

Your next step: a PhD?

- Miriam Egloff @UZH Research Department
- Sandra Schneeberger @UZH Graduate School Arts and Social Sciences
- Roger Gfrörer @UZH Career Services



LONG NIGHTS OF
CAREERS
2024



uzhcareerservices

Program

What does it take for a successful PhD?

Dr. Sandra Schneeberger, Graduate School Faculty of Arts and Social Sciences

How to fund a PhD?

Dr. Miriam Egloff, UZH Research Development

Why do a PhD? Advantages and disadvantages on the labor market

Dr. Roger Gfrörer, UZH Career Services

Questions?



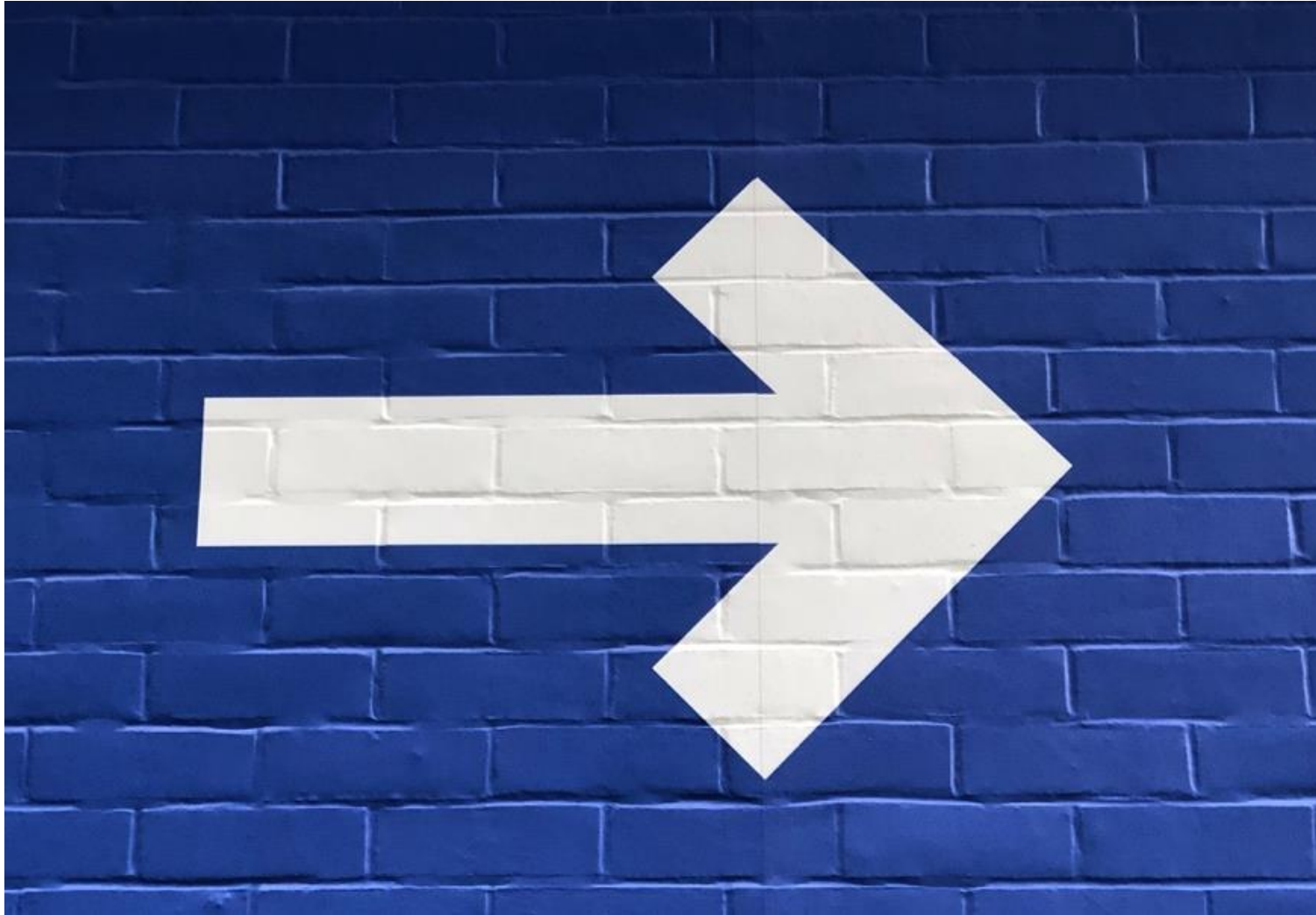
**Universität
Zürich** ^{UZH}

What does it take for a successful PhD?

Dr. Sandra Schneeberger

Graduate School Faculty of Arts and Social Sciences

Develop a realistic idea



- **Reflect** on your goals (in life & research!), motivation, skills, and expectations.
- **Talk** with PhD candidates and postdocs.
- **Browse** through guidebooks and websites.
- **Consider** how your PhD could be financed.

Deciding whether or not to pursue a PhD

Why do I want to do a PhD?

What are my expectations?



Do I need a PhD to follow my career aspirations?

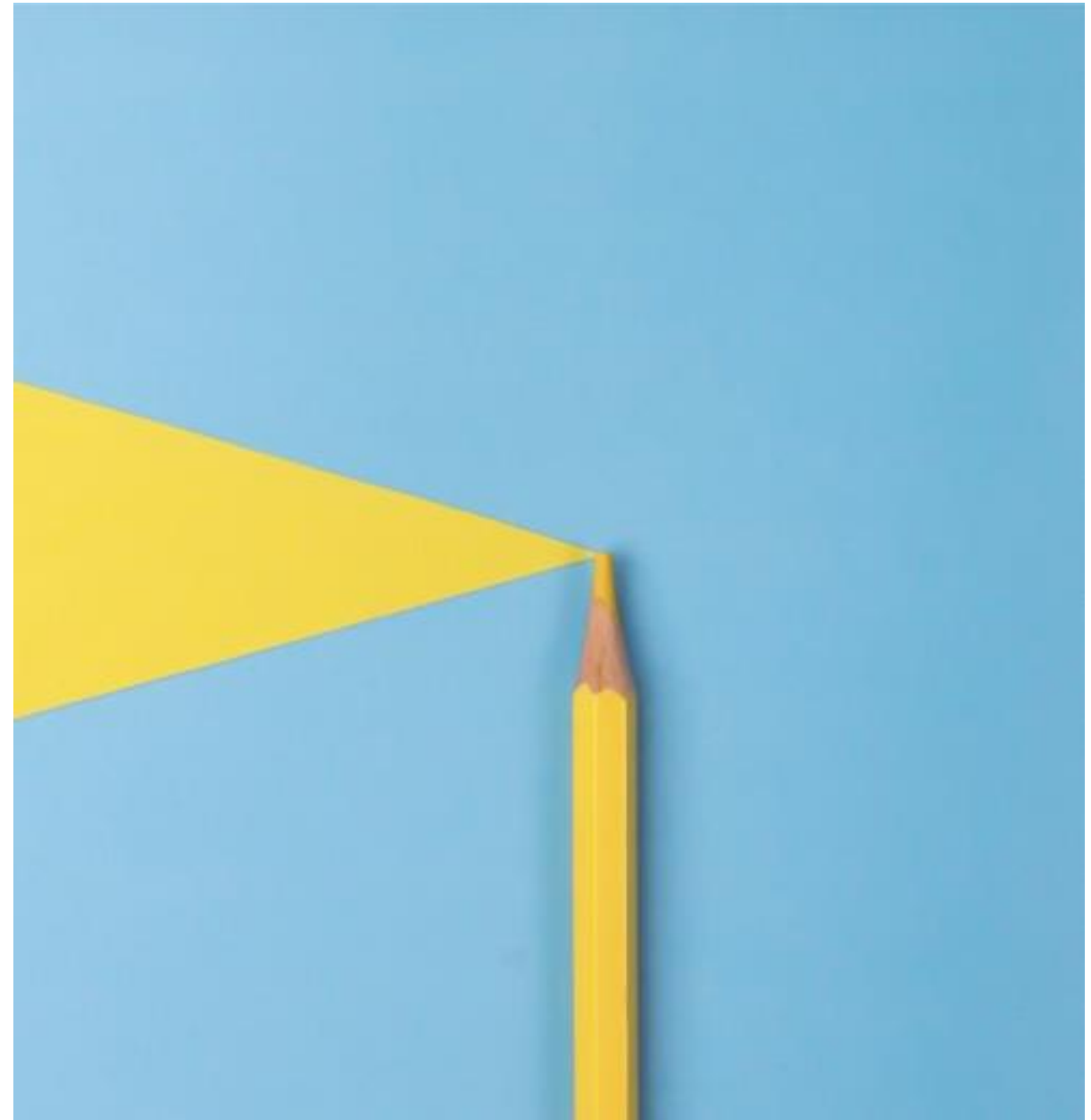
What is my current family/relationship situation?

How will I finance my PhD?

What skills do I have or need to improve?

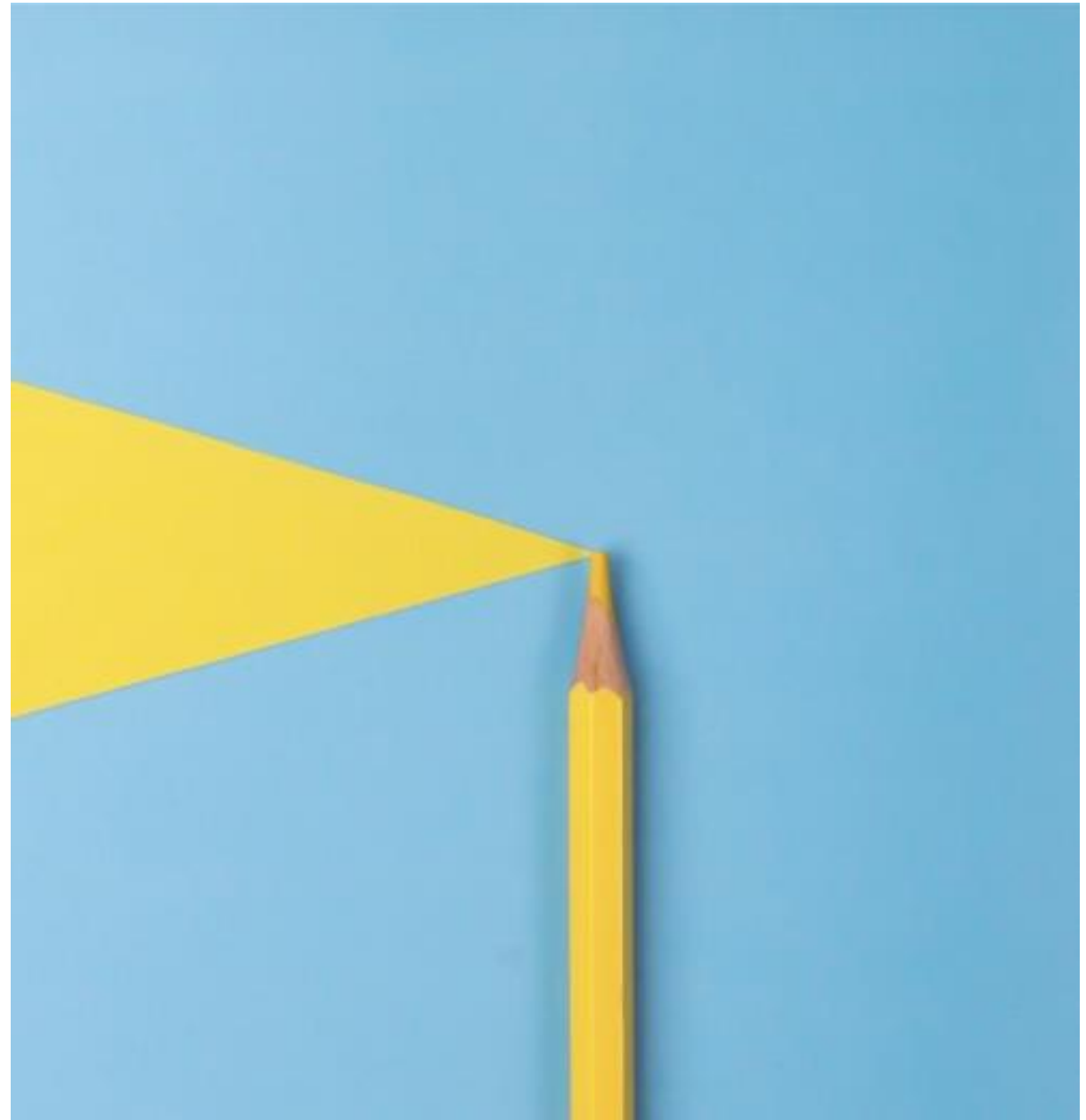
Reasons that don't speak for doing a PhD

- A professor has offered me a doctoral position.
- Peer or family pressure (e.g., my parents also have a PhD)
- I don't know what else to do.
- I am worried about the step into professional life.



Reasons that don't speak against doing a PhD

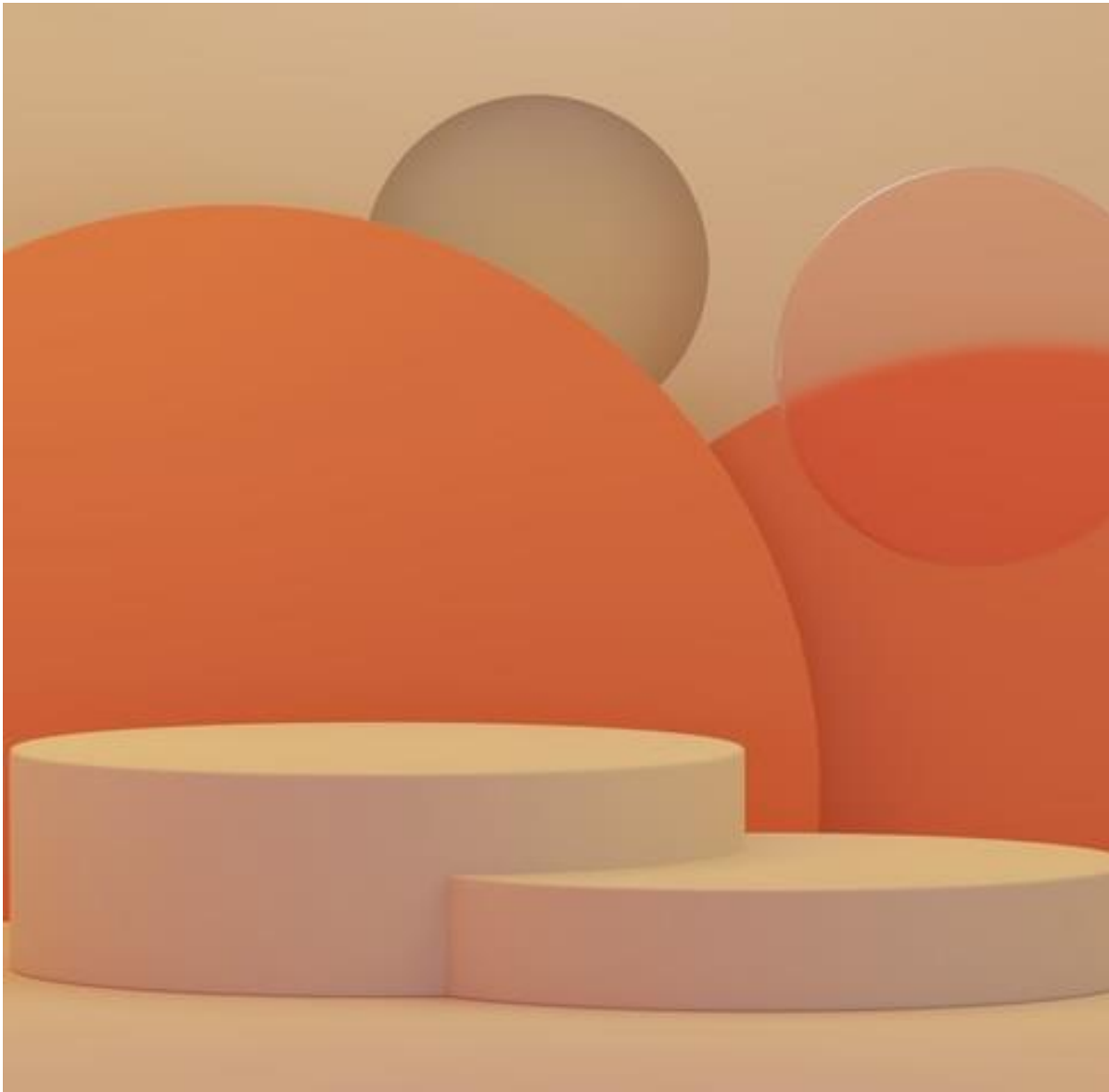
- I cannot find funding.
- I do not have a specific research question.



Good reasons to pursue a doctorate

- I would like to pursue an **academic career**.
- I can't get a (good) job in my **field** without a doctorate.
- I would like to acquire **specialized knowledge** in a field of interest.
- I have a **(research) question** that I deeply want to explore (further).



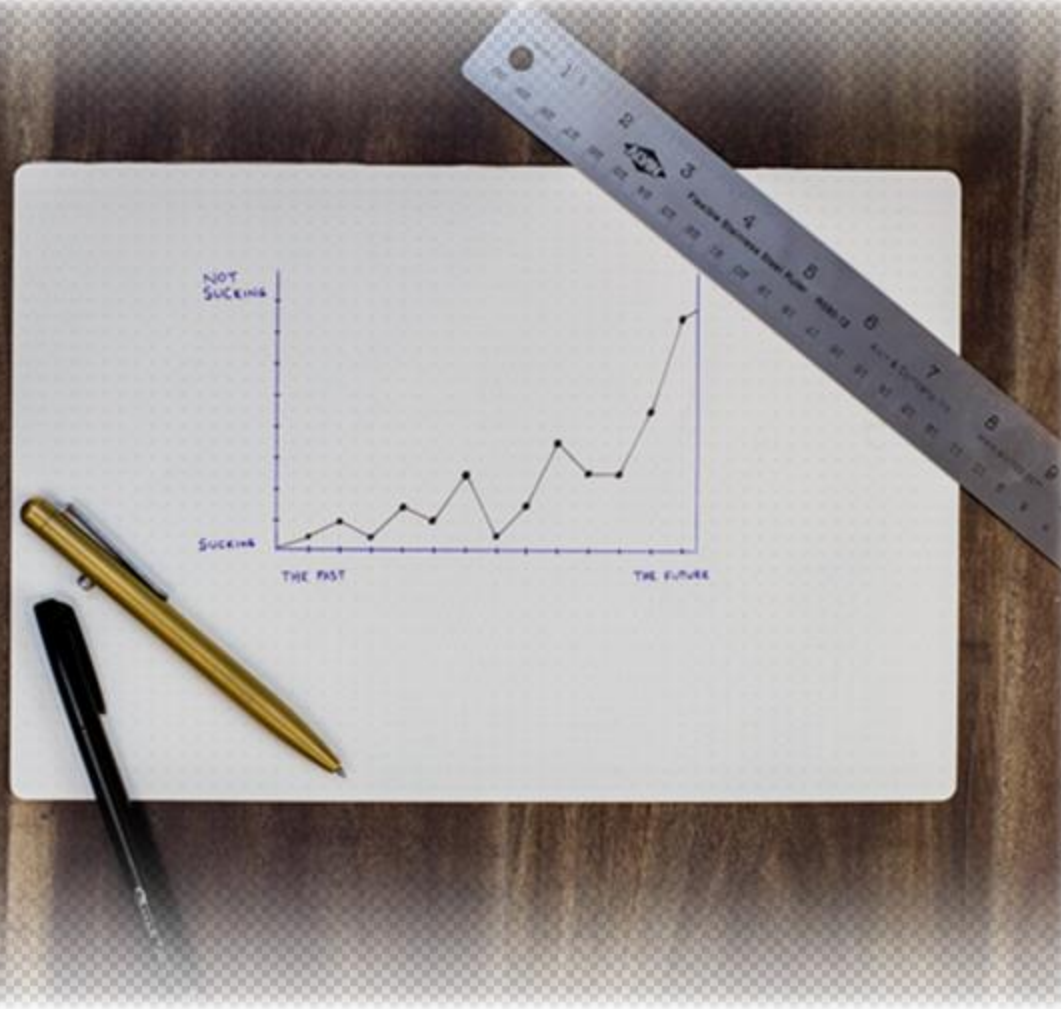


What does a successful PhD look like?

- The dissertation work has been completed within a **reasonable period** and with **own scientific findings**.
- Your work and you as a researcher are known and **recognized** within the scientific community.
- During the doctorate period, professional and personal **competencies & skills** were acquired that open interesting career options.

Good planning (early on) is key

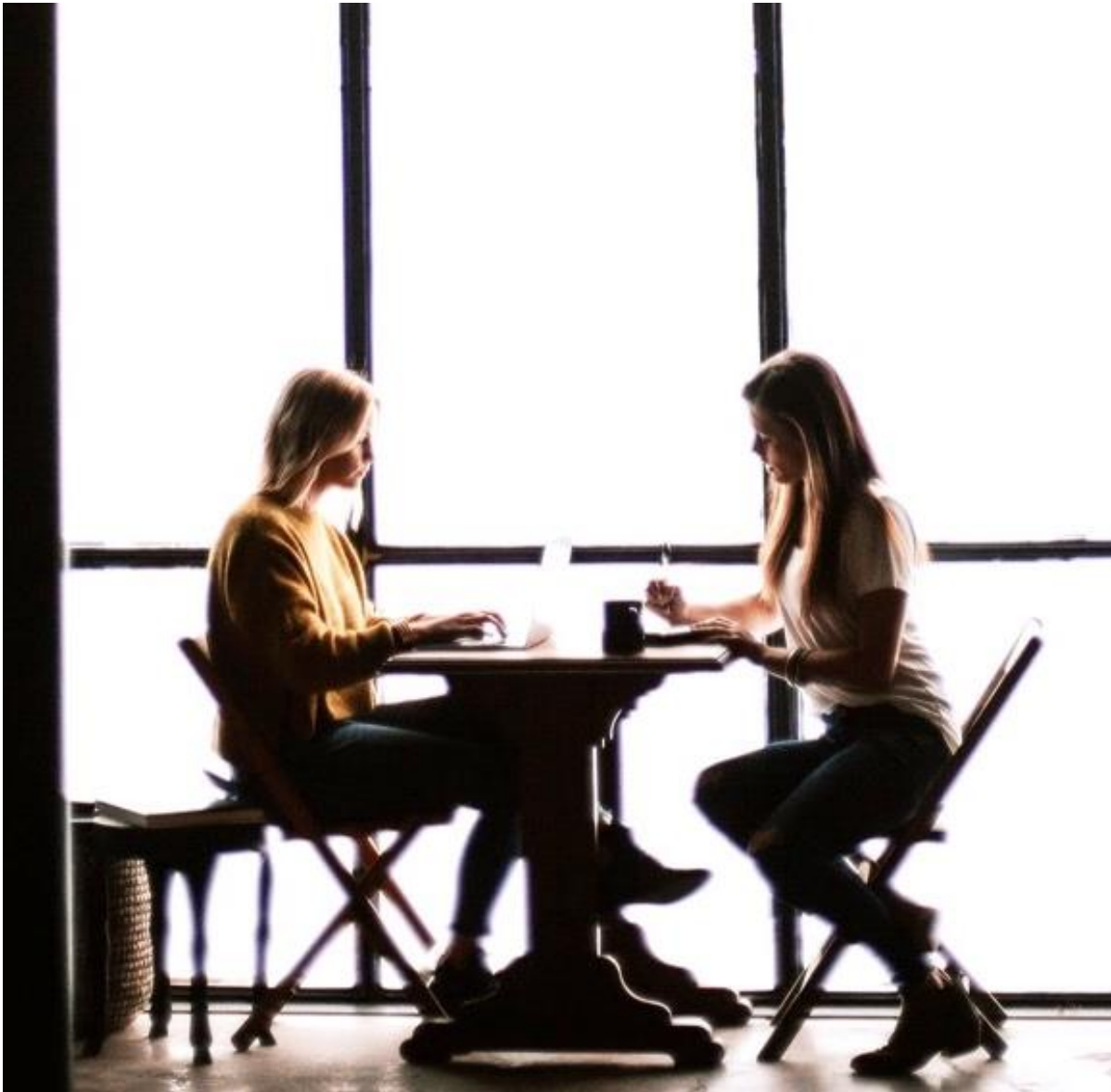
- A dissertation is a **project** (you are the project manager!)
- Participate in **courses & activities** that expand your area of expertise.
- Inform yourself about **rules of good scientific practice.**
- **Network** with other researchers as early as possible.
- Attend conferences and **present your work.**
- Involve yourself in university **committees/associations**, like VAUZ.
- Get familiar with **UZH guidelines** and directives.
- Start with the **writing** process as soon as possible!



Rules and Regulations

- Matriculation in a PhD program
- Doctoral Supervision Agreement signed
- PhD Commission defined
- Regular meetings with the supervisors established
- Courses (subject-specific and transferable)
- **Act immediately in case of problems!**





Finding a suitable PhD supervisor

- Can Prof. X supervise me in a **qualified** manner (scientifically / timewise)?
- Is Prof. X **established** enough to critically accompany my doctorate from her/his own scientific background?
- Does the environment of Prof. X enable me to engage in a **creative** and **critical** dialogue about my work, methodological problems, obstacles, but also about my progress and advancement?
- Is Prof. X **well-known** and **connected** in the scientific community? And can she/he help me get started in this community?

You are not alone during your doctorate!



Graduate Campus for early career researchers

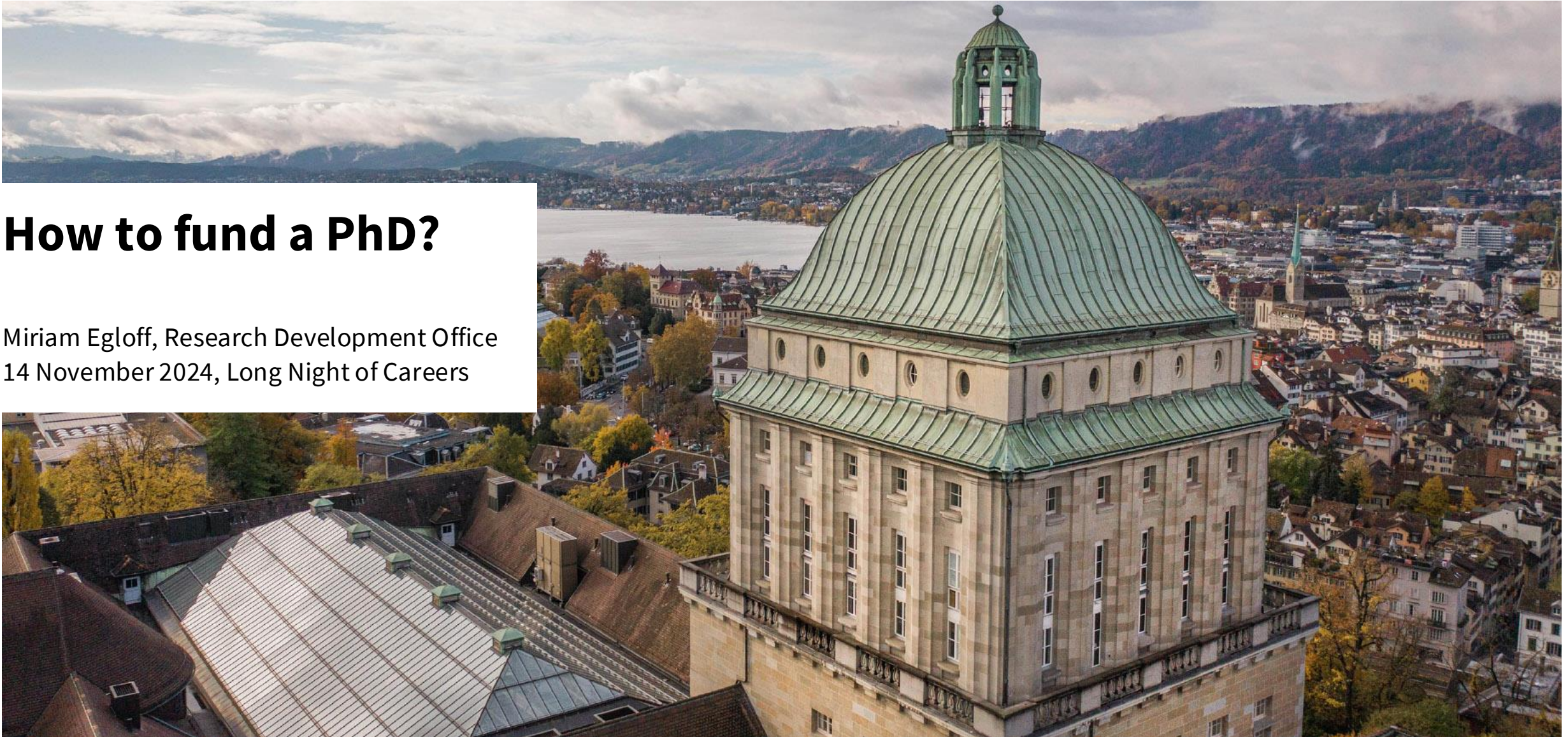
- **Doctoral programs / Graduate schools:** Structure, networking, etc. on Faculty level
- **Graduate Campus (GRC):** Support, funding, coaching, courses, information & networking on University level
- **Research Development:** Financing Issues
- **Center for University Teaching and Learning:** Teaching skills
- **Language Center:** Language courses and training in writing
- **Global Affairs:** International mobility
- **Gender Equality and Diversity:** e.g. Compatibility of family and work
- **Central IT:** Software courses
- **Career Services:** Transition to work outside academia
- **Innovation Hub:** Innovation and Start-ups
- **Psychological counseling center / Ombudspersons:** n case of problems



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How to fund a PhD?

Miriam Egloff, Research Development Office
14 November 2024, Long Night of Careers



Funding Pathways



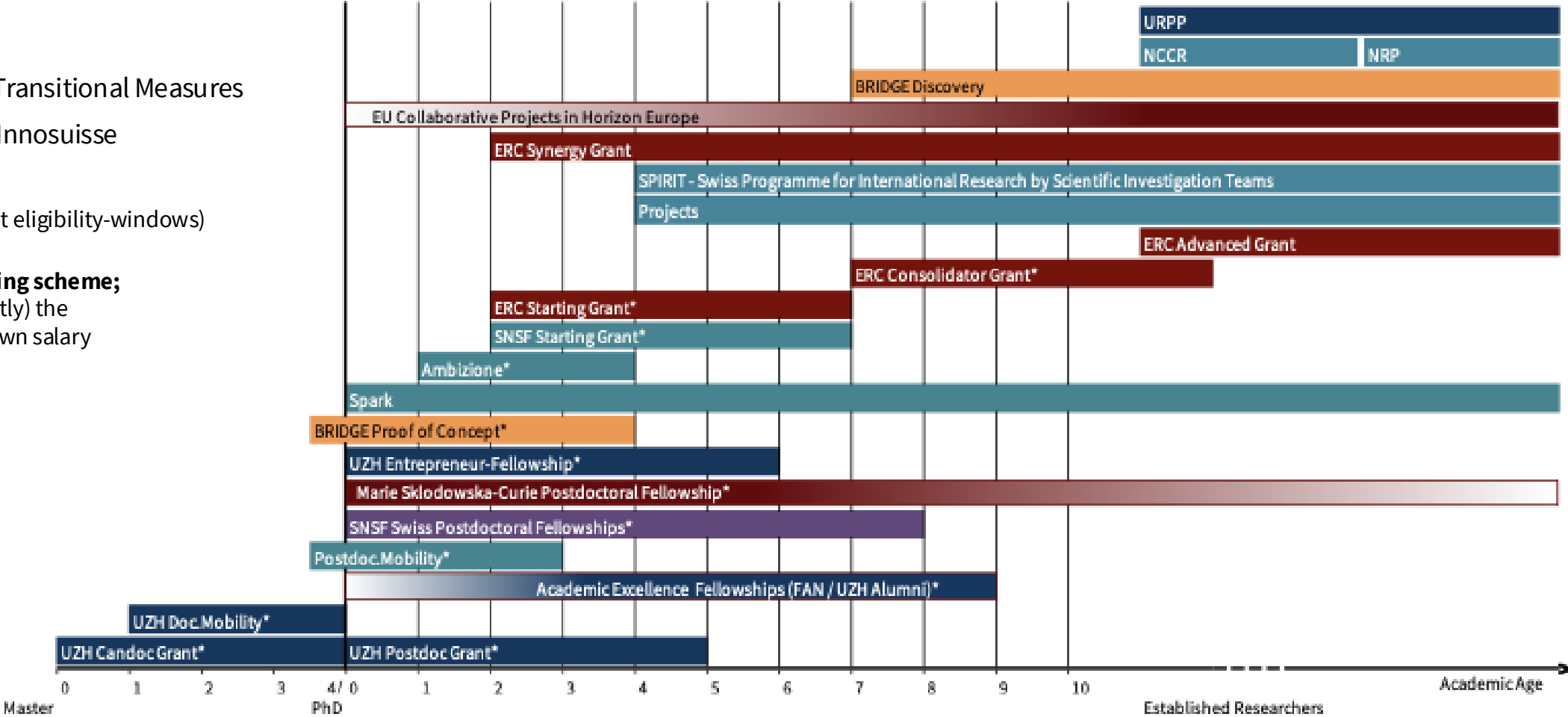
Download PDF (with links)
at www.research.uzh.ch
> Research Funding



- SNSF
- EU
- SNSF Transitional Measures
- SNSF/Innosuisse
- UZH

(Bars represent eligibility-windows)

* **Career funding scheme;**
includes (partly) the
applicant's own salary



Looking for Funding: Overview

➤ **Employment:**

Qualification positions or part time work

➤ **Fellowships and Grants:**

Self-raised third-party funds



Financing your doctorate through employment

- **Employment (at UZH) in a (academic) qualification position as**
 - **a doctoral candidate** (usually on a research project (e.g. SNSF))
 - at least 80% of the employment time for own research (PhD thesis)
 - a maximum of 20% of the employment time for teaching tasks or other activities in connection with teaching
 - salary (in accordance with SNSF rates):
 - 1st year: CHF 48,686
 - 2nd year: CHF 50,239
 - 3rd/4th year: CHF 51,791
 - Usually limited to 4 years
 - **a teaching / research assistant** (at a chair / in a lab / research group)
 - at least 40% of the employment time for own research
 - a maximum of 50% of the employment time for teaching tasks or other activities in connection with teaching
 - salary: LK 17
 - Limited to 6 years (3 +3)

❖ The best way to find out about open doctoral positions is to contact your supervisor directly or visit the UZH job platform:
<https://www.uzh.ch/en/explore/work/jobs.html>

Doctoral Candidate 80 - 100 %

Start of employment 01.06.2025, temporary

The EcoVisionLab in the Department of Mathematical Modeling and Machine Learning (DM3L) at University of Zurich is seeking applications for a Doctoral Candidate in computer vision and machine learning for multimodal analysis of green spaces and nature to assess environmental and societal well-being in densely populated areas.

We offer an exciting and stimulating environment to study and work in. The University of Zurich has several internationally recognized research groups dedicated to data science, machine learning and remote sensing. We also collaborate with several other institutions and companies in the fields of computer vision, machine learning and earth observation, in Switzerland and abroad. The EcoVision Lab is member of the UZH Digital Society Initiative, the ETH AI Center, the new UN-ETH partnership, and the ETH for Development Center (ETH4D).

Your responsibilities

The successful candidate will work on a project in the EcoVision Lab in cooperation with a large project consortium to build a Public Data Lab for measuring societal wellbeing under changing circumstances together with more partners from the University of Zurich, the Statistical Office of the Canton of Zurich, and the Zurich University of the Arts. Emphasis for the doctoral project is on developing deep learning and computer vision methods to jointly analyse street-view and depth imagery, aerial and terrestrial laser scans, satellite imagery etc. in combination with auxiliary map layers provided by the project partners, cantonal and federal Swiss agencies to come up with dense, high-resolution, spatially explicit indicators of green spaces with emphasis on societal and environmental well-being. Potential indicator domains include biomass, vegetation density, plant species, plant health etc. while project leaves ample room to explore various exciting technical avenues like uncertainty quantification, interpretability, and explainability in deep neural networks, attention-based approaches, text-to-image/point cloud translation, or diffusion models, for example.

Your profile

- We are looking for candidates with an interest in performing innovative research, strong motivation, and an interest in software development. An ideal candidate will have: an excellent degree (M.Sc. or equivalent) in Computer Science, Machine Learning, or a related field (e.g. Electrical Engineering, Applied Mathematics)
- strong mathematical understanding
- experience in programming, preferably in Python, and engineering
- prior experience in machine learning, computer vision and remote sensing

Furthermore, the candidate should be fluent in English, both written and spoken.

Two PhD Assistantships in American Literature and Culture 60 %

Start of employment is 1 February 2025, temporary

The English Department of the University of Zurich invites applications for two Research and Teaching Assistantships at the Chair for American Literature and Culture (Prof. Dr. Katharina Gerund) to begin on 1 February 2025. These doctoral positions are open to candidates with a completed Master's degree who plan to pursue a PhD in American Studies. The contracts are initially limited to three years (with the possibility of extension for up to three years).

Your responsibilities

For Research and Teaching Assistants, 50% of the working hours are reserved for research, primarily for work on the PhD project, but also for related activities such as conference papers, publications, organization of academic events, and applications for external funding. The other 50% are devoted to teaching BA courses (two hours per week, (two hours per week, beginning with a course within the “Textual Analysis” module or a BA seminar in literature) as well as some administrative tasks.

Your profile

We are looking for two members of staff with outstanding MA theses in the field of American Literature and Culture and promising ideas for research projects that correspond to the Chair's main research areas (Critical Military Studies, Affect and Gender Studies, Critical Race Studies, Cultural Theory and Popular Culture). The successful candidates will be well versed in literary history and critical theory, have didactic skills, and enjoy working in a team environment. They will be proficient in English and have a working knowledge of German (to be acquired within two years).

Financing your doctorate through employment

- **Employment in a part time work position**

- **at the University**

- at Libraries, Research Centers, Institutes, Clinics etc.
- as Scientific proposal writer, fundraising coordinator, course supervisor, scientific (research) assistant, animal caretaker

- **outside the University**

- In a position/field close to your research area
- In a position/field that you would like to continue after your PhD or that gives you early access to a preferred field of work
- In a position/field that is complementary to your field of research

❖ The best way to find out about jobs and open positions is to browse job platforms like the one from the UZH career services:

<https://uzhcareer.ch/de/jobs/>

Financing your doctorate through self-raised third-party funds: Fellowships&Grants

- currently no funding instrument that finances the entire PhD (4 years)

Projectfunding:

- **UZH Candoc Grant:** 12 months own salary (rsp. 24 for PhD's at the faculty of arts&social sciences) PhD students of UZH
- **GRC Short Grants:** Project and publications costs up to 5'000 CHF for advanced PhD students & postdocs of UZH
- **GRC Career Grant:** Project and publications costs up to 15'000 CHF for advanced PhD students & postdocs of UZH

Mobility:

- **UZH Doc.Mobility:** 6-12 months research stay for PhD students of UZH
- **GRC Travel grant:** Short research stay (1 - 180 days/6 months) for PhD students & postdocs of UZH
- **SEMP** (Swiss-European Mobility Program): 1-2 semester research stay in CH (PhDs coming from abroad) or EU (CH-based PhDs)

For foreign students

- **Swiss Government Excellence Scholarships:** 12 months full scholarship at a CH-University (monthly payment of 1'920 CHF prolongable up to 36 months)

UZH Candoc/Postdoc Grants

Who can apply?

- PhD Students enrolled at UZH / UZH Graduate Schools

What can be applied for?

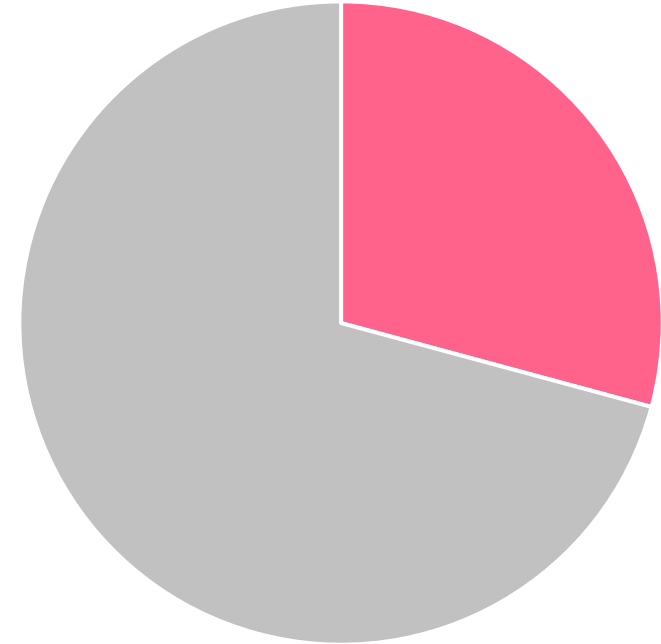
- Salary contributions, consumables on a very limited scale
- Usually 1 year (2 years at faculty of arts & social sciences)

When und how to apply?

- Deadline: **1 February 2025** (call opens 1 Dec)

Electronic submission on www.myuzhgrants.uzh.ch

Applications and success rate p.a.:



350 to 400 applications p.a.

100 to 120 grantees p.a. (approx. 30%)

Budget of approx. **10 million CHF** p.a.

Further / Other funding opportunities

- ❖ **Overview on "UZH for Researchers" website:**
<https://www.research.uzh.ch/en/funding/phd.html>
- ❖ **Graduate Campus / Faculties** (e.g. travel grants, workshops)
- ❖ Personalised search and email-alerts in ***Research Professional**
- ❖ **Foundations directories** – e.g.
<https://www.research.uzh.ch/static/fnf/stiftungen/>
<https://www.fundraiso.ch>
<https://stiftungschweiz.ch>
- ❖ **Funding abroad**





Why do a PhD? Advantages and disadvantages on the labor market

Roger Gfrörer, Dr.oec.publ. | Head UZH Career Services

14. November 2024





In the next 15 minutes I want to tell you about

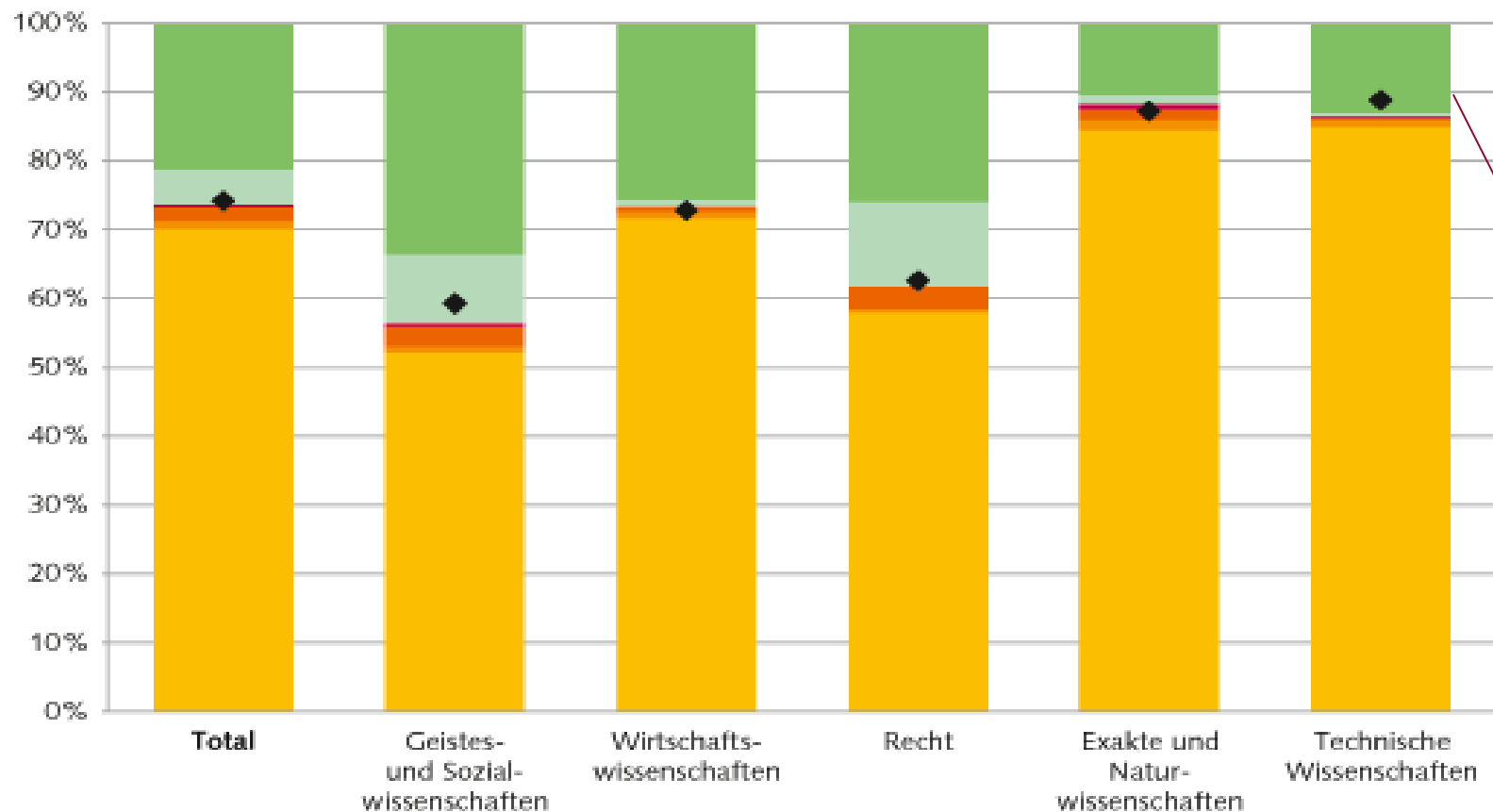
- **Where a PhD can take you**
- **The challenges after the PhD on the way to the job market**
- **The advantages of a PhD for the job market**
- **My conclusion for your PhD**

Where a PhD can take you



Universitäre Hochschulen: Studienerfolg neun Jahre nach Beginn des Doktoratstudiums, Studienabbruch und Verbleibensquote im Jahr 2012 für die Eintritte 2003 mit einem Abschluss einer Schweizer UH nach Fachbereichsgruppe zu Beginn des Doktoratstudiums

A PhD not always leads to a graduation



No graduation

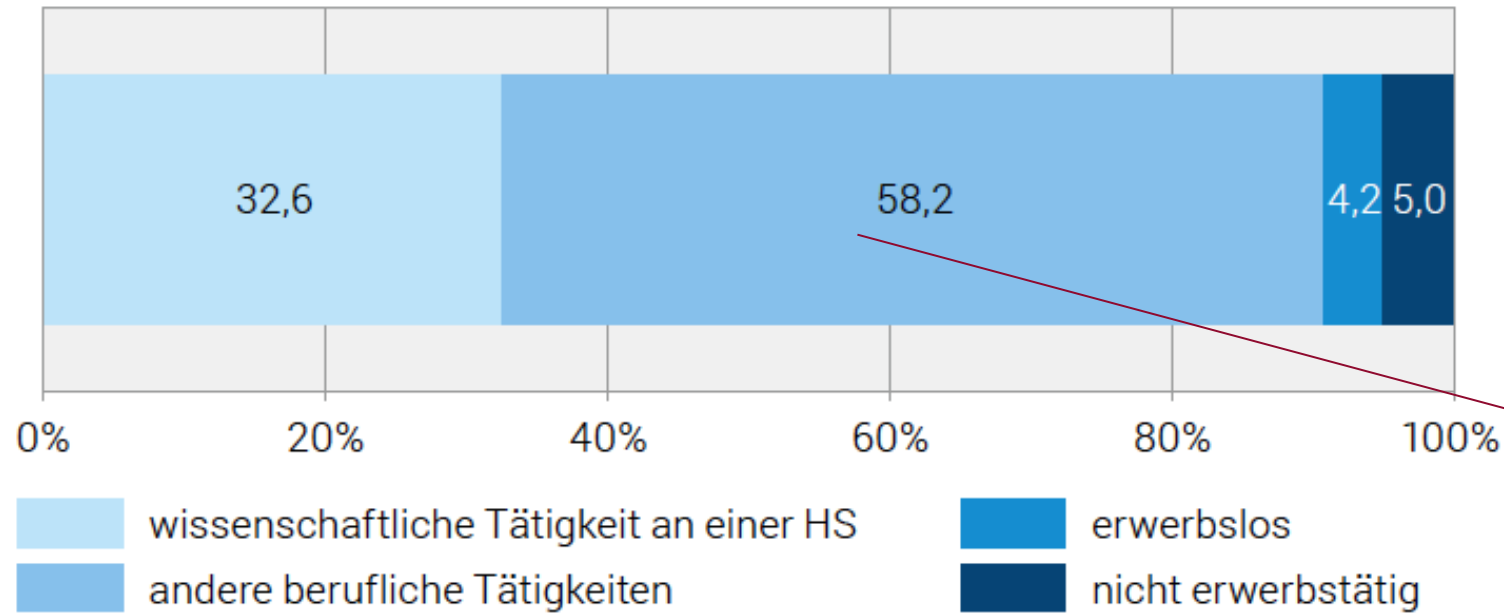
- Mit einem Doktoratsabschluss der gleichen Hochschule und in der gleichen Fachbereichsgruppe
- Mit einem Doktoratsabschluss der gleichen Hochschule aber in einer anderen Fachbereichsgruppe
- Mit einem Doktoratsabschluss einer anderen UH aber in der gleichen Fachbereichsgruppe
- Mit einem Doktoratsabschluss einer anderen UH und in einer anderen Fachbereichsgruppe
- Verbleibensquote (an einer UH immatrikuliert)
- Abbruchquote
- Kohorte 2000: mit einem Doktoratsabschluss einer Hochschulen zwölf Jahre nach Studienbeginn

A doctorate does not always lead to employment in science

Karriereorientierung der Doktorierten

Stand ein Jahr nach Doktoratsabschluss, Abschlussjahr 2012

G2.2.1



Other professional activities

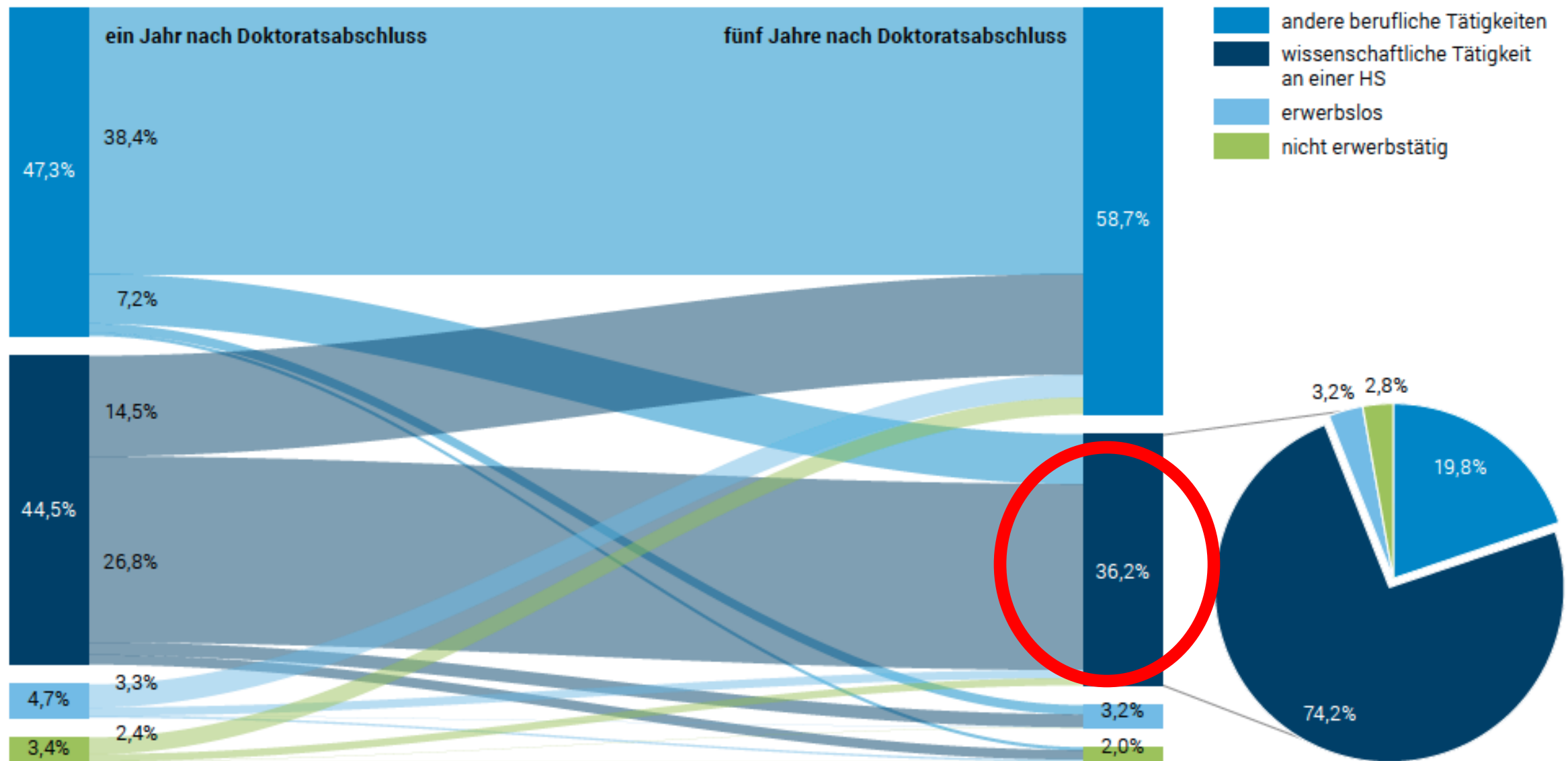
Quelle: BFS – Befragung der Hochschulabsolvent/innen

© BFS 2018

Entwicklung akademischer Laufbahnen von Doktorierten zwischen dem ersten und fünften Jahr nach Abschluss

Doktorierte in Exakte + Naturwissenschaften, Abschlussjahr 2012

G3.2



Advantages of a PhD



With a PhD, you get....

- ✓ Systematic understanding of a study field
- ✓ Proficiency in the skills and methods associated with this field
- ✓ Conception, design and implementation of a substantial research process with scientific integrity
- ✓ Ability to critically analyze, evaluate and synthesize new and complex ideas
- ✓ Communication skills with professional environment, wider scientific community and society in general
- ✓ Ability to promote progress within a science community

A doctorate is an advantage for the labor market if you are aware of these learning outcomes, if you are able to transfer these resources into other contexts and to communicate adequately.

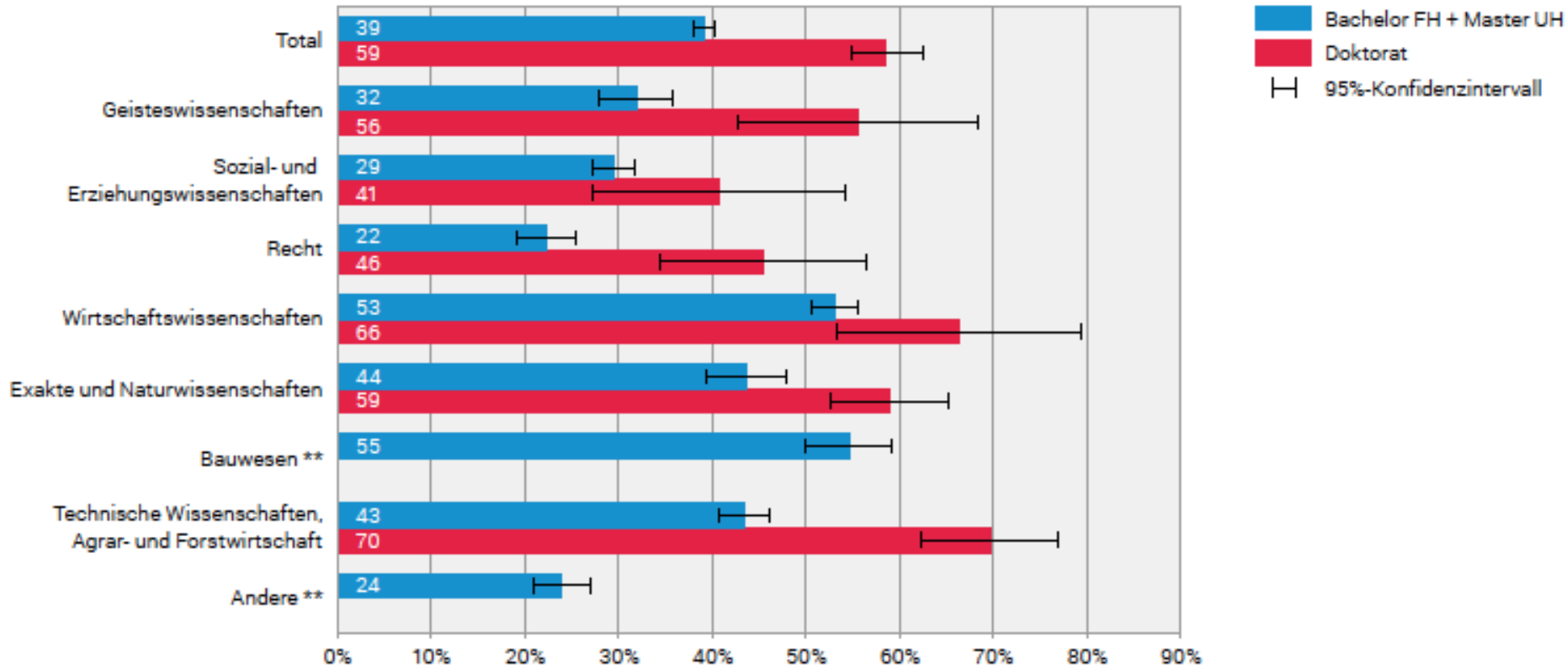
Vgl. Qualifications Framework for the Higher Education Area, nqf.ch-HS, S. 13

A PhD prepares you for an executive career

Anteil an Führungskräften nach Abschlusstyp und Fachbereichsgruppe

Stand fünf Jahre nach Studienabschluss, Abschlussjahr 2010

G 2.1.1



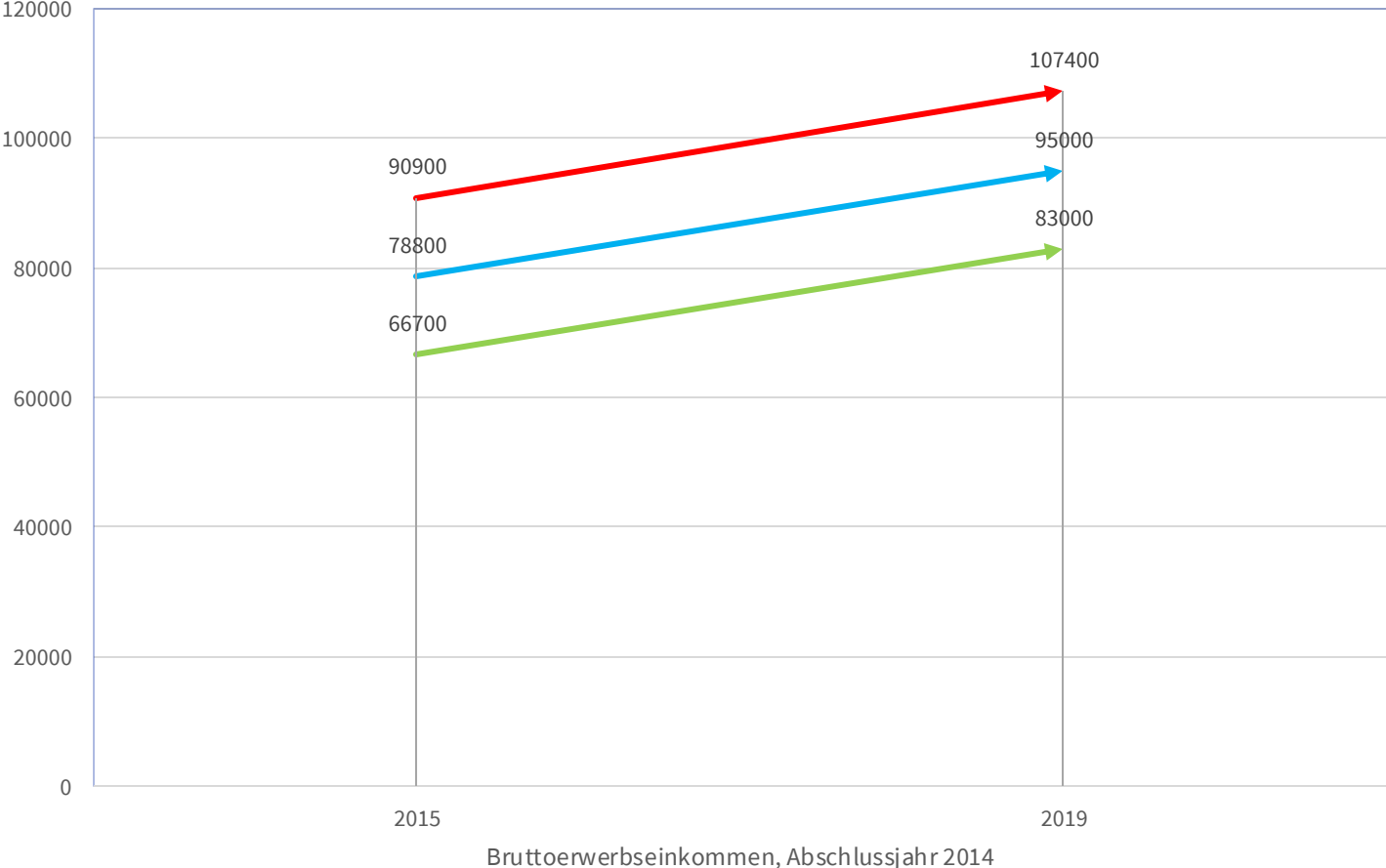
** UH Doktorat: weniger als 25 Fälle

Quelle: BFS – Befragung der Hochschulabsolvent/innen

© BFS 2016

A PhD even leads to a higher income than other degrees

Standardized gross earned income of graduates by graduation level
year of graduation 2014 (BFS, 2020)



	Entry salary 2022, CHF/year (Median)
UH BA	72'500
UH Master	80'900
Doktorat	95'000

With a PhD you are ready for the jobmarket: adequately occupied PhDs

TA3Z11-2 Education level adequacy of UH graduates by exam level and faculty group One year and five years after graduation, graduation year 2014						
	Bachelor		Master		PhD	
	1 year	5 years	1 year	5 years	1 year	5 years
Totally	51.0	61.0	86.1	86.6	89.9	92.1
Humanities & Social Sciences	47.5	56.8	79.3	81.9	85.8	92.6
Economy	62.5	68.2	86.4	84.7	87.7	97.5
Law	53.3	51.0	92.9	91.7	89.6	98.4
Sciences	37.5	52.5	84.5	84.9	91.4	91.2
Medicine & Pharmacy	**	**	96.9	97.6	92.6	97.6
Engineering	62.1	81.6	88.3	87.7	90.9	84.8
Interdisciplinary & others	43.0	60.5	78.6	84.5	**	**

BFS, Befragung der Hochschulabsolvent/innen, 2022, numbers in %

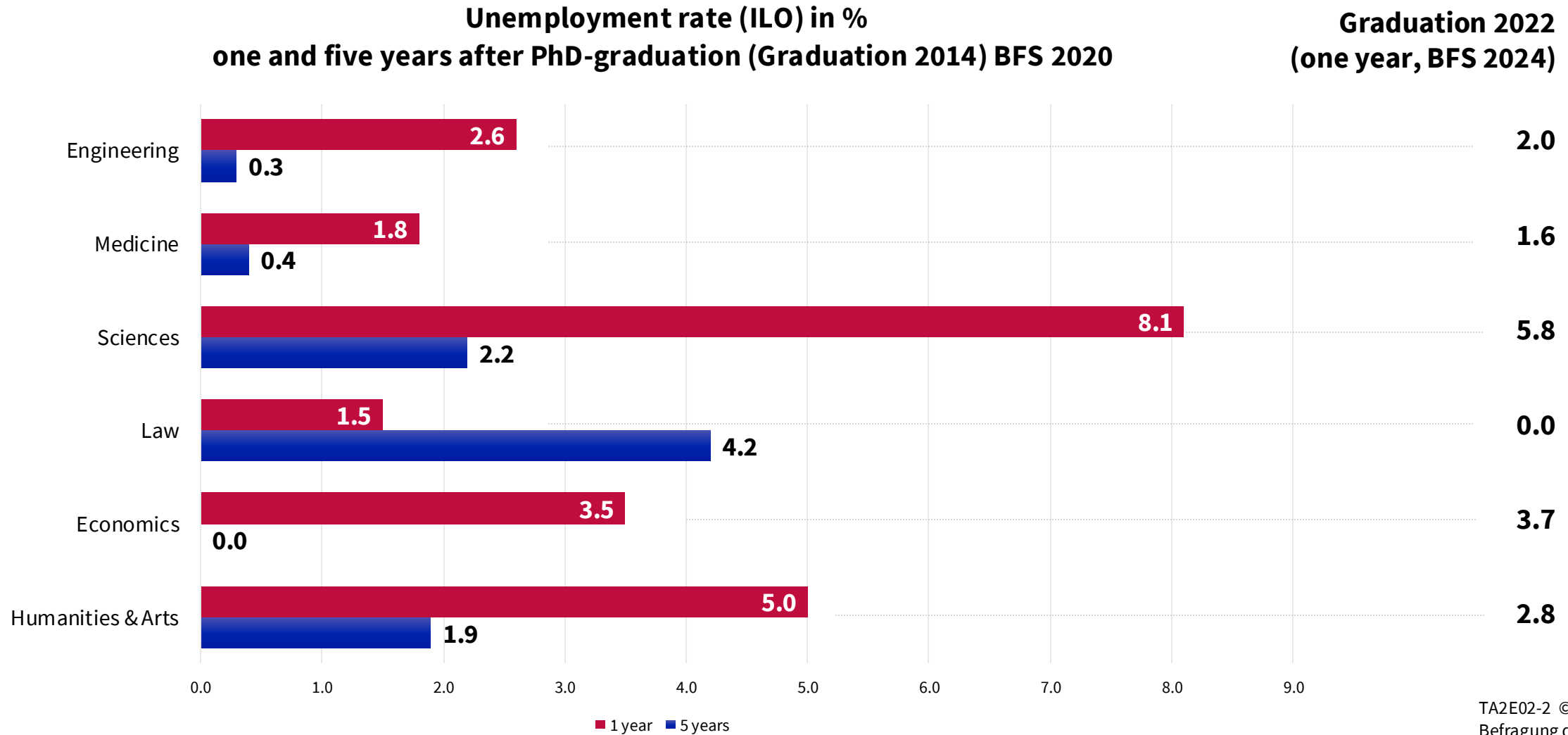
In green: The class of 2022 has higher scores

In red: The class of 2022 has lower scores

What are the challenges?

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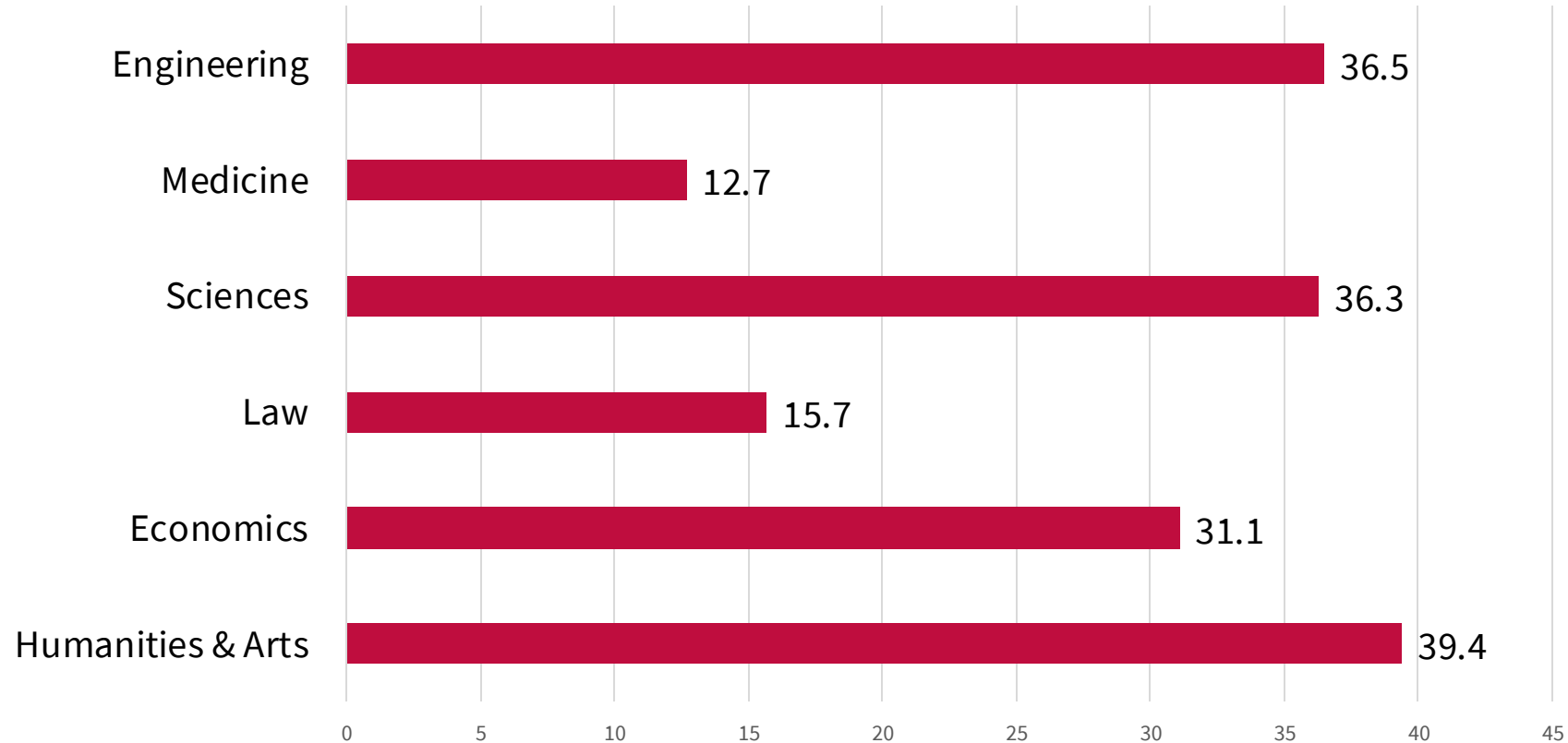
Although the PhD is a grade with high employability (across all disciplines)..



TA2E02-2 © BFS,
Befragung der
Hochschulabsolvent/-
innen (EHA) Swiss Federal
Statistic Office, 29.08.2024

... PhDs are facing challenges during the transition ...

Difficulties to find a job
(PhDs one year after graduation, Class of 2022)



TA2E11-2 © BFS, Befragung der Hochschulabsolvent/-innen (EHA) Swiss Federal Statistic Office, 29.08.2024

... because of different reasons (BFS 2018, Class of 2016)



	2022	2020	2016
	1	1	1
	2	2	3
	3	3	2
	4	5	4
	5	6	8
	6	7	7
	7	4	12
	8	8	5
	9	9	6
	10	11	10
	11	10	11
	12	12	9
	13	13	14
	14	14	13

My conclusions

4

The challenges (based on our observations) are

MISMATCH because PhDs and Postdocs

- do not know their skills,
- do not know how to transfer their skills into non-academic areas because the requirements in this areas are unknown
- are seen to be overqualified but underexperienced by employers

DISORIENTATION because PhDs and Postdocs

- do not know the non-academic labor market
- do not know the academic labor market [sic!]
- do not know the career paths of the alumni

MISSING CAREER MANAGEMENT as PhDs and Postdocs lack

- of profiling as experts during the doctoral studies
- of internal and external networking during the doctoral studies
- **of explicit control of their own career: Doctoral students wait too often too long for their supervisors to make career decisions for them.**

This challenges can be tackled with Career Engagement



My conclusion

A PhD is of high value on the labour market. There are challenges in the transition, but you can prepare for or even avoid them. Make use of the ecosystem at the UZH and around, that supports you.

- Do your PhD with joy and pride → You
- Develop a university-related network → Graduate Campus
- Develop your non-university network → Alumni, Career Services
- Develop important competencies for the job market → Graduate Campus, Center for University Teaching and Learning, Business Tools
- Develop communication skills → Language Center (**german!**), IT Services, Career Services (Self Branding)
- Think about to use your research results for a Startup/Spin Up → Innovation@UZH
- Start your transition planning in time (12 months before defense) → Career Services
- If you are from outside EU/EFTA („Third Country“) → Learn about the rules for work permits in CH!

Control your career development by yourself, do it explicitly and don't wait after the doctoral ceremony.

Have fun and enjoy the time of your PhD – it will be an extraordinary time!