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MINT FACTS

WOMEN 15,4%

PART TIME 8,5%

TECHNICAL FIELD

2% Mathematical & life sciences

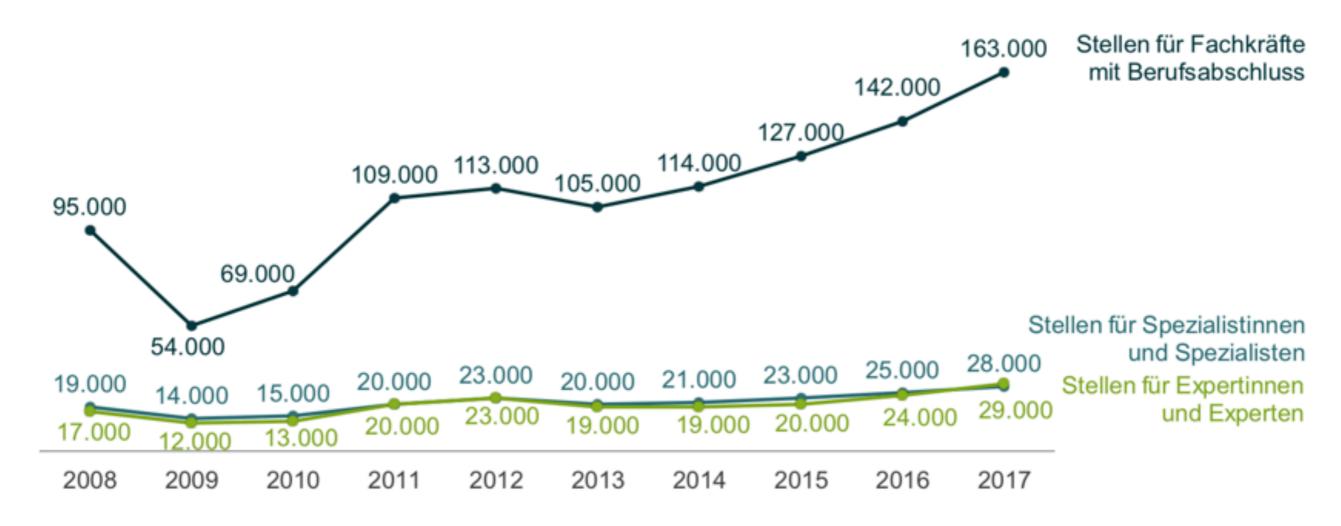
UNEMPLOYMENT 2,9% (2017)

47 000 searching Experts (academic background)

5,4 Million Academics

Zahl der gemeldeten Stellen steigt

Bestand gemeldeter sozialversicherungspflichtige Arbeitsstellen in MINT-Berufen nach Anforderungsniveaus Jahresdurchschnitt, 2008 bis 2017



Datenquelle: Statistik der Bundesagentur für Arbeit

Formaler Abschluss eher zweitrangig für die Karriere – Leistungsmotivation oder Identifikation sind wichtiger

Auswahlkriterien für höhere Fach- und Führungspositionen, Anteile in Prozent



Datenquellen: IW-Personalpanel 2014

Science & Conflict Resolution

- https://ombudsman-fuer-die-wissenschaft.de
- Prof. Dr. Florian Grüner (Uni HH) DFG

Academic Career

"Theres no guarantee - all you need is a strong interest and a Plan B"

§ WissZeitVG



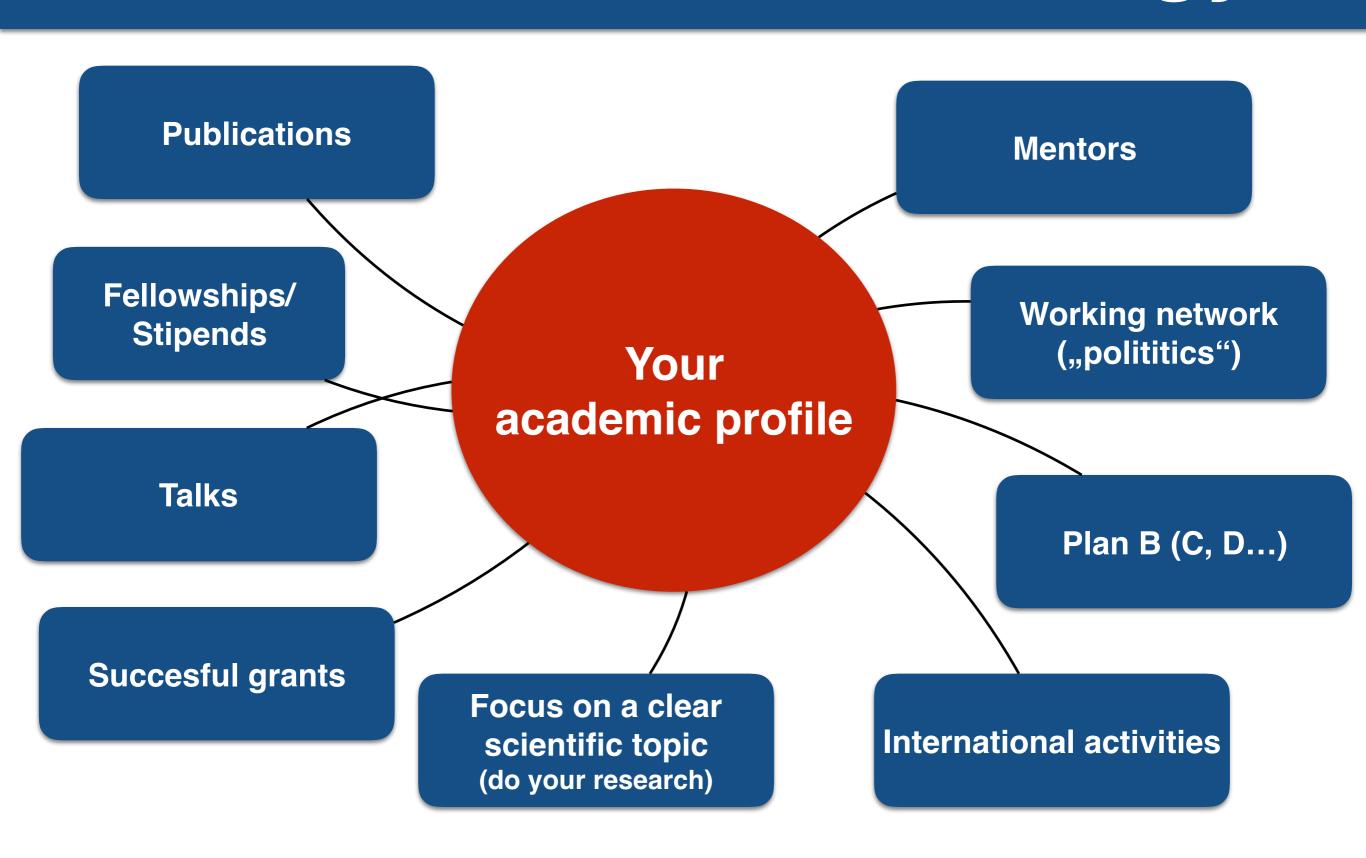
Before PhD (Exceptions: Scientists with children (+2y), Third party funded positions)



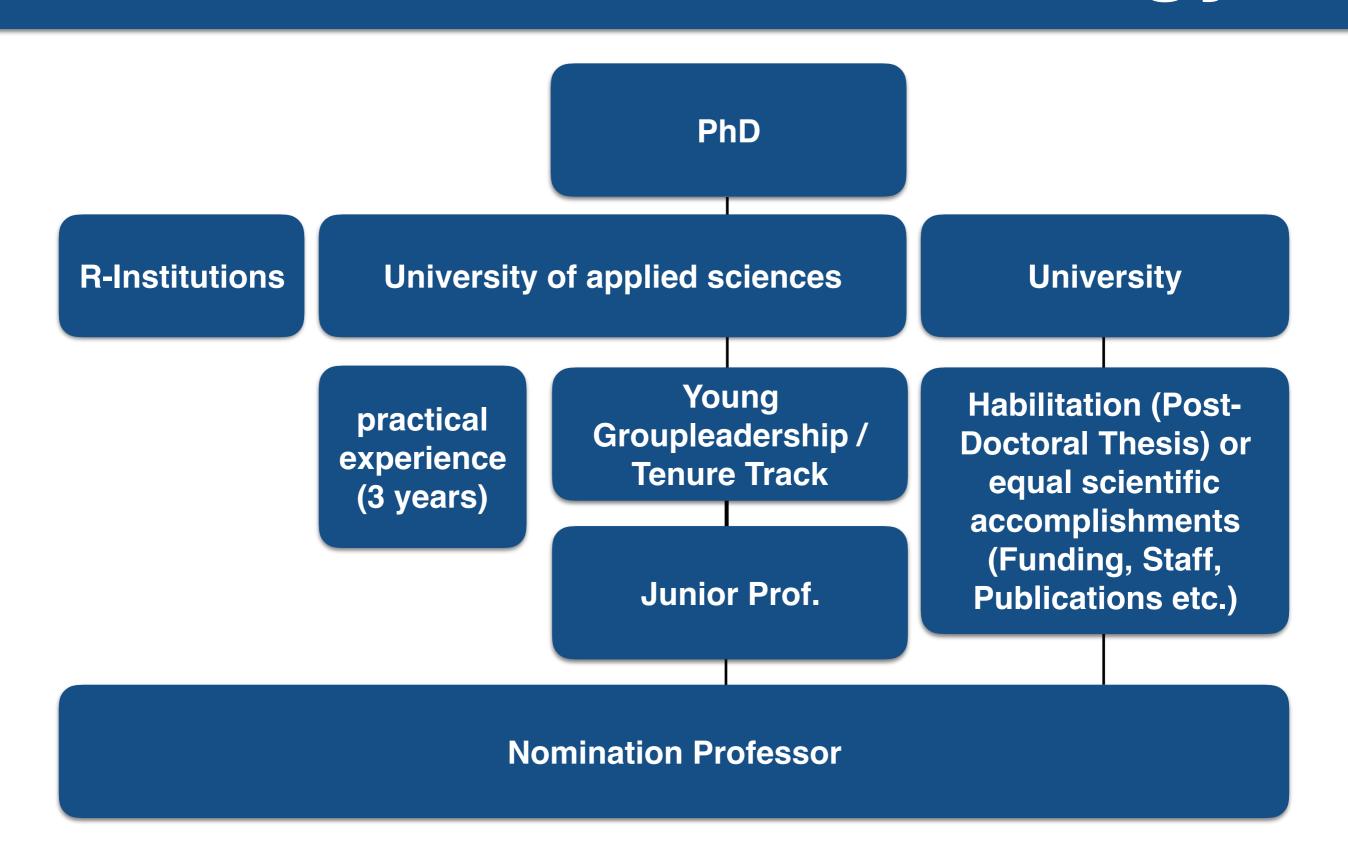
after PhD to get a permanent position (Exceptions: Scientists with children, Third party funded positions)

—> After 12 years in academia you need to fund yourself

Academic Career Strategy



Academic Career Strategy



Academic Career

Every3rd Person

that fulfills the requirements becomes a Prof

!! overqualification

9 of 10

Contracts are limited (50% < than 1 year)

Risk	uncertainty	§ WissZeit G	lower Income	Flexibility	Working 40-60 hours
Network	Persistence	Assertive- ness	"Lonelyness"	(Internal) Politics	Competition

Moving

Teaching

Academic Career Strategy

Junior Prof. (W1) HH 4400 €

Low funding (High variety of condition, but often only your own position is funded)

Less teaching (3-4 semester hours)

Academic Career Strategy

Professor (W3) 6000 € Profs in Germany (2017) 36000 (m) 11400 (w)

Funding and **resources** for staff, equipment etc.

Teaching (8-9 semester hours at Universities, 18 SH at universities of applied sciences)

Career orientation: Regularly look for open positions and check their requirements

Academic Career I Funding

Research & apply for Post-Doc programs and fellowships, stipends etc. such as:

Emmy Noether (DFG)

https://www.dfg.de/en/research_funding/programmes/individual/ emmy_noether/

Fellowship DKFZ

https://www.dkfz.de/en/postdoc-program/ Postdoctoral_fellowship.html?m=1568631828#section4

JOBS Accelerator R&D Fellowship

https://ard.desy.de/e206405#EMPLOYMENT%20IN%20GERMANY

Habil: https://www.kas.de/web/begabtenfoerderung-und-kultur/habilitation

Academic Career I Funding

Overview: Habilitation & Post-Doc-Programs for Women in Research

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https://www.gesis.org/fileadmin/
cews/www/download/
final_Förderprogramme_für_Frauen
_in_Wissenschaft_und_Forschung.p
df
```

GEPRIS: Grant & collaboration Inspiration



- Database for successful DFG-Projects
- Collaboration Partners (Industrial, Institutions)
- Contact Persons
- Overview about funded topics ("Hot Topics")

https://gepris.dfg.de/gepris/OCTOPUS?language=en

Academic Career I Important Q's

- Do I have the skills and excitement for research?
- Can I take a high risk for a long time?
- Am I able to perform under pressure, write scientific grants, do I like to teach?
- How does my **family planning** look like (50% of the women in and 42% of men in academia don't have kids)₁?
- Is my familiy/partner supporting my career?
- Am I willing to move?
- What is my plan B?

What's a post-docs plus?

SKILLS

scientific writing scientific practice researching

grant writing

teaching

presenting data

analyzing &

interpreting data

raising money

organizing

collaborating

analytical thinking

creativity

programming

systemic thinking

working self-reliant

solution oriented

problem analysis

working strategically

tolerate frustration

working under

pressure

Selling

PERSONALITY TRAITS

passionate creative committed resilient patience

Companies

Start Up (1-10) Small - Medium (10-50) Large (<50+)

Accessibility

Hierarchy

Anonymity

Culture (Values)

Structure

Flexibility

Economy

Environment

Salary

Risk Factor



WHATCHADO https://www.whatchado.com/de

- 1. 3 tipps to your 14-year old you
- 2. Whats on your business card?
- 3. Whats the best thing about your job?
- 4. What are the downsides of your job?
- 5. What's your job about?
- 6. How did you get this job? How does your vita look like?
- 7. Can I do this job without your prof. background?

WHATCHADO https://www.whatchado.com/de

- https://www.whatchado.com/de/stories/john-clippinger (Research Scientist)
- https://www.whatchado.com/de/stories/margareta-ahrer (Lab med, Doctors without borders)
- https://www.whatchado.com/de/stories/ben-robertson (Science Teacher)
- https://www.whatchado.com/de/stories/arielle-fakhraee (Life science consultant)
- https://www.whatchado.com/de/stories/anacristinaagueero-murillo
- Patent lawyers



TRADEFAIRS



WEB-NETWORK





https://www.xing.com

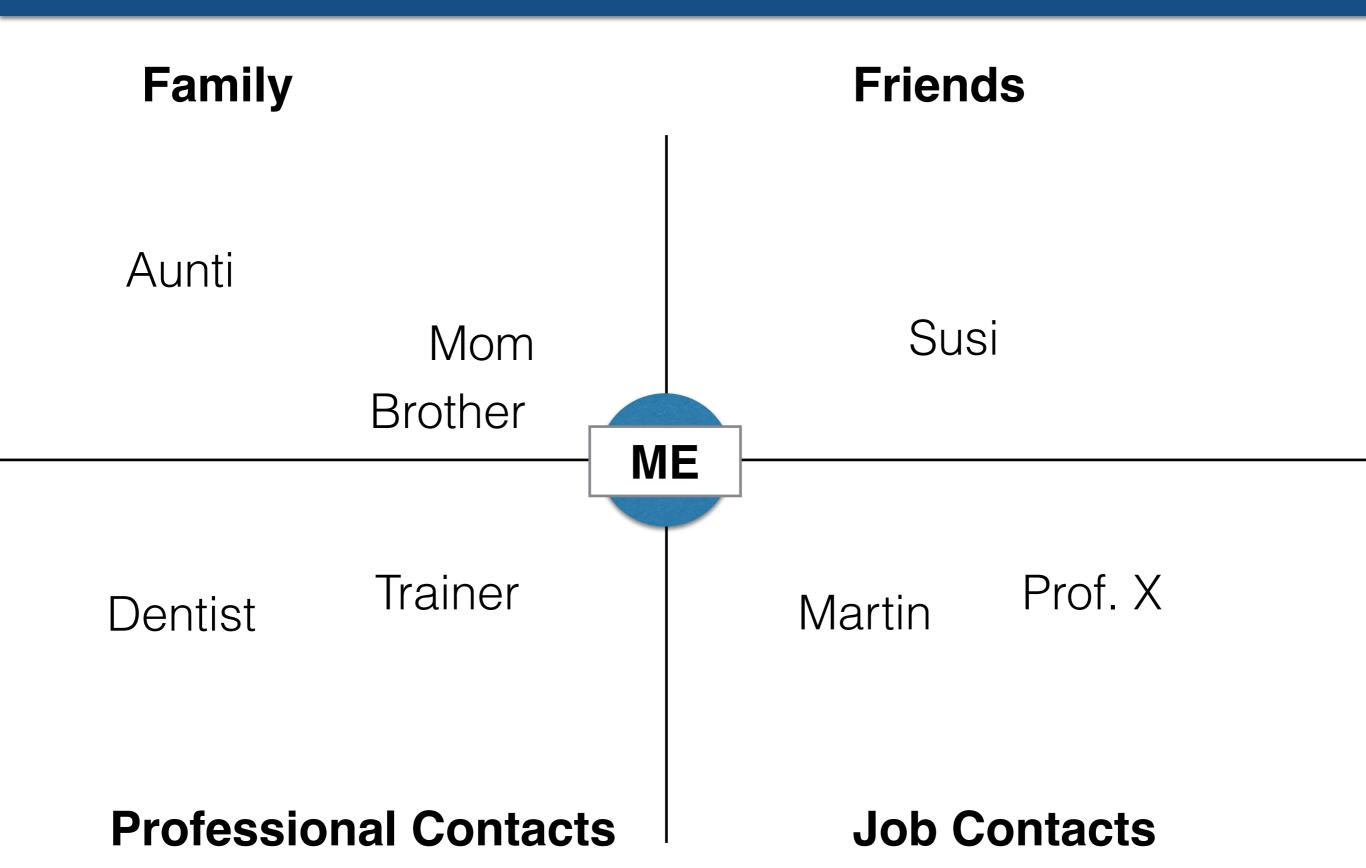
Facebook

NETWORKING

(bridge persons)



Network Analysis





How to find a mentor



- Build relationships
- Check your environment & your resources
- Seek for a good personal fit
- Introduce yourself (Big 5)
 shortly combined with a
 problem you love to solve
- Then ask/tell your specific need
- Learn to see chances & take action
- Follow and be thankful

CAREER CHANGER

Career Changer

- https://www.audimax.de/naturwissenschaften/quereinsteiger/
- https://www.lvq.de/foerderung-weiterbildung-vollzeit/
- Education Vouchers ("Bildungsgutschein" Jobcenter)
- Distance learning (Distance Univsersities) / Evening classes

Additional Education

- Good Manufacturing Practice (GMP)
- Programming
- · Leadership
- Management
- Business Administration...

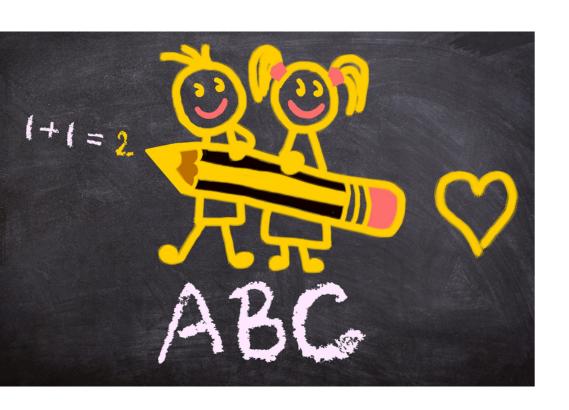
Scientific Management



- Certifications and seminars for
- Scientific management
- Groupleaders
- Professors
- Soft skills etc.

https://www.zwm-speyer.de/weiterbildung/

Teaching



High demand for **scientific subjects** (but also languages)

Berlin: 50% of invited teachers are career

changers

HOW? 18 month trainee teacher program

(Referendariat)

Demand: Work under high pressure + high workload (during traineeship), People oriented, interest in education and pedagogics, Patience and mental stability, Working self-oriented

+ Salary, Job Safety

Consulting

Every 4th position is filled in with a person with a scientific background (Boston Consulting Group (BCG))

Demand: Methodical competence, Problem solving competencies, Analytical thinking, Communication skills, High Workload (12-14 hours a day), Frequent travelling

+ Salary, career options, steep learning curve

Self Employment



Business Set up support/ Funding:

https://www.arbeitsagentur.de/arbeitslos-arbeit-finden/existenzgruendungund-sonderprogramme

Create a business Plan



https://www.hei-hamburg.de/service/

Demands: Financial fluctuation/uncertainty/risk, (Health)Insurances, Patience, Frustration Resistance, High networking affinity, Communication skills, Support System, Working alone, Self-Motivation, Organization skills

+ (Salary), Independency, Self-Fulfillment, Fun, Self-Development, High flexibility (Workload), Variety (Marketing, Finances, Sales, Blogging etc.), Steep learning curve, Network, Focus on your topics