

# “There Is an Enormous Market for PhDs in Technical Sales Positions”



Cleyde V. Helena



**Abstract** In our interview with Cleyde Helena, she tells us about her research work and how lack of continued funding led to the lab she was working in to close. Cleyde now works as an independent contractor in technical sales, helping researchers purchase customized scientific equipment for their research. Leaving academia was a long and painful process for Cleyde, but now she helps others realize that other career paths can also be fulfilling. If you are having doubts or are feeling pressured by others, think about why you want to stay or leave academia. There are many non-academic careers out there; it is worth considering if they might be a better fit and make you happy.

Cleyde V. Helena

## Contents

Chris: Can you introduce yourself and tell me a bit about your current position?.....	102
What was the focus of your PhD?.....	102
As you were finishing your PhD, what were you thinking about your career plans?.....	103
Can you tell us a bit about what day-to-day life is like in your current position?.....	104
How do you think having a PhD has helped you succeed in your current position?.....	105
If someone currently finishing their PhD was considering a similar position as you have now, how might they decide if it would be a good fit?.....	105
If someone was interested in pursuing a similar career path, what would you suggest they do to better prepare themselves?.....	106
A lot of people like academia because they feel it gives them an opportunity to work on a topic that they deeply care about. Do you think this is also true in your current position?..	106

C. V. Helena (✉)  
ASC Group LLC, Centerton, AR, USA

Another reason many like academia is that they feel it provides them with more freedom than they think they would get in other positions. How much freedom do you feel you have to work on what you think is interesting?.....	107
Can you tell us a bit more about how you transitioned to a job adjacent to academia? In particular, apart from thinking about translatable skills and finding a suitable job, how was it to change your perspective to mentally transition to a position outside of academia?.....	107
Based on your journey, what advice or suggestions do you want to pass on to someone who's currently finishing their PhD?.....	109
Is there anything else you'd like to tell someone reading this interview?.....	110

## **Chris: Can you introduce yourself and tell me a bit about your current position?**

Cleyde: My name is Cleyde Helena and I am a Brazilian-Chilean-American living in the United States. I am part of an analytical chemistry consulting group, and I represent four different companies. My official title is 'account manager', but I feel like 'problem solver' would be more appropriate. I am the person that links the customer to all parts of the organization, and although my salary is a commission on individual sales, I spend most of my time dealing with mundane tasks: emails, virtual meetings, customer training and phone calls.

I sell specific products within a geographic region. Because of my background in academia, they gave me an academic territory, so I cover all academic and non-profit institutions located in this territory. I enjoy this because it allows me to continue in the academic environment but without the pressure and stress that I was used to. Even though most of my work can be done remotely, I occasionally travel to meet customers face to face. Most of the instruments that I sell are very expensive, and it is usually very beneficial to meet in person. First to establish a relationship of trust but also to make sure you understand all requirements needed and suggest the optimal instrument/configuration for their research.

I am not a chemist, and it still takes me some effort and research to fully understand the several different types of chemical analysis that come to my hands. Also, I work within a team, so I can easily ask the product specialists for advice about application and instrument configurations. Most of the professors have an idea of what they want to purchase, but it is my job to make sure that the instrument is fully equipped to perform the analysis.

## **What was the focus of your PhD?**

I have a PhD in Human Physiology, with focus in neuroendocrinology from the Physiology department at the School of Medicine of the University of Sao Paulo, Brazil. Our lab studied the neural control of female endocrinology. In short, how the

brain controls the hormonal secretion in females. Our lab was particularly interested in the role of norepinephrine (particularly the one coming from the Locus Coeruleus) in mediating the steroid-induced gonadotropin surges that lead to ovulation.

In my master's, I studied the effect of Locus Coeruleus lesions on the preovulatory surges of LH (luteinizing hormone) and FSH (follicle-stimulating hormone), as well as the one induced by ovarian steroids in ovariectomized rats. In my PhD, I investigated the specific role of estradiol and progesterone in the Locus Coeruleus under several steroidal conditions. Interestingly, I've got in touch with a professor at the Rockefeller University, and when I attended my first Society for Neuroscience meeting (back in 2002), I also took the opportunity to visit their lab in NYC. It was my first time visiting the United States, and I fell in love with ... everything! We decided to apply for a Sandwich fellowship in Brazil, so I could come to their lab and do part of my PhD research in the United States. After spending 1 year doing research in an American lab, I was certain that I wanted to come back and pursue an academic career in the United States.

Because of visa restrictions, I couldn't come back to the United States right away after defending my PhD. I decided to do a postdoc in the same lab where I did my PhD because it was the easier thing to do, and there weren't a lot of people in Brazil working with neuroendocrinology of female reproduction. Looking back now, I believe this was one of my initial 'mistakes'. On one hand, continuing in the same lab gives you the opportunity to continue and finish several projects you've been working on. But, on the other hand, it doesn't give you the opportunity to grow, to learn new techniques and to pursue new ideas.

After 3 years, I was invited to apply for a postdoc position at Florida State University. It was also to study the neural control of female reproduction but focusing on the dopaminergic control of prolactin secretion. I was so excited about finally coming back to the United States and pursuing my academic dream. This new lab had a somewhat hybrid group, with part of scientists working on in vivo projects and others performing in vitro projects, and all data would be combined and modelled by some computational neuroscientists. This new experience was challenging and intimidating at first, but it turned out to be a valuable growing experience. A mathematician's mind functions in a very different way than ours, biologists. We tend to complicate things, to be very verbose. They are incredibly sharper; they go straight to the point. Working directly with them taught me to be more direct and concise. Sometimes, I think that they simplify too many things, but in the end, it's like they are summarizing things in a box and arrow diagram by the end of our paper.

## **As you were finishing your PhD, what were you thinking about your career plans?**

Some people have traumatic experiences during graduate school. I didn't. Of course, graduate school was hard, and it took me years to finally really understand what I was doing! But when I was finishing my PhD, I finally started to see the big picture

of my research, and I was really excited to continue doing it. I've already started attending international congresses, and meeting those famous researchers in person only made me aspire to be like one of them someday. I'd dream about migrating to the United States and getting an academic position in a nice university. I had no idea back then of how hard that would be!

## **Can you tell us a bit about what day-to-day life is like in your current position?**

Since I've transitioned out of academia, I've been working from home. I spend most of my time on the phone with customers and coworkers, responding to emails, creating and editing quotes. As an independent contractor, I don't have a salary and work on commission. That can be quite stressful as academic sales depend on grant funding and so many other things! So the main priority of my daily work is to generate sales. The analytical equipment that I sell are complex solutions, and you cannot get any pricing on our websites. Every instrument is customized, and every sale requires discussions about what each customer needs. As I've been in this job for a while, I usually can configure most of the instruments. However, sometimes, there are more complex solutions that require asking for help from our product specialists or other specialized people. Although I am not responsible for handling post-sales installations and service, I am usually contacted or copied in these emails as well. As an account manager, I am expected to be the point of contact between customers and the company. Even though nine out of ten times I cannot personally help the customer, I certainly know who can!

I also try to make regular visits to the several campuses I represent. The instruments I sell are very expensive, and it is useful to meet professors in person to create a relationship of trust. When meeting in person is not possible, we perform online meetings and presentations. We are also expected to organize at least two local seminars per year, on a topic that would be of interest to a large number of local researchers. Organizing these types of events is usually a lot of work but also very fulfilling.

Technology is constantly changing, and there are always new techniques, new instruments, new challenges. Because of that, I normally attend at least one online training per week and receive lots of emails with material to read on your own time. I thought it would be harder to work from home and deal with the procrastination and distractions. But when you deal with people, everybody has their own needs, and most of the things are urgent. When I was in academia, I used to have a to-do list and normally complete each task in the order of my list. Currently, things get juggled to the top in order of urgency. Most of the tasks take days, sometimes weeks, to be finished, making it harder to keep track of everything! The good thing is that there is no shortage of work and there is no day like another. Every day is new and different, and that's one of the reasons I really like my job.

## **How do you think having a PhD has helped you succeed in your current position?**

There is no doubt that having a PhD has helped me succeed in my current position. The main reason I was hired was because I had a PhD and have spent many years in academia. That helps me to understand the professor's needs and struggles, making it easier to communicate to them. Because I am not a chemist and don't have much lab experience with the equipment I sell, I need to read a lot of literature. Before talking to a new professor, I always go to their webpage and read at least the abstracts of their latest publications. Sometimes, professors send us some literature that performs the analysis they are willing to set up in their laboratory, and I can see that most of my non-academic coworkers either don't understand or don't have the patience to read scientific literature. Also, the presentation skills I've learned during my PhD are very helpful when putting a PowerPoint together to present to a customer. I attend training talks with PowerPoint presentations on a weekly basis. It is so easy to identify which ones were prepared by a PhD! Even upper management people with lots of experience do not present their talks in an organized and story-telling manner as we do. Other very useful skills I use on a daily basis are time management, multi-tasking and ability to work under pressure and deadlines.

## **If someone currently finishing their PhD was considering a similar position as you have now, how might they decide if it would be a good fit?**

Some people say that you need to be an extroverted person to succeed in sales. Being extroverted certainly helps, but the number one point in my opinion is that you have to be a people person. On average, I probably spend over 4 h/day talking to people either on the phone or in person. So not only you should enjoy talking to people but also understand them. Read between the lines and know when you need to explain all the details about a certain aspect, or when to only focus on the main parts. You need a lot of patience and enjoy helping others. An equipment sales person needs to be able to start and maintain relationships. The sales cycle is usually long (typically about 1 year or more), so you need to find creative ways to keep in touch with your customers during the waiting periods of time. Follow up, but never be pushy. Being trustworthy is key. Each sale is based on trust, and you are not just selling equipment. You are selling a solution, and your role is more of a consultant than of a sales person.

**If someone was interested in pursuing a similar career path, what would you suggest they do to better prepare themselves?**

There is an enormous market for PhDs in technical sales positions, but not that many at the moment simply because most PhDs do not apply for those positions. That usually happens mainly because PhDs think they need to have sales experience to apply for these positions, but also because they think that sales people need to be pushy and annoying. That couldn't be further from the truth in technical sales! In this line of work, you are not usually selling a product, but you are selling a solution. Usually, the customer has a deficiency that needs to be eased, and you are the consultant that is going to guide them through the process.

If you'd like to pursue a career in technical sales, I would suggest having informational interviews with people currently working in the technical selling branch you would like to explore. That helped me ease the stigma associated with sales people! That would also help you visualize yourself into that future and realize if this feels right for you. Regardless of the career path you want to pursue, I recommend doing as many informational interviews as possible. You will be surprised at how willing people are to help and talk about their experiences and career. And most importantly, while it may not help you choose the path you want to take, it certainly will make you certain of the ones you definitely don't want to take.

**A lot of people like academia because they feel it gives them an opportunity to work on a topic that they deeply care about. Do you think this is also true in your current position?**

I feel very fortunate in my current position now. For many years, I've thought I'd never find happiness and fulfilment in any occupation other than academia. Right now I feel I'm in an academic-adjacent position. I am not actively performing research, but I am directly supporting professors to achieve their projects by providing them with adequate instrumentation. I am still directly immersed in the academic environment, constantly talking to professors and students, visiting campuses and aware of the academic calendar of classes and grant proposals. My field of research was neuroscience, and I had no idea of how many interesting projects are done in chemistry and engineering! I don't have the gratification of seeing my own papers being published, but every time that I see a professor publishing something achieved using the instrumentation I've provided, it gives me a sense of gratification. It is not the same proud feeling of seeing your own work being published, but still feels like you helped it happen.

**Another reason many like academia is that they feel it provides them with more freedom than they think they would get in other positions. How much freedom do you feel you have to work on what you think is interesting?**

For many years, I also thought that academia provides researchers with more freedom than in other positions. However, during my last years in academia, I started realizing that is not entirely true. There is a false sense of freedom that states that you can research whatever you want, at the pace you want. In reality, there are research topics that are more recognized than others. In other words, if you don't do research in a highly applicable/translatable topic, you might not be able to fund your research. Also, you need to publish at a consistent frequency. Not too little, not too much. It is okay to increase the number of publications, but it has to be at a consistent rate. You get rewarded by the number of publications, by the impact factors of the journals you publish, and most of the time early career researchers are forced to teach topics that they are not familiar with and to join committees that they are not interested in.

I personally feel I have way more freedom now. As an independent contractor, I am my own boss. Even though I report to a manager and technically have to follow rules and reach a sales quota, I do not have to report my daily work or have someone telling me what to do. As I work on commission only, if I don't sell, I don't have a salary. So it is in my best interest to sell as many instruments as I can, but the way I decide to do that is totally up to me. The good part of it is that I have the freedom to take several days off work when I want. The downside of it is that I don't have paid vacations, so I must plan accordingly.

Even though I still occasionally work over weekends and holidays, this is much rarer now than when I was in academia. During the first month or so outside of academia, I used to feel very guilty about not working on the weekends. I remember once my manager asked me why I was still working, as it was already 5:30 pm. It is incredible how this culture of overworking is common sense in academia, and you just realize how unhealthy it is after you leave academia.

**Can you tell us a bit more about how you transitioned to a job adjacent to academia? In particular, apart from thinking about translatable skills and finding a suitable job, how was it to change your perspective to mentally transition to a position outside of academia?**

Leaving academia was a long and painful process for me. I don't know exactly when I started to change my mind about leaving academia. I think it was a mix of things that led me out of it. There was a lot of frustration after tons of academic job



applications (which require a lot of work!) and interviews that didn't turn into a job offer. On Twitter, I could see how almost everybody seems to be struggling to succeed, writing several grants every grant cycle with little success rate. I could see how doing research was getting harder and harder, especially in my field. I used to attend the Society for Neuroscience meeting, and I could see the transition happening over the years. People slowly leaving the field or applying for grants to study some other topics, and doing neuroendocrinology research 'on the side'. I remember talking to a researcher that changed fields because 'you gotta go where the money is'. True, but still depressing.

I still had a romantic view of science, of getting excited with data, with results. Not really worried about performing top techniques or publishing in top journals. I still wanted to do my basic research and not worry about including fancy techniques just because it would look good on my grant application. But then I started to believe I had to rethink my future research, not because I cared about those hot topics or I think they were necessary, but because I needed to get a job and money for my research. It made me feel like a research whore.

I believe the final disillusionment with academia happened when we received the news that our lab grant was not going to be renewed and our lab was going to close its doors. I am someone that always thought I had very clear goals in my mind. And for many years, I truly believed that academia was the only path that I wanted to pursue. The idea of becoming unemployed scared me, but not having a clear future goal scared me more.

After working in academia for almost 20 years, the hardest challenge for me was to find out which path I could pursue that I would be qualified for and that would bring me personal fulfilment. Because I've been on the academic one for so long, I had a hard time thinking about other paths. Also, not everything that you enjoy you will be able to do it effectively, and not everything you might be good at will necessarily be a gratifying job. It takes a lot of research and self-examination to find the best decision.

Leaving academia in many fields is the ultimate taboo. In journal clubs, seminars and laboratories, jokes are made that scientists who left academia for industry or other jobs have 'turned to the Dark Side'. A culture persists that academia is a noble calling that trainees should single-mindedly pursue. Academia is sticky, and when you are in it, everything funnels to pursuing an academic faculty appointment.

Only 12% of all PhD holders have tenure or a tenure-track appointment at an academic institution (see <https://nsf.gov/statistics/2016/nsb20161/#/data>, Table 3-16). Despite this fact, pursuing a career in anything other than academic research is still seen as 'alternative'. Worse still, the decision to leave academia is usually accompanied by feelings of failure. That prompted us to create the *Recovering Academic* podcast (<http://recoveringacademic.net>). Although we found articles and online resources about how and why to make the transition, we felt like there was a lack of emotional and community support to those that want to leave or are thinking about leaving academia.

Leaving academia, and re-charting a career path, can feel jarring. The first step, and possibly the hardest, is to make the decision to leave. Most PhD holders spend



at least a decade working in academic environments. Moving into something unknown may seem like a rogue move. Most advisers and institutions do a poor job promoting and preparing PhDs for non-academic, so-called alternative careers. The academic environment trains PhD holders to learn how to do experiments and write manuscripts, but not how these skills translate to the ‘real world’. PhD holders tend to think that they will leave behind all the skills they acquired while in academia, and they will have to start from scratch. But universities are not the only place where you can apply those skills! In fact, PhD level training—problem solving and project management—is applicable to most jobs. This may mean starting as a beginner in a new profession and rising quickly because of their doctoral training. Being in the ivory tower for so long, academics can easily fall into cognitive biases and forget that less than 2% of the population have a PhD. You might need to do some soul-searching, writing down a list of ideal career characteristics, for instance, to figure out what career path to pursue and how to transfer your academic skills towards your new role.

I got my first job outside academia in July 2015. Life changes and slowly I started to realize that academia was not the only way to be happy. Today, it’s been over 6 years since I left academia, and I am more certain than ever that this was the best decision I could have taken. I admire those who continue in academia, but the more time passes, the more I feel like this was not the life I wanted for me. I feel like now I have a much healthier work-life balance and also a much better salary!

### **Based on your journey, what advice or suggestions do you want to pass on to someone who’s currently finishing their PhD?**

When we are working on our PhD, we spend so many years putting a lot of effort into developing our research and writing our thesis that it is easy to lose track of the big picture. Of course, we all want to finish our PhD and defend our dissertation, but what’s next? It is beneficial to have a long-term plan in mind and have a list of goals that can help you achieve them, such as ‘publish X articles/year’. Your long-term plan may change along the years, so your immediate goals need to be adjusted accordingly. It is harder than you think to figure out what would make something your ‘dream job’. Don’t be afraid to experiment and to discuss this with other people.

That brings me to the second suggestion: no matter what is your long-term goal, you need to focus on networking. It is not just about growing the number of LinkedIn connections or simply knowing a lot of people. It is about having some meaningful connections with whom you can exchange ideas and ask for advice. The more you talk to several people, the more you understand the options that are out there and that can bring a lot of new opportunities. A lot of times we want to find ‘the path’ that will lead us to our perfect career choice. But there isn’t only one perfect path, there are many different paths to be explored, and many can indeed lead you to your

ideal career. And if the path you are currently pursuing ends up not being the one that will make you happy, don't be afraid to stop, rethink and adjust your path.

## **Is there anything else you'd like to tell someone reading this interview?**

Leaving academia is not easy. It takes a lot of courage to take the leap and jump out there in the open, in the unknown. Because we have been in academia for so long, we are surrounded by other academics, and it is easy to get swamped in feelings that if everyone around you succeeds in academia, you should succeed as well. And if you don't, you are a failure. This could not be farthest from the truth. Academia is not for everyone, and there are so many other career paths where you can use your PhD, directly related to higher education or not.

If you are having doubts about if academia is right for you, it is worth taking a moment to think and realize if you should keep pushing forward or start considering other options. If possible, you may want to take a break to see what is 'out there', but unfortunately, this is not an easy alternative to take. There are many reasons *why* you may be thinking about leaving academia. Is it because of the terrible job market, because of the lack of work-life balance or maybe because you simply realized that the academic life is not for you.

Regardless of your reasons, it is important to do some soul-searching and understand your own reasons before sharing them with the people that care about you. It is also very helpful to talk with other PhDs that have left academia and ask about their experience during the transition and their current state of mind. It is so easy to think that you're all alone and the only person going through those feelings. You will probably find out very quickly that most of the PhDs that left academia shared similar feelings and doubts about their choices.

When you decide to leave, there might be some pressure from immediate people like your advisor or family. Most advisors put a lot of effort into your academic growth and may see you as an 'heir' to their topic of research. Therefore, the idea of seeing a student leaving the path they imagined for you can be very disappointing. Immediate family may contest why you are willing to leave something that you, and them, in a way, have put so much effort and time pursuing.

There are plenty of opportunities for PhDs outside academia. You just need to make sure to find out which one will bring you fulfilment and make you happy!

**Thank you so much for sharing your experiences with us, Cleyde! I am sure your advice and perspective here will help many.**