Event report

Brussels 18.04.2023

TALENT IN DEMAND

THE POTENTIAL OF **DOCTORATE HOLDERS**











TABLE OF CONTENTS

ORGANIZING COMMITTEE	3
INTRODUCTION	4
PROGRAMME	5
WELCOME SPEECHES	6
VÉRONIQUE HALLOIN, SECRETARY GENERAL, F.R.S-FNRS KARL LAUWERS, ADVISOR SCIENCE & INNOVATION, CABINET OF JO BROUNS VALÉRIE GLATIGNY, MINISTER OF HIGHER EDUCATION AND SCIENTIFIC RESEARCH, WALLONIA-BRUSSELS FEDE	6 8
KEYNOTE PRESENTATION: TALENT IN DEMAND — THE POTENTIAL OF DO HOLDERS ECOOM & OBSERVATORY OF RESEARCH AND SCIENTIFIC CAREERS-F.R.SFNRS	
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 I MARKET ?	ABOR 17
How can employers outside academia attract and retain doctorate holders? How can universities and employers enable and enhance knowledge transfer and col	
BETWEEN DOCTORAL CANDIDATES, POSTDOCTORAL RESEARCHERS AND EMPLOYERS? HOW CAN ACADEMIC AND NON-ACADEMIC ORGANIZATIONS ENSURE THAT THE EXPERIENCE GAINED IS RECOGNIZED AS VALUABLE EXPERIENCE FOR NON-ACADEMIC JOB OPPORTUNITIES,	19 IN ACADEMIA
AND VICE VERSA? PHD CAFÉ SYNTHESIS	20
CREATE CONNECTIONS AND COLLABORATIONS	21
ENHANCE INFORMATION, TRAINING AND RESEARCH VALORISATION CHANGE OF MINDSET	22 23
PANEL DISCUSSION: DOCTORATE HOLDERS IN THE NON-ACADEMIC MARKET	LABOUR 24
CLOSING SPEECHES	
CARTHAGE SMITH, SENIOR POLICY ANALYST & HEAD OF THE GLOBAL SCIENCE FORUM, OECD IGNACE LEMAHIEU, DIRECTOR OF RESEARCH AND PROMOTOR OF ECOOM, GHENT UNIVERSITY	25 27
CONCLUSION	
ECOOM & OBSERVATORY OF RESEARCH AND SCIENTIFIC CAREERS-F.R.SFNRS	28

ORGANIZING COMMITTEE

ecoom



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/

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October 2023

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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

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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



PROGRAMME

8.30 - 9.00	REGISTRATION & COFFEE	
9.00 – 9.30	WELCOME	
	Veronique Halloin	
	Secretary General, F.R.S-FNRS	
	Karl Lauwers	
	Advisor & Innovation, Cabinet of Jo Brouns, Flemish Minister of Economy, Innovation, Work, Social Economy and Agriculture	
	Valérie Glatigny	
	Minister of Higher Education and Scientific Research, Wallonia-Brussels Federation	
9.30 – 10.00	KEYNOTE PRESENTATION: TALENT IN DEMAND — THE POTENTIAL OF	
	DOCTORATE HOLDERS	
	Expertise centre for R&D monitoring (ECOOM) & Observatory of Research and Scientific Careers - F.R.SFNRS	
10.00 - 11.00	······································	
11.00 - 11.15	COFFEE BREAK	
11.15 – 12.15	PANEL DISCUSSION: DOCTORATE HOLDERS IN THE NON-ACADEMIC LABOUR	
	MARKET	
	Moderator	
	Clàudia S. Sarrico	
	Professor of Management at School of Economics and Management, University of Minho / Visiting Researcher, Sciences Po	
	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	
	Senior Policy Analyst, Head of the Global Science Forum (GSF), OECD	
	Ignace Lemahieu	
12.30 - 14.00	Director of Research and Promotor ECOOM, Ghent University	
12.30 - 17.00	LUNCH	

WELCOME SPEECHES

VERONIQUE HALLOIN



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 introductive 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."

KARL LAUWERS



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."

VALÉRIE GLATIGNY



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 Wallonnia-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.

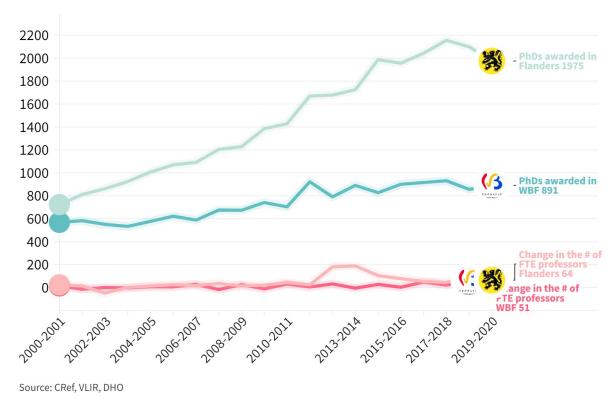


Figure 1. Number of doctorates awarded in Flanders and Wallonia-Brussels Federation and change in the number of professors (full-time equivalent) between 2000-2020.

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.

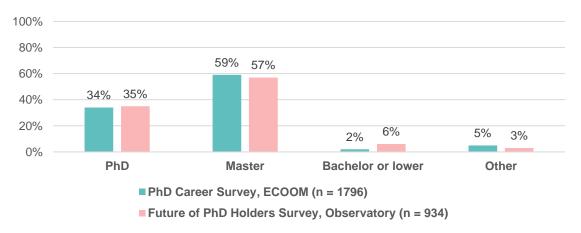


Figure 2. Educational level required for current job outside of academia – reported by doctorate holders.

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).

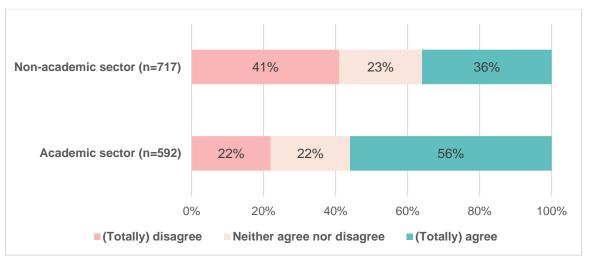


Figure 3. Doctorate enabled to secure a more attractive salary – reported by doctorate holders. (source: Future of PhD holders Survey, Observatory of Research and Scientific Careers-F.R.S.-FNRS).

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.

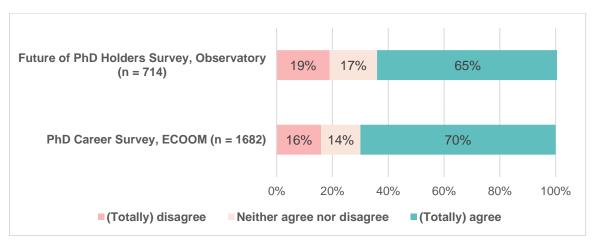


Figure 4. Doctorate perceived as an added value in current job outside of academia – reported by doctorate holders.

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.

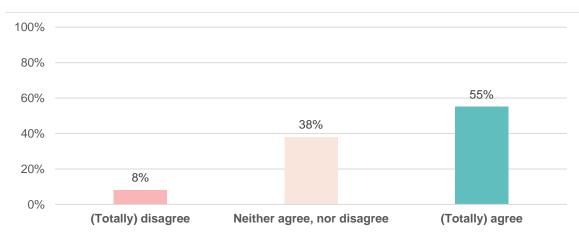


Figure 5. Added value of a doctorate holder – reported by non-academic employers (source: Survey of Employers, ECOOM; n = 251).

EMPLOYERS PERCEPTIONS OF DOCTORATE HOLDERS' SKILLS

LOTERS 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		
	Ability to work autonomously		
Difficulties with working on topics outside their speciality	Innovative mindset		
Lack of leadership skills			

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?

Value of PhD → not everyone is equally prepared.

Undervalued compared to other countries.

PhDs cannot be trained for the outside world because they are not part of it.

Show your skills! Show your strengths! Large differences between groups

Not everyone has the personal initiative to step up on their own.

Some training should be compulsory.

Write down your priorities (self-reflection).

Huge disconnect between trainings (i.e., leadership) and daily work. Doctoral training, transversal skills (PhDs & supervisors!)

Try to enhance the inter PhDs between company & university.

Changing the perception → industry in general.

Stop believing PhDs are underqualified.

Promoting PhD →
"student" status,
specific taxes (money
matters!)

How to keep your PhD to 4 years? → get rid of the idea of "finished work".

Problem: scientific discoveries vs. business ideas. Lack of leadership of people and/or projects.

Solution: internships.
Work on specific
project during
#weeks.

FWO trying to allow internships in industry.

Suitable job offer?

Values → choice to stay in academia.

Supervisors can really change the style of PhD candidates' expectations.

Training on supervisors to empower PhD candidates and give them freedom.

Involve the PI's/professors!

Connections/ exchange programs/legal framework → also for supervisors!

International PhD candidates → "search" year.

Adapt to different environments → be prepared for it!

Where do we find talents? → "Talent Pool"

HOW CAN EMPLOYERS OUTSIDE ACDEMIA ATTRACT AND RETAIN DOCTORATE HOLDERS?

More collaborations (events, projects, internship, pursuing a PhD within a company. Create awareness of the opportunities to connect both worlds (PhD café, internships).

Extend funding to non-academic sectors

Include industry in jury/thesis committee.

Adopt doctoral training to weaknesses Acquire skills needed for business via Doctoral Schools. Companies need to look at broader competencies (not only publications are important).

Keep contact with former PhD candidates now working in nonacademic world. Establish connections.

Job fairs: contacts with HR professio nals More connection between the different sectors and professors (bridging the gap).

Salary valorisation Companies should educate more: lifelong learning, propose trainings. Competences.

Academia needs to valorise more transversal skills. International
mobility (no limited
number of English
courses and
international
exchanges).

Demystification & find a common language.

Demystification academic/non-academic ways of working.

Need to translate "academic experience" into words used by the non-academic world and/or show links between academic experience with target job.

Inform PhD researchers that they should open their mind for different career options from the beginning.

Professors or supervisors should adopt a mindset that academia and nonacademia are equal.

Natural flux to jobs in research-intensive companies (what kind of degree is valuable for which sector?)

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

Build bridges between industry/university.

Good practice: professor doing a sabbatical in companies.

Integrate someone from outside academia in supervisory teams. Enhance mutual knowledge and integrate seeds of the private sector within PhD training.

Facilitate touching points industry/academia.

Solutions: organize internships and exchange of PhDs in non-academic environments.

Enable the legal framework to enable PhD candidates to do internships so that they have experience inside a company.

Increase the awareness of PhD holders of their potential.

Raise awareness during Master.

Make PhDs more aware of the knowledge they have acquired during the training, remind PhD holders that they are producing knowledge.

Focus on the training and the fact that what they have learned can be used later.

Improve communication

Improve communication towards other public.

Make the potential clean (independent thinking).

Improve the knowledge of the added value of the PhD (as a general)

→ who is responsible for this?

Inform PhD holders and supervisors

Inform (future)
PhDs about
strengths &
weaknesses of
PhD holders.

Educate supervisors about the importance of getting experience outside of academia.

Valorisation

Look for best practices of valorisation abroad.

Enhance applicability.

Balance between publication and valorisation. Publish more resolutions (e.g. what industry needs, plus value).

Universities: build business ecosystem.

Solutions: more resolutions needed. Find the right balance/fundamental versus applied (do we need more applied?).

Barriers: different cultures/different goals. Academic incentive system focuses on academic careers.

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?

Recognition of and "how to sell" a PhD (salary, skills) outside AND inside of academia.

Change how university recognize professional experience.

Ability to communicate what PhD researchers have and acquired.

PhD is not asked in a job ad.

Change how university does not recognize the professional experience brought by a PhD (does not hire PhD holders in its administration, etc).

Perceived as students and not working experience (inside and outside academia). Perception of a PhD to employers: student or employee.

University is perceived as too distant from "the real world".

Differences between regions and countries (e.g. Germany versus Belgium).

Different resumes outside of academia and inside of academia. Differences between employers (industry and NGO, social associations).

Can people from the industry become professors? Differences between social sciences and alpha sciences.

Differences between positions and sectors.

Mix academia and private sector.

Let PhD students spend a certain percentage of time outside of academia. Develop collaborative PhDs so they learn more teamworking skills.

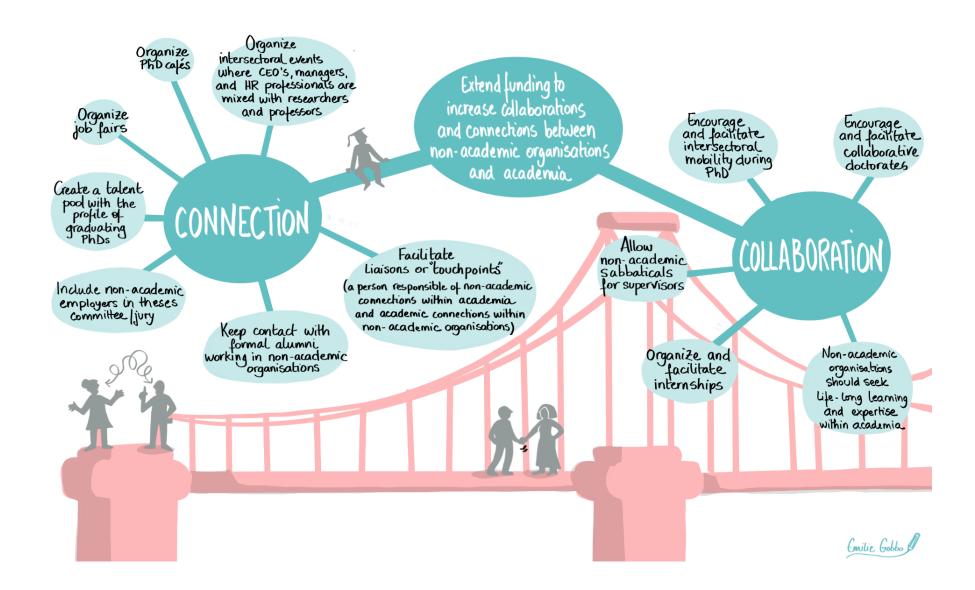
Change evaluation of researchers (no longer focus on publications) to allow to develop soft skills.

Recognition of years of experience (instead of diploma).

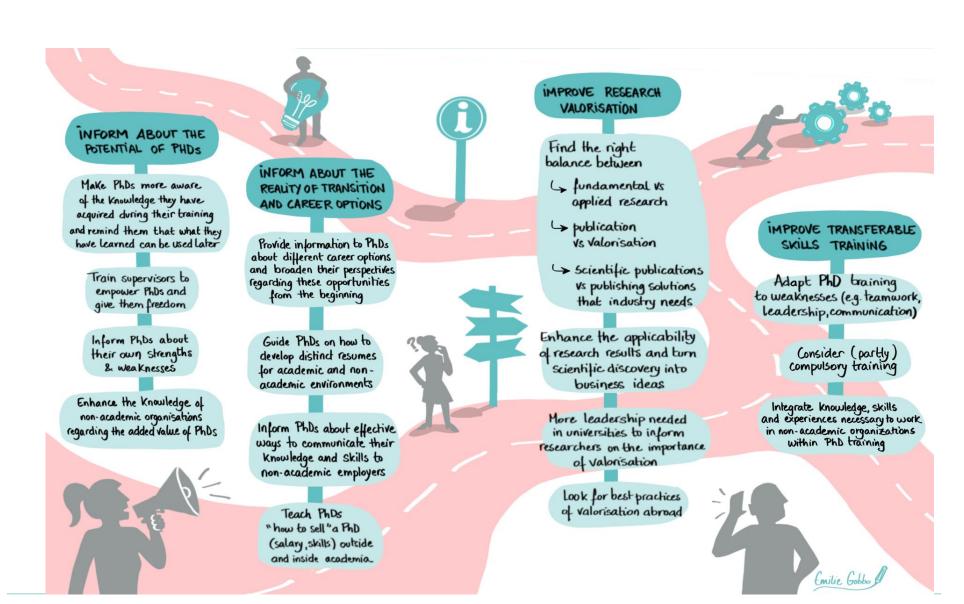
Communication between university and academia. Invite CEO's, managers, professors and researchers to similar events as this one.

Create greater awareness (in companies) and mindset (researcher).

THEME 1: CREATE CONNECTIONS AND COLLABORATIONS



THEME 2: ENHANCE INFORMATION, TRAINING, AND RESEARCH VALORISATION



THEME 3: CHANGE THE PREVAILING MINDSET



Industry is perceived as only applied research by university

Professors | supervisors should adopt a mindset that arademia and non-arademia are equally valid

Salary valorisation of PhDs both in industry and academia



University is perceived as too distant from the "real world" by industry

PhD holders are perceived as students with no professional experience

Universities, PhD candidates, PhD holders, professors/supervisors, employers/industry, policymakers: all stakeholders need to question their perceptions and stereotypes about academic vs non-academic ways of working. It is a collective responsibility to work on demystification of other parties to find a common language to improve the connections between academia and other Sectors, and to enhance mutual recognition

Ensure that experience gained in academia is recognized as valuable professional experience for non-academic jobs and vice-versa.



Find a common language



Emilie Gobbo &

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.

We need to reform the way research is assessed and recognize contributions to science and society other than publications.

You will achieve a better society faster if PhD holders can easily find their way into the business world.

At the beginning of the doctorate, the focus is not on the career afterwards.

We still have this idea of failure if we are not among those who "succeed" in gelting a permanent [professor] position in academia. We should all work to change the mindset.

The theme of research careers is complex, there are a lot of issues and stakeholders involved, requiring national and supranational level governance, since the labour market for researchers is truly global.

You can never be too educated as a person, but you can be too educated for the job market. Are there too many PhD's?

If it's for professorship, of course
there are too many PhD's! But may be
the right question to ask is: what does
Society need PhDs for? It's a question
we need to address collectively. Then
the answer may be completely different.

Many doctorate holders lack insight into good leadership and the impact of relational skills. They possess talent but often lack role models and the Vocabulary to articulate their skills and experiences.



CLOSING SPEECHES

CARTHAGE SMITH



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 then to make informed career transitions.

The OECD GSF project focused on <u>promoting diverse career pathways for doctoral and postdoctoral researchers</u> 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



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 thoughtprovoking 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)











