### WHAT DO PHDS FROM HEALTH SCIENCES DO?

Career Portraits 2022







AARHUS UNIVERSITY

### **INTRODUCTION**

This is a collection of career portraits of former PhD students from the health sciences at Aarhus University. Some of the big questions for PhD students are often "what do PhDs actually do?" as well as "Where do they find work and what are their job positions?" This collection of career portraits seeks to answer that question by giving 19 examples of different career paths and the considerations behind the career choices.

The collection of career portraits is the outcome of interviews conducted by PhD-students during a PhD course on Career Management Skills (CMS) held for PhD students from primarily Health in the autumn of 2022. The focus of the course was primarily on careers outside of academia, so the majority of the portraits are of PhDs working in the industry.

Enjoy the reading and we hope you will gain interesting insights as well as inspiration.

From the course organizers:

Kamille Smidt Rasmussen (Clinfo) and Vibeke Broe (AU Career PhD & JR) Aarhus University 2022

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### PhDs working in the private sector



Education: 2015-2019: PhD Molecular Medicine 2013-2017: MSc Molecular Medicine

2021-present: Research Scientist, NMD Pharma 2019-2020: Post doc., Aarhus University

#### Pernille – Research Scientist at NMD Pharma

#### What kind of position do you have today?

I work as a research scientist at NMD Pharma in the Molecular Pharmacology and Screening team in our research department.

#### How early did you start thinking about your next career step after the PhD?

I considered the transition into the industry early on during my PhD, but I thought that I would do more work as a post doc. before doing so. I was mainly interested in a finding a position either in academia or the industry where I could continue to do research, but I did not have any specific plans. I noticed NMD Pharma halfway through my PhD and thought that I would be a good match because of my field of interest, so I kept an eye out for the company and its progress.

#### Why did you decide to go in the direction you chose?

I was planning to do a post doc. in the group of associate professor Thomas Holm Pedersen, who is also the CEO and cofounder of NMD Pharma, but because of COVID and difficulties in finding funding I was temporarily hired by NMD Pharma instead. I turned out to be very happy with the work and my colleagues in the company, and luckily following my maternity leave additional investments had been made in the company and I was offered a fixed position.

### Have you had other jobs prior to your current job – if yes, which? And how did they lead to your current job?

I did a one-year post doc. to finish the work from my PhD. During that time a did a small collaborative project with Thomas Holm Pedersen and initiated the process of doing a post doc. in his research group.

#### How did you find your first job/current job?

I sought out the contact myself.

#### What contacts - if any, did you have at the company/workplace/university before you started?

I suggested our CEO, Thomas Holm Pedersen, as the chairman of my PhD defense, as that was a possibility for me to also showcase my profile and research for possible future collaboration.

#### Describe a typical day/week?

My days and weeks vary a lot, but I plan and execute experiments in the laboratory, analyze data, participate in meetings, read scientific papers, and communicate my work within in the company.

#### What skills and experiences from your PhD studies do you have the most benefit of today?

Project management – managing my time and resources when working on several projects at once. The ability to acquire new information and set up new techniques. The knowledge of how to gather, analyze and present data from experimental work. More generally speaking, then problem-solving and having an analytical mind.

#### What skills would you say you didn't develop during your PhD which you have developed afterwards?

Know-how of the biotech and corporate world, and how to do research in a company where there is a different output and timeline of your work compared to academia. I am still in the process of learning all of it.

#### What would you have done differently during your PhD (if anything) considering your current career?

I don't think that I would have done anything differently considering my current career. However, I would have liked to prioritize a longer research stay abroad as the time I did spend was very rewarding.

### What specific career advice would you like to share with someone who is just about to finish his/her PhD studies?

Don't be afraid to seek out and take contact to people who may be able to help you.

It may be good to start planning or thinking about your future career early on, but don't be afraid to take a different path if something else and interesting presents itself.



Education: PhD in Molecular Medicine (2014-2018) MSc in Medicinal Chemistry (2014)

Jobs: 2020- present: Quality Control specialist, Fertin Pharma A/S

#### Anne-Mette Schou Oxvig, Quality Control specialist at Fertin Pharma A/S

#### What kind of position do you have today?

Anne-Mette is a Quality Control specialist at Fertin Pharma A/S, Vejle at the Department of Quality Control of finished products.

#### How early did you start thinking about your next career step after the PhD?

Anne-Mette began thinking about her future career while she still was a PhD- student. She was considering her possibilities in a broader way, including possibilities outside the academia.

#### Why did you decide to go in the direction you chose?

Anne-Mette found, that it was important for her to see the results of her work faster. During her PhD-study in basic research, it took very long time to obtain visible results.

### Have you had other jobs prior to your current job – if yes, which? How did they lead to your current job?

This job is the first one since Anne-Mette's PhD.

#### How did you find your first job/current job?

Anne-Mette had applied to Fertin Pharma previously, without getting a job. Later, Anne-Mette's friend, employed at that time at the company's Quality Control department, advised Anne-Mette to contact the company, since the company needed a new specialist. Anne-Mette was invited for an interview and got a job.

#### What contacts - if any, did you have at the company/workplace/university before you started?

Anne-Mette knew some people employed at the company, from the time she was studying her Master Degree in chemistry.

#### Describe a typical day/week?

Part of the job is directly related to the production, where products are controlled according to the GMP (Good Manufacturing Practice) standards every day, before they leave the factory and are being sold. There is a close cooperation with laboratory technicians, who provide analysis of nicotine chewing gum. Anne-Mette's responsibility is to analyze these data ensuring correct nicotine level in the products. If results of their analyses differs from the manufacturing standards, Anne-Mette is responsible to find the cause and to write rapports on it. Beside this, Anne-Mette is responsible to document a products stability. She is also involved in different projects in the department, doing presentations, participating in audits, etc.

#### What skills and experiences from your PhD studies do you have the most benefit of today?

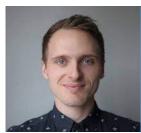
Anne-Mette uses her general skills, such as cooperating with colleges internally in the company as well as outside players. She uses both written and oral communication skills, making oral presentations, coping with many tasks and being able to structure and prioritize problems.

What skills would you say you didn't develop during your PhD which you have developed afterwards? Anne-Mette has learned about the GMP and medicine production, which she didn't have any knowledge in before.

What would you have done differently during your PhD (if anything) considering your current career? Anne-Mette became conscious, that she had a wish to work with food products, but her education was not directly related to this. She wished, she could have done more to re-direct her education to be able to work in the food industry.

### What specific career advice would you like to share with someone who is just about to finish his/her PhD studies?

Anne-Mette was focusing only to find a job in the food industry, but she could not get it. She advices to go for a job, which is relevant to your education, to search broader, and to be realistic in what you can get. Don't give up your dreams. They may become true later in another order than the easiest.



Education: 2012-2014: MSc in Molecular Medicine 2014-2018: PhD in Molecular Medicine

Jobs: 2022- present: Senior Bioinformatics Scientist, QIAGEN 2018-2022: Postdoc at AUH

#### Senior Bioinformatics Scientist at QIAGEN

#### What kind of position do you have today?

Senior Bioinformatics Scientist. Involved in bioinformatics projects and responsible for biological help, using molecular biology-based knowledge.

#### How early did you start thinking about your next career step after the PhD?

During the PhD, I only had a rough idea that at some point I may leave academics, and after 2 years into a postdoc, the decision was finally made.

#### Why did you decide to go in the direction you chose?

To try something different. Inside academia, there are only two types of jobs. One is to be rehired by the group leader after the contract expires, and the other is to become a group leader. There is very limited room for research if he/she is not a group leader. Becoming a group leader also requires people to work abroad for a period which is not suitable for me who has a little child. Besides, people in academia tend to be more homogenous compared with those working in the private sector, as they share similar backgrounds and ideas. Now, I need to collaborate with people from software development, marketing, and customer support, then the working environment is more abundant.

### Have you had other jobs prior to your current job – if yes, which? And how did they lead to your current job?

Four years of postdoc. Not sure how much it actually helped with my current job. Though it enriched my working experience, the number of publications may not help with recruitment.

#### How did you find your first job/current job?

I saw the job ad posted online, and I knew 2 people from the company. One of them is working in the hiring group, so I contacted him/her and had a casual talk with the person responsible for hiring people for this position. Finally, I had a formal interview and got the job.

#### What contacts - if any, did you have at the company/workplace/university before you started?

As mentioned above, I have two contacts at the company. They helped me learn about the job and the wor place environment better.

#### Describe a typical day/week?

Normally work from 8 to 4. The common working tasks include scientific writing, data analysis by R, formal documentation, software testing, and verifying the changes created by the developer.

#### What skills and experiences from your PhD studies do you have the most benefit of today?

ctDNA and cancer background Data analysis skills Scientific writing skills Project planning Problem-solving skills Quick learning skills

#### What skills would you say you didn't develop during your PhD which you have developed afterwards?

My current work requires me to move from specialized topics to broader fields, then it means I need to expand my biological knowledge continuously.

#### What would you have done differently during your PhD (if anything) considering your current career?

Nothing different during my PhD but I would not work as a postdoc for the following 4 years. I would like to make the switch right after my PhD.

### What specific career advice would you like to share with someone who is just about to finish his/her PhD studies?

Establish your network and use it. Don't be afraid to add people on Linkedln and be brave to reach out as most people are willing to help if you contact them due to work.

Make the switch soon and don't go around if you would like to leave academia.

No needs to chase a lot of publications and focus more on transferable skills.



Education: 2014-2017: PhD in Molecular Medicine 2018-2022: MSc in Neuroscience

2022- present: Senior Medical Science Liaison, Biogen 2017-2018: Assistant scientist, Green Valley Research Institute

#### Lixiang Jiang – Senior Medical Science Liaison at Biogen.

#### What kind of position do you have today?

Lixiang works as a senior medical science liaison in multiple sclerosis medical team, Biogen. The description of her job is described below.

#### How early did you start thinking about your next career step after the PhD?

Lixiang started to think about the next career step in the last year of her PhD. One year before her PhD graduation, she realized that she does not have many publications and therefore, she thought about which opportunities she had and whether she should stay in academia or go back to the industry.

#### Why did you decide to go in the direction you chose?

Since Lixiang did not have many publications, she chose a direction that did not require that. So, she found a job that did not require many publications, but still required a research background. Furthermore, the job required good communication skills. Due to her research background and good communication skills, she thought that this job was a good match for her.

### Have you had other jobs prior to your current job – if yes, which? And how did they lead to your current job?

Lixiang has one year of work experience as an assistant scientist in another pharmacy company (Green Valley Research Institute) before she started her PhD. In this job, she was working on exploring the novel anti-AD medicine, that was launched in China. She thinks that this work experience helps her, when she was taking the interview of her current job, since her employer assessed that she has skilled experience in the neuroscience research field.

#### How did you find your first job/current job?

Lixiang found her first current job using LinkedIn.

### What contacts – if any, did you have at the company/workplace/university before you started? Lixiang had not contact with the company before she started.

Describe a typical day/week?

Lixiang visits the HCP in the hospital. The HCP is usually the head of multiple sclerosis team. Lixiang needs to talk with the HPC about the efficacy and safety of our products. Furthermore, Lixiang must show the HCP the clinical data and tell the HCP how to handle the side effects if patients have any. She also needs to talk with the HCP about the new published papers of multiple sclerosis and how the other doctors in other countries treat this disease. So, she does not sell any products, but is responsible for scientific communication which she is happy about.

#### What skills and experiences from your PhD studies do you have the most benefit of today?

Lixiang uses her paper reading skills and summarize skills. Especially her neuroscience background is very helpful for her to understand multiple sclerosis that is essential for her current position.

## What skills would you say you didn't develop during your PhD which you have developed afterwards? Lixiang did not learn how to understand and interpret the clinical data during her PhD, but she has learned it afterwards.

### What would you have done differently during your PhD (if anything) considering your current career? Lixiang would have liked to spend more time on learning the clinical treatment from the industry perspective.

### What specific career advice would you like to share with someone who is just about to finish his/her PhD studies?

Lixiang would recommend that PhD students spend more time on thinking what they want to do. Once they have decided it, prepare as much as you can to fit the requirements for the job. You can usually find the requirements online where you can learn about what skills they expect from the candidates.



Education: 2013-2019: Integrated PhD (including 2x maternity leave) 2011-2015: MSc in Molecular Medicine 2008-2011: BSc in Molecular Medicine Jobs: 2022 – present: Senior Medical Writer, Novo Nordisk 2019 - 2022: Medical Writer, Novo Nordisk

#### Sigrid Salling Árnadóttir – Senior Medical Writer – Novo Nordisk

#### What kind of position do you have today?

Sigrid is employed as a Senior Medical Writer at Novo Nordisk. She writes protocols, reports and applications for authorities in relation to clinical trials. Also, she evaluates data, performs stakeholder- and project management and develops new trial strategies in collaboration with other team members.

#### How early did you start thinking about your next career step after the PhD?

Halfway through her integrated PhD. Sigrid and her husband agreed that they would move to Copenhagen/Zealand after the completion of her PhD, as they both wanted to make the move to industry. Sigrid attended an event thrown by "Molekylær Medicinsk Forening" where a medical writer told about his job and this arouse an interest for this kind of job position.

#### Why did you decide to go in the direction you chose?

Sigrid chose to leave academia mainly due to the high uncertainty (temporary job positions) and the "money race" to obtain funding. As a medical writer at Novo, she has a permanent employment and is still doing research, but only "the fun part" (which, according to her, is analyzing data and writing about it). Furthermore, she likes that the research at Novo is close to the patients.

### Have you had other jobs prior to your current job – if yes, which? And how did they lead to your current job?

Sigrid was employed as a Medical Writer for 2.5 years before being promoted to Senior Medical Writer. To get the promotion, she took more responsibility, made sure to get involved in larger projects and joined a specialized working group (a layman-writing group). She states that you need to seek your own promotion.

#### How did you find your first job/current job?

She applied for an open position at Novo. She already knew two medical writers (one at Novo and one at another company) who gave her feedback on her application and CV.

#### Describe a typical day/week?

Besides working on current projects, there is meetings with the other team members and a monthly meeting for all medical writers. The workload is variable depending on number of projects and the status of the different projects. Normally (if you also learn to say no) the workload can be managed within a fulltime position (37 hours).

#### How is it to work from a distance?

In 2021, Sigrid moved back to Central Jutland, while keeping her position at Novo in Søborg. She commutes to Søborg two days every second week, but works from home otherwise. This works very well for her as many of her colleagues work from home as well, as the current general rule at Novo is that you only have to be present at work twice a week.

#### What skills and experiences from your PhD studies do you have the most benefit of today?

Communication skills in English (both written and spoken), project management and planning, meeting deadlines, working with different personalities and knowledge of how people are motivated by different things. Furthermore, she uses knowledge obtained from her Molecular Medicine studies and the ability to quickly familiarize herself with new knowledge.

### What skills would you say you didn't develop during your PhD which you have developed afterwards? More advanced project management.

What would you have done differently during your PhD (if anything) considering your current career? Nothing really. During her integrated PhD, she focused a lot on getting experience with many different methods and technologies, but she does not use these skills in her current position.

### What specific career advice would you like to share with someone who is just about to finish his/her PhD studies?

You should make use of your network and remember to target your CV/application to the specific position and emphasize how you can use your skills/competences in the given position. If applying for a position as a medical writer, remember that project management is just as much a part of the job as writing tasks.

Sia Viborg Lindskrog



Education: MSc in Animal Physiology – Neurobiology, Charles University in Prague PhD in Neuroscience, Charles University in Prague

Jobs: 10/2022-present - Project manager at i&i Prague 04/2016-09/2022 – Postdoctoral researcher at IEM, Czech Academy of Sciences, Czech Republic

#### Jiří Růžička – Project Manager at i&i Prague

#### What kind of position do you have today?

Today I am working at i&i Prague as a project manager and scientific advisor. i&i Prague is a Biotech Hub in central Europe, which is searching for Startups with innovative technologies in drug discovery, diagnostic MedTech, and life science tools that can invest in through its venture fund i&i Bio.

#### How early did you start thinking about your next career step after the PhD?

Last year of my Ph.D. Before that, I thought I will continue my career in science.

#### Why did you decide to go in the direction you chose?

First, I was offered to join the international program, led by Professor James Fawcett from the University of Cambridge. I was looking forward to joining the interesting group of scientists. However, after 6 years, when the program was closing, I decided to change direction which turned out to be helping young scientists to realize their ideas through startups.

### Have you had other jobs prior to your current job – if yes, which? And how did they lead to your current job?

I continued as a postdoc after finishing my PhD. The postdoc experience in the international program led me to think about the gap between scientific publications and clinical setting. I was searching for clinical-related positions, and I was found by my current employer.

#### How did you find your first job outside academia/current job?

I was contacted by headhunters through the LinkedIn network.

#### What contacts - if any, did you have at the company/workplace/university before you started?

I had no contacts in my current company before, but I was very attracted by the company's atmosphere and what they are trying to create within the central Europe Biotech/ Business environment.

#### Describe a typical day/week?

Evaluating incoming startups from various fields from the perspective of possible investment into the company, the quality of the science, and their team. Traveling around Europe and partnering with university tech transfer offices, Pharma companies, and Startup companies, to connect the good fits.

#### What skills and experiences from your PhD studies do you have the most benefit of today?

Critical thinking, knowledge of good and bad ways how to do scientific experiments, Scientific funding opportunities and how to use them, and of course the long-term contacts establishment as a major player in successful scientific or other careers.

What skills would you say you didn't develop during your PhD which you have developed afterwards? Team management, the bigger picture, stress management.

What would you have done differently during your PhD (if anything) considering your current career? I would go abroad and apply for international grants for young scientists, even if it would lead to lower publishing performance.

### What specific career advice would you like to share with someone who is just about to finish his/her PhD studies?

Search your postdoc opportunities already during your Ph.D. Go for a short (few months) research stays at your possible next employee during the end of your Ph.D. Use EU and local funding and apply for grants, even small ones. It always shows your capabilities that you can write grant application and attract funding. The grant history is very important, and it is never too early to start.



Education: 2005: Degree in Biology, University of Porto (Portugal) 2011: PhD in Biomedical Sciences, University of Porto (Portugal) Jobs: 2022- present: Medical Content Specialist, Novo Nordisk 2019-2022: Assistant Professor, Aarhus University 2015-2019: Postdoc, DANDRITE, Aarhus University

2012-2014: Postdoc, University of Porto (Portugal)

#### Nelson Gomes Ferreira – Medical Content Specialist – Novo Nordisk A/S

#### What kind of position do you have today?

I work as a Medical Content Specialist at Novo Nordisk. I'm responsible for leading medical content development and agenda design in relation to Clinical Trial meetings both face-to-face and virtual; delivering creative scientific solutions to the development of medical training resources required for site staff participating in Clinical Trials; and liasing with key external speakers as well as internal stakeholders from Medical Affairs, Medical & Science, and Clinical Operations.

### Have you had other jobs prior to your current job – if yes, which? And how did they lead to your current job?

After finishing my PhD, I had 2 postdoctoral appointments, one at Porto University, and another at Aarhus University as Lundbeck Postdoctoral Fellow, before progressing to Assistant Professor. These positions gave me a solid background in scientific communication and (scientific) project management, which are key skills for my current position.

#### Why did you decide to go in the direction you chose?

By the time I started my Lundbeck Postdoctoral Fellowship at Aarhus University, I was already scientifically independent. I wrote my own research projects, independently designed and conducted most of my experiments. Four years later, I progressed to Assistant Professor, which is a glorified term for "very senior postdoc" (laughs). By then, I had published in some of the best and most prestigious journals of my field (neuroscience), and my work was acknowledged by my peers (good level of citations & h-index). Yet, I felt that my scientific output was not being properly recognized. Career-wise I felt stagnated. I was missing a more challenging and fulfilling career opportunity. That was when I seriously started considering switching to the industry.

#### How did you find your current job?

I found it on Linkedin. I called the hiring manager, and after a brief conversation he encouraged me to apply for the position. After 3 rounds of interviews, with psychological and logic tests in between, I got the job.

#### What contacts - if any, did you have at the company before you started?

I knew 2 previous colleagues that were working at Novo, but none of them in the department I was hired by.

#### Describe a typical day/week?

On a typical day, I spend a lot of time in meetings with various stakeholders, so I'm very mindful of blocking some desk time whenever possible. I manage meetings in relation to 3-4 different clinical trials at any time point, with different trial teams. Compared to working in academia, I have many more stakeholders and much less control of my schedule - even though I'm mainly the one organizing the meetings, I often also get booked by others on short notice.

#### What skills and experiences from your academia jobs do you have the most benefit of today?

- Strong experience in scientific communication and data analysis
- Reviewer and editorial experience in more than 20 academic journals
- Deep understanding of disease mechanisms in chronic debilitating diseases
- Scientific project management experience
- Creativity and ability to generate out-of-the-box ideas.

### What skills would you say you didn't develop during your academia jobs but have developed afterwards?

- Collaborative efforts on a wholly different scale across the organisation
- Keeping deadlines more strictly (deadlines are much stricter than in academia)

#### What are the biggest differences between working in academia and in industry from your perspective?

In a very simplistic way, the industry is oriented towards value creation, while academia is oriented towards fundamental knowledge. Another striking difference is the collaboration dynamics. In the industry, the entire organization is working together towards a common goal, compared to being reliant on oneself or a very small lab or team in academia.

In industry, you always work simultaneously on multiple projects, while in academia you typically focus on a couple of projects at the maximum. Lastly, in academia you basically have the freedom to dictate your own schedule, whereas in industry, time is much more structured, ensuring maximum productivity.

#### What would you have done differently during your PhD (if anything) considering your current career?

That was a long time ago, as I was awarded my PhD in 2011. Looking back, I wouldn't have done anything different. I believe I had a very successful PhD project, with relevant findings for the field that resulted in highly cited publications.

### What specific career advice would you like to share with someone who is just about to finish his/her PhD studies?

As a PhD you're a highly educated and skilled individual and there are plenty of job opportunities outside the university walls for you. But if you want to swich to the industry and become an interesting candidate, I'd strongly recommend you to highlight your skills in teamwork, collaboration and meeting deadlines.

Nanna Møller Jensen



Education 2019: PhD in Molecular medicine 2015: MSc in Molecular Medicine

Jobs May 2022 - present: Molecular Biologist at ARCEDI Biotech 2020 - 2022: Post doc at Department of Clinical Biochemistry, AUH October 2019 - December 2019:

Biochemist at Department of Clinical Biochemistry, AUH

#### Marlene Christina Nielsen - Molecular Biologist at ARCEDI Biotech

#### What kind of position do you have today?

Marlene is a Molecular Biologist at ARCEDI Biotech. She works within research and development, developing cancer diagnostics.

#### How early did you start thinking about your next career step after the PhD?

Marlene started looking at job postings approximately six months before handing in her dissertation. However, she stresses that for her – as well as many others – this stage of the PhD was quite busy. She also talked to her supervisor, which eventually led to her continuing in two different positions within the same department before leaving AUH/academia.

#### Why did you decide to go in the direction you chose?

Marlene was very interested in research felt a lack of security within academia, especially regarding funding. In her current position, the research environment from academia is combined with the stability of a permanent position in the private sector.

### Have you had other jobs prior to your current job – if yes, which? And how did they lead to your current job?

During her PhD, Marlene had talked to her supervisor about the possibility of continuing in a post doc position. However, she initially had a temporary position as a biochemist within the same department for three months, allowing her to get familiar with quality assurance. She started missing research and did not wish to continue as a biochemist. When her biochemist position expired, she started her post doc within the group where she did her PhD. This gave expertise knowledge within the methods required for her current position. In addition, she gained a lot of independence which is highly useful for her today.

#### How did you find your first job/current job?

Marlene found her current job in a job add while she was doing her post doc.

#### What contacts - if any, did you have at the company/workplace/university before you started?

She did not have any contacts within the company.

#### Describe a typical day/week?

Typically, Marlene spends one day per week doing laboratory work. The remaining time is primarily spent on data analysis, protocol development and literature search. In general, her tasks are pretty similar to the ones she had in academia.

#### What skills and experiences from your PhD studies do you have the most benefit of today?

Marlene clearly benefits from the specific methods she used during her PhD and subsequent post doc. In addition, she uses many general skills such as project management, data analysis and literature search.

What skills would you say you didn't develop during your PhD which you have developed afterwards? Marlene uses most of the skills she gained during her PhD and would not have sacrificed her expertise knowledge for other methods. In her case, having experience within her field is what got her the job.

What would you have done differently during your PhD (if anything) considering your current career? She would have liked more exposure to career options outside of academia, as offered from the course "Prepare yourself on the movement from a PhD in Health to a career in non-academia."

### What specific career advice would you like to share with someone who is just about to finish his/her PhD studies?

- Don't panic about your career. Things have a way of working out.
- Don't be afraid to leave a position that does not feel right for you.
- It is okay to take small detours. Sometimes, it is best to simply do what you find interesting without a great career plan in mind.

Emma B. Johannsen



Education: MSc in nursing (cand.cur.) PhD: rehabilitation of elderly people with hip fracture Jobs: 2021- nu: Investment Officer, Innovation Fund Denmark 2016-2021: Health Consultant at Health and promotion/Assisted Living Technology, Aarhus Municipality 2013-2017: PhD Student, Department of Public Health, Health Services Research and Rehabilitation Research, Aarhus University 2010-2016: DEFACTUM

Foto: https://innovationsfonden.dk/da/medarbejdere

#### Monica Milter Ehlers – Investment Officer at the Innovation Fund Denmark

#### What kind of position do you have today?

Currently, I am an Investment Officer at the Innovation Fund Denmark, where I primarily work with large partnership projects, called Grand Solutions and international partnership projects within the EU. In my position, I take part in, for example, both the review process of research project applications as well as I oversee research projects funded by Innovation Fund Denmark.

#### How early did you start thinking about your next career step after the PhD?

Prior to my PhD, I had considered becoming a researcher, and following the academic track. However, during my PhD, it became clear to me there had actually been a meaning behind the things I had worked with previously [a background as a clinical nurse, and responsible for preparing hospitals for accreditation]. Thus, at the end of my PhD, I knew that I was not going to be a full-time researcher.

#### Why did you decide to go in the direction you chose?

Some things in academia, like the process of writing articles, and the following – at times – long review process, did not motivate me. I wanted to be closer to actually seeing things gain value in a real world perspective. When assessing research project applications at the Innovation Fund Denmark, there is a focus on the practical implementation and feasibility of the project in a real world perspective, which resonates with my own professional interest and motivation. Moreover, I find the collaboration with clinicians very interesting. In my current position, I get to do both.

### Have you had other jobs prior to your current job – if yes, which? And how did they lead to your current job?

Prior to my current job, I have had two different positions at Aarhus Municipality. In my first position, I got to work on a research project related to rehabilitation, which was also the research area of my PhD. In my second position at Aarhus Municipality, due to restructuring of the organization, I ended up being the only one in the department holding a PhD. I experienced, that it was challenging for the managers to see the possibilities of my background as a PhD, and thus I found the job, that I am currently in.

#### How did you find your first job/current job?

I applied for an open position at Aarhus Municipality.

#### What contacts - if any, did you have at the company/workplace/university before you started?

I did not have any contacts in Aarhus Municipality, when I applied for my first job. However, following my first – time-limited - position at Aarhus Municipality, my former manager encouraged me to apply for an open position in a different department in Aarhus Municipality, for which I got hired.

#### Describe a typical day/week?

A typical day could, for example, be spend reading through a Grand Solution project application consisting of about 100 pages, and to subsequently score the quality of the project. Other days, I participate in meetings in steering groups, where I oversee some of the active health related projects that are funded by Innovation Fund Denmark. When overseeing a project, my main task is to ensure that the project is moving forward, and assist the researchers, if they, for example, need their project to be extended, mitigated or changed in relation to work packages. Moreover, I participate in Board meetings, where the allocation of funds is decided. I also prepare the materials for these meetings (ranking of projects, and a two-page summary of the projects). I am also responsible for preparing investment contracts, which is more an administrative task along with approval or rejection of progress reports from the Grand Solutions projects or international partnership projects within the EU.

#### What skills and experiences from your PhD studies do you have the most benefit of today?

I utilize my knowledge of, for example, how good and sound research is conducted, if the chosen methodology is fitting for a given project, and if it seems feasible to implement the proposed project in a clinical setting or the Danish society. Moreover, I assist researchers with their dissemination plan to ensure a well though through plan and provide guidance on possible partnerships, they may engage in, to enhance the probability of the research actually providing genuine value in a real world perspective. I also use my skills of being able to quickly read and learn new things, and to understand research areas that may be different from those, I have conducted my own research in.

### What skills would you say you didn't develop during your PhD which you have developed afterwards? It is not my impression that I have developed "new skills" as such. For me, it's more a feeling that I have built

It is not my impression that I have developed "new skills" as such. For me, it's more a feeling that I have built onto the skills, I gained from doing a PhD. I feel like I get more insights into what is at stake in the clinic, and the practical implications of the theory, we read and learn during a PhD. Moreover, in my experience, you get better when working with someone who has different competencies and different knowledge than you, and I feel that there are more different professional profiles in my current job compared to when I was conducting my PhD.

#### What would you have done differently during your PhD (if anything) considering your current career?

During my PhD, I felt that I was working alone most of the time. For me, I would have liked to have had more room for reflection and sparring with colleagues and supervisors. Adding to this, a project relating more to a bio-medical perspective with laboratory work might have worked better for me. Moreover, there were some personal factors, like having a small child when starting the PhD and a father diagnosed with cancer, which complicated the experience of being a PhD student. However, I feel like I gained a lot of useful knowledge and competencies by doing a PhD.

### What specific career advice would you like to share with someone who is just about to finish his/her PhD studies?

Sit down and really think about what makes you happy, what motivates you, and where you feel you contribute with valuable competencies and insights. If you experience that, you are more sad than happy, or if there are more though days than good, then -I believe - that you are in the wrong place. I would also like to emphasize the importance of gaining insights into how research may contribute to actual change in the real world - not just experience from "behind the desk".



Education: 2017-2020: PhD in Biomedicine 2016: MSc in Molecular Medicine bs:

2021 - present: QC Scientist at FUJIFILM Diosynth Biotechnologies 2020 -2021: Post Doc., Biomedicine Aarhus University 2016-2017: Cytostatic production at the Hospital Pharmacy, Region Midt

#### Camilla Gunderstofte Nielsen – QC scientist at FUJIFILM Diosynth Biotechnologies

#### What kind of position do you have today?

Camilla is a Quality Control (QC) Scientist at FUJIFILM Diosynth Biotechnologies in Hillerød. FUJIFILM is a Contract, Development and Manufacturing Organization (CDMO), with a Quality Control unit consisting of different testing-teams. Camilla is a part of the QC-testing team Bioassay and Virology, responsible for more than 15+ assays, and Camillas main focus is on Bioassays.

#### How early did you start thinking about your next career step after the PhD?

Camilla was offered a 21 month Post Doc. position in her current research group at Biomedicine AU, before ending and defending her Ph.D., wherefore a 'next-step' career plan was not relevant at that time. 4 months into her Post Doc. employment, Camilla started to look for jobs in the industry, as well as generating a Job-agent and updating her LinkedIn profile. She also benefitted from the offers at AU Career PhD & JR to get feedback on her applications and CV. 3-4 months before ended employment, Camilla intensified her job-search. Here AU Career supervised her on how to prepare relevant questions for a call on interesting job applications. Camilla made calls on three applications; one got her to a job interview and resulted in her current job at Fuji.

#### Why did you decide to go in the direction you chose, and how did you find your current job?

Camilla applied very broad on all job applications she found interesting within Bioscience, in all of Denmark. She used her Network in the industry, to help her 'understand' what the companies actually were searching for within specific applications and to figure out if she had relevant qualifications to apply.

#### What contacts did you have at FUJIFILM before you started?

Camilla applied for the position at FUJIFILM on a tip from a previous colleague in her network. When invited for the job-interview, Camilla located three acquaintances working at FUJIFILM via LinkedIn. She reached out to each of them, to get their inputs on how best to prepare for the interview.

#### Describe a typical day/week?

As a QC Scientist, Camilla is responsible for controlling the quality of bioassays executed by her testing-team at FUJIFILM. Lab technicians in Camillas Team execute all practical work, but Camilla is accountable for the assays executed in her team. If anything goes wrong with the assay, the instruments fails, or details differ from their everyday routines, Camilla will help identify, evaluate and solve the problems. A big part of Camilla's workday is cooperation across profession units and teams at Fujifilm, where teamwork is needed to succeed everyday tasks. Camilla never knows what challenges a day will bring, and she often have to change expected plans of a day and just go with the flow.

#### What skills and experiences from your PhD studies do you have the most benefit of today?

Camilla states, not much within her current job position. She mostly benefits from her specialist knowledge within specific analytic methods. But also generic skills as being creative in solving everyday problems within the testing-team, and critical thinking. Camilla also applies lots of troubleshooting and constant decision

making in her everyday work, and here she benefits from her time as a PhD student, where similar situations could occur.

Project managing is also a big part of Camillas everyday work, which to some extend was acquired during her time as a Ph.d student, however it has developed a lot within her current position.

What skills would you say you didn't develop during your PhD which you have developed afterwards? Good Manufacturing Practice (GMP) is a keyword in Camillas everyday work as an Quality Control (QC) Scientist, and is a skill-set she has achieved in her current job. Camilla also mentions that she has learned to prioritize everyday tasks in a different manner, than at AU. Work-pace and efficiency is suddenly more important factors.

What would you have done differently during your PhD (if anything) considering your current career? Camilla would have focused more on building up a useful CV for the Industry, focusing on qualifications that can make one standout. As for example, taking a course in GMP and Leadership-management, as well as focusing on previous job experiences.

Camilla states that a Post. Doc. position has not benefitted her CV – unless you use it to build up your CV in terms of project managing for students or so, that can give you skills relevant for the industry.

### What specific career advice would you like to share with someone who is just about to finish his/her PhD studies?

Prepare on writing applications and questions for job interviews, and get as much help as possible from your network in the industry - they know what the companies want.

Lea Skovmand Jensen



Education: MSc in Medicinal Chemistry PhD from the Graduate school of Natural Science in Computational Biophysics

Jobs: 2020- present: Quantitative Analyst (WheatherQuant)

#### Talia Zeppelin – Quantive Analyst at Danske Commodities

#### What kind of position do you have today?

The position I have today is titled "Wheatherquant" and I am working in the energy trading company, Danske Commodities.

#### How early did you start thinking about your next career step after the PhD?

Before I started on my PhD, I already knew that I should not work in academia, but find a job in the private sector.

#### Why did you decide to go in the direction you chose?

I always know that I would like to be a data analyst, however, I did not know in which specific field I would like to work in, as there are so many different opportunities for working with different types of data. Another thing I also know beforehand was that I would like to be in a position where I get paid for what I do and that the position does not include many hours of only interest as there is in academia.

### Have you had other jobs prior to your current job – if yes, which? And how did they lead to your current job?

I did not have a job prior to this position, except for the PhD. The PhD itself lead me to where I am now. While doing my PhD, I focused on optimizing my skillset, especially my programming skills in python.

#### How did you find your first job/current job?

When I was in my second year of the PhD, I attended the AU PhD carer day. Here I met Thor, who is now my current team manager. We talked together and the year after, I once again talked to him at the AU carer day. After this, I found out that they had an open position which I luckily ended up in and I think it was a good thing in this situation, that he was able to recognize me and remembered me from the AU carer days.

#### What contacts – if any, did you have at the company/workplace/university before you started?

Thor, who is now my current manager.

#### Describe a typical day/week?

My days at work are never the same. However, a typical period often includes the following: downloading weather data, standardizing the data back in time, and after this trying to create a prediction model and look for trends. If the model seems promising, it continues in the process and may end up in production.

#### What skills and experiences from your PhD studies do you have the most benefit of today?

While doing my PhD, I got a lot of different skills that I am using today. As said before, I was really focusing on developing my programming skills in Python, which I am using and are further developing today. However, I am also using a lot of the transferrable skills that I got like troubleshooting, project managing, and in general managing skills now to structure my day and the different tasks I am working on.

#### What skills would you say you didn't develop during your PhD which you have developed afterwards?

I am now more than ever focused on that a code is not just a code which should work. I am after my PhD getting better at optimizing my codes and making them as clear as possible. Furthermore, I have afterward developed many new skills within data engineering and learned how to work with sql databases and coding in sequel and pandas.

#### What would you have done differently during your PhD (if anything) considering your current career?

If I could do anything different, I would maybe not have been thing that much about my grade point average when signing up for courses, but instead chose some harder coding courses like the one DTU has in their summer school program.

#### What specific career advice would

Find a work that makes you happy. It sounds simple, but it is not. I know that many people think a lot about the salary and everything, but I think is important that you ask yourself before looking at jobs – what does make you happy, and what will you like to work with?

Education: 2011-2014: PhD in Nanotechnology 2008-2012: MSc in Nanotechnology

#### Jobs:

2022-present: Principal Scientist, Unikum Therapeutics 2020-2022: Project Manager, Ceptur Therapeutics 2020-2022: Consultant, Repertoire Medicines 2020-2020: Senior Scientist, Repertoire Medicines 2017-2020: Senior Scientist, Torque 2016-2017: Research scientist, Torque 2014-2016: Postdoc, DTU

#### Jonas Bruun Vejlebo – Principal Scientist at Unikum Therapeutics

#### What kind of position do you have today?

Jonas is a Principal Scientist at Unikum Therapeutics, which is an early stage biotech company spun out from the Department of Biomedicine, Aarhus University. In this position, Jonas is involved in the different research projects from a managing perspective. Some of his daily tasks include overseeing various data, planning future experiments, decide the future direction of different research projects, and establish communication between the research scientists and the upper management. Besides these tasks, Jonas is also responsible for the establishment of pre-clinical productions and adherence to the required GMP guidelines, which he has previous experience doing.

#### How early did you start thinking about your next career step after the PhD?

Since studying for his bachelor degree, Jonas has been interested in a career as a research scientist in the industry, however he did not have a specific career plan during his PhD. At the end of his PhD, he was offered a Postdoc position at DTU and during that Postdoc position, he was offered a position in Torque, a startup company in Boston (USA).

#### Why did you decide to go in the direction you chose?

Originally, he decided to pursue a career in the industry out of interest, not necessarily in a startup company, but that ended up being his first employment after the Postdoc position. However, Jonas find that the workflow in a startup company is very exciting and that it is very exciting to be a part of the early phases and affect the future of the company. Working in a startup company, you can clearly see the impact different projects and tasks have for the entire company. Jonas liked the workflow in startup companies since his first position and has also pursued it in his subsequent career steps.

#### How did you find your first job/current job?

Networking, specific knowledge, and experience with something the startup companies want to implement has been key. Jonas has found his different positions mainly through networking, especially with help from his PhD supervisor for the first position, but he has also used networking to find his current position.

Startup companies can be difficult to find specific information about, so networking can especially be important. Thereby, almost all of Jonas' job interviews have been based on networking and/or unsolicited applications based on specific skills and experiences.

### Have you had other jobs prior to your current job – if yes, which? And how did they lead to your current job?

Yes. Networking, specific skills, and experiences has led from Jonas' first position to his next positions. The postdoc position might not be directly necessary for his current job, however it was because of his postdoc position he was offered a position in the industry, which has led him to the position he has today. Jonas did an industrial PhD, however that has not been an additional advantage for him, his career path would

have been the same with an ordinary PhD.

#### What contacts – if any, did you have at the company/workplace/university before you started?

Networking has been extremely important, especially his former supervisor and former colleagues has been important for many of Jonas' positions.

#### Describe a typical day/week?

Typical tasks during a day or week include meetings with research scientists, emails, communication, preparing presentations and documents, planning, writing protocols, and electronic data management.

#### What skills and experiences from your PhD studies do you have the most benefit of today?

The skills and experiences Jonas use in his current position originate from his first position in the industry, where he transitioned into the scientific area that the startup companies focus on. Therefore, in his current position he only benefits from general skills that all PhDs acquire, such as literature search, data analysis, extensive knowledge of various techniques and assays in the lab used for communication with research scientists, etc.

However, specific scientific skills and experiences obtained during his PhD and postdoc positions was necessary for his first position in the industry, but not in his current position.

#### What skills would you say you didn't develop during your PhD which you have developed afterwards?

Extensive project management, supervision, management responsibilities, etc. include some of the skills Jonas has developed during his career afterwards.

What would you have done differently during your PhD (if anything) considering your current career? Nothing. Everything you learn during your PhD provides experience and skills, which will become the foundation for your future career.

One thing Jonas mentioned however, is that the scientific results obtained during his PhD has not had a large impact on his subsequent career (e.g. number of papers published). Experiences and skills has been much more important during Jonas' career.

### What specific career advice would you like to share with someone who is just about to finish his/her PhD studies?

Use your network. Identify the people in your network who can help you in a specific direction and has the connections you need. Also, be very specific about your passion, your skills, and the type of position you want, which in return makes it easier to benefit from your network. A network based job search will be much more successful if you can be as specific as possible.

### PhDs working in the public sector



Education: 2007: PhD in Health, SDU 2000: MSc in Sports Science, SDU

Jobs: 2017- present: Researcher, DEFACTUM, Central Denmark Region 2011-17: External lecturer, Health, AU 2007-2017: Consultant, Aarhus Municipality

#### Jes Bak Sørensen - Researcher at DEFACTUM – Central Denmark Region.

See career portrait of Jes Bak Sørensen from 2020 for more background questions.

#### What kind of position do you have today?

I am a researcher at DEFACTUM (research center and consultancy in the Central Denmark Region). The classification of research positions at DEFACTUM is: assistant researcher, researcher, and senior researcher.

### Have you had other jobs prior to your current job – if yes, which? And how did they lead to your current job?

I worked at Aarhus Municipality from 2007-2017. During my time at the municipality, I was part of an advisory group on the "How are You?" survey at DEFACTUM, and in 2013/2014, I worked at DEFACTUM "on loan" from Aarhus Municipality. Therefore, I knew DEFACTUM and several of my colleagues when I applied for the position in 2017. Before I started my PhD, I had different shorter positions for four years.

#### What skills and experiences from your PhD studies do you have the most benefit of today?

At Aarhus Municipality, I used my experience and skills related to health promoting interventions, evaluation of interventions, and methods and approaches from research. I also used my research experience to plan and conduct an RCT. I also worked with health policy and how to prioritize health and public resources. In this work, we tried to use evidence and research and collaborated with research institutions. However, for most of the projects and tasks at the municipality, I used the transferable skills gained during my PhD and not the very specific research related skills. At the municipality, I also experienced that the real world is more complex and "muddy" than the project I worked on during my PhD.

#### What skills would you say you didn't develop during your PhD which you have developed afterwards?

During my PhD, I did not have any courses in project management which would have been very useful for my later positions. It would also have been useful with more knowledge about working in a political organization prior to starting the position at Aarhus Municipality. Lastly, it was very different to change from a position in academia to a position at Aarhus Municipality closer to the "real world" in which knowledge is generated and used differently than in academia.

#### How do the positions at Aarhus Municipality and DEFACTUM differ?

The pace is faster at the municipality because it is a political organization, decisions have to be made, deadlines are shorter, and tasks can change all the time. At DEFACTUM, researchers work further away from policy decisions and deadlines are longer.

#### Describe a typical day/week?

At DEFACTUM, project work based on funding takes up 50-70% of my time. The rest of the time is used on meetings and other internal tasks. Right now, I work on projects related to stress and heart disease using data from the "How are you?" survey. All project I am working on is related to the "How are you?" survey. This work also includes national collaboration across all five Danish regions conducting the surveys.

I like to do research which is closer to the real world. At DEFACTUM, we spend three months visiting different organizations within the Central Denmark Region to present the results from the "How are you?" survey conducted every four years. I believe this makes more of a difference and knowledge is distributed better than working on research papers for three years. This also leads to collaborations and better exchange of knowledge.

#### What were your tasks and responsibilities at Aarhus Municipality?

In the beginning, I worked on single issues and projects. Later, my responsibility increased, and I had the responsibility for developing health policy and collaborating with other departments and collaborators. Today, I still collaborate with the municipality on active transportation and physical activity.

#### How did you get your first job at Aarhus Municipality?

One of my former fellow students worked at Aarhus Municipality and introduced me. After an interview and then two different job posts (the first one was not relevant for me), I got the job.

#### Did you apply for very specific jobs at the end of your PhD or very different types of jobs?

I was open for different positions but knew that I would move to Aarhus and was therefore limited geographically. I was also open for a position at the University of Southern Denmark, but this was not a possibility.

#### Do you have/have you had a career plan you try/have tried to follow?

No. I had thought of staying in academia but that was not a possibility when I finished my PhD. At the same time, I wanted to work somewhere where I felt I could make a difference for citizens and/or health professionals. In academia, few people will sometimes read and use your papers.

Previously, I have looked at different positions and thought that they were relevant/somewhere I would like to work but I have not had a specific career plan.

#### What would you have done differently during your PhD (if anything) considering your current career?

Nothing (except from skills and experiences mentioned above).

### What specific career advice would you like to share with someone who is just about to finish his/her PhD studies?

Network is important. In addition, I advise people to be curious and think about the transferable skills gained during the PhD. How can experiences, skills, and knowledge be used in other settings and positions. The specific PhD topic is sometimes a little random – remember that and be aware of the broader skills and knowledge which can be very useful outside of academia.



**Education:** MSc Psychologist from Aarhus University (1998-2004)

PhD: "Increasing access to evidence-based psychotherapy to improve mental health through the use of Internet interventions" Jobs: 2022-now, Head of research 2021-now, Assistant professor 2019-2020, Research coordinator 2019-2021, Researcher psychologist 2015-2019, PhD fellow 2012-2015, Project leader 2004-2012, Clinical psychologist

#### Kim Mathiasen - Cand.psych., Ph.D., Associate professor

#### What kind of position do you have today?

I am head of research at the Research Department for Digital Psychiatry at University of Southern Denmark in Odense. Our department consists of several different research groups focusing on developing, testing and implementing digital treatments for various psychiatric conditions –for instance, anxiety, depression, eating disorders and substance-abuse to name a few.

#### Describe a typical day/week?

I have an incredibly varied work-life with many different tasks. As a research-leader my primary work activities focus on supervising and coordinating the various projects in our department – sending mails, arranging meetings, writing grant applications, designing research projects, and so on. I also have an international network that I work with, and as such I also travel occasionally. Furthermore, I hold lectures and talks nationally and internationally. I also have a little bit of clinical work, treating patients, but these days this takes up less and less space in my work life.

### Have you had other jobs prior to your current job – if yes, which? And how did they lead to your current job?

I was a clinical psychologist for many years, working first in a psychiatry unit in Norway, where I was trained in cognitive behavioral therapy and earned my authorization, and then in the Student Counselling Service in Aarhus.

I had been working with developing internet-based treatment, in my free time, with a friend, and based on this I was then offered the opportunity to become a project leader on a project that focused in implementing an internet-based treatment at Aarhus University Hospital. In this process I realized that there was a massive need for more, and better, knowledge about internet-based treatment. This motivated me to pursue a research career within digital psychiatry, and I then started a Ph.D. in 2015 at the Dpt. of psychology at SDU and the Digital psychiatry unit at the Mental Health Services of Southern Denmark, where I have been ever since.

#### Why did you decide to go in the direction you chose?

I found the idea of incorporating digital elements in traditional psychological treatment exciting, motivated by the potential for providing easier access to evidence based psychological treatments for the general population. Furthermore, I like the scientific process of producing new knowledge and contributing to the sum of human knowledge.

#### How early did you start thinking about your next career step after the PhD?

I was pretty convinced that I wanted to continue working with internet-based research, so I didn't think that much about the next steps. Primarily I was thinking about designing the next research project, and how to fund it.

#### What skills and experiences from your PhD studies do you have the most benefit of today?

The Ph.D. is actually an incredibly extensive educational program, and you learn so much. The most important skill I gained has been in terms of designing research projects, especially how you design projects to yield results that are interpretable and can be replicated. As a part of this I have had to become much better at statistics, as I am a quantitative researcher. I've also learned how to quickly acquire new knowledge, and how to present knowledge effectively. Finally, there is so much implicit knowledge that you acquire during the Ph.D., for instance how you work with and generate 'knowledge', how the research world works, how to build networks and so on.

#### What skills would you say you didn't develop during your PhD which you have developed afterwards?

Well, generally I would say it's important to maintain focus, and limit your scope and make sure that you don't start too many new projects at once – especially when you are doing an RCT, which is quite demanding. I would generally say it's a great idea to learn about the career paths within and outside academia early on, so that you can plan your way, and make sure that you can work strategically towards meeting the requirements for the next position you are pursuing.

#### **What would you have done differently during your PhD (if anything) considering your current career?** Hmm – I wouldn't really say that there is anything that I would have done differently, if I think about it.

### What specific career advice would you like to share with someone who is just about to finish his/her PhD studies?

Generally, I would say the two most important things are to, 1) work with something, be it the topic or the method, that you're passionate about, and 2) make sure that you work with people you are comfortable working with. As a Ph.D. researcher, you have a task of figuring out what you are passionate about, and you got to have the courage to move in that direction. As a part of that you have to take some chances and its ok to make mistakes along the way.

\*Note: all statements in this article has been complied, formulated and edited by Thomas Tandrup Lamm based on an interview with Kim Mathiasen, who has reviewed and approved the draft.



Education: 2015-2019: PhD in Molecular Medicine 2012-2014: MSc in Molecular Medicine

Jobs: 2019- present: Clinical academic at the Department of Molecular Medicine (MOMA)

#### Johan Vad-Nielsen - Clinical Academic at the Department of Molecular Medicine

#### What kind of position do you have today?

Johan works as a clinical academic at the Department of Molecular Medicine (MOMA).

#### How early did you start thinking about your next career step after the PhD?

Johan knew early on that he did not want to pursue a career in academia and therefore kept an eye on interesting job opportunities in the last part of his PhD. He went to the job interview for his current position at MOMA the day after defending his PhD dissertation.

#### Why did you decide to go in the direction you chose?

For Johan it was not so much a decision to go in a specific direction as it was an exciting opportunity that arose.

#### How did you find your first job/current job?

Johan found the job through an online job posting. He knew the leading physician at the department through one of his PhD supervisors and called him. He invited Johan for coffee and a tour at the department. Johan then wrote an application, got called for an interview and got the job.

#### What contacts – if any, did you have at the company/workplace/university before you started?

Johan knew the leading physician at the department through one of his PhD supervisors. He had been a part of the research environment at the clinical department where Johan did part of his PhD. They attended some of the same research related meetings and he remembered Johan from those.

#### Describe a typical day/week?

Johan normally starts the workday by opening his email and prioritize the tasks of the day. He oversees the passing of clinical samples through the wet lab and is responsible for the subsequent interpretation of genetic variants. A lot of different ad hoc tasks arise in relation to running the clinical samples, and Johan has to consider the significance of different deviations, resolve issues with machine breakdowns and when relevant reprioritize sample runs or tasks in order to meet deadlines. Johan is also involved in research related tasks through the NGS core unit at MOMA.

#### What skills and experiences from your PhD studies do you have the most benefit of today?

Experience in being in charge of a project, understanding causal relationships and making risk assessments.

### What skills would you say you didn't develop during your PhD which you have developed afterwards?

Knowledge within the field of quality control and especially validation within quality control.

## What would you have done differently during your PhD (if anything) considering your current career?

No not really

### What specific career advice would you like to share with someone who is just about to finish his/her PhD studies?

Use your network and invite yourself for coffee.



Education: MSc in Molecular Biology 2008-2010 PhD in Molecular Biology 2011-2014

2022-present: Part time startup of MediSkill 2022-present: Associate Professor at AUH 2018-present: Part time data manager at Frontal Lobe IVS 2014-2022: Postdoc and assistant Professor at

#### Jacob Hesselvig Fredsøe – Associate Professor at Aarhus University Hospital

#### What kind of position do you have today?

Jacob is an associate Professor employed at the department of Molecular Medicine working in the prostate cancer group. Other than that, he employs his data handling skills as a data manager in the small company of Frontal Lobe where he constructs Redcap databases for clinical trials. Furthermore, he has recently launched his own company together with two collaborators focused on categorizing feedback to surgeons in training during their apprenticeship.

#### How early did you start thinking about your next career step after the PhD?

Jacob was considering his next step while doing his PhD. There was only little money in the group, and postdocs were hired rarely, if ever. He sought different positions both in industry and different postdoc positions and The Department of Molecular Medicine was the first who offered him a job. In theory, he could have gone to many other places, including the private sector.

#### Why did you decide to go in the direction you chose?

There was no particular reason as to why it was at AUH, MOMA that he went. During his PhD, he learned some coding in C++, though he spent the majority of his time in the lab. He realized that he enjoyed working with data and analyzing it and now greatly enjoys designing his own projects at MOMA with a bioinformatic focus.

### Have you had other jobs prior to your current job – if yes, which? And how did they lead to your current job?

None that were relevant to Jacobs' current position.

#### How did you find your first job/current job?

The current job was an open position. Importantly, he had learned to code in C sharp ad C++ during his PhD, and that was very important for getting the job.

#### What contacts - if any, did you have at the company/workplace/university before you started?

Jacob knew someone in the group (that has later left the group) which may have had some impact on him getting the job.

#### Describe a typical day/week?

A typical week is composed of many different tasks and can vary quite a bit. Sometimes, project planning and legal legislature can take up a lot of time. Jacob describes this as constructing the framework for doing research. On average, this takes up 15-20 % of a week. Another 20-25 % of a week is filled by meetings and mentoring of younger students. Perhaps unusually for the majority of Associate professors the majority of

Jacobs' time is still spent on data analysis (40-50%), and it is this aspect of the job that Jacob finds the most stimulating.

#### What skills and experiences from your PhD studies do you have the most benefit of today?

General skills such as planning and time management is without a doubt the most important. His time spent in the lab gives him some perspective as to how "hands-on" research is conducted while learning the foundation of coding was also important.

#### What skills would you say you didn't develop during your PhD which you have developed afterwards?

There are may specific skills involving coding and understanding the legal context of conducting research that Jacob has had to learn. Furthermore, counselling students to a bigger extent has been something he has had to learn, but as he himself states: All these things comes with experience.

#### What would you have done differently during your PhD (if anything) considering your current career? Nothing

### What specific career advice would you like to share with someone who is just about to finish his/her PhD studies?

Learn

to

Code!

That being said, he believes it will be easy to find a job, and that you should not worry too much about achieving specific skills doing your PhD. Jacob also cares about having a good work/life balance and attempts to keep his work-week to 37 hours. This gives him time to focus on his kids, and various creative hobbies as well. These are things that one should also consider when picking a career path.



Education: 2015 - 2018 PhD in Nursing Science, Aarhus University 2006 - 2010 MSc in Nursing, Viborg, School of Nursing in Viborg and Master in Health Science

within the field of Nursing, Deakin University

2019 - present:

- Head of Research, Center for Research in Clinical Nursing, Regional Hospital Viborg
- Associate Professor, VIA University College Viborg

Part time lecturer, Aarhus University
2018 - 2019: Research Nurse, Regional Hospital
Viborg

# Anne Bendix Andersen - Head of Research at Center for Research in Clinical Nursing at Regional Hospital Viborg, Associate Professor at VIA University College, Part time lecturer at Aarhus University.

#### What kind of position do you have today?

Clinical Nurse

I have a part time position as Head of Research at the Center for Research in Clinical Nursing at the Regional Hospital Viborg. Next to that I'm also employed as an Associate Professor at VIA University College in Viborg and a part time lecturer at Aarhus University.

#### How early did you start thinking about your next career step after the PhD?

It was more some kind of a coincidence because as I was talking to people after finishing my Master, they motivated me to do a PhD. And when I finished my PhD, I knew I would like to work in a place where there was a lot of focus on how to create collaborations and bridge education, the clinic and research. And in the center, where I'm working now, the main task is to work towards keeping or creating or developing collaborations between the clinical practice, education and research. So, you can say that it is my dream job. One of the things that can be challenging is, that it takes up a lot of time to make activities to actually do that. That means that the part about research, which is also demanding, makes it challenging. But it is very, very interesting to work in education and development of the clinical practice. Right now, I'm investigating the experience of newly educated becoming part of the working life and how to create work life. It is called 'Human first' and a cooperation between the central Denmark region, VIA university college, Aarhus University and the 19 municipalities.

#### Why did you decide to go in the direction you chose?

On the one hand it was a strong interest and on the other hand it was the opportunity.

### Have you had other jobs prior to your current job – if yes, which? And how did they lead to your current job?

I am trained as a Clinical Nurse and worked in the field for more than twenty years, where I also got a specialization. Doing my PhD also enabled me to work as a Research Nurse.

#### How did you find your first job/current job?

I got my first job because I applied for it. My first job after my PhD I found through networking, as I was part of the Research Center. The Research Center was created 2005 and I've been a part of it ever since as a clinical nurse. I participated in data collection for research projects. Actually, I've been connected to the center for a long time and when the opportunity came, I applied for my current job. That was after finishing my PhD. What contacts – if any, did you have at the company/workplace/university before you started? I was part of the Research Center before and during my PhD.

#### Describe a typical day/week?

Actually, no week is the same. Monday, this week for example I finished an article, and I attended a meeting at the Research Center. On Tuesday I attended a meeting at the Research Center and worked together with other collaboration partners from Copenhagen University. On Wednesday I participated in a workshop with other educators at VIA. On Thursday and Friday, I was teaching at Aarhus University and had supervision meetings. As you can see, every day is different. It is a lot about collaborations, which is a big driver for me. Meeting people who want to collaborate in research subjects which I find exciting.

#### What skills and experiences from your PhD studies do you have the most benefit of today?

The skill and experience I gained through my PhD which I benefited the most from was to being able to formulate critique. The collaboration during supervision is what I benefited most from. But also, what gave me the most was to understand what critique is. Why do we do it as we do it. I had a great supervision team during my PhD. So, I think that is what gave me the most. Especially with regard to the supervision of the students it is really important. Furthermore, I gained skills about how to network. I became part of a bigger network during my PhD. The possibility to be at the university as a teacher and all the people I met here, that is very important to me. And also, some of the PhD courses I attended. For example, the courses about writing in English. And of course, the fact that there are three years, where you can deeply focus on one subject.

#### What skills would you say you didn't develop during your PhD which you have developed afterwards?

What I would have loved to develop a little bit more during my PhD is how to communicate the findings, the knowledge, especially, with a focus on the right point of views from my study and the argumentation. It is also about how to carry on and spread the findings. I think it took me about a year to find out how to do that. As a PhD student you are taught to argue in a specific way and when you are working, you have to do it in another, simpler way, for example when you are writing book chapters.

### What would you have done differently during your PhD (if anything) considering your current career?

There is nothing I would have done differently.

### What specific career advice would you like to share with someone who is just about to finish his/her PhD studies?

Follow your heart. Anytime. Especially when there are a lot of demands.



Education: MSc in Biomolecular Science, University Tübingen PhD with Prof. Klaus Harter, Faculty of Natural Science and Mathematics, Tübingen, Germany Jobs: 2020-2021: PostDoc with Prof. Sebastian Karpf, Institute of Biomedical Optics, University Lübeck, Germany 2021- present: Manager to Bioimaging Core Facility at the Biomedicine Department, Aarhus University, Denmark

### Nina Locker - Burmeister Core facility manager to Bioimaging at the Department of Biomedicine, Aarhus University, Denmark

#### What kind of position do you have today?

Nina is a Manager at the Imaging Core Facility, Department of Biomedicine, Aarhus University.

#### How early did you start thinking about your next career step after the PhD?

Nina always wanted to have a job related to the scientific imaging (confocal and multiphoton microscopy) and was seeking for the opportunities to get enough skills for this position since the start of her PhD. At the same time, she advises to start searching for jobs at least 6 months before your end date.

#### Why did you decide to go in the direction you chose?

First, imaging was her passion since master degree. Second, this kind of position that she possess currently is outside of professor track but still inside of academia and even more, including collaborations with companies. Therefore, it is some sort of golden middle and opens multiple prospects in the future.

### Have you had other jobs prior to your current job – if yes, which? And how did they lead to your current job?

Nina had intensive postdoctoral studies at the Institute of Biomedical Optics, Lübeck University, Germany. It was a collaborative work with self-built multiphoton microscopes and lasers, and she learned a lot. Nina believes that those technical skills she obtained back there were crucial to get her current position.

#### How did you find your first job/current job?

Nina was looking through the "ELMI" website: European Light Microscopy Initiative. It had multiple jobs openings in the field of microscopy where she found this position.

#### What contacts - if any, did you have at the company/workplace/university before you started?

Nina got the current position not through the existing contacts. However, she feels that her references helped to get the job since they were known figures in the field. Nina is of the opinion that support by senior researchers might open many prospects. In addition, she recommends using the chance of networking: do not be afraid to interact and have some fruitful discussions.

#### Describe a typical day/week?

Mornings: Emails. Afternoons: Introduction of newly arrived people to the different kind of microscopes, maintenance of facility equipment, repair if needed and again emails. Afterwards, multiple meetings where they discuss ongoing projects, visits from companies, purchase of new equipment for the facility. Two times in a week, they have open office hours where people can get help with image processing, programming. Nina also tries to expand on her existing skills when she has some time.

#### What skills and experiences from your PhD studies do you have the most benefit of today?

In general, PhD was a good time where she learned different kinds of imaging techniques, scientific illustrations, data processing and programming: it was a good match with her interests. In addition, she progressed in terms of multifunctioning (having multiple projects at the same time) and generating collaborations (good communication skills).

#### What skills would you say you didn't develop during your PhD which you have developed afterwards?

During your PhD, you mostly focus on your research question and other people support you in that, even though you do not necessarily notice their crucial functions. One of those people are actually core facility managers: they take care of the equipment, know all details behind it and give you a hand if something does not work. In case of Nina, she needed to learn all elements of microscopes, the principal of engineering, that she can repair the failures, and customize instruments for individual projects. What is also new for her in the current position is financial responsibility: they need to spend the budget wisely to maintain the core facility.

#### What would you have done differently during your PhD (if anything) considering your current career?

Nina would have taken an intern job in a company between Masters and PhD, at least to experience how industry workstyle differs from academia. In addition, she did not get much experience with automated microscopy-based assays, but later she discovered that it could give many job opportunities, especially from companies. Nina had the feeling that she failed to benefit from it. She advises to diversify the skills also according to the job market.

### What specific career advice would you like to share with someone who is just about to finish his/her PhD studies?

You made it through your studies, difficult deadlines and work under pressure. Trust yourself! Even if things are not great right away, gradually you will get to where you want to be.



#### Education:

Bachelor's Degree in Medicine Masters Degree in Urology Fellow of European Association of Paediatric Urology PhD

#### Jobs:

2021 – Present: Head of Paediatric Urology 2019 – Present: Head of Research in Paediatric Urology 2010: Consultant Paediatric Urologist 2004-2008: Registrar General Urology

#### Yazan Rawaashdeh – Head of Paediatric Urology, Aarhus University

#### What kind of position do you have today?

I am a consultant paediatric urologist and renal transplant surgeon working at Aarhus University Hospital, Aarhus, Denmark. I am also head of Paediatric Urology research at my department.

#### How early did you start thinking about your next career step after the PhD?

I think my path was set prior to commencing my PhD studies in that my PhD topic was tailored to my future plans.

#### Why did you decide to go in the direction you chose?

I always wanted to be a surgeon, so when I first came to Aarhus I had a mentor who opened my eyes to paediatric urology and I was instantly drawn to it.

### Have you had other jobs prior to your current job – if yes, which? And how did they lead to your current job?

Yes - I started my career wanting to be a GI surgeon, and I also had a stint in Orthopaedic Surgeryand Plastic Surgery, but have mainly been in Urology, and I am a fully qualified adult Urologist also.

#### How did you find your first job/current job?

Working at Aarhus University Hospital and doing my research here, it was only natural for me to apply for my current position once I became qualified.

#### What contacts - if any, did you have at the company/workplace/university before you started?

As mentioned, I was introduced to the specialty by a senior colleague, and he was my contact to the place.

#### Describe a typical day/week?

Currently my typical week is as follows:

Monday: Research and admin, however usually I get involved in clinical work at some point due to shortage in staff or need for my opinion on some matters.

Tuesday: every other Tuesday I have an adolescent transition clinic, alternating with operations in paediatric urology theatre.

Wednesday: Paediatric urology clinic

Thursday: Operations in paediatric urology theatre.

Friday: Alternates between adolescent surgery theatres and research / admin.

All this is interspersed with paediatric urology on calls and on calls for the renal transplant service.

#### What skills and experiences from your PhD studies do you have the most benefit of today?

I think that would be the ability of critical analysis of research articles and management protocols. It has also allowed me to carry on with clinical research alongside a busy daily clinical schedule.

#### What skills would you say you didn't develop during your PhD which you have developed afterwards?

Clinical skills and the ability to observe the limitations of research in everyday clinical practice, be they economic, logistic or due to time constraints.

#### What would you have done differently during your PhD (if anything) considering your current career?

I would probably have waited till I had more clinical experience with the topic I chose before embarking on the PhD I can now see how the experience I now have would have led me to fine tune some of the research I undertook.

### What specific career advice would you like to share with someone who is just about to finish his/her PhD studies?

Keep on doing research even though it is difficult especially if you end up in a busy clinical practice. Once some of the skills you acquired during your PhD become rusty it is difficult to revive them.





