



### Alexander Jethwa

#### **What is the biggest difference between working in academia and working in industry?**

To me, there are three major differences: First, you work in multidisciplinary teams and projects are always team efforts – you never work alone. Second, you work in a highly regulated environment, which is why you are obliged to follow established protocols and to meticulously document everything you do. Third, the terminology is different: we invent and use abbreviations for everything.

#### **What is a common misconception about working in industry?**

That the working environment is very stiff, formal, and hierarchical. In fact, the opposite is the case!

#### **What was your career hallmark so far; or a crucial factor to get your current job?**

My career hallmark up to now is still my PhD. To get my current job, it was crucial that I brought the right mix of hard and soft skills. I had basic scientific knowledge in immunology but also had practical experience in project/lab management and in supervision of technicians and students.

#### **Retrospectively, what do you think what was the most important decision that you made in your career? Is there anything that you would have done differently?**

My most important career decision was to leave academia behind and to only apply for jobs in industry. This was not an easy decision at all because there were many aspects that I liked about working in academia. I think I should have tried to do an internship in industry during my studies because working in industry always remained a black box for me. This way, I could have maybe figured out earlier that industry was the right place to go for me.

#### **What do you think is the most important quality (soft skill, knowledge, technique...) for a successful transition from academia to R&D?**

Since the success of a project in industry is so much dependent on efficient teamwork, the soft skills needed for this are absolutely crucial, for example solid communication skills and project management skills.

#### **What is your number one tip or quote for scientists who might be considering a move to your sector?**

Always try to see the bigger picture and to be curious! Don't just focus on your own research project and spend all your time at the bench. Try to learn and see as much as you can outside of your area of expertise, for example by engaging with your colleagues and by participating in advanced trainings. In industry, it is not all about your high-impact paper.

### Janick Georg Weberpals

#### **What is the biggest difference between working in academia and working in industry?**

In my opinion working in industry is very project-oriented and interdisciplinary. While this may also be true for academic work, projects and priorities in industry usually have a much shorter half-life and one has to adapt to new questions and challenges in a more agile way.

#### **What is a common misconception about working in industry?**

When I joined R&D in industry, I conceived that the time of failures and frustration (like in the PhD) should be over. I learned very quickly that also in industry R&D projects fail all the time which requires resilience.

### **What was your career hallmark so far; or a crucial factor to get your current job?**

There are two crucial factors/advice that I can share: First, only do what intrinsically motivates you, because you can only convince others if you are convinced yourself. Second, try to create a network from very early on and personally get in touch with the institution you want to work for, e.g. by doing internships.

### **Retrospectively, what do you think what was the most important decision that you made in your career? Is there anything that you would have done differently?**

I think the most important career step so far was going abroad as a research scholar to the US for a 6-month period. This experience opened many doors.

### **What do you think is the most important quality (soft skill, knowledge, technique...) for a successful transition from academia to R&D?**

In my opinion the most important quality when transitioning from academia to industry R&D is to be open for new things and to be willing to constantly learn and communicate with a kaleidoscope of different disciplines. In academic research one is usually very focused on the own research and discipline. In industry R&D one must be able to communicate complicated challenges and results to other project members who are usually having a different training and background.

### **What is your number one tip or quote for scientists who might be considering a move to your sector?**

Know what you want, build your network and don't be frustrated if doesn't work out right away.

## **Florian Fuchs**

### **What is the biggest difference between working in academia and working in industry?**

Publications are needed for career development and grants but have a less important impact in industry.

### **Retrospectively, what do you think what was the most important decision that you made in your career? Is there anything that you would have done differently?**

Running some of my education in an English speaking country.

### **What do you think is the most important quality (soft skill, knowledge, technique...) for a successful transition from academia to R&D?**

Knowledge is key (ideally complementary knowledge on technologies or biology that is not yet existing), furthermore a sense of strategic thinking.

### **What is your number one tip or quote for scientists who might be considering a move to your sector?**

Make yourself familiar with your ideal workspace description, reach out to scientist actively working in the company of interest to retrieve insights, identify universities strong with industrial collaborations and make use of sabbatical opportunities or exchange programs.

### **What is a common misconception about working in industry?**

Working in industry is without limitations and endless budgets.

### **What was your career hallmark so far; or a crucial factor to get your current job?**

Continued interest in learning and growing.

### Michael Becker

**What is the biggest difference between working in academia and working in industry?**

Research in academia goes deep; Research in pharma goes broad.

**What was your career hallmark so far; or a crucial factor to get your current job?**

Perseverance and always giving one's best.

**Retrospectively, what do you think what was the most important decision that you made in your career? Is there anything that you would have done differently?**

I would have studied medicine or bioinformatics to be more flexible in the long run.

**What do you think is the most important quality (soft skill, knowledge, technique...) for a successful transition from academia to R&D?**

Perseverance

**What is your number one tip or quote for scientists who might be considering a move to your sector?**

Talk to as many scientists working in pharma as possible prior to making the move to Pharma.

### Christos Patsis

**What is the biggest difference between working in academia and working in industry?**

Projects in industry are more thoroughly planned and pursued by multidisciplinary teams and, as such, they require coordination and effective communication for their successful completion. The collective effort towards shared goals is a strong motivating factor.

**What is a common misconception about working in industry?**

Some of the most frequent misconceptions surrounding R&D in industry are:

- the lack of diversity in daily tasks
- profitability as the main driving force
- second-rate scientific research

**What was your career hallmark so far; or a crucial factor to get your current job?**

Several qualities came into play for my transition to industry, such as broad knowledge of cancer biology, critical and analytical thinking, and experience with omics data, interpersonal skills and project management competence. In addition, the translational aspect and collaborative nature of my research projects, especially during my postdoctoral work, was one of the most determining factors.

**Retrospectively, what do you think was the most important decision that you made in your career? Is there anything that you would have done differently?**

I was always interested in translating scientific findings into useful clinical solutions for the treatment of cancer, so pursuing translational research projects was one of my highest priorities. Expanding my horizons by travelling abroad and working in an international setting, as well as advancing and diversifying my skill set through online courses and trainings, certainly helped me achieve my goals.

### **What do you think is the most important quality (soft skill, knowledge, technique...) for a successful transition from academia to R&D?**

Although technical expertise and considerable knowledge in the respective scientific field are essential in order to enter R&D in industry (depending on the position), excellent transferable skills such time management, self-organization, flexibility, team work, decisiveness and –above all– communication, can really make a difference. Equally important is also to share the same values and culture with the company you would like to join.

### **What is your number one tip or quote for scientists who might be considering a move to your sector?**

'Nothing ventured, nothing gained' – be open-minded and self-confident, gather various kinds of experience and skills, even beyond your field of studies/research, network and learn how to promote yourself!

## **Oana Toader**

### **What is the biggest difference between working in academia and working in industry?**

The work is much more collaborative and it is fairly easy to change field completely within a company, by just talking to people and making new contacts.

### **What is a common misconception about working in industry?**

A common belief is that going into industry means working less or being less passionate about science than scientists in academia. This could not be farther from the truth.

### **What was your career hallmark so far; or a crucial factor to get your current job?**

For my current job it was crucial to show that I can independently set up a complex new technique from scratch. The job posting fit my expertise to a high degree.

### **Retrospectively, what do you think was the most important decision that you made in your career? Is there anything that you would have done differently?**

Taking a break after my PhD and not pressuring myself into immediately getting a job was definitely one of the best things I did. This time allowed me to get more clarity in terms of what I want and what I'm good at. Looking back, I still believe I took the right decisions for myself, given certain circumstances that were out of my control.

### **What do you think is the most important quality (soft skill, knowledge, technique...) for a successful transition from academia to R&D?**

In my opinion, the most important quality is being a team player, along with knowing what your strengths and weaknesses are.

### **What is your number one tip or quote for scientists who might be considering a move to your sector?**

Really just try to figure out what you like and go for it. Contact people and try to get information about the many options available, the possibilities are endless and hard to imagine for an outsider.

**John Lindner****What is the biggest difference between working in academia and working in industry?**

Industrial research is generally designed around measurable outcomes. One example of this is a high-throughput screen to identify antibody sequences. An excellent academic question is to examine the nature of the entire antibody repertoire, and whether it shifts in response to developmental trajectories or health status; a successful experiment is one which addresses a hypothesis built up around that question, and the output is knowledge and the satisfaction of curiosity. The industry approach might design an endpoint assay to determine whether a given antibody sequence recognizes a target molecule; a successful experiment here is one that produces a validated sequence which can be turned into a diagnostic or therapeutic monoclonal antibody – that is, the output is a tool or a drug and its associated intellectual property.

**What is a common misconception about working in industry?**

I'm going to give something of a "meta-answer" here and say that it's a common misconception that there is such a thing as a common misconception in industry. There are certainly elements of truth to every positive and negative stereotype one might have heard, but these generally don't define any specific person, company, or institution. And the lines between industrial and academic research are becoming increasingly blurry.

**What was your career hallmark so far; or a crucial factor to get your current job?**

The ability to think "small" with big data: pairing high-throughput/content, "-omics"-style experimental approaches with a focused scientific question that can be addressed within that framework. Having a pragmatic, flexible attitude (contingency plans for "failed" attempts) but at the same time avoiding low-hanging scientific fruit always looks good on a job application.

**Retrospectively, what do you think what was the most important decision that you made in your career? Is there anything that you would have done differently?**

Obviously, the decision to apply for my current position was the most important one I've made so far. Being a postdoc is a great time for a scientist to immerse themselves in their work, and it's a tough decision to actively apply for the next step in your career – in particular because there's always "one last experiment" to do. That being said, I have started giving the advice to young scientists to take a small break in between career steps. A month or two to travel to a far-off destination, or learn a new skill you've been putting off for years, or immerse yourself in a hobby you've been neglecting, is a great way to push the "reset" button on your mental state before starting the next phase of your professional life.

**What do you think is the most important quality (soft skill, knowledge, technique...) for a successful transition from academia to R&D?**

The majority of projects in industrial settings, from small biotech start-ups to big pharma, are structured around teams. The phrase "team player" is a bit cliché, but the value of having well-developed social interaction skills, being willing to share data, reagents, and protocols, and being able to rely on your colleagues to do the same should never be underestimated.

**What is your number one tip or quote for scientists who might be considering a move to your sector?**

Wherever you practice the art of science, it's about transforming the "unknown" into the "known"; finding opportunities to do that – in either academia or industry – will always pay dividends to passionate researchers.

### Anna Pryszyk

#### **What is the biggest difference between working in academia and working in industry?**

The biggest differences between working in academia and in industry include that in Industry: No project is a single person's effort. Rather than being an expert in one narrow field, it is better to have wide and general knowledge and recruit experts for specific tasks. Unpromising projects and hypothesis are quickly abandoned without having to look for an explanation why results don't match the expectations. Soft skills are much more important for success in start-ups as compared to academia. All projects are well planned, by deciding crucial pathways and critical resources rather than adopting the "do it as you go" approach of academia.

#### **What is a common misconception about working in industry?**

Great academic track record in form of publications in no way translate to an easy entry into industry career or future success in industry.

#### **What was your career hallmark so far; or a crucial factor to get your current job?**

Interdisciplinary experience and soft skills were crucial factors in getting my first industry position. Promotion from Senior Scientist to Principal Scientist for Technology Development came thanks to good people- and projects- management skills as well as ability to multitask and prioritize.

#### **Retrospectively, what do you think what was the most important decision that you made in your career? Is there anything that you would have done differently?**

One of the more important decision during my career was to focus, on the technological aspect of addressing scientific problems - rather than basic research questions - in all my research projects, even during academic pathway. I would probably have taken more courses in science related soft skills, especially during undergraduate studies.

#### **What do you think is the most important quality (soft skill, knowledge, technique...) for a successful transition from academia to R&D?**

The most important quality is to quickly adapt to changing requirements and work environments. E.g. changing projects backgrounds, changing team members, changing technologies.

#### **What is your number one tip or quote for scientists who might be considering a move to your sector?**

During your academic pathway acquire as many soft skills as possible, work on projects from various fields and, if possible, try already to collaborate with industry. Attend events that allow networking with industry and even if you do not plan currently to change job look at open positions in industry and what are the requirements to see what else you can do to increase your chances.

### Stefan Wilkening

#### **What is the biggest difference between working in academia and working in industry?**

In industry, you usually have to work close to or within a regulated environment, meaning documentation, qualification of equipment and validation of methods. Changing a process can be cumbersome. Besides quality, parameters like time, costs, robustness, and regulations have to be considered.

#### **What is a common misconception about working in industry?**

Working in industry does not necessarily mean working harder.

### **What was your career hallmark so far; or a crucial factor to get your current job?**

Having a clear aim, working close to applied medicine and knowing people in the field helped.

### **Retrospectively, what do you think what was the most important decision that you made in your career? Is there anything that you would have done differently?**

Going abroad and getting early access to real life science (in my case an intern at the NIH) during my studies helped me to get important experience and find a good PhD position. Except minor things (e.g. publishing issues), I would not have done things differently.

### **What do you think is the most important quality (soft skill, knowledge, technique...) for a successful transition from academia to R&D?**

Patience and persistence is a key skill to survive in science and eventually enter industry. Going after the latest technologies might also be a plus.

### **What is your number one tip or quote for scientists who might be considering a move to your sector?**

If at first you don't succeed, try two more times so that your failure is statistically significant. ;-)

## **Martin Kratzmeier**

### **What is the biggest difference between working in academia and working in industry?**

In R&D, it is working within a highly regulated Product Lifecycle framework

### **What is a common misconception about working in industry?**

In many scientific disciplines, e.g. biology, it is rather lack of knowledge than misconception. During my biology study and PhD thesis time in Heidelberg, I did not receive any insights into job profiles at the Life Sciences industry at all.

### **What was your career hallmark so far; or a crucial factor to get your current job?**

The crucial factor was my practical experience and knowledge about capillary electrophoresis and liquid phase separation technologies.

### **Retrospectively, what do you think what was the most important decision that you made in your career? Is there anything that you would have done differently?**

Clearly the decision to leave academia and move to industry.

### **What do you think is the most important quality (soft skill, knowledge, technique...) for a successful transition from academia to R&D?**

Curiosity, good communication skills, technical knowledge, being authentic, positive mindset

### **What is your number one tip or quote for scientists who might be considering a move to your sector?**

Leave your comfort zone, go out and apply for interesting jobs even if you are not sure that you would take them. It is all about learning and communication.