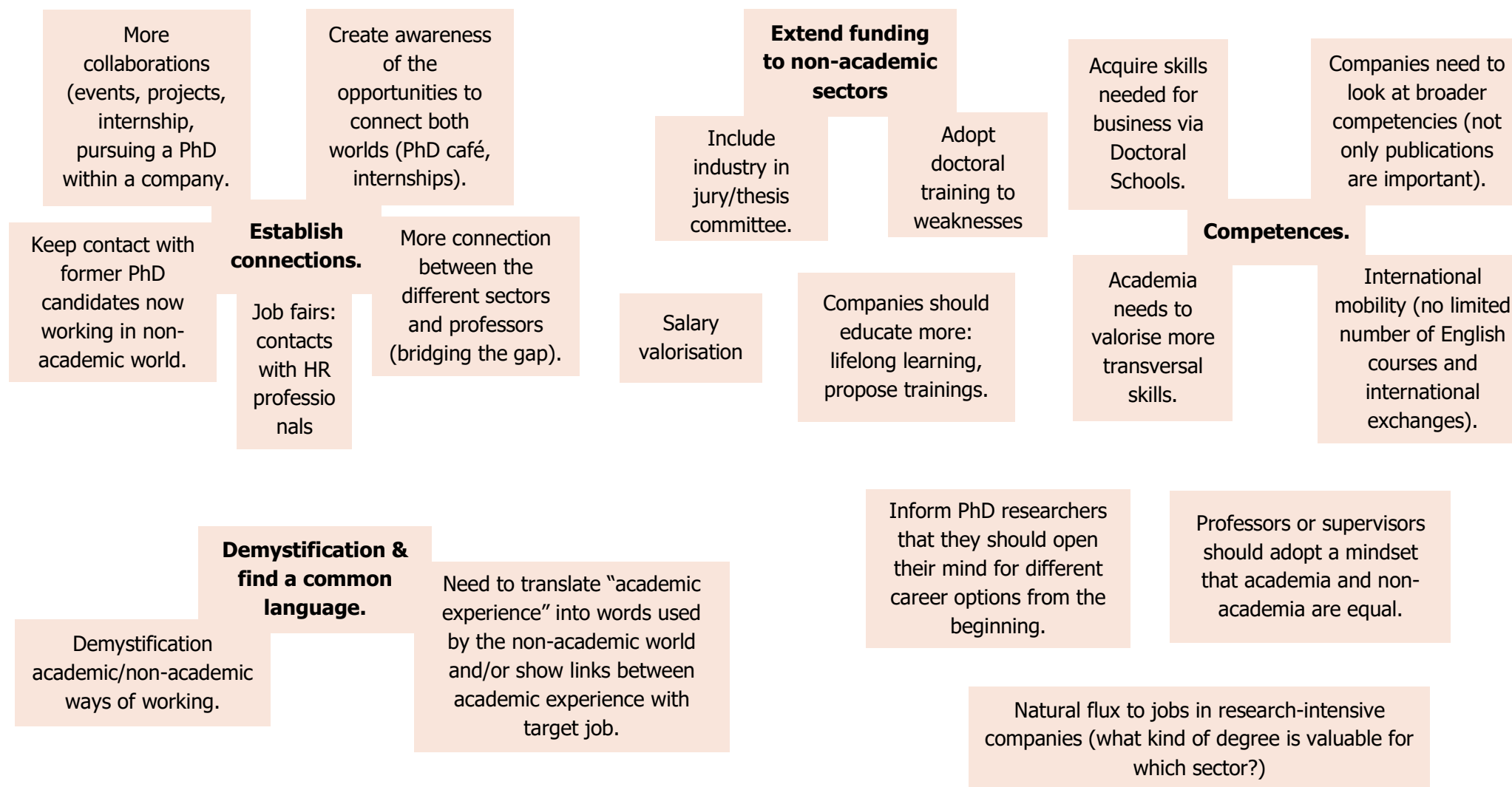
Following these discussions, the main ideas identified by each group were captured by the organizers, separated according to the respective questions, and presented to the audience (see pages 17 to 19). Additionally, to offer a more comprehensive perspective, these ideas have been grouped under overarching emerging themes (pages 21 to 23).



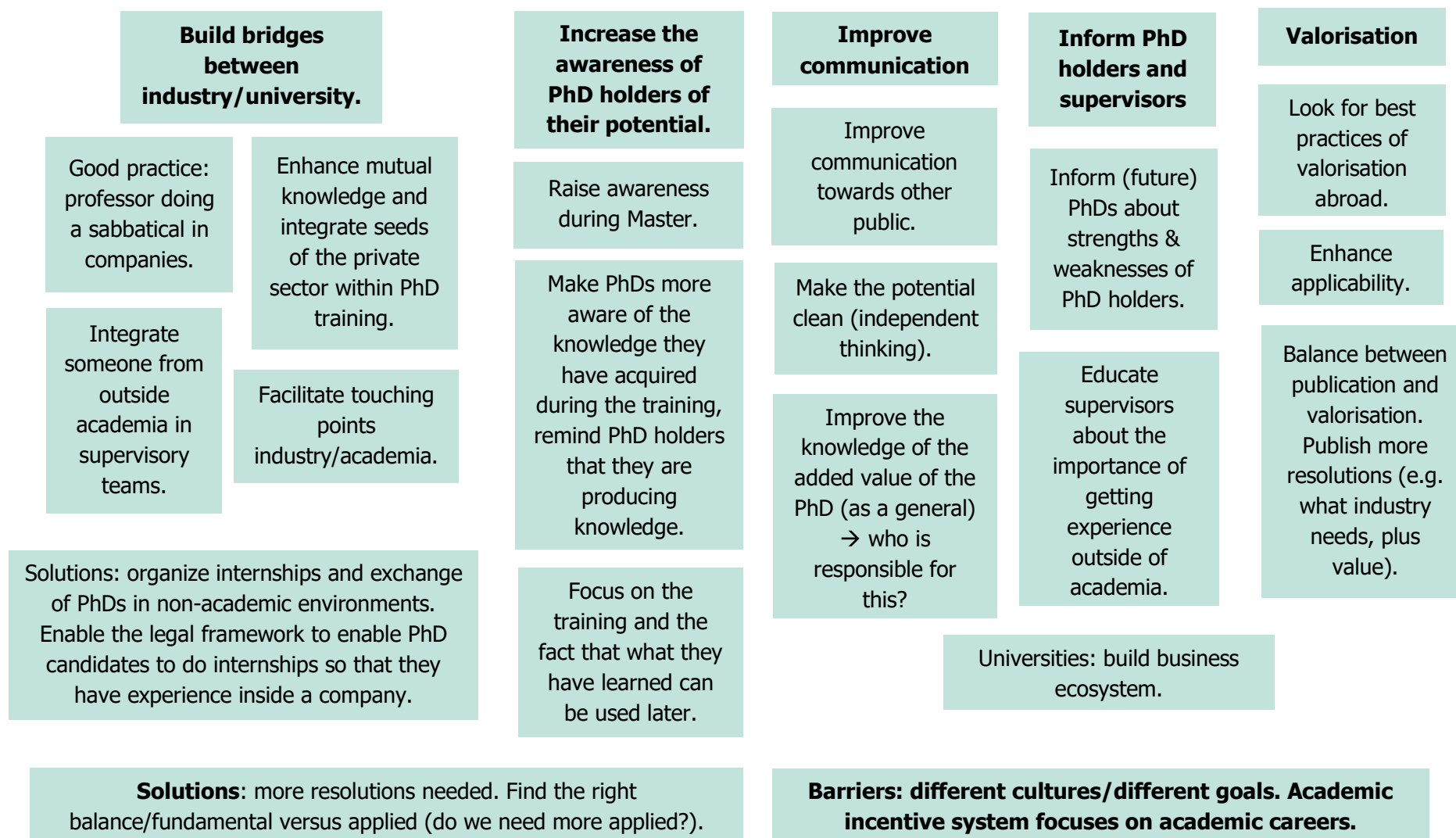
ARE DOCTORATE HOLDERS SUFFICIENTLY PREPARED TO START WORKING IN THE NON-ACADEMIC LABOR MARKET ?



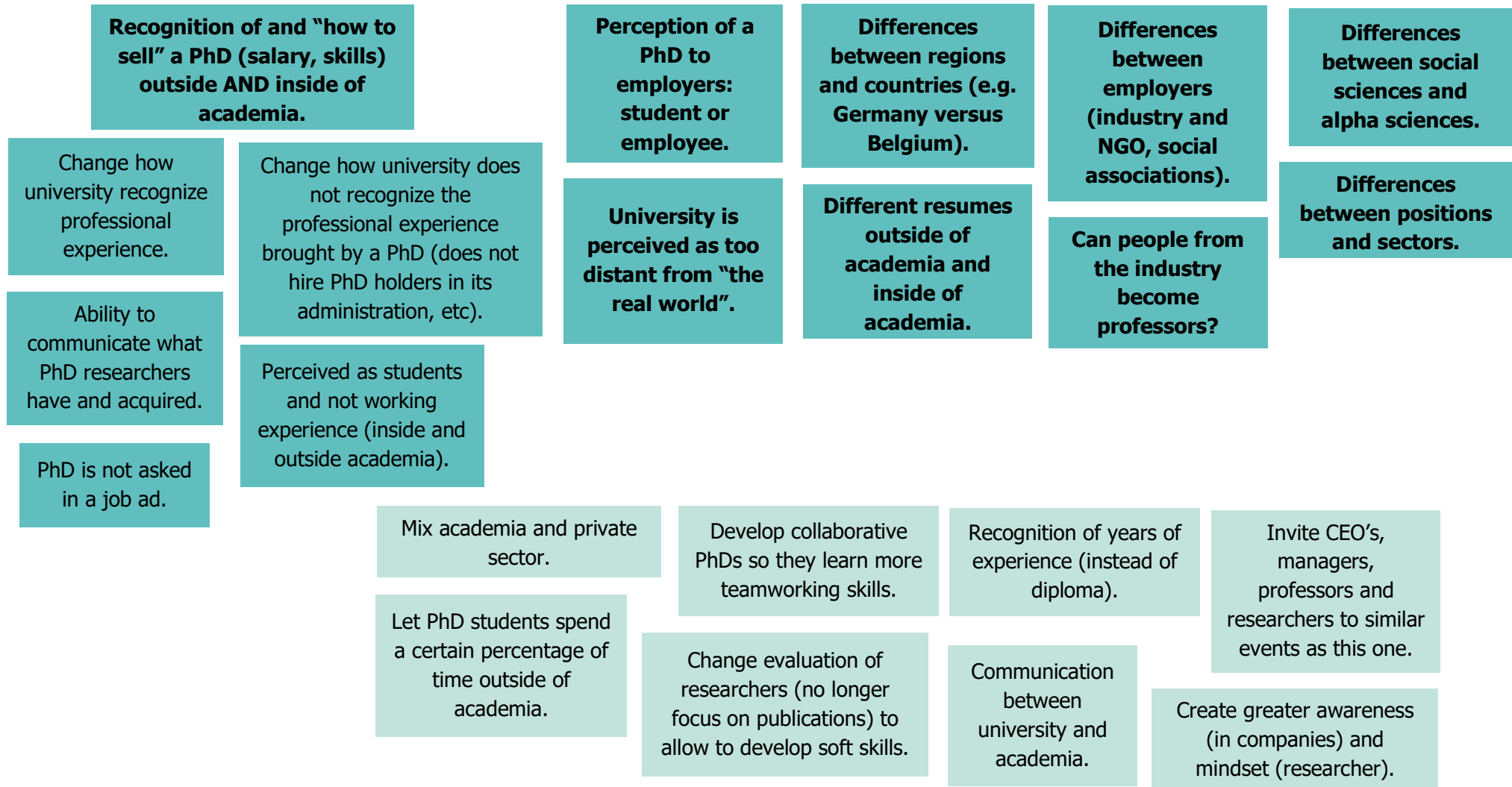
HOW CAN EMPLOYERS OUTSIDE ACDEmia ATTRACT AND RETAIN DOCTORATE HOLDERS?



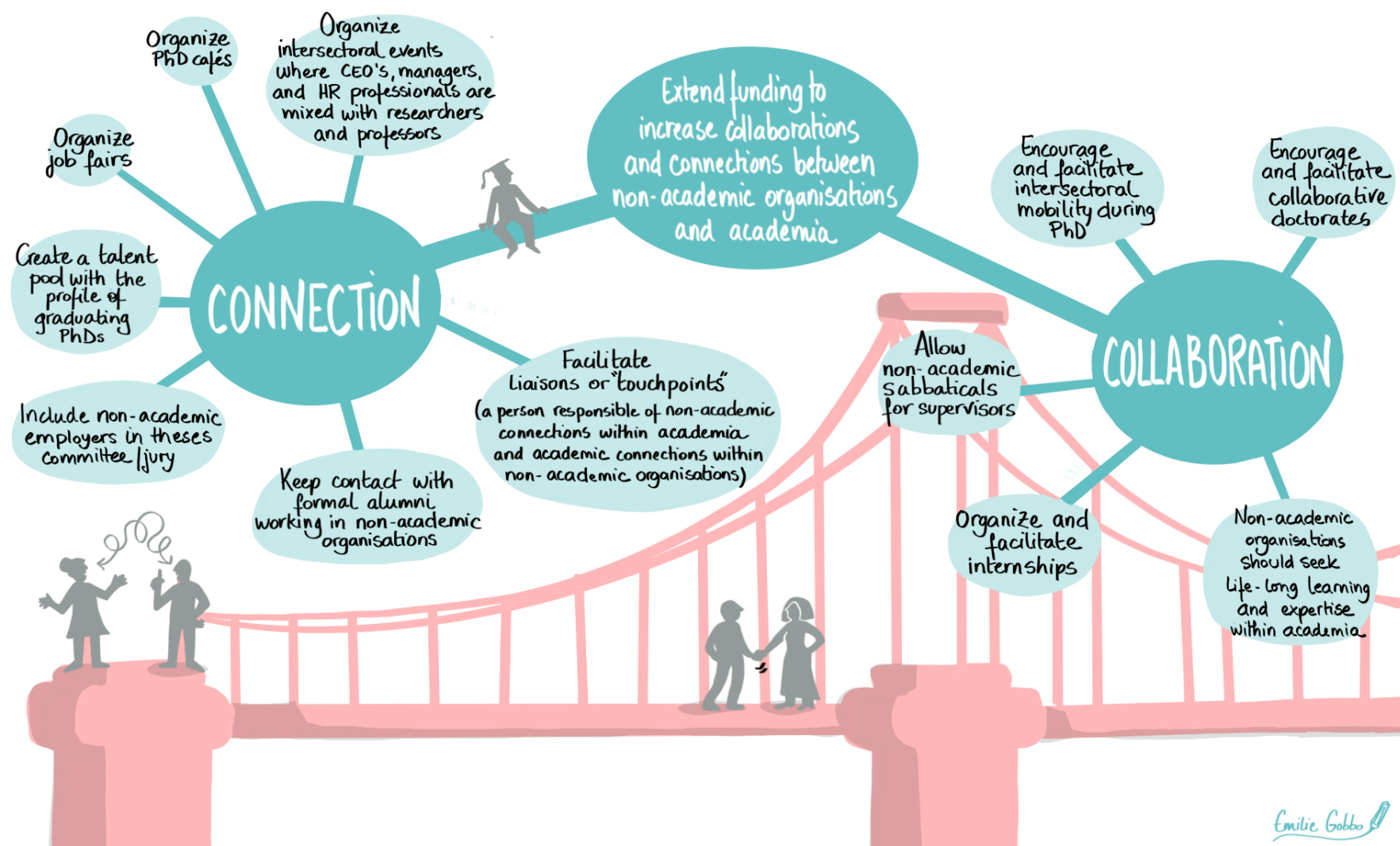
HOW CAN UNIVERSITIES AND EMPLOYERS ENABLE AND ENHANCE KNOWLEDGE TRANSFER AND COLLABORATION BETWEEN DOCTORAL CANDIDATES, POSTDOCTORAL RESEARCHERS AND EMPLOYERS?



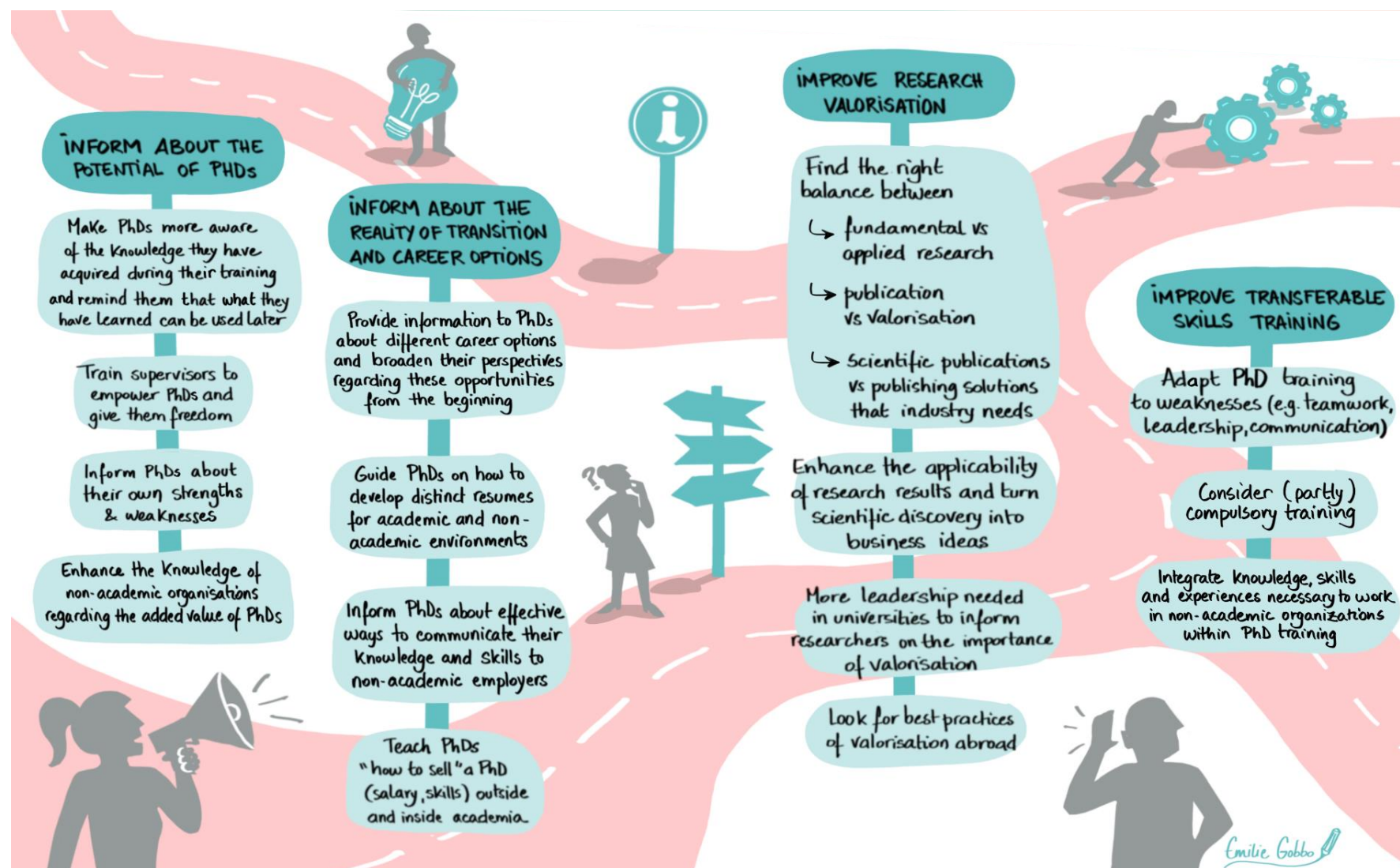
HOW CAN ACADEMIC AND NON-ACADEMIC ORGANIZATIONS ENSURE THAT THE EXPERIENCE GAINED IN ACADEMIA IS RECOGNIZED AS VALUABLE EXPERIENCE FOR NON-ACADEMIC JOB OPPORTUNITIES AND VICE VERSA?



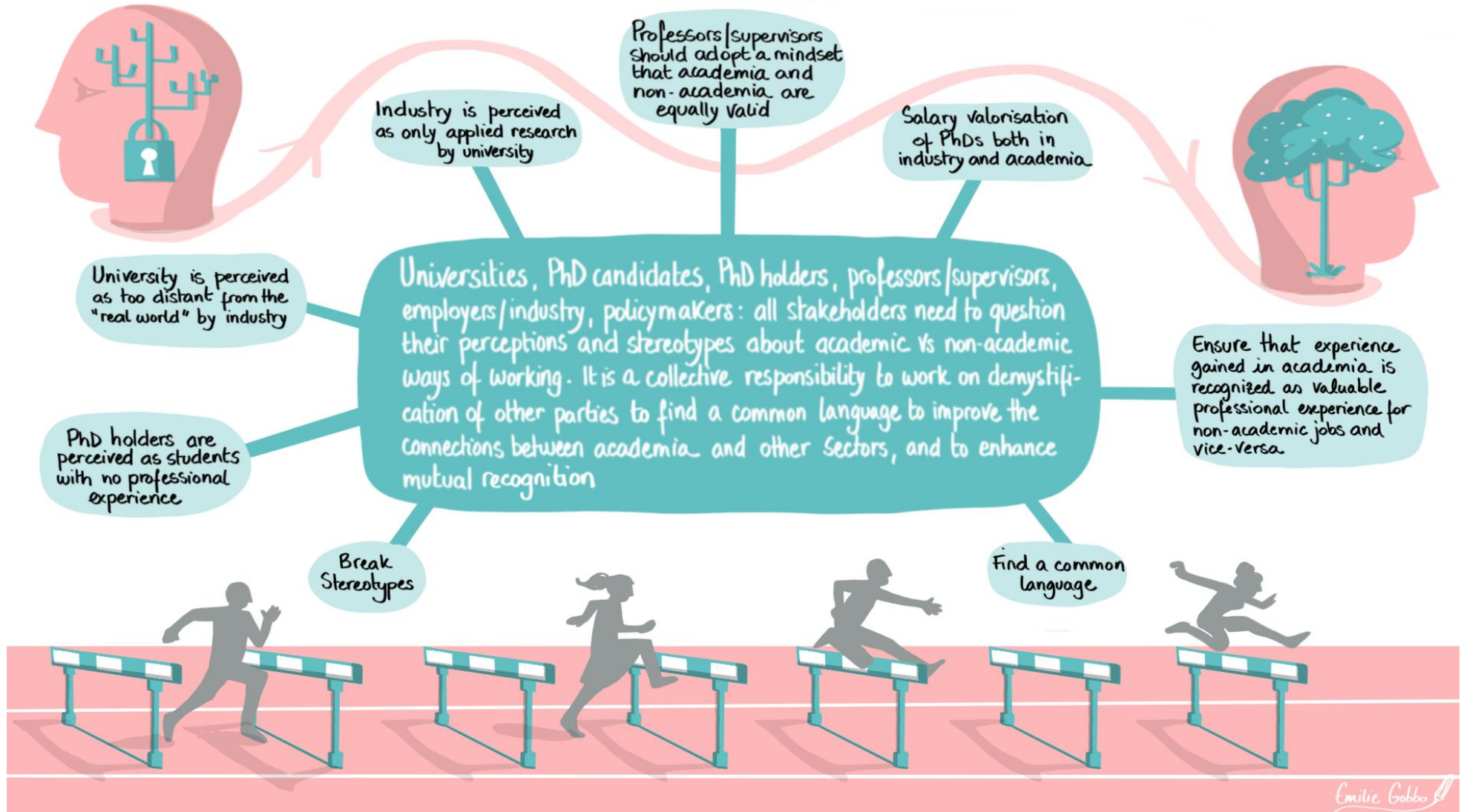
THEME 1: CREATE CONNECTIONS AND COLLABORATIONS



THEME 2: ENHANCE INFORMATION, TRAINING, AND RESEARCH VALORISATION



THEME 3: CHANGE THE PREVAILING MINDSET



PANEL DISCUSSION

The panel members who were carefully chosen to represent researchers, policy makers, university administrators, and employers reflected on the PhD Café discussions from their unique perspective.



CLOSING SPEECHES

CARTHAGE SMITH



CARTHAGE SMITH
SENIOR POLICY ANALYST OECD-STI

The previous work undertaken by the OECD-Global Science Forum on [precarity in academic research careers](#) emphasized the need for significant changes at a systemic level, involving various stakeholders, to foster a research workforce that is more diverse, robust, and efficient. The prevailing model for academic careers is characterized by a bottleneck that occurs between the doctoral phase and the attainment of a secure academic research position, a path that ultimately remains accessible to only a select few individuals. Those who find themselves stuck in this bottleneck often complete a series of precarious postdoctoral positions before eventually 'dropping out' of academia to pursue other career opportunities.

This situation poses a risk to the welfare of researchers, making doctoral training less appealing, hindering the retention of skilled individuals, and obstructing initiatives aimed at enhancing diversity within the research community. Ultimately, it is influencing decisions regarding research choices and negatively impacting the calibre of

scientific work. These factors are a strong motivation for reforms in doctoral and postdoctoral programs to promote a wider array of career opportunities for those with doctorates and to increase the attractiveness of research careers to a diverse and highly talented group of individuals.

A more desirable alternative vision entails equipping early-career researchers with the skills, information, and experience for various roles not only within academia but also in other sectors such as public administration, the social sector, the business world, or self-employment. Achieving this requires support and empowerment of young scientists to enable them to make informed career transitions.

The OECD GSF project focused on [promoting diverse career pathways for doctoral and postdoctoral researchers](#) aimed to address challenges that countries face in realizing this objective. The project provided eight recommendations for policy action:

- Promote the engagement and interaction of academic institutions and their funders with employers beyond academia.
- Provide doctoral and postdoctoral researchers with experience and skills for diverse careers within and beyond academia.
- Render more visible and encourage valorisation of diverse career options within and beyond academia.
- Offer career development and guidance on career options for doctoral and postdoctoral researchers and their supervisors.
- Promote inter-sectoral mobility with the business enterprise sector.
- Promote inter-sectoral mobility with the government and the private not-for-profit sectors.
- Reconfigure traditional academic career models and support diverse careers in academia.

- 
- Support international mobility.

Preparing the research workforce of the future requires consistent, long-term commitment and a united vision across different stakeholders. Ultimately, promoting the diversification of research careers and the flexibility of career trajectories should contribute to increased satisfaction, diversity, and productivity in the research workforce across all sectors of society.

"A more desirable alternative vision entails equipping early-career researchers with the skills, information and experience for various roles not only within academia but also in other sectors."



IGNACE LEMAHIEU
DIRECTOR OF RESEARCH AND PROMOTOR ECOOM
GHENT UNIVERSITY

Dear Attendees,

We are now approaching the end of this event about the training of doctoral candidates and the careers of doctorate holders. These careers are no longer limited to an academic context, but cover a broad range of options, also on the labour market outside academia. Today, we have convened an audience with various backgrounds and perspectives.

These diverse points of view led to insightful and thought-provoking discussions and presentations on how to connect the academic and non-academic worlds, on how to valorise the doctoral degree within and outside universities and on how to future proof the training of doctorate holders.

To close, I want to express my gratitude to the speakers, the panel, and the moderator of the panel for their contribution to this event. I would also like to thank the organizing team, ECOOM-UGent and Observatoire-F.R.S.-FNRS. Finally, I want to thank all of you for being part of this event and for your input in the discussion. I hope that every one of you will take home the knowledge and inspiration that has emerged from this event.

"These diverse points of view led to insightful and thought-provoking discussions and presentations on how to connect the academic and non-academic worlds, on how to valorize the doctoral degree within and outside universities and on how to future proof the training of doctorate holders."

CONCLUSION

Rapid technological, economic, and demographic changes have a profound impact on our way of life. Addressing these challenges requires talented workers. Among the talent pool, doctorate holders stand out for their unique ability to innovate and solve complex problems. Thus, the question arises: **how can we facilitate a seamless job transition after obtaining a doctorate?**

Our goal to organize this event was to facilitate a fruitful dialogue among various actors: universities, employers, policymakers, and doctoral and postdoctoral researchers on issues related to the job transition of doctorate holders. The discussions consistently emphasized that effectively addressing these challenges requires a **multifaceted approach**. First and foremost, fostering **connections and collaborations** between academia and non-academic sectors (i.e., industry, service, government sector) is paramount. This relationship can be mutually beneficial, as doctorate holders bring fresh perspectives and innovative thinking to non-academic settings, while non-academic settings offer them the opportunity to apply their expertise in practical, real-world contexts. Simultaneously, it is crucial to invest in the **dissemination of information, targeted training, and research valorisation**. This approach not only assists doctorate holders in adapting their skills to non-academic roles but also helps to dispel misconceptions about the applicability of their knowledge in diverse industries. Moreover, it is essential to **change the prevailing mindset** within and outside academia. Breaking down traditional stereotypes and biases is necessary to encourage the recognition of diverse career options.

ECOOM in Flanders and the Observatory of Research and Scientific Careers-F.R.S.-FNRS in the Wallonia-Brussels Federation will continue collecting data on the career trajectories of doctorate holders. This monitoring helps us gain insights into potential gaps and challenges in the career paths of doctorate holders, enabling us to inform doctoral education policies. These endeavours are essential, contributing not only to the personal success of doctorate holders but also to the advancement of innovation and societal and economic progress in Belgium.



*Observatory of Research and
Scientific Careers-F.R.S.-FNRS*



*Expertise centre for R&D
monitoring (ECOOM)*



DEPARTMENT OF
ECONOMY
SCIENCE &
INNOVATION



Observatoire
DE LA RECHERCHE
ET DES CARRIÈRES
SCIENTIFIQUES
fnrs

ecoom



FÉDÉRATION
WALLONIE-BRUXELLES



UNIVERSITEIT
GENT