Iransferable For PhDs



20 Transferable Skills

For Biotech, Biomed, & Biopharma Industries

1	INFORMATION MANAGEMENT	4
2	TIME MANAGEMENT	6
3	PROJECT MANAGEMENT	7
4	TEAMWORK & COLLABORATION	9
5	COMMERCIAL ACUMEN	10
6	NEGOTIATION SKILLS	12
7	LEGAL & REGULATORY ASPECTS	14
8	LEADERSHIP SKILLS	16
9	COMMUNICATION SKILLS	17
10	RELATIONSHIP BUILDING	19

20 Transferable Skills

For Biotech, Biomed, & Biopharma Industries

11	ORGANIZATIONAL SKILLS	20
12	CLIENT-FACING SKILLS	21
13	STRATEGIC PLANNING	23
14	PROFESSIONAL AWARENESS	25
15	ADAPTABILITY / FLEXIBILITY	26
16	CREATIVE PROBLEM SOLVING	28
17	CONFLICT RESOLUTION	30
18	CURRENT INDUSTRY TRENDS	32
19	ENTREPRENEURIAL MINDSET	34
20	EMOTIONAL INTELLIGENCE	36

INFORMATION MANAGEMENT

With the growing use of technology and connectivity, and the volume of data generated by businesses, the amount of information available on any specific topic has increased exponentially.

This is even truer for pharmaceutical or biotechnology industries, which are continuously being influenced by new research data, and where success is reliant on keeping up with current information associated with these cutting edge innovations. This makes it even more crucial to gather and analyze large volumes of data points to determine their relevance. Hence, the management of information is a valuable transferable skill for this industry.

Science PhDs, who are required to filter through research data and identify relevant information, should realize that they already possess this transferable skill.

But you should keep in mind that the key to successful information management in industry is not just about gathering and understanding information or accumulating knowledge. In a non-academic environment you have to go beyond collecting and deciphering data. The real value lies in understanding available information and then utilizing it to come up with the most appropriate actionable intelligence. This will enable the company to create the ideal strategy for adapting to changing trends and staying ahead of the competition.

A study on preparing students for the life science industry stated that, when training students for the biotechnology industry, it is essential to teach them skills which will allow them to access and critically evaluate relevant information (Ward et al, 2007). Keeping up with constantly evolving industry trends, and dealing with all the information this generates, is one of the major challenges for new employees. Therefore, information literacy is a much sought after quality.

Applying analytical skills to a large volume of collected data in order to distill actionable intelligence is considered a highly valuable skill in business. The ability to gather, assess, evaluate, interpret, and then communicate technical and scientific data is something science PhDs are trained to do, so they should leverage this transferable skill in their efforts to transition to the biotech or pharmaceutical industry.

TIME MANAGEMENT

While managing your individual responsibilities or your team's projects it is important to be well organized so that you succeed in reaching your personal and organizational goals in a timely manner.

In the pharmaceutical industry a lot of clinical data or regulatory submissions tend to be highly time sensitive, so time management is considered a crucial transferable skill for this sector. Making effective use of available time on a daily basis, and also organizing yourself so that you meet targets of longer or larger time sensitive projects is essential in any role in the biotechnology industry.

As you progress further you will need to develop skills for managing and organizing not only yourself, but also others working on your team.

In a report on California's workforce trends in the life science industry (2014 Talent Integration Report) it was stated that time management is a major challenge for those who have never worked in industry before.

This report found that students fresh out of life science research in academia are used to being involved in projects with a long innovation cycle, where acquiring publishable data is given priority over finishing projects in the shortest possible time. Unlike industry, in academia projects are also not aimed at generating revenue.

As a result, adapting to highly time sensitive and ROI driven projects can prove to be difficult for those transitioning to the life science industry. Therefore, candidates who are organized and good at time management are preferred by employers.

PROJECT MANAGEMENT

roject management is another highly sought after transferable skill in innovation-based industries such as biotechnology and pharmaceuticals, where complex projects need to be well planned and efficiently managed.

Even if you are not officially working as a project manager you need this skill to efficiently manage your own projects and to ensure their successful completion in a timely fashion. Project management skills are also considered to be a major determining factor in career progression.

As a science PhD you might be wondering whether you have this skill or not. Even if you have not worked in industry, you have managed research projects utilizing a limited budget while working in an academic lab, and this can be transferred to industry.

However you need to be aware of some critical differences between a research project in academia and one in the corporate environment. For project management in industry it is essential to gain an understanding of how business works. Unlike academia, where the main purpose of your projects was to generate publishable data, industry decisions should be made taking into account the bigger picture and business goals of the organization.

Industry projects tend to be more time sensitive relative to academia and there is little room for exploratory research that deviates from the primary objectives of a project.

As you move up in hierarchy along with managing your own projects you will also need to learn managing members of your team, manage budget of projects and ensure its timely completion.

As your responsibilities grow it will become impossible to do everything on your own so two other attributes that add value to the transferable skill of project management are ability to motivate others and delegation of tasks. To achieve this you must develop a rapport with your colleagues and team members and identify their individual strengths and weaknesses.

Project Management requires a combination of different qualities. In order to work efficiently in the biotech or pharma industries you will have to combine your scientific skills with business skills. If you can develop these qualities you will be a valuable asset to any organization.

TEAMWORK & COLLABORATION

In industry, even when you are working in a research lab, you cannot work by yourself with the sole aim of getting more data as you might have done during your tenure as a postdoc or PhD student. Industry environment is more collaborative and teamwork is considered to be one of the most important transferable skills. In order to work as a part of a team you will need to develop interpersonal skills, communication skills, and diplomacy.

While working in an academic research lab, PhDs and postdocs often work as part of a team. You might even have been part of projects where multiple labs or universities were working together. These projects would have given you some experience in teamwork and collaboration.

However, you should be aware that there are some differences between industry and academia. In industry, teams tend to be larger and not limited to your department. You will often be sharing information and interacting with people involved in non-scientific functional roles such as business development or marketing. So in order to work well as a part of a team in industry, you should learn to communicate with people across multiple divisions.

Failure to be a team player can seriously hinder your chances of career progression as working well with others and managing collaborations are considered to be key requirements for leadership positions.

COMMERCIAL ACUMEN

ack of formal business training is often cited by prospective employers as one of the main reasons why they are reluctant to hire science PhDs into non-R&D roles. If you are a science PhD interested in non-R&D positions such as in business development or project management, you can easily overcome this obstacle by taking a few business courses.

With innovation based industries such as IT or biotech forming a major part of the economy nowadays, a majority of business schools offer management courses geared towards training future managers on how to manage technology industries such as IT or biotech. These courses will be ideal for advanced science degree holders who wish to gain formal business knowledge. Often courses are offered for free, or your department might agree to pay for your tuition. Another way of getting the knowledge without having to pay for it is to audit some business classes. Adding this to your resume will show your interest outside of traditional academic research.

Even if you are working in a functional role that is not directly related to business, you will need to be aware of the commercial implications of your project and know how your role fits into the bigger business goals of the organization. Therefore, it is important to have business skills and gain understanding of current trends in industry.

Employers value candidates who have the ability to make financial projections, manage a budget, and predict trends that might affect

the organization's bottom line. Being able to recognize business opportunities, whether it is a secondary effect of a molecule that you are working with, or the opportunity to collaborate with another company, is a highly sought after transferable skill that is applicable in multiple roles.

While working in a lab you have already developed some business and financial skills as you managed a budget while ordering supplies, so make sure to leverage that in your resume and job interviews. You can further develop business acumen by making a habit of keeping an eye on the bottom line even when working in academia, and by reading blogs and articles about the business aspects of the biotech and pharma sector.

NEGOTIATION SKILLS

xchanging ideas and making decisions are essential components of working in industry. Whenever these two factors are involved you will be required to use negotiation skills. Sometimes it might be financial negotiation for a possible strategic partnership with another company, at other times it might be finding a middle path among all the ideas of your team members in a brainstorming session. Therefore, you must realize that negotiating is a very important transferable skill for industry professionals.

In most business situations you are expected to negotiate so you need not feel hesitant about it, even if you are not used to it. Each time you do not negotiate you are likely to miss out on opportunities or rewards you deserve. However, while negotiating one must be mindful of being professional and not coming across as too demanding. Those who can negotiate in a professional fashion and seek the mutual benefit of both parties are more likely to achieve a successful result.

You might think that as a science PhD you are ill-equipped to negotiate in an industry environment with business professionals. However, you must realize that your scientific knowledge can be of great value to any negotiation. Information is a powerful tool, so the technical knowledge you possess gives your opinion more value and allows you to participate confidently in the process.

As a PhD you have already been using negotiation skills. You might have had to discuss the value of your research in a conference

with an audience who had a very different point of view. PhDs are also constantly using negotiation skills while convincing dissertation committees about steps taken in a PhD research project. PhDs also utilize negotiation skills while communicating with reviewers of scientific journals, where they are trying to get their research articles accepted.

In order to further improve your chances of negotiating successfully, make sure to do your homework on the subject beforehand, as preparation will give you an edge over others. Practice tailoring your response to the other person. Listen carefully and understand what is at stake for both you, and other side. You will also need to draw upon your interpersonal and communication skills during negotiations, as developing trust and a good relationship are key ingredients of negotiating.

LEGAL & REGULATORY ASPECTS

While working in academia, you have had to follow certain rules and regulations regarding the use of reagents, operating equipment, and the reporting of scientific data from our experiments. But if you are working in a biotech organization you have to be aware of various others rules beyond those related to scientific research.

This is especially true in the case of innovation based sectors such as the biotechnology and pharmaceutical industries, where you will need to learn about laws associated with compliance and intellectual property. Since these sectors are also heavily monitored by guidelines from regulatory bodies such as the FDA, it is also essential to be aware of regulatory laws. Whether you are responsible for monitoring manufacturing or working as a scientist in R&D, you will have to keep compliance and regulatory guidelines in mind while planning your projects.

As the biotech and pharmaceutical industries are reliant on innovation, anyone working in this field needs to be conscious of intellectual property laws and the confidentiality of scientific data. Unlike in academia, the protection of intellectual property gets priority over publication and you should always be aware of that while you are representing your company in conferences, or preparing documents for communicating with external audiences. Protecting intellectual

property is crucial for a biotech organization to maintain a competitive edge over its rivals in this sector.

With growing pressure on life science organizations around monitoring the environmental and ethical consequences of their products, there is increasing regulation, and hence there is a serious need of professionals in this sector to be aware of ever-changing rules and guidelines.

So while working in a biotech or pharma company during any form of planning, communication, or decision making, you need to be aware of any possible political, legal, or ethical implications.

LEADERSHIP SKILLS

The ability to show initiative and demonstrate leadership qualities is highly valued in industry and are considered to be major determining factors for progressing into higher management positions. Postdocs and PhD students often think they did not have the opportunity to develop these qualities in academia. But while working in a research lab you were already developing these skills by taking the initiative in research projects and mentoring undergrads or new graduate students in your lab.

You can further improve your leadership skills by taking the initiative of starting a professional group in your university or department. Groups such as a consulting club or a career club for postdoctoral scholars will improve your leadership skills and also help you in regard to expanding your professional network. Some schools also have formal mentoring programs which offer further leadership opportunities for graduate students or postdocs.

Those of you who are involved in large projects involving researchers from multiple labs should take an active role in coordinating with everyone, and ensuring the timely completion of projects. Having this on your resume will be additional evidence of your leadership skills and ability to show initiative. Motivation and the ability to step forward to get a job done are highly valued in industry. Since the biotech industry is rapidly growing, and life science innovation is constantly evolving, in this sector candidates who are motivated and constantly striving to enhance themselves and their organization tend to do well.

COMMUNICATION SKILLS

This is often considered to be one of the most important transferable skills for working in industry, and it is also the skill which most new graduates are found to be seriously lacking. Both oral and written communication skills are essential for the success and growth of your career in industry.

While working in industry you will have to get your scientific message across to a diverse group of professionals on a regular basis. As an industry professional you will be responsible for delivering presentations to explain new findings to decision makers, or for training new recruits. For oral communication, you may have to adapt your message so everyone understands the main idea and realizes its value towards the organizational goals.

Some of your academic activities, such as interacting with undergraduates through teaching, and delivering poster presentations or PowerPoint presentations for conferences or graduate level courses, will prove to be helpful in developing the transferable skill of oral communication.

Communicating through writing is as important as oral communication in industry. You will be regularly conducting professional communication through emails and reports. Depending on your functional role, you might be also involved in preparing or reviewing written material for communication with colleagues from other divisions or an external audience such as stakeholders and business partners.

Your skill in scientific writing, developed during your PhD or Postdoc, will be applicable to these responsibilities. However, although you might have a lot of writing experience because of your research articles and dissertation, you will need to modify your writing style to adapt to a corporate environment. Depending on the audience, you will have to limit the use of scientific jargon and adjust your writing based on the target audience without changing the actual technical information. With globalization, most major biotechnology and pharmaceutical organizations now have centers in multiple nations, so it helps if you can communicate efficiently in more than one language.

In 2013, a survey on current and projected trends in the life science industry was jointly conducted by the Coalition of State Bioscience Institutes (CSBI) and the consulting firm Booz & Company. The study found that in this sector, employers value candidates with good communication skills, and the lack of this transferable skill is one of the main reasons new graduates fail to secure industry jobs.

This same study stated that in life science organizations there is high demand for those who can communicate effectively both orally and through writing and can translate scientific information into a message that can be understood by a broad range of both internal and external target audiences.

RELATIONSHIP BUILDING

rrespective of the position you work in, it is impossible for anyone to be successful in industry without interacting well with others. As mentioned earlier, the environment in industry is lot more collaborative compared to academia in general. So this transferable skill is also tied to two other important transferable skills: communication, and teamwork.

As a result of this, more employers are stressing the value of having the right attitude, and you can expect hiring managers to ask interview questions aimed at understanding a candidate's personality. Employers try to screen for candidates who will work well with existing team members, who understand professionalism and are capable of working with others.

Your people skills will be a major determining factor in how you collaborate with other professionals and handle unfavorable situations. This transferable skill is not only important for your performance but it is also regarded as a key criteria for being promoted to leadership positions. A good leader can understand and manage people with a wide range of personalities and get the best performance out of everyone.

In a leadership role, people skills will enable you to manage people with fairness, understand their demands, express empathy and at the same time ensure that your team performs to meet organizational goals. Candidates who have the required scientific skills but are difficult to work with are highly likely to miss out on a lot of job opportunities in industry, so it is essential to develop your people skills.

ORGANIZATIONAL SKILLS

n the biotech industry you will often be involved in multiple projects and it will be important to prioritize your various duties and designate adequate timelines to each of them.

Remaining focused on priorities and avoiding distractions is an essential skill for consistently meeting your professional targets and deadlines. Different people have different methods of organizing, so you must try different ways and figure out the tools and techniques that are best suited to help you stay organized. Some professionals prefer using online scheduling tools while others prefer writing things down on paper.

Setting deadlines and goals is only half the task. You must think ahead to make sure you attain these goals. This might require multitasking, planning in advance, and when necessary, delegating tasks to others.

Today there are several organizational tools available to us through online resources. However, technology is also considered to be the biggest source of distraction in the modern workplace. So set aside a specific time for emails and make sure you are not constantly distracted by your cellphone.

While working in industry, it is also important to keep the bigger picture in mind, and not just your personal plan. It is essential to have a clear idea of the business goals of your team and the organization, so that you can design the ideal strategy for achieving your own targets while staying aligned with the overall goals of your organization.

CLIENT-FACING SKILLS

ore than anything else, a company's success relies on keeping its clients happy. Or rather, keeping its clients happy enough to keep buying. As such, these companies are very hesitant to hire PhDs who display even the slightest level of arrogance, self-entitlement, insecurity, shyness, lack of patience, or any other kind of social awkwardness.

No matter which industry position you get hired for, there will come a time when you have to talk to a customer. You might be a research scientist asked to explain your results at a scientific meeting, or a technical sales specialist asked why your product is better than a competitor's product.

Either way, you'll be facing the client directly and will have to communicate your answer in a pleasant, yet effective manner. Your ability to interact with people and display what is commonly termed as "people skills" will be a determining factor in your career growth in industry.

For this and many other reasons, it's impossible to be successful in industry without interacting professionally with others. Often you will be involved in projects which will require you to collaborate with people from various departments in your own organization, or sometimes even a different company. In addition to having technical knowledge, you will be required to attend several internal and external meetings. In order to succeed and build a good working relationship with others, you will need to know how to interact with people from different fields in an efficient and professional manner.

PhDs often fail to find employment or achieve career progression because they refuse to develop their client-facing skills. This can be a costly mistake, as industry is more collaborative than academia and it is necessary to develop these interpersonal skills. This is why biotechnology and biopharmaceutical companies rigorously screen job candidates' personality traits.

Any employer will want to know:

- Can he work well with our established team
- Will she maintain her professionalism at all times?
- Will he lash out at clients when he's having a bad day?

PhD candidates who have the required technical skills but lack the ability to interact with customers will not get hired into industry roles. The only way to differentiate yourself from the competition for these roles is to develop and leverage your ability to collaborate with other professionals, even in unfavorable situations.

STRATEGIC PLANNING

Solving problems as they come up is not enough. You must also be able to find problems in advance, prioritize these problems, and find the right solutions to them. PhD job candidates are expected to be able to see further ahead than average job candidates. They're expected to consider both the short-term and long-term goals of an organization and plan accordingly.

If you wish to move up into higher management position where decision making will be one of your essential responsibilities, then this is one of the most important transferable skills. You must realize that there are some key difference between planning your daily tasks and strategic planning. While planning strategically you must have the ability to keep the bigger picture in mind and also maintain a balance between short–term and long-term goals.

The ability to be strategic is very valuable in a sector such as biotechnology, where success depends on long-term planning and the execution of complex innovation projects. Therefore, identifying actionable intelligence, and the appropriate course of action based on this intelligence, is a key part of strategic planning.

One advantage that science PhDs have over other candidates is that they know how to act upon information and plan multiple research projects based on constantly changing feedback. During this time, you've had to finish weekly experiments while still progressing in other areas, such as publishing a first author paper or getting enough data

for your dissertation. You have had to plan daily experiments, but also keep track of the larger goal of the project, which may have taken multiple years to accomplish. This has prepared you for a career where strategic planning is essential. Make sure you communicate these experiences and highlight your strategic planning abilities through the job search process.

PROFESSIONAL AWARENESS

When you are looking to transition into industry you should always keep in mind that organizations not only value your scientific knowledge, but they are also looking for a person who fits into their culture and positively represents their "brand". This is why your professional image is as important as your technical skills.

Employers look for candidates who are keen towards personal development. This demonstrates that you are eager to keep learning and progressing. Organizations will want to hire professionals who want to improve themselves, as they are also more likely to produce overall growth within the company. No matter how good you are at scientific benchwork or technical writing, companies will be reluctant to hire you if they feel you are not capable of representing them professionally. How you conduct yourself when at work or even at work related social events will largely influence your professional image and you will judged by it.

One of the major aspects of this professional image is how you sell yourself and whether you are capable of negotiating well and in a diplomatic fashion. The ability to balance giving and taking is highly valued by employers. Whether you can interact professionally with others, and your ability to handle challenging situations in a professional and mature fashion are all major determining factors of your image. You need to be constantly aware of maintaining and enhancing your professional "brand" so that you are seen as someone who portrays the organization in a positive manner.

ADABTABILITY / FLEXIBILITY

mployers value candidates who demonstrate flexibility so they can shift between functional roles if necessary. A study published by Nature Biotechnology on workforce and hiring trends of the biotechnology industry (Nugent and Lindburg; 2015 http://www.ncbi.nlm.nih.gov/pubmed/25574640) indicated that PhDs coming directly out of academia are often too specialized, and find it difficult to adapt to the broader work environment found in industry.

Since professionals in the life science industry often have to work on multiple projects (some spanning different divisions) they need to learn to adapt quickly. According to this study, adapting to changing trends and being flexible enough to work in different functional roles over the span of one's career are seen as valuable transferable skills by employers.

As innovation is an essential part of the biotech and pharma industry, employers tend to prefer candidates who are capable of improvising to find a unique solution to existing problem. Often academia teaches science PhDs and postdocs to concentrate on becoming an expert in one narrow field. While this is good for someone in an academic career, in order to succeed in industry you need to be more openminded and willing to adapt. This will be especially helpful for those PhDs who wish to pursue roles beyond traditional research.

You have to be flexible and willing to experiment with new approaches and ideas for making a project successful. Like most of the other transferable skills mentioned earlier you must have developed some flexibility and adaptability while working in your academic research lab.

As a PhD, you have had to adapt to new challenges and improvise while troubleshooting problems in your research projects. It is also likely that you dealt with multiple projects which required you to use different lab equipment or draw upon knowledge from different fields of science. You should keep these past experiences in mind and apply these lessons on flexibility while working in industry.

CREATIVE PROBLEM SOLVING

reativity and problem solving are valuable transferable skills in any work environment. This is particularly true in the biotechnology and biopharmaceutical industries, since in these industries, PhDs must constantly innovate and plan far in advance to make complex projects successful.

As a professional in the biotech and pharma industry you will be expected to apply creative problem solving techniques. You must be able to think laterally to come up with solutions that will help your organization maintain its competitive advantage. Biotechnology and biopharmaceutical industries rely heavily on innovation and value employees who are quick to solve problems.

As this sector is highly innovation-based, in order to be successful organizations are constantly striving to find unique solutions to new medical challenges. The only way to discover something completely unique and novel is to apply creative problem solving skills. Often some of the major breakthroughs in biotech industry are result of so-called "out-of-the-box" thinking. This is why major biotech and pharma organizations devote a lot of time to brainstorming. When you are trying to solve a very well defined problem or to achieve a specific business goal you have to apply both technical and scientific knowledge, as well as creative problem solving skills, to accomplish your task.

This process has become so prevalent in technology oriented industries such as biotech that now in corporate jargon there is even a specific term for it. It is called CPSP which simply stands for Creative Problem Solving Process. If you are a science PhD transitioning into industry immediately after graduate school or a postdoc in academia, you need not worry if this sounds completely new to you. Even if you have not heard of CPSP before, you have been applying it regularly in your research lab.

As a researcher in an academic lab you are used to identifying a problem, clarifying it using your knowledge, and then doing research to find possible solutions. Following these steps, you applied a combination of information gathered from research and your own innovative ideas to find the ideal solution. The CPSP applied to solve corporate problems utilizes these exact same steps. The only two differences you have to keep in mind while solving problems creatively in industry is that these problems are more time-sensitive and the goals are more specific compared to academic projects.

CONFLICT RESOLUTION

A nother major transferable skill that you must develop for working successfully in a collaborative environment is that of conflict resolution. Since the members of any team are surely going to have differences in opinion, there will be a chance of conflict. Whether you are functioning as a member of a team, or supervising a team, you will be required to develop conflict management strategies to work with other professionals.

This is a common challenge in the biotech industry where professionals from different departments, such as marketing and research and development, often have to work together on one project. Owing to their different backgrounds, they may have different ways of approaching the same problem and working for a solution. This often leads to conflict.

You need to realize that conflicts are inevitable but it is necessary to alleviate these issues before they escalate to a level that harms the functioning of a team or the team's productivity. The first and most important step in conflict resolution is to identify the root cause of the conflict. Most conflicts can be broadly categorized into the following types based on their cause: technical (e.g. finding a solution for a R&D problem), structural (e.g. team infrastructure), logistics (e.g. timing of meetings), or behavioral (e.g. conflicting attitude of coworkers). Understanding this will help you in finding an appropriate solution to the conflict.

Fortunately (or rather, unfortunately) every PhD has a lot of experience

with conflicts and how to deal with them. We all have had experiences with either lab members or collaborators or a PhD thesis committee member we conflicted with, and had to find a solution for it, or work around it. You've had to deal with lab politics and navigate your way through both good and bad days with your advisor. While working as a PhD or postdoc, you've had to collaborate and compete for everything from publications to reagents to time in the cell culture hood. These kinds of conflict resolution skills are highly valuable in industry.

CURRENT INDUSTRY TRENDS

In any industry a professional is expected to be aware of the trends of that specific sector and all the other factors that influence it. In the case of the biotech industry it is even truer, because it depends heavily on the latest developments in technology. What is cutting edge today might be deemed obsolete a decade or two later. So it is essential to be aware of the trends that are going to influence this sector's future.

As a PhD you should also keep in mind that unlike in academia, staying abreast with only research oriented developments in your field will not be adequate. Once you have transitioned into industry, even if you are working as an R&D professional you must remain aware of developments in other areas such as new regulatory laws, business decisions, or changes in the financial environment, because they are all bound to have varying degrees of influence on your company's decision making process — which will eventually affect what you do. So, in this case, you should always be well-informed about the current trends of industry beyond R&D.

It is also important to keep up with global trends, accounting for globalization, and the increased speed of communication and data transfer. Do not limit your knowledge to what is happening in your geographic region. Always keep abreast of the new technologies, current developments, and the trends that are influencing the biotech and pharma sector globally.

In order to understand these business aspects beyond scientific research you must be willing to learn about industry trends such as the latest mergers and acquisitions, or which therapeutic areas are more likely to receive funding from venture capital. This will help you in transitioning into industry and also enable you to plan better for future career progression.

As a PhD you are already accustomed to gathering data, identifying important facts or ideas from large volumes of information, and doing regular research to keep up with the latest developments in research in your field. All you have to do now is just extend this information gathering and curiosity to a broader field.

ENTREPRENEURIAL MINDSET

This might sound confusing but employers like to see some entrepreneurial spirit in their employees, even though they are hiring them to work for the company. This does not mean that they want you to quit immediately and start your own business, but they do want you to demonstrate some of the key attributes necessary to work independently and take responsibility for your work.

Employers in industry value candidates who are capable of performing without needing to be continuously supervised. Candidates who perform with minimum supervision, but know when to ask for specific instruction are sought after.

Another skill associated with the entrepreneurial mindset that employers look for is whether you can respond in a mature way when confronted with unexpected challenges. As projects in the life science industry are complex, lengthy, and involve collaboration between multiple sites or even companies, you will often be presented with novel and unexpected challenges. How you cope with these, and find solutions for them, will be recipes to your success in industry.

Professionals who use creative problem solving skills to find new solutions for these unexpected challenges are more likely to thrive in industry work environment. This is quite similar to what entrepreneurs

have to do while building a startup. Acting decisively and taking responsibility for your own duties are also valued and respected in industry as much as they are in an entrepreneurial environment.

People in any organization are entrusted with specific duties and are expected to fulfill them. But employees who take action on their own and strive to achieve goals beyond their regular duties are highly valued and more likely to gain promotion.

As a PhD working in the lab you have had to function independently, take important decisions with limited supervision and find unique solutions to novel problems. So, perhaps without noticing, you have already gained some of these entrepreneurial qualities that are appreciated in industry. This is one more reason why PhDs can be valuable candidates for positions in the biotech and pharma industries.

EMOTIONAL INTELLIGENCE

ow you communicate with your colleagues, share responsibilities, and deal with differences in opinion will be major factors in your success in industry. One factor that strongly influences your people skills is your emotional intelligence (EI) or emotional quotient (EQ).

It might sound strange at first, but emotional intelligence has a lot of value at the workplace as all forms of human interaction can be influenced by it. Whether it is a manager talking to his team, or members of a team participating in a brainstorming session, or your interaction with clients, all of these can be improved with the application of emotional intelligence.

Acting professionally and remaining calm under adverse or stressful conditions is essential to functioning well in the workplace, and those with high EI tend to handle these situations better. Developing your EI will help you to assess people, predict chances of a possible conflict, develop trust, and influence decision making in a professional manner. As you know, all of these qualities are considered as key ingredients for working in a business environment.

Historically, it was often assumed that the importance of EI was limited to nontechnical roles such as marketing or management. But this perception is changing with new findings about how emotions affect our reasoning

and decision making. A recent publication in the International Journal of Medical Education recommended incorporating teaching EI as a part of medical students' curriculum, as this will improve the clinician-patient relationship (http://www.ncbi.nlm.nih.gov/pubmed/26638080).

Developing emotional intelligence can help you improve a number of other transferable skills such as teamwork, conflict resolution, client-facing skills, management, and flexibility.

To access the next 20 transferable skills, and for resume, networking and interview help, join the Cheeky Scientist Association by going to

cheekyscientist.com/association



Arunodoy Sur, PhD

Isaiah Hankel, Ph.D.

