



INFORMATICS
EUROPE

A PhD is not Enough... What's Next?

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Based on a talk and slides by

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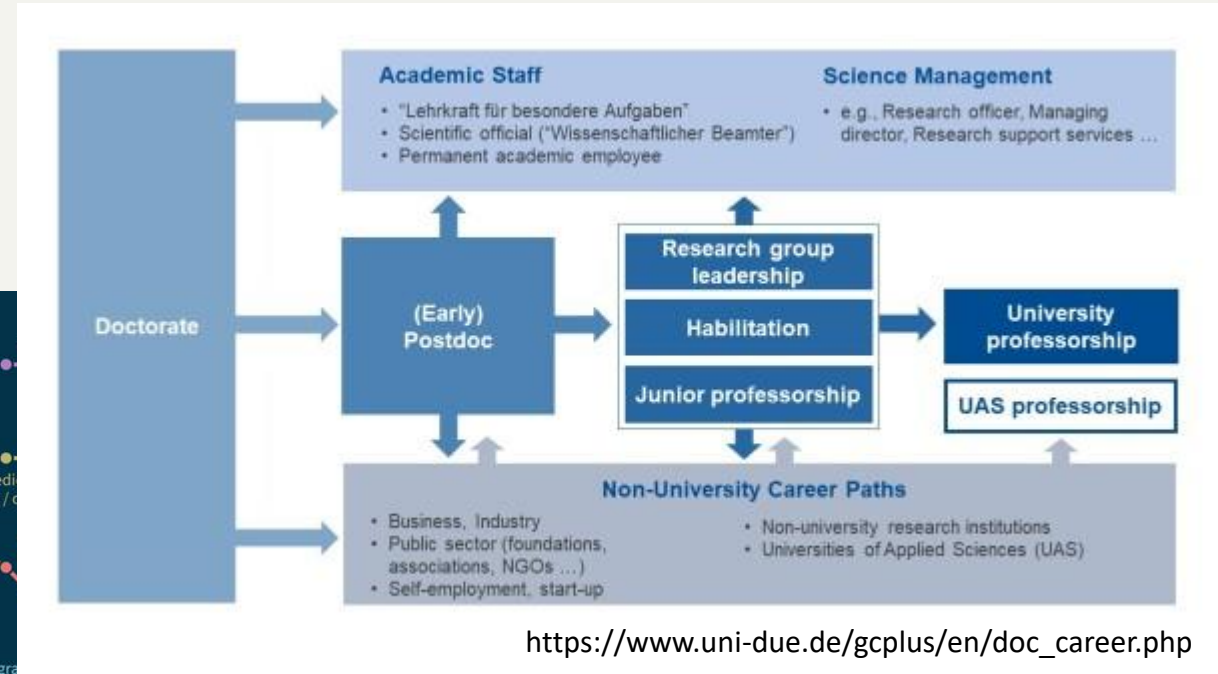
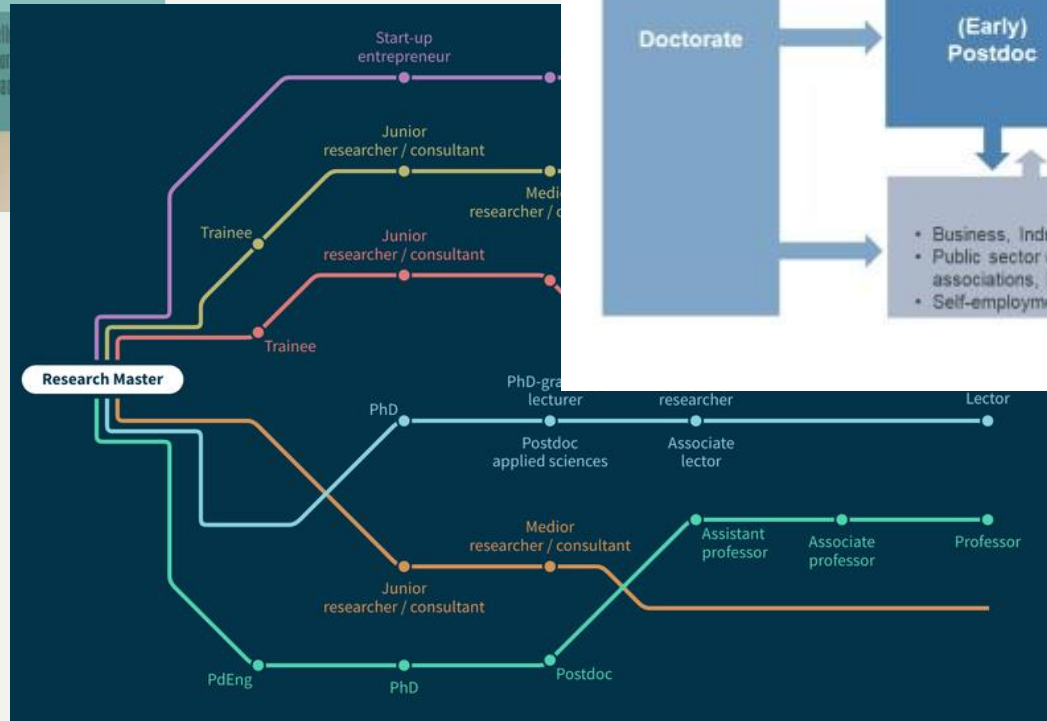


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After your PhD, there are many career options



Image from U.K. Diamond Light Source



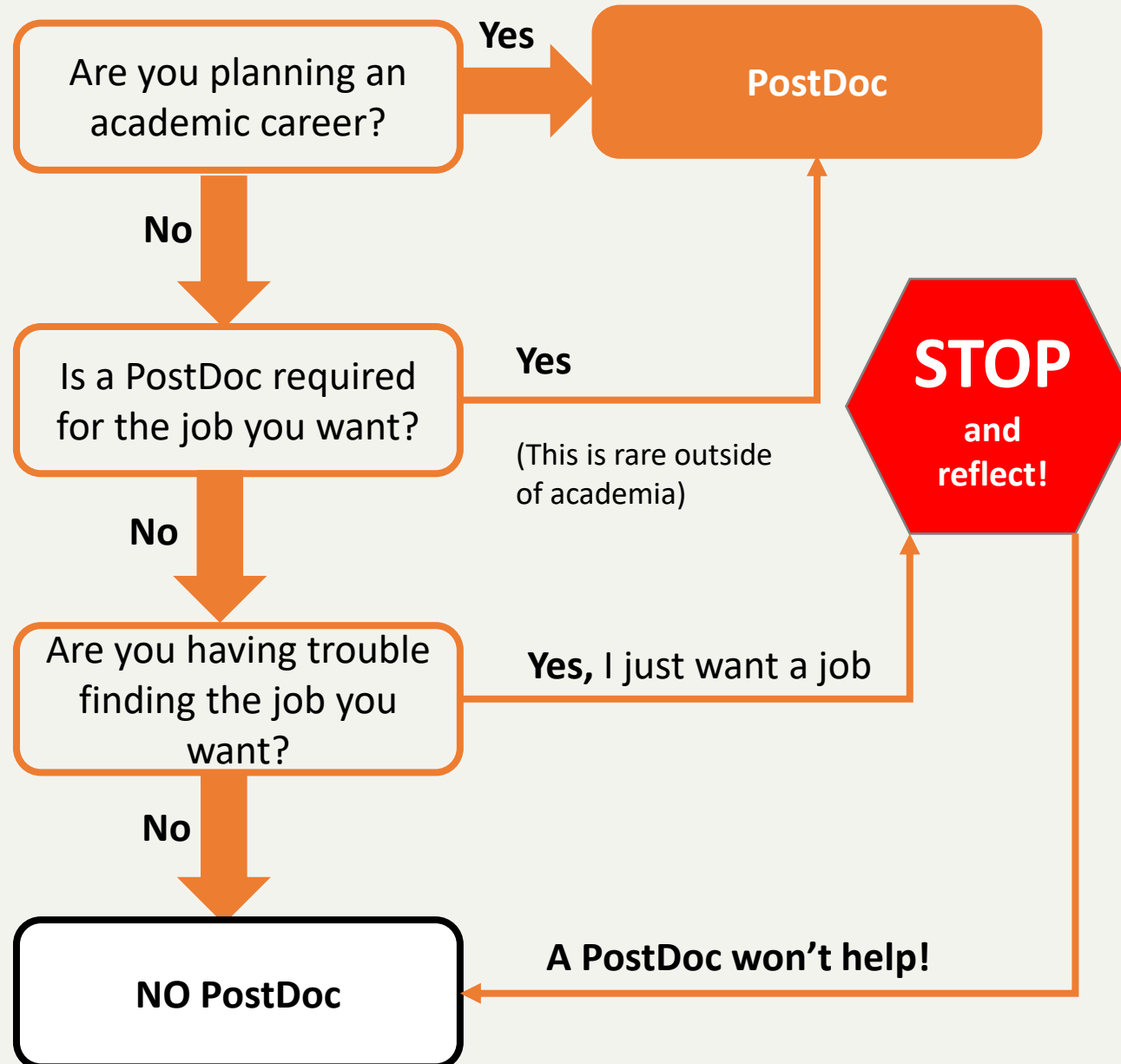
https://www.uni-due.de/gcplus/en/doc_career.php

<https://www.academictransfer.com/en/blog/career-opportunities-after-the-phd/>

Academia or Not?

- If you have been very successful in your PhD and you are decided that university is your future – go for it
- If you are good at research and you have publications, your supervisor will think it is obvious that you can do an academic career.
- Even if your supervisor has not explicitly encouraged you to go for it.
- “I don’t think you need to be extra smart for an academic career. Much more important is that you love research and teaching, how much time and effort want put into it and that you are not afraid to be alone.”
- Having a Family and a Academic Career is possible.

After PhD – go for a PostDoc or not?



PostDoc Positions - Your Expectations

- You will be selected on the basis of your research competence and skills
 - Maintain your performance
 - Broaden your research focus
- What can you benefit from?
 - Experience with different research environment
 - Experience with new techniques/new research topic
 - Recognition of your ideas
 - Network of future collaborators

Which supervisor? Which place?

- Experience with different research environment – many universities require postdoc abroad for tenure track candidates
- Experience with new techniques/new research topic – going to work with a “hot shot” has advantages and disadvantages...
- Recognition of your ideas/topic – going to work with a junior professor has advantages and disadvantages...
- Network of future collaborators – you meet more people in “famous places”

During your PostDoc

- help supervising bachelor, master and PhD students
- show leadership: start a journal club, organize a workshop
- do outreach in schools, participate in open days
- participate in competitions (3Minutesthesis, Famelab, Dance your PhD, young speakers contest...) – you will learn speaking techniques and a better talk makes you attractive as invited speaker later and improves your teaching
- apply/ask to be nominated for prizes/awards
- apply for any type of money you can: access to large facilities or computer time, travel grants for conferences, ...
- do some teaching during your postdoc and if possible also some teaching training
- ...

Find a good supervisor and/or mentor!

- scientific guidance
- provide training in transferable skills (presentation of results, paper writing, group management, etc.)
- find funding / help you find funding
- teach you how to write successful proposals
- teach you the « rules of the game » and how to change it
- introduce you to important professional contacts
- give you challenging assignments and opportunities
- provide constructive feedback on unsuccessful proposals or interviews
- give you credit, and advocate you in the academic community

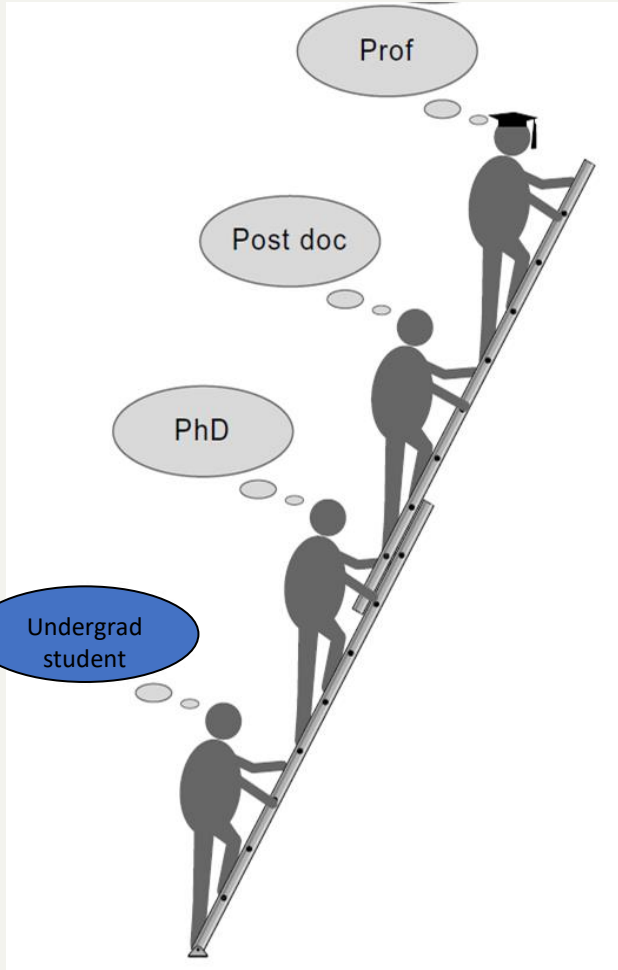
Find a good supervisor and/or mentor!

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- views
- Expect support and advice for the next step*

Make publicity for yourself / Be visible

- Future employers, people who nominate you for prizes, organizers of conferences have to find you
 - Setup your profile on ORCID (with miniCV etc.) and make it public
 - Be on google scholar, publons, researchgate, LinkedIn, wherever your research community is visible ...
 - Have your own website ...
- Say what you are proud of!
- Google yourself. Want to see what your prospective employer can see?

Next Step: Tenure Track Assistant Professor...



- Position Announcement
- Selection process
 - Interview
 - Meetings with potential future colleagues
 - Negotiation of Offer
 - When you start your new position

The Position Announcement – Sets the Expectations

As an Assistant Professor you will:

- set up and develop your own research line and research group
- supervise PhD students
- acquire external funding
- promote the societal relevance of your research
- teach in and contribute to the development of the degree programmes of the Faculty of ???, especially courses with XXX content
- contribute to the organisation of the faculty, for example by participating in working groups and committees, in the domains of teaching, research and management.

CV and Motivation letter

- Provide a complete and well formatted CV
- Talk to the person indicated in the announcement and find out details
- Write a Motivation letter:
 - 1) Why are you writing?
 - 2) Why do you fit the job description? These include a paragraph about your dissertation/current research, one about your future research plans, and one or two about your teaching experience/interests/approach/courses you could offer.
 - 3) Say what you attach, that you would appreciate explaining personally & thank for time and consideration
- Show that you fit the job announcement
- **Apply even if you don't tick ALL the boxes!**
- **Talk about your strengths and be positive.**

Research and Teaching Statement

- Research Statement:
 - Have a good research vision and a plan
 - for the first 5 years and a general outlook for later
 - whom are you planning to collaborate at XX, in the country, Europe-wide, worldwide?
- Teaching Statement:
 - Try to be non trivial when explaining your teaching philosophy
 - Important: What would you like to teach at XXX? What is your experience?
 - How would you organize your course? How do you think you can make your course particularly attractive?
 - Don't forget supervision of bachelor and master students during their (final) projects

The interview with the Committee

- Prepare your talk and/or lecture well and try them out in front of a critical public;
- If you give it online make sure before that there are no technical problems;
- Think of who will be in the audience and tailor your presentation for them;
- Prepare for possible questions from committee members.

- This is not a conference presentation so results are less important than packaging and leaving the right impression.

- Do not talk longer than you are allowed to talk.

- For the Q&A: giving the right lecture?

The Interview

- Do your homework, i.e. know the answers to the following questions:
 - Why do you apply for this position?
 - Why do you think you are the ideal candidate for this position?
 - Why XX and not Cambridge or who knows what?
- Be prepared to answer the following list of questions (see next slides)

The Interview

- Why should we pursue this research at XXX?
- Who are your competitors worldwide on this subject?
- Why do you think you have a competitive edge? What are the risks involved in this research and what is your plan B for each risk?
- How many people do you need to carry out this programme?
- What sort of funding do you plan to apply for to get these people?
- What facilities do you need to carry out this programme? What sort of funding do you plan to apply for to get these facilities/instrumentation?
- What will be the title of your first grant proposal or your first PhD Student Project?

The Interview

- Show that you have a vision for your future development:
- Be prepared to answer:
 - How big do you want your group to be in 5 and in 10 years? Why this size?
 - How do you plan to organize the supervision of your PhDs and postdocs?
 - If you realize that your PhD student is not up to the task you have assigned to him/her, what do you do?
 - If you realize that your PhD student is not doing the task you have assigned to him/her, but pursues other issues which are however giving very good results, what do you do?

The Interview

- About you as a person:
 - “How would a close colleague of yours describe you?”
 - What will be the biggest challenge in coming to XX?
- You can be invited to do a SWOT analysis or to name your strongest and your weakest points.
 - Present your weak point as a strength as well!
 - Be honest.
- What will be your biggest challenge if you come here?

Interviews with individual committee members

- Do your homework....
- Make the interviewer aware that you have done your homework...
- Ask questions...
 - Especially regarding what the position offers
 - If there are specific expectations beyond the announcement

Negotiating the Offer

- You will be told that you cannot negotiate – not true!
 - Wage gap: in the NL – see LNVH report
 - Female scientists at the 14 Dutch universities earn on average €799 per month less (before tax) than their male colleagues, i.e. 13,7%.
- Get training in negotiation or train with your mentor
- Talk to colleagues, find out what others get...
- Make sure that the conditions for promotion and when it will happen are crystal clear and written in your contract!

Starting...

- The first 6 months determine your image for the next 20 years to come.
- Find a mentor who teaches you the ropes of that faculty, that university...
- Find a guardian angel who becomes your advocate in the community and makes sure you get invitations to national events and to give colloquia/seminars at other universities.
- Be pro-active, learn the local language (politics is done in the local language).
 - The earlier, the better

Don't Isolate Yourself and Reach out to Others

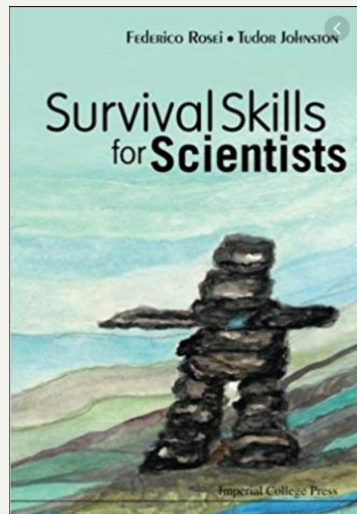
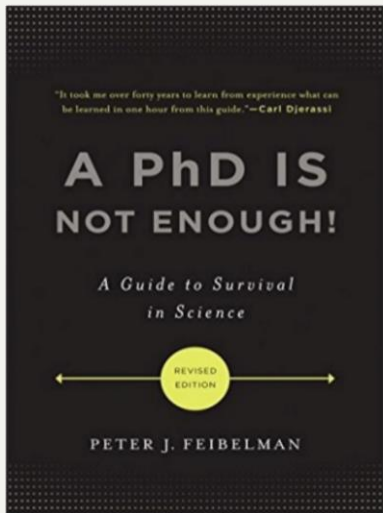
- "Getting into the practice of saying no saves space for smarter yesses. Your time is your most valuable asset. **Don't spend it doing someone else's job.**" Elaine Welteroth
- OR "Default to No!"



Good luck!

*The future is bright for
everyone in science!*

A PhD is not enough... What's next?



Recommended books:

- Federico Rosei and Tudor Johnston, Survival Skills for Scientists, World Scientific;
- Peter J. Feibelman, A PhD is not enough: a guide to survival in science, Basic Books
- Ritsert Jansen, Funding Your Career in Science Cambridge University Press

Watch inspiring online videos on the topic

Useful Links

- Cover letter:
 - <https://hwpi.harvard.edu/files/ocs/files/gsas-cvs-and-cover-letters.pdf>
- “Sell yourself and your science in a compelling personal statement” Nature | Vol 593 | 6 May 2021 | 153
 - <https://www.nature.com/articles/d41586-021-01101-z>
- Research Statement
 - <https://grad.ncsu.edu/news/2020/04/how-to-construct-a-compelling-research-statement/>
 - <https://www.evalantsoght.com/2022/02/phd-talk-for-academictransfer-how-to-write-a-research-statement.html>
- Teaching Statement
 - Guide about teaching statements <https://cft.vanderbilt.edu/guides-sub-pages/teaching-statements/>
 - <https://www.evalantsoght.com/2022/04/phd-talk-for-academictransfer-how-to-write-a-teaching-statement.html>
- Mothers in Science – 64 ways to have it all :
 - https://royalsociety.org/~media/Royal_Society_Content/about-us/equality/2011-06-15-Mothers-in-Science.pdf