Tips for young scientists aiming for an academic career in Germany

(This presentation will be downloadable from our homepage after the conference)
Career steps in (German) academia

Biology is the most interesting subject ever!

But small mistakes may screw up your academic career...

Master → PhD → Postdoc → Group leader → Professor
PhD thesis

- Try to be fast (3-4 years)
- Get a very good grade („summa cum laude“ or „magna cum laude“)
- **Publications!** (1-2 as first author in decent, „peer reviewed“ journals)
  (longer time for PhD can be compensated by more / higher-impact publications)
- Get awards

Master → **PhD** → **Postdoc** → **Group leader** → **Professor**
Postdoc

- 2-3 years
- International (not necessarily USA)
- Host lab should be renown / equipped with cutting-edge technology
- Try to bring your own funding! (HFSP, Humboldt, EMBO, FEBS, Marie Curie, DFG, DAAD)
  This leaves you more choices for host lab and research topic

- Start to establish your own research topic
  Should be sexy, but not too competitive;
  arrange early with your supervisor that you can take this research topic with you!

- Publications! (≥ 1-2/year, first author, good impact factor)

- Do networking / stay in contact with people in Germany
  Visit conferences, invite important researchers in the field for talks

-> To choose host group, check number/quality of publications per postdoc
-> Ask current postdocs (science should be fun there!)

Master → PhD → Postdoc → Group leader → Professor
Group leader positions in Germany

1. Junior professor with Tenure track
2. Emmy-Noether-program (DFG); ERC starting grant (EU)
3. Institutional group leader position (e.g. Max-Planck-Society)
4. Junior professor without Tenure track
5. Assistant
6. Self-funded position
Group leader positions in Germany

1. Junior professor (W1 with Tenure track)

+ Own position funded for 6 years
+ Own rooms with basic equipment
+ Start-up funding (also for personell)
+ You are independent
+ Insights into how a university works
+ Own teaching, recruitment and education of students according to your needs
+ Criteria for Tenure set upon start; first evaluation after 3-4 years
  + If first evaluation positive, normally also true for tenure evaluation after 6 years;
    if first evaluation negative intermediate funding available to look for another job

- Highly competitive
- First 3-4 years are stressful: teaching, administration, publications, fund raising
  → requires efficient time management!

(try to bring established research topic and unpublished data from postdoc time!)
Group leader positions in Germany

2. Emmy-Noether-program (DFG); ERC starting grant (EU)

+ Own position funded for 5(6) years
+ Plenty of funding (up to 1.5 Mio Euro)
  → up to ~2 PhD students, 1 postdoc, 1 technician
  → money for consumables
  → Lab equipment, also expensive devices
+ You are independent
+ Teaching load low
+ Choice of host institution up to you
+ Status equivalent to Junior professors

- Very competitive; 12 months research experience abroad; ≥ 2 years postdoc
- No extension after 6 years
- Application at latest 4 years after PhD was received
- You have no real mentor (cost of independence)
3. Institutional group leader position (e.g. Max-Planck)

+ Own position funded for 5 years
+ Plenty of funding
  → MPI: ~100.000 Euro/year, sufficient for ~2 PhD students or 1 postdoc
  → Part of the consumables paid by institute
  → Modern equipment, access to cutting-edge instrumentation
+ You are independent
+ Teaching load low
+ Status equivalent to Junior professors
+ 5-years limit can be extended if you perform really well
+ Directors usually are influential mentors

- Highly competitive
- Limited access to university (teaching, administration)
Group leader positions in Germany

4. Junior professor (W1 without Tenure track)

+ Own position funded for 6 years
+ Insights into how a university works
+ Own teaching, recruitment and education of students according to your needs
+ 6-years limitation can be extended by institute chair

- Start-up equipment, positions depends on faculty

- Recruitment via institute chair: association to his/her institute limits independency
- You have no real mentor (cost of formal independence)
- Evaluation yes, tenure no
- Stressful: teaching, administration, publications, fund raising
  → requires efficient time management!
  (try to bring established research topic and unpublished data from postdoc time!)
Group leader positions in Germany

5. Assistant

+ Own position funded
+ Insights into how a university works
+ Own teaching, recruitment and education of students according to your needs
+ 6-years limitation can be extended by institute chair
+ Chair serves as mentor

- Recruitment via institute chair
- Equipment limited
- Teaching load often high
- Limited independence (regarding teaching and research)
Group leader positions in Germany

6. Self-funded position

Not advisable
What is required to get a group leader position?

„Hard“ requirements
- PhD thesis with very good grade, fast
- (International) postdoc experience (≥ 2 Jahre)
- **Publications** (several, from PhD thesis, more from postdoc time; quality beats quantity)
- Own, sexy, visionary research profile
- Modern approaches, cutting-edge technologies

„Soft“ requirements
- Communication skills (good presentations, good English writing skills)
- Self-confidence
- Mentor / network
- Mobility

Master → PhD → Postdoc → Group leader → Professor
What do you need to have achieved to get a professorship?

- **Own research profile**  
  (your name is connected with a research field / a technology)

- **Publications**  
  (as corresponding /first author; > 20 with good impact factor)

- **Third-party funding** *(DFG!)*

- **Teaching experience** *(professorships are at universities!; no ring-lectures!)*

- International visibility  
  (invited talks; session chair on conferences; conference organizer; Editorial Board member)

- Experience with university administration

- Awards

**Essential:**

- **Contact, networks**

- **Good students!**

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