
Career within academia, tips and suggestions from researchers to junior researchers.

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We here disclose the open answers provided by the respondents. To facilitate the navigation in the wide set of tips collected, we subdivided the answer in categories: Work/personal life balance, Academic Career Planning, which contains Network, general strategy tips, CV development, scientific communication and advisor, and Career outside academia tips. At the end of these sections, we collected longer and more comprehensive suggestions in the category "Broad tips". As it can be noted by the answers, a large set of concepts have been discussed by the respondents. Further analysis concerning associations between these observations and its consequences for the candidates, on career tips from researchers to junior researchers**, will be provided in forthcoming publications based on the collected data.

1 Work-life balance

- 1.1. "Do not forget that there is a real life outside of the university!!!!!!!!!"
- 1.2. "Don't be a mother without a large family backing you up, and publish, travel, do research and take your job seriously."
- 1.3. "I think academic lifestyle is deeply unhealthy until you get a permanent position. You are expected to move countries constantly, you work insane hours to try keep up with an unregulated rat race for publications so you can meet requirements for permanent positions. To be honest, I would be tempted to tell the young researcher to get a job in the private sector instead."
- 1.4. "Be mindful not to make your academic career your sole focus in life, or the only source of your identity/self-image. That way it is easier to adapt to whatever course your career takes. The academic career path is inherently unstable and unpredictable. "
- 1.5. "Hard Work, keep your motivation, jump over the barriers being made as a result of jealousy, try to do your best for your students, talk to them and be open to get feedback."
- 1.6. "Force yourself to have rest and physical activity. Feel what you like and do it. Fifteen minutes' walk from work also counts. This is obligatory for your mental health. Your brain is a key instrument for work. - Find a good psychologist who will help you to overcome the issues that you have. That is extremely useful in the long-term. You should always feel that you do what you like, that you enjoy what you are doing even though your work is demanding. Otherwise, you'd better quit academia and find another interesting job that will help you to feel happy and satisfied. Your life matters - not others' opinions on what matters for you."
- 1.7. "Work hard!"
- 1.8. "Just work hard, publish, if possible ignore department quarrels, always treat everyone right and fairly, prove that you are good at what you do, try to inspire people, believe and practice in partnerships and, above all, learn what colleagues can teach you."
- 1.9. "Stay open-minded and flexible concerning your placement; work hard and rehearse your

presentation a lot; have a plan B in case it does not work out."

- 1.10. "Grow a thick skin. Apply for jobs everywhere in the world."
- 1.11. "Work hard and don't despair."
- 1.12. "Work a lot to reach a high level in every skill and knowledge and remember that this is a marathon. Strive to reach an excellent level but avoid perfectionism."
- 1.13. "Make sure this is what you want, and take care of yourself along the way!"
- 1.14. "I am now also a researcher, and I enjoy this job more than my academic job. I am more free, and can choose my tasks."
- 1.15. "only continue after a PhD if you know there is a high statistical chance that there will be jobs available in your field make sure you have a fall back (many people do not, and struggle)."

2 Academic Career Planning

2.1 Network

- 2.1.1. "Go abroad, publish, extend your network. Keep good relationships with your collaborators (PhD, postdoc supervisors, colleagues, etc). Be open to opportunities."
- 2.1.2. "Go abroad for a postdoc. Do not stay in the same lab (where you did your PhD for too long)."
- 2.1.3. "Engage with people and grow your network. You may hear of more job opportunities that way. It is an advantage if those you network with know your background and skills, as such they may have a position that is specifically suited for you."
- 2.1.4. "Collaborate with other researchers. Take the time to be social with your co-workers. Try to find a good supervisor."
- 2.1.5. "Network, network, network - Be flexible - Never accepts positions you are not completely sure about."
- 2.1.6. "Get experience outside of Norway!"
- 2.1.7. "Networking is key. International experience is said to be an advantage, but it makes your life harder in many ways. Not speaking the language of the country will have serious consequences to your career."

2.1.8. "Work with organizations outside academia for ideas, data, networking, etc. Present your work as much as possible."

2.1.9. "Network! Reach out!"

2.1.10. "Network, publish, and plan your career ahead as much as possible."

2.1.11. "Get as much experience as possible early on, especially as a researcher but also within the specific practice area and teaching. Try to stand out with experience beyond "the usual". Put in the extra work at early phases (beyond normal working hours and more that sustainable over the long run, make a foundation). Focus and work hard on creating your own network."

2.1.12. "Networking is the most important task."

2.2 General strategy tips

2.2.1. "Plan in advance. Have a strategy or philosophy in academia."

2.2.2. "Make/discuss a career path. Control you output and make sure that it is consistent with the ongoing scientific production. Not to do: Listen to your advisor. His personal story will most likely be a problem for you, more than an advantage. Work only with your group. Stay in a single place."

2.2.3. "To do: Find a powerful person to follow and that will open you the way in academia. Most positions are open like that. This or try to win an European Grant. Do not waste time in nice but small groups."

2.2.4. "Dream big and talk even bigger - if you're just a solid worker the current state academia is in will not lead you to any green shore."

2.2.5. "Follow your gut feeling in terms of direction/path. Pursue what you are most passionate about and let the world know that this is what you want and love to do. Then the opportunities will come. Also make sure to get experience in both research and teaching. Travel and build a network. Learn Norwegian if you aim for a permanent position in Norway."

2.2.6. "Start building your academic CV early on. Find out what is important (courses, experience, publications etc.)."

2.2.7. "Departments need people who can teach. Try landing a relevant teaching gig in addition to a research position. Being a likeable person counts for a lot."

- 2.2.8. "Working early on the topic that you would like to base keep working within academia is a great advantage."
- 2.2.9. "Don't change the topic more than once. Find a second topic, where you already know how to connect it to your first one."
- 2.2.10. "It's essential to gain international experience. Just an exchange of a few months does not suffice. Don't do a BA, MA, PhD, PostDoc all at the same institute. Make sure to go to at least 2, preferably 3 different institutes and make sure they are not all in the same country. Most important is a change in scenery from MA to PhD and from PhD to PostDoc."
- 2.2.11. "Do what you love and carry it out with great passion!"
- 2.2.12. "Stay focused. Pursue your dreams and do not despair. Effort pays in the end."
- 2.2.13. "Try to choose the best ranking universities in their studies."
- 2.2.14. "Plan for the long term and be patient. You might be lucky and get a permanent position early. Most likely you will have to wait many years though."

2.3 CV development

- 2.3.1. "Experience with teaching and communication with the non-academic world matters even though job ads may not always reflect that. Build networks by making friends. Join a union."
- 2.3.2. "Start preparing early. The process takes time, and most postdocs gets posted in the fall. Publish."
- 2.3.3. "The implicit rules of institutions are very important. A temporary teaching post can be a way in for a permanent one, especially in smaller universities. Teaching experience is much more important than all the career workshops I attended to explain. Being able to teach in Norwegian can be a very valuable asset."
- 2.3.4. "Know your price and do not buckle under when you get treated unfairly. Join a union, fight for your rights, demand openness and insight in documents."
- 2.3.5. "Get some teaching experience, but just enough to claim that you do have some teaching experience."
- 2.3.6. "Get funded. Do a PhD. Do a postdoc. Do

not go abroad other than on exchanges/visiting fellow programs. Become the star of your department. Get your name on as many peer reviewed publications as possible. Must include the first author (even if someone else is doing all the job for you.) Also publish as a sole author."

- 2.3.7. "Mobility is the Achilles's heel of many Norwegian academics, often due to the good working conditions as a PhD student meaning that people start families and buy a house (which is in and of itself not a bad thing!). However, making the effort to change institutions, or working abroad, can be well worth it, career-wise. Even if (or perhaps especially if) your goal is to return to your home institution for the rest of your career."
- 2.3.8. "Ask prominent young researchers for help (most will offer it). Ask them to send you their CV, teaching portfolio, research proposals, letters of motivation, etc. for inspiration. Do not lie on your CV and in your application letter, but do not be afraid of speaking highly of yourself (this goes especially for the women, there is a significant gender difference here!). Do not start an application letter with details about your PhD. Get a course in university pedagogics."
- 2.3.9. "DO: believe in yourself, join in all academic experiences you can, plan early to publish (but publish good, not only for counts). build your network! DON'T: work too much alone Work in the practitioners field, if your topic is practitioner based. You will know much more about what to focus on in research. Too many are just going from school, to university, to PhD , to academic positions...."

2.4 Scientific communication

- 2.4.1. "Write articles, teach less."
- 2.4.2. "Publications, publications, publications."
- 2.4.3. "Publish a lot. Get international experience. Find out if you actually want to commit to a career in academia."
- 2.4.4. "Communicate about your work (conference is mostly valuable for young researchers and especially PhD)."
- 2.4.5. "Do everything to get something published, some teaching experience, and a network. Also consider if you enjoyed writing your BSc or MSc, and really want to keep doing that forever."
- 2.4.6. "The most important thing is networking and making your research visible. I would also urge

young researchers to consider jobs in the private sector, instead of dismissing it outright."

2.5 Advisor

- 2.5.1. "Weird but my honest suggestion: don't follow your supervisor's career advice. He/she is focuses in 'using' you, not to uplift you. Don't sell yourself, Be patient, sooner or Later there will be some positions where you will bet through. Chances are some positions are really open, not many candidates, and no internal candidates, they still need someone, and there- it would be you. Don't lose hope, even if so much looks hopeless!"
- 2.5.2. "Make sure to have good supervisors, advisors and mentors. Make sure to join groups who publish good papers."
- 2.5.3. "Only get involved with a winner, e.g. those who repeatedly succeed at gaining external funding and have a proven publication record. Do not spend/waste time on applying for funding with someone who has not received funding before and/or do not complete papers."

3 Career outside academia

- 3.1. "Academic life has changed. New Public Management, managerialism, political correctness, plus the increased influence of identity politics are destroying academia, helped strongly by politicised research fields where a goal in social science is to confirm state policies. Academia has a future for you if you like being a politically correct bureaucrat."
- 3.2. "Don't do it. Choose something else. It is not worth it. High risks with low rewards. Gender bias. Impostor syndrome. Corporatisation of research..."
- 3.3. "Do NOT go to academia. Go outside. Get a real job. Get solid managerial experience. Get accustomed to real world procedures. Strive for excellence. Insist on equal job opportunities. Be fair to your colleagues. Improve the working environment from the inside."
- 3.4. "Academia is not the only place to one but 1 of 1000s of places to work."
- 3.5. "Left academia, came back with a different skill set. Innovation and teaching more than lab research, fits me very well."

- 3.6. "It's better not to do PhD or postdoc if you are an outsider as the system here doesn't consider the technical knowledge for jobs . They want language as their main priority rather than technical skills to build a good research network. Read a lot, know what the rest of the world is doing. Don't, at least not if you want a family or care about what continent you end up living in."
- 3.7. "I would recommend applying for a job in the public sector, as the salary and career benefits are much better."
- 3.8. "Target job market when you decide which fields you are interested into delving into. Get some experience outside academia, otherwise they will question your motivation for non-academic jobs and favor people with experience. Experience counts most."
- 3.9. "I believe the research institutes make a good starting point, as the staff is fairly young, the hiring process is less formal, and you gain experience in writing research proposals."
- 3.10. "Do not do it! Pull yourself out of this human unfriendly environment before it makes you into one of those who think of themselves as «those that are here deserve to be here and those who left did not deserve to be here»."
- 3.11. "Don't do it."

4 Working tips

- 4.1. "Time! Often it takes months between submission of the documents, evaluation of the committee, interviews, and final employment. It would be realistic to expect at least 6 months for the recruiting process to last. Who can wait that long?"
- 4.2. "Time for recruitment process. At one point, I was invited desperately for an interview the day after the application deadline. The reason was that they wanted to finish the process asap- and give the position to a preselected candidate. Elendig/horrible."
- 4.3. "Jealousy and barriers made by colleagues is unfortunately a bad experience. When someone does not work almost 3 months a year, has no research result or no other activities than running a 10 credit course in a year, he will create lots of negative atmosphere around you. How can I know how evaluations and committees work when they hire, I have no idea, thus rating how fair they have treated me or not is impossible."

4.4. "I am repeatedly discouraged by the emphasis of quantity over quality in today's academia. This affects evaluations of job applicants, promotions, research funding, salary etc."

5.6. "Most PhD graduates will never work in academia: the number of PhDs is much higher than the number of open permanent positions. Still, unemployment among PhD holders remains low. Some attention to how skills acquired doing a doctorate being useful also in other sectors would be nice."

5 Organizational tips

5.1. "I wish there were more surveys in this line."

5.2. "I think it should be a state panel who picked the candidates, not the university itself. Then we would have a more neutral process."

5.3. "I would say that there is an impressive indifference from [institute] towards Forskers. No career plan, no support, no investment in formation (e.g. no pedagogic, no training, no language courses, no mental health support, no grant writing support, no financial pillow in between projects etc). We have no unions that support us directly (too busy to take care of the permanent staff and PhDs). We are underpaid (in respect to similar positions in Norway) and 'used' until needed (temp job)."

5.4. "Our contract with the institution depends on the money that we bring ourselfourselves in and/or on teaching a specific course to 'fix the holes' of the NTNU personal. At the same time, we are the most scientifically productive personnel. As a consequence, the best minds that do not have an 'academic sugar daddy/mommy' are lost."

5.5. "I am thinking about supervisors' attitudes to their newly hired Ph.Ds and postdocs. Personally I am so lucky to have a boss that cares about me and introduces me to academic circles. That helped me a lot to adapt and to achieve my career and academic results. But I know enough cases when the boss/supervisor simply neglects their young colleagues' existence. Probably these senior people forget their own young experience, the importance of advice that helped them to find themselves a professional in several years. I am not sure if it may be obligatory. Of course, we never can change people. But at some point that would probably be useful to share some guidelines/handbook/short video courses that would remind senior colleagues that it is important to pay attention to those whom they are going to hire. So that seniors could understand that at least they did what they could do to help young colleagues to achieve high results and do not get depression or another mental/social disease or quit the academic career after feeling marginalized."

6 Strategy tips

6.1. "Career development support within universities, ranging from workshops to coaching to smaller grants for start up projects"

6.2. "I think it should rather be a question on changing the terms for research financing in Norway (currently assumes and encourages too many PhDs and postdocs) combined with very high threshold for job/permanent position there is also institutional problems in that PhDs and postdocs are encouraged (assumed) to participate in research proposals to NFR or EU - while institutions /universities are reluctant to "host" such applications (afraid to be trapped into giving permanent research positions!); thus there is a catc: you cannot get funding unless you have a job, and you cannot get job unless you have proven ability to get funding."

6.3. "Forskningsrådet (and others) who demand that post.docs must go abroad (travel grants) are in fact discriminating against young female researchers. We all know that job arrangements that are not family-friendly have a worse effect on women than men. Female post.docs are typically in their early thirties, and to demand of them to be flexible and to do their research abroad is simply bad politics if the goal is to get more women in higher academic positions."

6.4. "Financial support to enhance your profile (i.e. funding opportunities to attend foreign conferences) parenting versus career"

6.5. "I'm a scholar from a country outside Norway. I think Norway offers great opportunities in academia and excellent work-life balance, unlike academia in many other countries. Unfortunately, my Norwegian colleagues do not always recognise that. Norwegians are spoiled. At the same time, great conditions here means that Norway becomes a bit of a golden cage. Once you're in, you can't leave because the costs of change - worse labour conditions - are simply too great. This means people are unwilling to move abroad, which hurts the quality of Norwegian academia. Norwegians are in general far too unwilling to

move, nationally or internationally. This seriously hurts the quality of research, as research communities become stale, group think enters, and the working climate deteriorates. Mobility - colleagues coming and going - is essential for stimulating and innovative academic environments. The quality of research in research in Norway obviously suffers from a lack of willingness by Norwegians to move."

- 6.6. "Many of the "permanent" positions (including mine) nowadays, are really not permanent in the traditional meaning. These are the positions that are deemed "permanent on external funding" - so permanent as long as there is external funding (and no internal funding will be used for these positions). Calling these positions permanent improves the statistics for the universities etc, and follows the legislation (more than 3 years in same position = permanent), but they don't feel more permanent than the "midlertidig" we all came from. This has to do mainly with the funding models for academia, with an emphasis on external funding, but it results in "A" and "B" employees, with "A" (Permanent-permanent) employees involved in all teaching, committees, etc (and not really "listening hours"), and "B" (external-funded permanent) employees not being allowed to partake in the internal work such as teaching and committees (a blessing, will many "A" employees say, but also an inability to qualify for an A-position, as these experiences are necessary), and more and more a move towards counting hours spent on each external project and moving the "free academic" position towards the ouncultancy-model where what is funded is what can be interesting."

7 Broad tips

- 7.1. "See a career in academia only as one of many options. Usually, there are many other interesting areas where you can apply your competencies gained during your academic training. Be open-minded and creative when looking for alternative jobs. If you really want a job in academia in Norway, it helps to build a network. Be present, show up at meetings, be social, offer help to colleagues (but without being pushy). And mention early on that you are pursuing a job in academia to your colleagues, supervisors, head of department etc. If your colleagues believe in your skills, they are likely to support you in your pursuit of your career (e.g. as your reference person, sending you job openings)."
- 7.2. "Weird but my honest suggestion: don't follow your supervisor's career advice. He/she is focuses in 'using' you, not to uplift you. Don't sell yourself, Be patient, sooner or Later there will be some positions where you will bet through. Chances are some positions are really open, not many candidates, and no internal candidates, they still need someone, and there- it would be you. Don't lose hope, even if so much looks hopeless!"
- 7.3. "The amount of administrative work put on professors at the moment should be a point of consideration for young researchers. A professorship at my university will not lead to any active research, but mostly be teaching and administering multiple PhDs. Possibility of doing your own research is close to zero. Hopefully this will change over the years, but after 10years at my department I've seen what was my dream job end up as an administrative nightmare."
- 7.4. "Publish and start publishing early while you're still a PhD student. Be nice and collaborative. Academia is a competitive environment, but in my opinion, egotistic competitors only get so far. It is those who help others be good too that gets the positions in the end."
- 7.5. "Work hard, continue to build your CV: Publish, attend conferences, take part in public debate, win awards, teach, organize outreach, volunteer, write grant applications. Have clear answers to questions like: "What unique skills and expertise do you bring to the community? How do students learn, and how has this insight shaped your teaching strategies?" Realizing skill and experience is not enough: You also need luck and good timing. Not having children, and working 24/7 might give you an advantage - if you don't do this sacrifice one of your competitors may."
- 7.6. "Strategically develop your CV, write proposals, build a network of people you can work with, Focus on getting papers published. Work with other researchers more experienced than yourself to improve the process of getting published. Prioritize your work do not try to do everything work in a good Group, publish high quality and relevant papers in good journals, get some practical experience."
- 7.7. "It is sad to say this, but "great teaching" is seldom rewarded in Academia, with a few exceptions. In the end it is the research that you produce that seems to weigh heaviest when applying for a permanent position. So be selfish; Focus on your research, don't automatically say yes to everything the permanent staff want you to do, and be pragmatic - your first paper does not need to go to "science" or "nature"."

- 7.8. "Be patient. Never give up, if you think Academia is really for you. Get used to experiencing more setbacks than positive news (We regret to inform you that...your paper was not accepted for our journal / conference / seminar series ; your application was not successful). Patience and perseverance pay off in the long run. If you are not somewhat passionate about doing research it is perhaps too demanding or boring: not too much social interaction in terms of work, may have to work on weekends,... Tell everyone about your work, ask questions,... It is useless to think: I rather don't say anything so that for sure I don't appear stupid. Present your work everywhere you can. Be open to your advisor, make him push you."
- 7.9. "If you are in a highly competitive field, try to publish as much as possible. If the field is extremely specialized, focus more on this specialization. Anyway, try to "network" as much as possible. Do many internships or research stays at other institutions. If you have the chance to jump into existing research projects besides your main PhD project, do that! In my experience, you are often recognised as someone who just works on the side on the project, hence the workload is relatively low, but you still get your name on the paper."
- 7.10. "Commitment is important, there is huge competition and, when hiring, the employer wants someone qualified (of course) but also someone who will be cooperative and contribute to a group. Since lots of people naturally want job security, which is fair, it often comes through that the candidate is applying to a certain place, only to jump off the train when the next opportunity comes along. It makes perfect sense to be looking out for good opportunities but it is equally important to show you will get a job done."
- 7.11. "Get a good idea of what academia involves before you set your heart on getting a job in the academy - talk to people looking for permanent positions right now and people who have recently obtained them. Don't get caught up on the prestige and perceived "nobleness" of the career. But also don't assume you do not have a chance and give up immediately - it's worth a try and if you don't enjoy the process you can always change careers."
- 7.12. "Teach. Teach. Teach. If you are a foreigner: Learn Norwegian now and learn it well. Being an academic, you are probably gifted. You are able to learn a new language. Don't care too much about the number of papers you have. If you are early in your career path: Make sure you pick up skills that could be relevant for teaching in applied sciences i.e. engineering. Such fields often have a hard time finding good candidates."
- 7.13. "I think the best option I can give - both myself and others, is to go as far as you feel comfortable with. Maybe a job in academia is the dream job, but it might not be worth jumping from one short post doc position to another for years on an end just to get that one shot at a permanent position. If you don't feel motivated for the job when writing the project proposal or the cover letter, then the job might not be the right one. If the job is right for you, writing the application should not feel like a drag. That job might also be outside of academia."
- 7.14. "Don't listen too much to the "rosy advertising" about "using your talent for improving the world", "go abroad and gain valuable experience", "don't become <insert ordinary job>, you are too clever for that", etc. Don't be naive. The world is a tough place, and most people you meet don't really care whether or not you succeed in your career. * Are you willing to work harder than most people, for less pay, with reduced social and material security (potentially for the rest of your life, e.g. with respect to pension, home ownership etc.), for an unknown number of years, while not being able to plan more than a few years ahead, and have a significant probability of not succeeding in the end? If not, maybe an academic career is not for you... * If you go abroad (and would like to return some day), stay relatively close to home; it makes it easier to keep in contact with the local network/prospective work places. * Don't have too high ideals / be too concerned with things like attempting to solve challenging problems (you may fail, and then you'll have nothing to show to!) or making significant progress within one work (better to divide it into smaller pieces for more publication/CV "points"). Save these ideals for when/if you manage to get a permanent position."
- 7.15. "Think about the quality of your work (translate this well into your CV) AND your network. All the time. Both matters. You can get the impression that objective evaluations are the norm in academia. In such a small country as Norway, with very small professional networks, it is not."