

EXPECTATIONS

By Prof. AE Rotaru
<https://rotarulab.com/>
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PCR (PASSION, COMMITMENT, RESILIENCE)

A Ph.D. is NOT a substitute for a regular job. A Ph.D. comes with trade-offs and advantages. The main trade-off? Hard work. Before embarking on a Ph.D. ask yourself: Are you gritty? Can you quickly recover fast from setbacks? Are you the type to get obsessed with projects? And can you stay focused on your goals no matter what? Your decision should be based on a thorough self-assessment of your **Passion, Resilience, and Commitment (PCR)** to your chosen field of study.

If the answer is yes, then a Ph.D. is right for you.

The advantages of a Ph.D. are:

- **Research independence:** You are your own boss, steering your research work in a direction that interests you most.
- **Contribution to a research field** that interests you.
- **Developing diverse skills:** from research to writing, critical thinking, to teaching and training others.
- **Guaranteed income:** Danish Ph.D. programs offer a steady income over three years, so no need to stress about money.
- **Networking and travel:** You'll build a global network, and travel for meetings and research stays broadening your horizons.
- **Career advancement.** Completing a Ph.D. can enhance your CV and open doors to a variety of career opportunities, both in and outside academia.

Additionally, statistics show that Ph.D. holders tend to earn more, and experience lower unemployment rates compared to those without a Ph.D.

MISCONCEPTIONS ABOUT DOING A PHD

- **It's just an extension to previous education.** It is not. It is a research-intensive independent journey, a deep dive into your chosen field.
- **Quick path to expertise.** It is not. Don't expect to become a field expert overnight. Expertise comes with time, experience, and a lifetime of learning, well beyond your Ph.D.
- **Unlimited freedom.** You will not have that. You'll have some freedom, but you're bound by project constraints and institutional guidelines.
- **A master plan.** There is none. There is no structure. It is a misconception that someone else leads your projects and must tell you what to do. There is no one else that knows how to do it. Try it out! Fail! Correct it! Try again!
- **Your thesis is just lab work.** It is not. It's not just about lab experiments. Your Ph.D. is about formulating and answering specific research questions. Invest time in questioning, reading, discussing, and communicating your findings.

BASIC EXPECTATIONS

- **Speak with integrity!** Avoid speaking negatively of yourself or others.
- **Be solution oriented!** Instead of complaining, identify issues and propose solutions.
- **Don't take what others say or do personally.** Recognize that others' actions reflect their situation, not your worth.
- **Clear communication.** Ask questions, express your needs, and avoid making assumptions to prevent misunderstandings.

- **Unwavering Ethical Standards.** Uphold ethics in data collection, analysis, and presentation — *absolute requirement*.
- **Time management.** Master time management to juggle research, coursework, and life without burning out.
- **Embrace diversity.** Respect and embrace the diverse ideas, backgrounds, and cultures you encounter.
- **Network & Collaborate:** Build connections with researchers and professionals; it's your key to growth and opportunities.
- **Ethical Partnership:** Treat your colleagues (any career stage) & collaborators with fairness & respect. Avoid using them as tools for your project. Engage them as partners with shared goals and contributions. **No one else should be doing the work for you.**
- **Commitment to Continuous Learning:** Commit to ongoing education and professional development. Keep your skills and knowledge up to date.
- **Communication of absences.** Inform your supervisor about vacations, health breaks, lab stays, or conference attendance. Unannounced leaves of absence will be grounds for firing.

EXPECTATIONS FROM SUPERVISION

- **Human supervisor.** Understand that your supervisor may make mistakes. It's essential to think independently and seek clarification when in doubt.
- **Availability.** Your supervisor cannot always meet with you! She is busy trying to keep the funds coming in, writing, reviewing, coming up with new ideas, having faculty meetings, teaching and more. Disturbances leads to her getting ineffective results. Ask for appointments ahead of time and try keep the times of the appointments.
- **Feedback.** Expect direct assessment of your progress and work. Understand that criticism is about your work, not your person.
- **Feedback delays.** Because of too many commitments, your supervisor may occasionally give delayed feedback.
- **Guidance.** Your supervisor is not doing the work for you. Her role is to: guide you, train you, provide feedback, assist in course correction, suggest experiments, and help with writing and planning.
- **Independent Decision-Making.** Your supervisor may offer many ideas when excited about your research. It's your role to make independent judgments, explain your choices logically, and seek input when needed.

EXPECTATIONS FROM THE TEAM

- **We're a Team:** Think of us as a tight-knit crew on a mission - deciphering the mysteries of microorganisms and their interactions with their environment. So our aim is to work united, to exchange ideas, and support each other in overcoming research hurdles.
- **Weekly group meetings.** Each week, we come together as a team. Two team members will spotlight recent progress, lay out their plans for upcoming experiments, or present research papers on their topic. Satoshi is in charge of organizing these meetings. Send him your presentation beforehand.
- **Other important meetings.** Monday Nordcee meetings and Departmental Thursday Bread. A great venue to discover the latest research and lab-related discussions. Connect with fellow researchers, foster new collaborations, and expand your professional network.
- **Active participation.** Don't be a passive observer. Dive into your teammates' research, ask questions, offer your insights, and lend a hand when needed. These meetings are where we all enrich each other's knowledge beyond our individual projects.
- **Share and learn:** Keep those communication lines open. Regularly update the team on your progress, obstacles, and

bright ideas. Let's build a culture of transparency and collaboration.

LAB EXPECTATIONS

- **Lab notebooks.** These are your lifeline for your Ph.D. and career. Keep detailed, organized, and accurate records in English. Remember, upon leaving the lab, they remain lab property for over a decade. Neglecting this constitutes **research misconduct** and violates ethical data collection standards. Please ensure the lab book is in a labeled location in the lab. Electronic lab books should be shared on OneDrive/ROTARULAB.
- **Raw data.** Grant agencies require a data management plan. Collect all raw data, good or bad, in the 'ROTARULAB/RAW DATA' folder and provide explanations in the same document or an additional description file for future audits.
- **Friday bench clean-up.** Clear your bench every Friday before going home for the weekend. Nothing should be on the bench at random. Lasse will supervise this task, and make sure it looks tip top on Monday at 8 am.
- **Safety and Cleanliness Rules:** Follow rules set by our lab technicians and managers. Not only is it safer, but it also keeps our workspace running efficiently.
- **Document New Methods:** Share new lab methods on OneDrive/ROTARULAB/Protocols. Encourage others to test them for consistency.
- **Challenges.** failed experiments, slip-ups, equipment issues, or delays. You are expected to also communicate the bad news to your supervisor. Persist. Try again.

EXPECTATIONS TO COMPLETE YOUR PH.D.

- **Balancing Workload:** Maintain a healthy work-life balance to prevent burnout and keep your productivity at its best.
- **Timeline.** You have a three-year window to complete your Ph.D., and it's not just about research. Teaching and coursework are also crucial. Take all of it seriously; it's key to your development.
- **Progress communication.** Share regular updates about your progress with your supervisor.
- **Progress report.** Each year, the Ph.D. school will want to know how you're doing. They'll request a progress report to see if you're hitting your milestones.
- **Publication Milestones:** To meet your Ph.D. requirements, you must be the first author on three research articles. Keep us informed of your progress on these three articles in your progress reports.
- **Documented contribution.** Your co-authors need to sign off on your contributions for each article. This document, detailing your role in experiments, intellectual input, writing, editing, and more for each manuscript, will be included in your thesis folder. The Ph.D. committee will use it to determine if you've put in enough work to earn the Ph.D.
- **Thesis Preparation:** Plan well in advance for your thesis. Familiarize yourself with the university's thesis guidelines and meet all formatting and submission requirements.
- **Feedback Timeline:** Keep in mind that your supervisor might need several months to read your thesis and provide feedback. Plan accordingly.

EXPECTATIONS ON AUTHORSHIP

- **Co-authorship contribution.** You will be co-author on each other's papers if you have made significant contributions to research, intellectual input/writing of the manuscript (e.g., data for a figure + the figure and text explaining the results and read and commented on the final version of the manuscript).

- **Co-authorship role.** If you contribute to another colleague's manuscript, speak up during meetings about your co-authorship role. The supervisor will have the final say regarding the authorships and the order of the authors in relation to their contribution. Being a member of the group implies accepting this condition.
- **Lead authorship.** You will be lead/first author on papers on which your ideas, writing and research work makes up for most of the manuscript.
- **Senior/last authorship.** The senior author is often the PI, or the person with significant intellectual contribution (grant writing/idea generation and help plan experiments and write the manuscript). These senior authors oversee the work but might not be actively involved in experiments. The last author often becomes the corresponding author, handling data inquiries, material transfers, and paper discussions.

EXPECTATIONS ON INTELLECTUAL PROPERTY

- **Ownership.** Inventions or intellectual property related to projects funded and advised by me will typically be shared between us and the university.
- **Commercialization.** The university holds the rights to commercialize the intellectual property we generate. By joining our group, you're agreeing to this policy.
- **Patenting.** Please be aware that patenting can take years, during which time the work can't be published.
- **Financial expectations.** If patented, the university typically holds most of the commercial rights. So, getting rich off it? Not likely.
- **Prioritize scientific discovery.** Our work is driven by a passion for scientific exploration and innovation. Generally, in this lab we will sacrifice IP for scientific discovery.

Our goals

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| <ol style="list-style-type: none">i. Team Goals: We're here to create world-class research together.ii. Mentor's Goals: As your mentor, my goal is to nurture researchers who can produce top-tier, globally recognized independent work. |
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