

# Navigating Your Academic Journey



PhD Students



PhD & Post-Doc -  
Academic Career



Early Career -  
Permanent Position

**Tips for managing the early stages of your scientific career**

# General Advice

These are **suggestions**, not rules – use them for inspiration.

Applicability may vary by field (e.g., theory vs. experiment).

Don't try to check off everything – adapt to your path.

Always talk to your **supervisor, peers, and colleagues**.

# Strategic Advice for Early Career Researchers



## PhD Students

Before starting

Beginning

After 6 months

Every year

Midterm

Toward the end



## PhD & Post-Doc - Academic Career

Stay Informed

Strategize your work

Plan your career

Be visible

Enhance your CV

Improve Soft Skills

Networking



## Early Career - Permanent Position

Find a new position

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- Make an informed choice: choose a topic and group you **like and trust**.
- Ask about duties (e.g. teaching), opportunities, and challenges.
- Consult the following JGU links: [The "General Postgraduate Program"](#), [Interdisciplinary program](#)

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- Read general academic career advice - useful **even if you don't stay in academia.**
- **Talk to your supervisor** regularly.

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- Understand your **timeline** and write a **preliminary project plan**.
- Include: title, motivation, research plan, milestones, and events.
- The initial aim should be to finish after 3 years. This is not always possible, in particular if experimental work is involved.

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- Set up a **PhD committee**. Meet yearly to present progress and discuss next steps.
- It should consist of your supervisor and, potentially, other professors or members of your research group/institute.

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Decide your direction:

- If you want to **work in industry**:
  - build transferable skills, e.g., experience in common programming languages, machine learning, artificial intelligence, big data. Visit also the career center of JGU: [Career Center](#).
  - attend soft skills workshops.
  - consult these web pages:
    - [Mentoring-Programme an der JGU und der HS Mainz](#)
    - [DPG Mentoring-Programme](#)
    - [Laboratory visiting programme "One day on site"](#)
  - learn to manage your time and work on several projects in parallel. These are skills that will be very precious in industry.
- If you want to **stay in academia**:
  - inform your supervisor
  - one year prior the end of your PhD studies start applying for postdoc positions.

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Start writing your thesis, it will take you longer than you think.

To get help in the writing, consult these JGU links:

- [Young researchers](#)
- [toolbox: For students.](#)

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- Sign up for **mailing lists** to learn about the latest research (choice is field-dependent):
  - [arXiv](#)
  - [FG Stochastik](#)
- Register to the most relevant mailing lists of **our faculty**: [Mailing lists](#).
- Attend the relevant **colloquia** to keep updated with research in a broad sense: [Colloquia](#).
- Register at platforms where you can interact with other researchers and ask for publications that are not open-access or available on the arXiv, e.g. [ResearchGate](#).
- To stay informed about conferences, job postings, etc., use platforms like: [InspireHEP](#).
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- Plan projects and **manage time** well.
- **Document** your work carefully.
- Discuss **publications** and goals with your supervisor.
- Request a yearly meeting with your supervisor or your PhD committee to discuss objectives and future plans.
- Attend at least one **major conference**.
- Show initiative and suggest projects on your own.

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- Be aware of **application cycles** (often in fall).
- Attend student conferences that organize sessions dedicated to career advice: e.g., Frontiers and Careers in Nuclear and Hadronic Physics.
- If you are a PhD student, ask your supervisor early enough about possible contract extensions beyond the 3rd year (if needed) or the possibility to bridge the time between PhD defence and start of the first postdoc position.
- Apply for funding for research visits or independent projects.
- Try to gain international experience (ask your supervisor for advice, in order to do so compatibly with your private life).
- Read the advice for early career scientists to prepare for the next step in your career.

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- Present your work – even **preliminary results**.
- Seek recognition within **collaborations**.
- Register at [ORCID](#) to have a personal researcher ID.
- Set up a profile at the publication search engines relevant to your field, e.g., [InspireHEP](#). It should be easy for others to find your email address and get in touch with you.
- Consider a **personal webpage**.

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- Keep your CV and publication list **up to date**.
- Get involved in **teaching, mentoring, organization** (if time allows).

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- Try to become an (associated) member of a graduate school or academy: e.g.,
  - Graduate School of Excellence in Materials Science
  - HGS-Hire
  - MPA
- Take soft skills workshop on: Scientific writing, Grant writing, Time management, Project management. Check out websites where these are offered like: Irene Joliot-Curie Programme or Extra-Curricular activities
- If you are not formally registered to a mentoring program, think about registering to one (e.g., Ada Lovelace, Pro Academia), or seek for informal mentoring by talking to your supervisor or to scientists you meet at conferences.  
Visit also <https://www.nachwuchs.uni-mainz.de>.

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- Build a network of **collaborators and peers**.
- At conferences: **ask questions, meet new people**.
- Talk to peers that do not do exactly the same work as you. You can learn a lot from each other.
- Prepare a **2-minute elevator pitch** for non-experts.

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- Be clear about your project and **show initiative**.
- Keep track of **job ads** (they may be off-cycle).
- If you interview for a new position, ask also if (and how much) you will be allowed to continue working on your own projects.

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- Grow your **collaborations** and **visibility**.
- If possible in your research field, try to achieve publications without your PhD supervisor as soon as possible.
- Aim for **single-author publications** (field-permitting).
- Get a broad overview of your scientific field, the so called “big picture”.
- Try to understand also challenges in personnel management and in the university politics.

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- Start applying early (even 1 year after PhD).
- Explore:
  - DFG: Walter Benjamin Programm, Emmy Noether Programm, Research Fellowships, Individual Research Grants, etc.: [DFG research funding](#).
  - [Helmholtz Young Investigator Groups](#).
  - Humboldt foundation: [Feodor Lynen fellowship](#).
  - EU: Marie Skłodowska Curie Action, ERC, etc.: [EU office](#), [Horizon Europe](#).
- Take courses on **grant writing**.
- Read successful proposals and **prepare carefully**.
- Use grant offices and peers for feedback and mock interviews.
- Make use of services to proof-read your grant proposals and practice your application talks. Ask, e.g., the grant office, [KoWi](#), as well as your colleagues.